

Utility Coordination Best Practices

*Promoting effective collaborations
for efficient project delivery*



GUIDE FOR LOCAL AGENCIES

Effective utility coordination leads to many tangible benefits—helping keep construction costs in line and projects on schedule, as well as promoting collaborations that make the process move more smoothly and efficiently for all.

“The more effectively local agencies involve utility companies in the concept and early design stages, the more likely they will avoid costly issues and project delays. Since **utility owners play such an important role in a project’s success**, it’s critical to involve them early and consider their utility relocation constraints. Before the project starts, promoting collaboration between the utility and the contractors also pays off in many ways.”

GORDON MCCONNELL / RIGHT OF WAY AND PERMIT COORDINATOR / DAKOTA COUNTY

True Impact

How much of a difference can an investment in utility coordination best practices make?



In 2005, the Minnesota Department of Transportation (Mn/DOT) launched a new utility coordination process with the goal of proactively coordinating utilities to minimize project delays, construction costs, and utility-related contractor claims.

Since then, utility-related contractor claims at Mn/DOT have decreased significantly in only a few years. Construction engineers also report fewer delays in the field.

“Mn/DOT is realizing clear benefits from its investment in improved utility coordination,” says Marilyn Remer, Mn/DOT Utilities Engineer. “We are identifying utilities earlier and have improved our communication and collaborations with utility owners. It’s making a difference.”

Mn/DOT Requirements on Local Agency Projects

Local agencies work with Mn/DOT on transportation projects in a variety of ways, and utility coordination can impact both Mn/DOT and local agencies in certain circumstances.

In 2007, Mn/DOT issued a Technical Memorandum regarding utility coordination on cooperative projects. It introduced a new requirement that local agencies submit the Mn/DOT Utility Certification Form, which documents the completion of steps that meet utility-related statutes for the following types of local agency projects:

Cooperative construction projects that receive trunk highway funds

Permit projects that require a level one or level two geometric layout for work on the trunk highway

Case-by-case basis in situations that may include, for example, obtaining new trunk highway right of way, relocating city utilities within the trunk highway right of way, or planning for major excavations on trunk highway right of way

Visit www.dot.state.mn.us/utility/ for the following forms and information:

- Certification Form
- Local Agency Checklist
- Technical Memo
- Mn/DOT Utilities Manual
- Mn/DOT Permit Application and Information



Starting Points



Mn/DOT developed its utility coordination process based on national, state, and local best practices that include the following:

Starting utility coordination efforts early

Greater emphasis on utility coordination early in the project development process can help reduce design and construction time later in the process.

“Early coordination is important to successful utility relocations,” says Steve Lillehaug, Public Works Director and City Engineer for Brooklyn Center. “An early start gives more time for finding the best relocation solutions.”

Communicating with utility owners

Best practices call for sharing information with utility owners while projects are in the planning stage and continuing throughout construction. Mn/DOT and many local agencies host an annual meeting with utility owners to review long-term capital improvement programs and upcoming projects. Holding the meetings in mid-March helps utility owners with their budget planning for current and future years.

Considering SUE as an option

Subsurface Utility Engineering (SUE) is a branch of engineering. It involves managing certain risks associated with utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, and other utility issues. A study for the Federal Highway Administration quantified a savings of more than \$4 for every \$1 spent for SUE.

Agencies may want to consider using SUE on any project where inaccurate underground utility information would negatively impact the project in a significant way or when underground facilities are present in areas of excavation or where other activities disturb the ground. For information about SUE, visit www.fhwa.dot.gov/programadmin/sueindex.cfm.

Complying with statutory requirements

Mn/DOT, local agencies, and utility owners must comply with Minnesota statutory requirements, which include contacting Gopher State One Call for utility identification and verification before construction, a meeting with utility owners during the design phase, and a preconstruction meeting with utility owners. For information about utility-related statutes (161.20, 161.45, 161.46, 222.37, and 216D.01-07), visit www.leg.state.mn.us/leg/statutes.asp.

Following a consistent process

Approaching utility identification and utility relocation through the use of a consistent process based on best practices achieves several aims. It clarifies roles and responsibilities, helps all parties understand what needs to happen, and supports the communication that needs to take place for successful utility relocation. Steps to effective utility coordination based on best practices are highlighted next.

“We spend millions of dollar each year to relocate or adjust our facilities for road construction projects. It’s very important for us to know as soon as possible about utility relocations so we can plan our resources accordingly.”

Steps to Effective Utility Coordination

- Annual Project Meeting** 1 Hosting an annual meeting with utility owners to review long-term and upcoming projects
- Utility Identification** 2 *(Fulfills M.S. 216D.04 Subd. 1a requirements)* Using a variety of methods—Gopher State One Call, utility owner contact, field reviews, surveys, and other sources—to identify utilities, utility easements, and other related issues
- Utility Information Meeting** 3 Preparing plan sheets as soon as possible during preliminary design and hosting a utility information meeting on complex projects to identify utility issues and possible solutions
- Review of Utility Owner Information** 4 Reviewing utility owner-marked plans, considering design modifications to minimize utility impacts; communicating with utility owners and with road agencies regarding potential reimbursement or right of way needs
- Utility Design Meeting** 5 *(Fulfills the M.S. 216D.04 Subd. 1a requirements)* Preparing plan sheets during detail design and hosting a utility design meeting to discuss all potential utility conflicts and resolution
- Request for Utility Relocation Plans** 6 Setting the deadline for submission of utility relocation plans, sending each utility owner a set of project plans, and following up as necessary
- Utility Design Change Meeting** 7 Hosting a meeting with utility owners if there are significant changes in the project or right of way
- Gopher State One Call Utility Verification** 8 *(Fulfills the M.S. 216D.04 Subd. 1a requirements)* Contacting Gopher State One Call 90 days before completion of the final plan for bid or contract, depicting any additional utility facilities on plans, and coordinating impacts
- Utility Relocation Plan and Schedule Review** 9 Reviewing utility relocation plans and schedules and requesting submission of required permits if applicable
- Agreements and Official Notification** 10 Contacting road agencies regarding utility agreements and other agency permits and notifying utility owner to proceed after confirming permits and agreements are in place
- Contract Documents and Final Plan** 11 *(Utility depiction and indication of quality levels in plans fulfills 216D requirements)* Including the appropriate information and depiction in plans, such as quality level, utility tabulation sheet, and appropriate information in utility special provisions, and submitting the certification form to Mn/DOT when applicable
- Construction** 12 *(Fulfills the M.S. 216D.04 Subd. 1a requirements)* Setting and hosting a preconstruction meeting and assisting the transition between the designer and construction contract administrator

Q&A

Q: Why invest in effective utility coordination?

A: Construction engineers often point to issues with utility relocations as one of the most common reasons for project delays and increased project costs.

Q: What does Mn/DOT require for certain types of local projects?

Mn/DOT requires local agencies to submit the Mn/DOT Utility Certification Form for three types of projects: cooperative construction projects that receive trunk highway funds, permit projects that require a level one or level two geometric layout for work on the trunk highway, and case-by-case situations that involve trunk highway right of way.



Q: What role does a permit play?

Utility owners must receive an approved permit before they can begin work. The permits help ensure that the utility will not conflict with project construction, future projects, or other federal, state, or local laws, rules, and regulations.

Q: What are some tips to working with utility owners?

Ongoing communication is important in building productive collaborations with utility owners. Host an annual meeting with utility owners to share information about upcoming projects. Allow adequate time for utility relocation planning, design, and right-of-way acquisition. Supply utility owners with the preliminary plans that they will need and appropriate contact information. Be sure to follow-up with your utility representative and check with the utility owner contact if your utility representative is unresponsive. For a statewide list of utility owner contacts, visit www.dot.state.mn.us/utility/files/pdf/contacts/contact-utility.pdf.



www.dot.state.mn.us/utility/