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600.1 General

The Washington State Department of Transportation's (WSDOT's) Region Utilities Offices are responsible for the oversight and control of utility installations within the operating highway right of way. During the project development and construction phases, Region Utilities Offices serve as subject matter experts regarding utility installation requirements. They provide organizational contact and coordination support between utility organizations and highway project managers as well as utility agreement- and service agreement-writing services. In addition, Region Utilities Offices are responsible for providing guidance and assistance to project development staff as they address utility issues relating to their projects.

600.2 Schedules, Goals, and Strategies

The project team should approach utility relocations systematically during the development phase of highway projects. Establishing a Utility Relocation Plan early in the project development process that includes goals, strategies, and expected milestones facilitates appropriate and timely utility conflict resolution throughout the process. It also serves as a template for measuring the progress and success of utility conflict resolution early in the project and helps prioritize and focus resources in later project stages.

The primary goal of any project utility conflict should be to relocate the utility before construction begins. However, this is often not possible when utility relocation is dependent upon the acquisition of right of way or the construction of a highway element such as a utility conduit on a bridge, major earthwork, or environmental permitting. Regardless of the utility conflict, solutions should be identified and goals established as early as possible for each conflict resolution.

(1) Schedules

It is the Region Utilities Engineer's responsibility to be sure that utility companies understand the project schedule. The Region Utilities Office will ensure utilities provide the Project Engineer with necessary, reasonable utility relocation schedules. Any possibility of schedule delays needs to be communicated to the Project Engineer for resolution.

(2) Goals

Involvement in initial project meetings such as Pre-Design meetings provides opportunities to work with various project stakeholders to discuss utility conflict goals and strategies. Some projects will have few utility conflicts and will require little effort to resolve them. Other projects will have extensive utility conflict resolution issues and will require more involvement and effort by the Region Utilities Office. Establishing conflict resolution goals and strategies early will also assist in forecasting the resources that will be necessary to meet those goals.

(3) Strategies

Developing an effective strategy to deal with various utility elements helps to facilitate the overall conflict resolution objective. As mentioned above, strategies are the means by which to achieve the goals.

- What needs to happen in order to achieve a specific utility conflict resolution?
- Does a strategy include advancing certain design work to minimize or avoid a utility conflict?
- Will changing a design element minimize the conflict?
- Does the strategy benefit the state?

Many variables may be present and available to influence overall goals and strategies and will differ considerably between projects. Other issues that may influence utility conflict resolution strategy include the following:

- Multiple utilities
- Right of way limitations
- Project schedules
- Easement rights
- Agreements

The Region Utilities Office is responsible for all utility issues within the right of way and should be available for assistance and to provide input regarding utilities. Developing an effective utilities strategy involves the consideration of all variables within a project. A good strategy represents a "contingency approach" that can offer the greatest and most efficient project benefit for resolution of utilities conflicts.

600.3 Early Utility Identification

The Region Utilities Office is responsible for acquiring existing utility information. Early recognition of utilities located within the project limits is crucial to the overall success of a highway improvement project. Identification can come from a variety of sources available to the Region Utilities Office and may include various levels of detail. These sources include:

- WSDOT utility databases.
- Region Utilities Office hard copy files.
- Region utility contact lists.
- Utility company as-built records.
- Subsurface Utility Engineering (SUE) investigation.
- Site visits.
- SR View program.

Virtually all highway improvement projects will involve some type of a utility facility within the highway right of way. Utility conflicts should be expected and anticipated. Each utility facility within the project limits has the potential to influence the project; therefore, consider utility issues as early as possible in the project development process. This early recognition will help avoid schedule and budgetary pitfalls in later stages when the project is more established and recovery from unexpected project redesign or utility relocation coordination conflicts can be more difficult to overcome.

Careful and diligent research should identify existing utility facilities and their general locations. If not already identified, early research should also determine any compensable property rights an existing utility may possess. Since compensable rights may have a budgetary impact on the project, it is prudent to identify compensable interests as early as possible in the project development phase.

Refer to [Chapter 2, Utility Agreements](#), for detailed information regarding utilities with compensable property rights.

600.4 Coordination, Cooperation, and Communication

Utility coordination often involves working with multiple utility representatives to:

- Identify existing utilities within project limits.
- Resolve conflicts between those utility facilities and various project elements.

Coordinating between affected utility owners and the project development team can represent a significant effort by the Region Utilities Office. This effort should include vital design or construction personnel who are familiar with the project as well as region support groups such as Real Estate Services or the Environmental Office. Having the utility owner's cooperation is also very important. Note that project utility coordination efforts typically focus on preliminary project design issues; however, it is common for coordination to carry over into construction.

Early and continuous communication between affected utilities and WSDOT helps avoid miscommunication and minimizes the potential for project delays. Effective coordination requires both cooperation and effective communication. Fostering a productive environment in which the affected utilities and the department can exchange mutual concerns and establish realistic objectives can yield mutually beneficial results. Avoid setting unrealistic expectations that will be difficult to achieve. Successful facilitation of utility conflict resolution issues involves an understanding that both parties have requirements that need accommodation.

(1) Utility Engineering Needs

WSDOT should not underestimate utility relocation needs. The relocation of even a short section of buried utility line or a small number of utility poles can easily result in a utility construction project whose scope is larger than anticipated by the department. This may in turn have a negative effect upon the project delivery schedule. Provide utility owners enough time to plan and engineer utility relocations; budget funds; comply with environmental and permit requirements; negotiate real estate transactions; order and receive materials; and schedule construction crews. Utility companies often must advertise and award bids for relocation work. As with other construction issues, the project development team should incorporate utility relocation requirements into the overall project schedule to avoid project delays and provide a realistic project schedule.

(a) Highway Project Schedule and Design Changes

The effects upon utility relocations should also be taken into account when considering highway improvement project scheduling and design changes. Design changes that affect expected relocations add time and expense to utility owners' relocation plans. Maintain regular communication throughout the project development process to ensure WSDOT and affected utilities meet the project's scheduled Ad date.

(2) Communication

Best Practice

Establish regular coordination meetings with utilities to discuss project status. These meetings should provide a forum for open two-way exchanges of critical information. They also provide an opportunity for Project Engineers and designers to manage the project and react to issues as they are identified. The intent should also be to convey WSDOT's expectations concerning project timelines and utility accommodation requirements.

The role of the Region Utilities Office may vary between regions. For those regions using different Design and Construction Project Engineers, the role is to bridge the critical gaps between the design and construction phases. Therefore, the Region Utilities Office must be involved in both project phases.

Other project considerations include:

- Oversight of advance utility relocation efforts.
- Establishing schedules and timelines for all utility relocation work.
- Permitting and accommodations with the Region Utilities Office.

- Design changes, project schedule delays, and shelved projects.
- Tracking necessary right of way acquisitions.
- Additional required environmental permitting beyond that which may be required for the project.

(3) Documentation

To ensure success, approach the utility relocation process with a cooperative attitude. Clearly document all phases of the utility relocation process and WSDOT's efforts to work with and accommodate utility owners. Maintain all correspondence, diaries, plans, meeting notes, and other information in an organized manner. These documents should clearly illustrate and support the steps the department has taken to work with utility owners. For future reference, regions should establish a filing system to maintain all documentation related to utility relocations.

600.5 Roles and Responsibilities

Responsibilities for utility relocations vary between regions and projects and within each phase of the project development and construction processes.

(1) Region Utilities Office

The Region Utilities Office should be available to assist project development staff in creating a strategy to identify and coordinate the relocation of utilities located within the project limits.

(a) Unknown or Undocumented Utilities

The Region Utilities Office may not have access to information about every utility installation located on the project; unknown and undocumented utilities may exist. Further, utilities may exist on private easements or owned property outside the existing right of way where additional right of way acquisition is required for the improvement project. By initiating early communication about utility issues, the Region Utilities Office can work with project designers to obtain as much utility information as possible as early as possible and avoid unnecessary delays later in the project development process.

Once utilities have been adequately located, the project development staff should determine the extent of utility impacts or conflicts to the project. The Region Utilities Office and Region Real Estate Services Office should help to assess where the responsibility lies for the associated relocation costs. The Region Utilities Office will also work to communicate the impacts to the affected utilities. The Region Utilities Office staff should work to provide benefit to the project design team and keep abreast of all changes and communications that take place with utility owners and the project design team.

It is important to recognize that project development staff has a responsibility to communicate project impacts to utility owners. However, the Region Utilities Office should take a proactive role in project utility issues and, as subject matter experts, should be involved in the project development process whenever necessary.

(2) Project Engineer's Office: Design Team

Project designers are responsible for project design development and implementation, including coordination and resolution of utility conflicts within the project limits. The design team in the Project Engineer's Office identifies potential conflicts and works to resolve those conflicts by coordinating utility relocation efforts to eliminate potential project delays or to redesign portions of the project to avoid utility conflicts. In order to avoid costly utility relocation delays during the construction phase of the project, regular and meaningful coordination with the project design team is essential.

(3) Project Engineer's Office: Construction Team

The construction team in the Project Engineer's Office maintains overall administrative QA/QC oversight for the construction phase of projects. The Project Engineer is responsible for bridging the gap between utility owners and WSDOT's construction contractor.

(4) Utility Owners

The owner of a utility installed within the operating highway right of way has an obligation to contribute to the project design and delivery process and relocate its utility to a location at a time that is mutually agreeable and beneficial to both WSDOT and the utility owner. However, utility owners also have a reasonable and justified expectation that they will be kept informed of pertinent project details so they can schedule the necessary time and resources to meet their relocation needs.

600.6 Cost Responsibility and Recovery

Ultimately, the taxpayer/ratepayer pays the costs for necessary utility relocations. It is for this reason that utility relocations and the redesign expenses incurred to avoid utility relocations should be a shared cost, depending on the circumstances surrounding the utility conflict.

Addressing utility impacts early in the project development process can significantly reduce costs and project delays associated with utility relocations.

(1) Determination of Cost Responsibility

Impacted utilities generally fall into one of the following four categories. These categories dictate whether the utility or WSDOT will be required to pay for work associated with any relocations or design cost recovery efforts. Refer to [Chapter 8, Reimbursement](#), for additional information on cost recovery policies.

(a) Utility Occupation by Permit or Franchise

Most installed utilities are authorized to occupy the operating highway right of way by a utility permit or franchise, generically referred to as an accommodation document. Accommodation documents are binding contracts between WSDOT and a utility that define the circumstances of the installation of the utility's facilities within state right of way.

Utilities installed under an accommodation document have no compensable property rights. In this case the utility is responsible for the relocation's costs or additional design costs incurred by WSDOT to avoid relocation.

(b) Utilities Located Within State Right of Way by Easement

Utilities are sometimes located within the operating highway right of way by easement. Easements generally, but not always, provide a compensable property right to the utility. Carefully screen identified easements to determine the allowable provisions of the easement and what compensable property rights the easement document may grant.

WSDOT is responsible for the costs associated with relocation or project redesign of utilities with easements granting a compensable property right. Early identification of compensable property rights is vitally important. Ideally, these rights should be identified in the scoping phase, as those costs often have a significant financial impact on project budgets.

(c) Utilities Located Outside State Right of Way

In some cases, proposed highway improvements require the purchase of additional right of way to accommodate the highway project. Often utilities exist outside of, but adjacent to, the existing highway right of way in the area of the new additional right of way acquisition. The utility may own the property fee simple or may have a property right upon the adjacent property. In conjunction with title research, the Project Engineer's Office should examine title reports for evidence of an existing utility property right or other easements both inside and outside the existing right of way and verify the extent of the easement property right. If the property right is valid, WSDOT has the responsibility to pay for any relocation costs as well as replacement of or compensation for the easement or property right.

For detailed guidance on property acquisition issues, contact the Region Real Estate Services Office. If additional rights of way are needed for the project, Real Estate Services may need to clear the right of way of all encumbrances. Quitclaim deeds will need to be prepared, signed, and recorded to extinguish an easement or to exchange easements.

Property acquisition requires considerable time—sometimes six months or more for each parcel. Early communication between the Project Engineer's Office, Region Utilities Office, Region Real Estate Services Office, and utility owner is vital to avoid project delays.

(d) City Utilities on City Streets

When a highway project impacts a city street in which city utilities are located, WSDOT is responsible for the relocation costs. When city utilities are located within state limited access areas, the city is responsible for the relocation costs of its facilities.

(2) Utility Agreements

If a property right is verified, payment for relocation costs will require a utility agreement. The agreement should detail the conditions of payment and, in most cases, should document specific utility design criteria. Regardless of circumstances, before any utility work is completed, an agreement between the utility and WSDOT is required that defines costs, circumstances, rights, and responsibilities for necessary relocation work. Refer to [Chapter 2, Utility Agreements](#), for detailed information on preparing various types of utility agreements.

600.7 Coordination Milestones

Coordination responsibilities for utility relocations vary within the project team and during each phase of project development and construction. Important milestones for utility coordination generally include the following:

- Scoping Estimate
- Project Design Notification
- Geometric Review
- General Plans Review
- Preliminary Contract Review
- Plans, Specifications, and Estimates (PS&E) Final Contract Review
- Advertisement and Award
- Project Construction

Each milestone provides an opportunity for more defined and specific coordination with existing utilities that could affect project delivery schedules (see [Figure 600-1, Project Utility Coordination Process](#)).

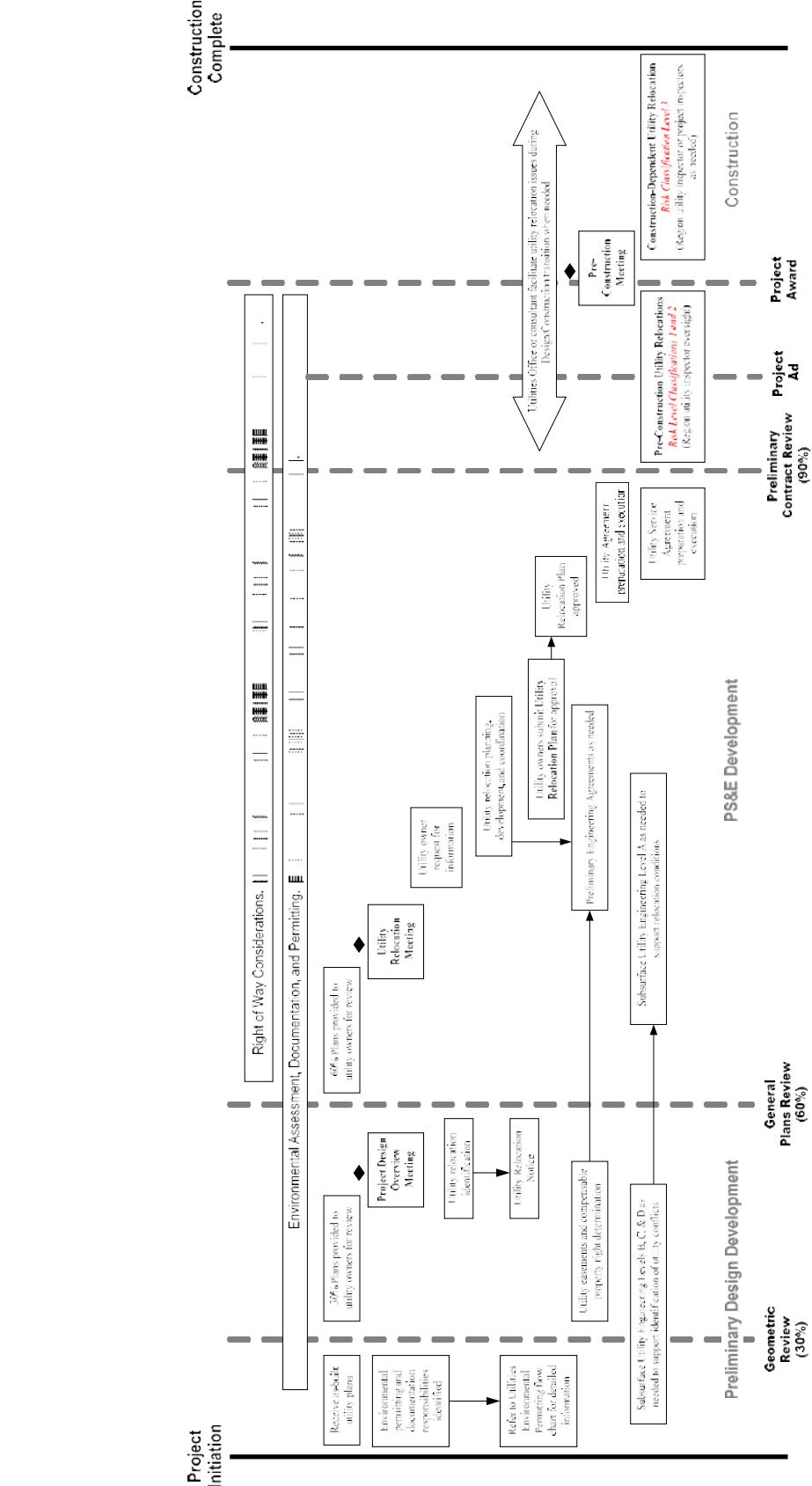
600.8 Project Initiation: Project Design Notification

The project design team should request utility location information from the Region Utilities Office during the preliminary development of the project. Upon receipt of the Project Design Notification, the Region Utilities Office should make every effort, based on available information, to determine which utility owners have facilities located within the limits of the WSDOT project. The Region Utilities Office should send letters to all identified utility owners requesting utility as-built information and data. The letter should also request receipt of this information within a reasonable period after the date of the request. Forward as-built information to the Project Engineer's Office upon receipt from the utility for inclusion in project plans. The Region Utilities Office should document efforts to obtain utility as-built information.

600.9 Geometric Review (30%)

Once the project development process is approximately 30% complete, the design team at the Project Engineer's Office arranges a Project Design Overview meeting. Among other discussions, the meeting should identify utility owners impacted by the project. Utility owners should be prepared to update and verify the location of their utilities and express any concerns or suggestions they may have regarding utility relocations.

Utility conflicts should be sufficiently identified and any additional investigative engineering determined by the Geometric Review. Start or continue to develop the Subsurface Utility Engineering (SUE) Level B, C, and D investigations as needed to sufficiently identify and locate existing utilities within the project footprint. The Project Engineer's Office and utility owners should also discuss required relocation phasing and the needs and responsibilities for obtaining any utility-related environmental documentation and permitting.



Project Utility Coordination Process
Figure 600-1

As the project design continues to develop and evolve between 30% and 60% plan completion, continue to address utility impacts and keep utility owners informed as issues arise. Continue to coordinate with the Region Real Estate Services Office on right of way acquisitions, and provide information (as appropriate) to the utilities to assist them in the process of acquiring property or easements outside state right of way on which to relocate if they are not being placed on a permit or franchise.

(1) Project Design Overview Meeting

The Project Engineer's Office and/or the Region Utilities Office should invite utility owners to a Project Design Overview meeting. The purpose of the meeting will be to explain the project's scope, expectations, and schedule. Provide utility owners with copies of the Geometric Review and project development schedule prior to the meeting for review and consideration.

The general goal of the Project Design Overview meeting should be to identify environmental issues, real estate acquisitions needs, erosion control concerns, Control Zone Guidelines compliance, and other issues or constraints related to the project. During the meeting, make a good faith effort to identify and evaluate preliminary opportunities to avoid or minimize utility conflicts within the project limits.

(a) Utility Owner

When invited to attend the Project Design Overview meeting, WSDOT should ask utility owners to provide:

- Verification of the locations of their respective utility facilities shown on the Geometric Review and any additional or updated information with respect to those facilities.
- An overview of project concerns, relocation issues, property rights, utility facility requirements, utility installations needed for future expansion, and schedules for utility preliminary engineering, utility relocation, and environmental compliance issues or needs.

(b) Project Design Office

WSDOT should provide the following information:

- Identify utility potholing needs.
- In consultation with the Region Utilities Office, determine the need for Subsurface Utility Engineering corresponding to Construction Institute/ ASCE Standard CI/ASCE 38-02 – *Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data*.

(2) Utility Identification: Subsurface Utility Engineering (SUE)

Sometime during the project development process, typically around 30% plan completion, the Project Engineer's Office, Region Utilities Office, and SUE consultant (if used) should meet to discuss subsurface utility identification needs and make appropriate arrangements for SUE investigations. SUE investigation and coordination includes the following:

- The Project Engineer's Office continues project development beyond the Geometric Review.

- As the project design is developed, areas of utility conflict and potential utility relocation are narrowed down.
- Aboveground utility objects that require Control Zone Guidelines compliance are listed on the project Utility Object Relocation Record (UORR).
- The Project Engineer's Office sends project UORRs and the Geometric Review showing utility conflict areas to the Region Utilities Office for review and approval prior to transmittal of the Utility Relocation Notice to affected utility owners.
- The Project Engineer's Office will send the Region Utilities Office a listing of environmental document approvals required by governmental agencies and the expected schedule for WSDOT permit applications that may be affected by utility relocations.

(3) Utility Relocation Notice

Once utility conflict redesign options have been eliminated and necessary utility relocations identified, the Region Utilities Office is responsible for the following:

- Review existing utility facility conflict area.
- Check UORR calculations.
- Send Utility Relocation Notices to each affected utility owner. Notices should include project plans identifying existing utility locations; UORRs for surface utilities; a listing and application schedule for governmental approvals for the highway project; project milestone dates; and an approximate date for Utility Relocation meetings.
- Begin the development and negotiation of Utility Preliminary Engineering Agreements, if appropriate.

(4) Environmental Permitting and Documentation

Discuss responsibility for acquisition of any necessary environmental documentation and permitting with the Project Development Engineer and the utilities as early in the design process as possible. Environmental requirements will vary between projects. Ensure Project Development Engineers are aware of the need for environmental documentation and permitting compliance for utility relocations. Address and verify that construction issues and the responsibility for obtaining environmental permits and documentation have been addressed.

If a utility relocation within project limits is necessary during construction, project environmental permitting for utility relocations may be included within WSDOT's environmental permitting package. This avoids delays to the project schedule related to difficulties a utility may experience acquiring separate environmental permitting.

It should be kept in mind that WSDOT assumes a certain amount of risk for environmental violations whether utilities obtain their own permitting or they are included within the department's environmental documents. Further, utility owners' priorities are not always the same as WSDOT's; therefore, utilities may not strive to obtain environmental permitting to meet the department's project schedule.

Advantages to including utility relocation work under WSDOT's environmental documentation and permitting include the following:

- WSDOT maintains control over the documentation and permit approval process, reducing opportunities for conflicting project work descriptions being presented to the approving authorities.
- It eliminates potentially redundant permit approval processes.
- It reduces the potential for project delivery delay if the utility is unable to obtain documentation and permits on time to meet the construction schedule.

Disadvantages to including the utilities under WSDOT environmental permits include the following:

- WSDOT is responsible for managing the utility's activities on the project site and may need to add staff to manage this aspect.
- Permit conditions for utilities may be more stringent and impact WSDOT work plans, or WSDOT conditions may be more stringent and impact the utility's work plan.
- WSDOT, as the permit holder, is responsible for fines to utilities.
- It creates delays to the Project Design Office's completion of plans; it will need the Utility Relocation Plans, which typically are being prepared until the General Plans Review.
- It creates delays to WSDOT environmental permits due to Utility Relocation Plans not being submitted until after the General Plans Review.
- Added time is needed for WSDOT to review utility environmental documents and plans for inclusion in project plans.

(a) Environmental NEPA/SEPA Documentation and Biological Assessments

To assist WSDOT in including the utility work in the department's National Environmental Policy Act (NEPA), State Environmental Policy Act (SEPA), and Biological Assessment (BA) approvals, early determination of relocated utility configuration and installation methods should be included:

- For the highway project.
- When work is occurring in areas for which WSDOT will be clearing the permit process for NEPA/SEPA.
- In critical and sensitive areas.

By including utility relocation work in the highway project's environmental process, designers can realize considerable time savings later in the design process. When potential utility modifications and relocations are included for environmental review and documentation at the same time as the rest of the highway project, the regulatory agency considers utility relocation efforts covered under WSDOT's environmental process and the NEPA and SEPA documentation. In addition, WSDOT may be able to avoid cost overruns during actual construction that might otherwise occur due to utility delays.

Consult with the Region Environmental Office for detailed guidance on determining the eligibility of a utility to be included under WSDOT's environmental documentation.

(b) Determining Permitting Coverage

Determine permitting responsibilities between WSDOT and a utility on a project-by-project basis. Responsibility for obtaining environmental permits should be determined early in the design process and documented to ensure all parties are aware of their roles and responsibilities. When utilities must obtain environmental approvals independent of WSDOT, ensure there is good communication with the utility and complete understanding of the needs and requirements. Regular communication will assist in avoiding confusion and miscommunication that can lead to project delays later.

(c) WSDOT-Acquired Environmental Permitting

Consider the following factors when determining whether utility relocations can be included under WSDOT's environmental package:

- Can both the utility and WSDOT operate under the same type of permit and permit conditions?
- Is relocation work occurring in areas where WSDOT will be clearing the NEPA/SEPA process?
- Are utilities able to inform WSDOT of construction methods and processes so the department can include that information in the project environmental permit application?
- Can coverage under WSDOT's permits accommodate the timing and sequence of relocation work with the scheduled highway work?
- Is there a relatively low risk of noncompliance? (Since environmental permits are under WSDOT's name, the department is the responsible agency.)
- Are utilities willing and able to commit to performing their relocation work under the required permit conditions and in an environmentally sensitive manner?
- Is WSDOT able to ensure utilities have copies of, understand, and are willing to work under the conditions set forth in the environmental permits, regardless of whether the utility is working prior to actual highway construction start or is working concurrently with the highway construction?

(d) Relocation Under WSDOT Environmental Permitting

If permit coverage for utility work is going to be included in WSDOT's permit package, the project offices should work closely with the utility to gain a thorough understanding of the utility's relocation needs and construction methods. Issues that require clarification include:

- Is the utility relocation dependent upon highway construction phasing?
- Does bridge construction need to be completed for the utility relocation to be completed? If so, are there temporary relocation issues? Is there a cut or fill section that needs to be built before the utility can be relocated?

- Is there a construction method that involves special contamination containment methods?
- Are there any public safety issues (such as those associated with combustible materials)?
- Are there industry-specific permits that need to be obtained (such as those associated with the petroleum industry)?

(e) Utility-Acquired Environmental Permitting

Consider the following factors to determine whether the utility should acquire environmental permits independently:

- The utility relocation is scheduled in advance of the construction or outside the project limits.
- Environmental documentation necessary for the utility work differs from the environmental documentation requirements for the work being done by WSDOT.
- Specialized work methods for the utility relocation exist that WSDOT is not able to sufficiently outline in its permit application.
- Utility relocation has substantial impacts and mitigation because utility upgrades (betterments) are included in the relocation work.
- There are times when utility compliance issues would jeopardize or delay the issuance of the WSDOT project's environmental permits.
- Environmental permits are required solely for the utility work and not for WSDOT's project.

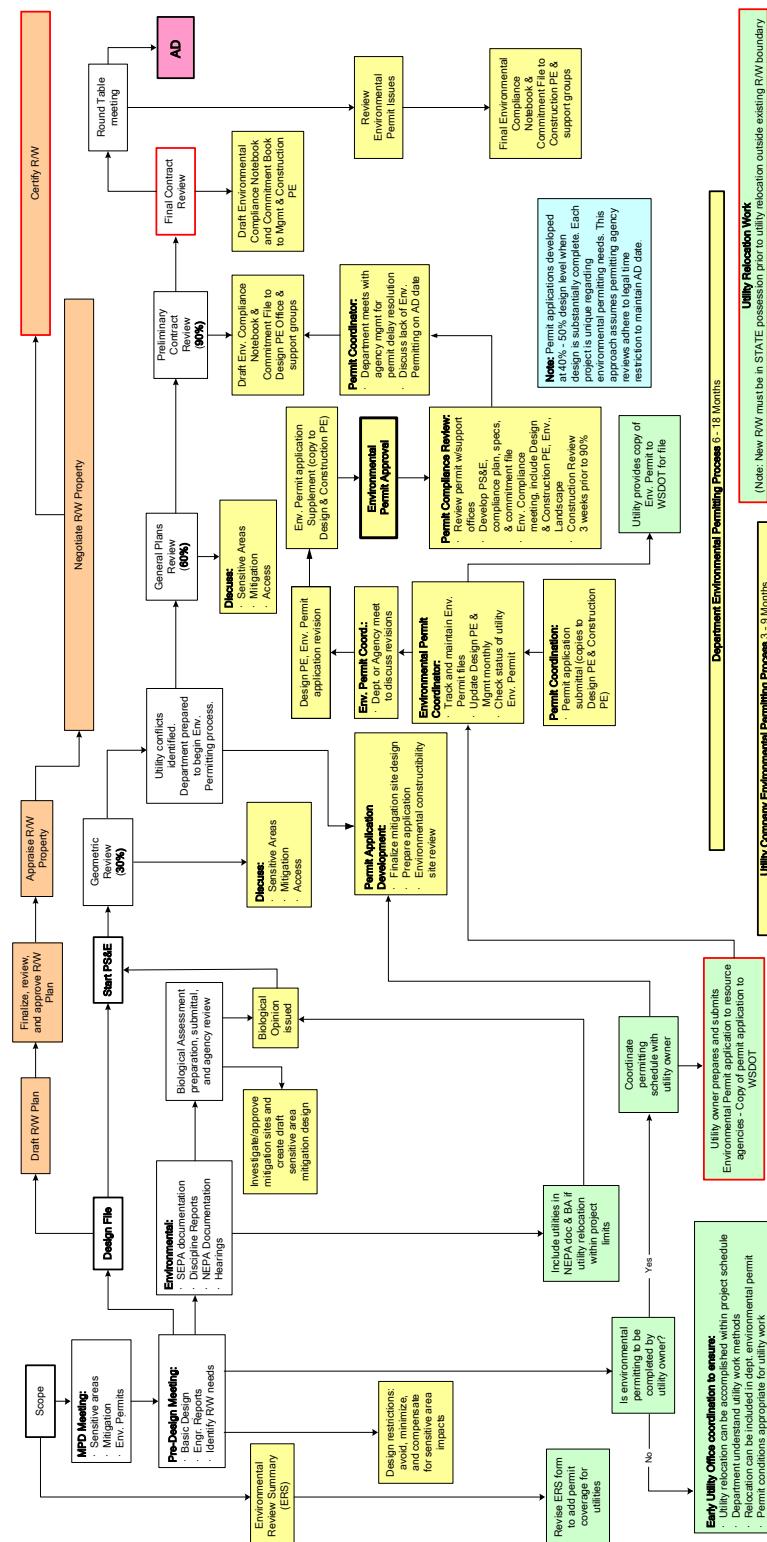
When the utility owner is responsible for obtaining environmental permits independent of WSDOT's environmental permitting effort, the department should maintain regular contact with the utility to ensure the process is moving forward. Refer to [Figure 600-2, Project Delivery Utility Relocation Environmental Permitting Process](#), for a graphical representation of the process.

600.10 Subsurface Utility Engineering (SUE)

The Construction Institute and the American Society of Civil Engineers have established the reference, CI/ASCE 38-02 – [*Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data*](#), which WSDOT has adopted.¹

To minimize the risk of utility conflicts with contract work, a project design team should be certain that existing utilities—active, abandoned, and unknown—are identified so that the locations of these individual utilities are recorded with appropriate assurance and reliability. The following guidelines are based on quality levels of utility information presented in the ASCE Standard. These guidelines will allow WSDOT project teams to develop strategies to reduce the risk of utility conflicts with construction activities by appropriately identifying the quality level required for a given construction activity. All project team members must understand how the utility data for each quality level are obtained, and they should determine the level required for the planned design and construction activities.

¹ WSDOT personnel can obtain this publication from the Headquarters Utilities Specialist



Project Delivery Utility Relocation Environmental Permitting Process

Figure 600-2

(1) SUE Quality Levels**(a) Quality Level “A” (QL-A): Locating**

The precise horizontal and vertical locations of utilities are obtained by the actual exposure and subsequent measurement of subsurface utilities at specific points. Minimally intrusive excavation equipment is typically used to decrease the potential for utility damage. Precise horizontal and vertical positions, as well as other utility attributes, are shown on the final work product. Accuracy is typically set at 0.05 foot vertical and to applicable horizontal survey standards.

(b) Quality Level “B” (QL-B): Designating

This information is obtained through the application of appropriate surface geophysical methods to identify the existence and approximate horizontal position of subsurface utilities. Quality Level B data are reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances and reduced onto plan documents.

(c) Quality Level “C” (QL-C): Surface Visible Feature Survey

Information is obtained by surveying and plotting visible aboveground utility features and by using professional judgment in correlating this information to Quality Level D information.

(d) Quality Level “D” (QL-D): Existing Records

Information is derived solely from existing records or verbal recollections.

(2) Selecting SUE Quality Level

Determining the appropriate quality level for planned construction activities is an important responsibility. If a lower level is specified than what is required for a given construction activity, the project team must be willing to accept the risk for the activity. These risks include the possibility of additional costs due to project delays, bid contingencies, change orders, unnecessary utility relocations, redesign, and perhaps utility damage, as well as other problems. In the past most projects have proceeded at Quality Level C whether or not project teams realized it. However, engineers should be encouraged to determine higher levels knowing that WSDOT may incur liability for lower quality level depictions. Fewer change orders and delays might be realized by using these higher quality levels.

When a highway project includes the types of work described in [Figure 600-3](#), at a minimum, the designated level of SUE needs to be completed.

When deciding the appropriate level of utility investigation, the project team should evaluate the additional costs of a higher quality level versus the potential costs associated with the risk of performing a lower quality level utility investigation. Project teams will identify and apply appropriate techniques based on budgets and expectations. Decisions and judgments must also be made as to where Quality Level A data should be provided. Finished plans may contain utility data with different quality attributes; all four quality levels may be represented in one project.

Type of Work	Quality Level Required			
	D	C	B	A
HMA Overlay Only	X	?		
Guardrail Installation		X	?	
Pipe/Drainage Structures			X	?
Ditch/Pond Excavation			X	?
Roadway Excavation/Widening			X	?
Clearing and Grubbing Operations	X	?		
Removal of Structures and Obstructions	X	?		
Surfacing	X	?		
HMA or PCCP	X	?		
Advanced Geotechnical Work			X	?
Bridge Structures			X	?
Retaining Walls			X	?
Piling			X	?
Signal Systems			X	?
Illumination Systems			X	?
Signing		X		
ITS Systems			X	?
Railroad Crossings			X	?
Roadside Planting		X	?	
Fencing		X	?	
Striping	X			
Mailboxes		X		
Sidewalks	X	?		
Guideposts	X	?		
Monuments	X	?		
Irrigation Systems		X	?	
Curbing	X			
Temporary Erosion Control		X	?	
Sanitary Sewers			X	?
Water Mains			X	?
Concrete Barrier	X			
Pit Site Production	X	?		
X – Minimum level required				
? – Depending on what is found, may need to complete further study to identify conflict areas				

Project Work Type SUE Levels
Figure 600-3

If utilities are expected to significantly impact the project, the Project Engineer should consider utilizing a WSDOT-approved SUE provider. SUE services should be implemented in a two-step process, with QL-B performed early during preliminary design and QL-A performed after identification of potential conflicts.

(a) Recommended SUE Levels by Project Phase

1 Project Planning: Quality Level “D”

- Review the proposed highway project with the highway planners.
- Determine the type of work to be performed.
- Determine the risks of utility impacts for the work.
- Obtain existing records from utility owners. If utilities are expected to have a significant involvement on the project, the SUE provider can supply record information during the planning phase as part of the QL-B investigation (to avoid redundancy).
- Plot utility information on plan sheets using utility records (QL-D information) and visual indications (QL-C information).
- Review the potential impacts of the utility information for the proposed work.
- If there is a potential for critical impacts, provide contingency funding to address the risk.

2 Preliminary Design: Quality Level “C” or “B”

- Review established project limits with the project team.
- Review the type of work to be performed.
- Determine the risks of utility impacts for the work.

If utilities are expected to have minimal impact on the project, proceed with QL-C.

- Survey visible appurtenances (such as hydrants or valves) and match to utility records and topographic features.

If utilities are expected to have a significant impact on the project, proceed with QL-B.

- Apply applicable surface geophysical techniques to determine the existence and approximate horizontal position of underground utilities within the project limits (QL-B information) (**SUE provider**).
- Survey QL-B information to horizontal project survey control and transfer onto the preliminary plans (**SUE provider**).
- Correlate existing utility records with the QL-B information and resolve any discrepancies (**SUE provider**).
- Review the potential impact of the utility information with the proposed work (**designer**).

- At this point, decisions can be made on where to place storm drainage systems, footers, foundations, and other design features in order to avoid conflicts with existing utilities. Slight adjustments in the design can eliminate many utility relocations and enhance safety by moving excavation work away from utilities (*designer*).
- If critical risk is determined for work items (*designer*), then QL-A information should be obtained for those work items (*SUE provider*).

3 Final Design: Quality Level “A”

- Designer shall identify and list potential utility conflicts on the “Utility Conflict Matrix.” QL-A test holes are recommended if a utility conflict may exist within 5 feet—either vertically or horizontally—of a proposed feature (see [Figure 600-4](#)). A blank form is attached for project use.
- Project teams review the Utility Conflict Matrix to approve or reject recommended locations for test holes at certain critical points where the highway design and underground utilities appear to conflict or where additional utility information is desired (*designer*).
- Use nondestructive excavating equipment (such as vacuum excavation) at critical points along a subsurface utility’s path to determine the precise horizontal and vertical position of buried utilities (QL-A information). This involves physically uncovering the utility using a small hole measuring about 8 inches x 8 inches at the top, thus allowing the utility to be accurately surveyed (top to bottom), providing information on its type, size, material, and condition (*SUE provider*).
- Survey QL-A information shall be delivered to the project team and transferred into WSDOT’s CADD system or onto its final plans (*SUE provider*).
- Resolve discrepancies with any previous information shown on the plans (*SUE provider*).
- The project team will then know where the critical utilities are located in three dimensions and can make small adjustments in design elevations, horizontal locations, or structure types and avoid the need to relocate utilities or excavate near them (*designer*).

4 Construction

The Project Engineer should:

- Provide and review all information with bidders at the prebid meeting.
- Provide QL-A and QL-B information to utility owners for their use in relocating utilities.
- Provide QL-A and QL-B information to utility owners and/or one-call centers (811) for their use in marking facilities prior to excavation. SUE data are gathered for design purposes. Utility owners and/or one-call centers retain liability for markings for construction.

Utility Conflict Matrix				
Suggested Quality Level "A" Test Holes				
Project Name: EXAMPLE Date:				
Location	Station	Offset	Conflicting Highway Feature	Comments
TH-1	34+24	22' RT	T-duct @ prop bridge abut	
TH-2	34+28	42' RT	T-line btwn prop W & prop S	
TH-3	34+55	42' RT	FO (Qwest) btwn prop W & prop San	
TH-4	34+74	42' RT	FO (AT&T) btwn prop W & prop San	
TH-5	35+10	42' RT	FO (AT&T) btwn prop W & prop San	
TH-6	35+39	18' RT	T-duct @ prop bridge abut	
TH-7	35+40	42' RT	RR signal line btwn prop W & prop San	
TH-8	36+27	17' RT	@ prop abut (UGT)	
TH-9	36+30	20' RT	@ prop abut (UGT)	
TH-10	36+72	47' LT	gas @ prop water	
TH-11	37+98	41' RT	T-duct @ prop water	
TH-12	38+17	15' RT	T-duct @ prop bridge abut	
TH-13	38+37	48' LT	T-duct @ prop W/L	
TH-14	38+78	16' RT	T-duct @ prop abut	
TH-15	39+98	15' RT	T-duct @ btwn W/L & abut	
TH-16	40+52	55' LT	(FO) @ prop W/L	
TH-17	40+62	57' LT	(FO) @ prop W/L	
TH-18	41+35	74' LT	RR comm @ prop W/L	
TH-19	41+70	82' LT	T @ prop W/L	
TH-20	41+51	18' RT	UGT (FO) @ abut	
TH-21	41+55	20' RT	T-duct @ abut	
TH-22	41+73	32' RT	(FO) @ prop bridge abut	
TH-23	44+20	15' RT	T-duct @ prop bridge abut	
TH-24	44+62	40' LT	T-duct @ prop W/L	
TH-25	44+20	26' RT	(FO) @ abut	
TH-26	44+63	71' LT	(FO) @ ret wall	
TH-27	44+65	75' LT	(FO) @ ret wall	
TH-28	44+64	40' LT	T-duct @ prop W/L - - - -	If necessary; see TH24
TH-29	44+65	40' LT	T-duct @ prop W/L - - - -	If necessary; see TH24
TH-30	50+60	20' LT	T-duct with cut	

Sample Utility Conflict Matrix
Figure 600-4

(3) Project Criteria for SUE Application

Although Subsurface Utility Engineering is a useful tool for identifying underground utilities during project design, not all projects require the use of a SUE consultant.

A ground-disturbing project (such as excavating, trenching, boring, driving, or tunneling) that has the potential for conflicts with recorded or suspected underground utility installations would be a good candidate for which to consider hiring a SUE consultant, provided that one of the following applies:

- The project is located within an urban or suburban level of development adjacent to the highway.
- Knowledge of relatively accurate underground utility positions is critical to project design.
- Utility records and as-built information are not known to be 100% accurate and complete.
- Multiple utility owners within the project limits preclude a coordinated, timely, or complete underground investigation by individual utility owners.
- Project construction will extend beyond the current right of way line.
- The project can be designed to avoid underground utility conflicts if the exact utility positions are known.
- The project is a “City street as part of a state highway.”
- Project construction will likely result in utility congestion within an existing right of way and no additional property will be taken.

[RCW 47.24](#)

If your project meets any of the above criteria, contact your Region Utilities Office to obtain the services of a Subsurface Utility Engineering consultant. SUE consultants may also assist with undocumented storm sewer systems encountered on projects.

(4) Utility Relocation Coordination Responsibility

Utility relocation coordination is WSDOT's responsibility by virtue of the permit or franchise entered into with the utility. Because of existing state law, the department cannot make a contractor responsible for utility relocations by contract provision.

[RCW 4.24.360](#)

When utility relocation is necessary to accommodate a highway improvement or other highway work, there are two utility relocation management alternatives available to project managers.

(a) Utility Relocation Coordination: Department Responsibility

Under this alternative, WSDOT maintains legal utility relocation responsibility. Department project managers are responsible for facilitating and coordinating existing utility relocations between WSDOT's contractor and utility owners. This alternative places liability for project delay claims resulting from utilities on the department. WSDOT must then pass on any delay costs to the utility that caused the delay.

(b) Utility Relocation Coordination: Assignment to Contractor

This alternative involves the legal transfer of assignment of existing utility permit and franchise rights to WSDOT's contractor. Utility relocation liability and resultant delay claims then become the responsibility of the department's contractor. By the assignment of utility permit or franchise rights to WSDOT's contractor, the contractor has the legal authority to require a utility to relocate and to file delay claims directly against a utility.

Issues such as project size and complexity, existing utility density, the number of individual utilities that require coordination, and other issues should be taken into account when considering utility relocation responsibilities.

(5) SUE Agreement Task Order Process

This section provides direction on the financial ranges to be considered and how they are applied when selecting an on-call consultant for Task orders:

- Task Orders with a cost estimate in the \$0 - \$10,000 range, the Region can pick a consultant from the on-call list. The region then makes a request to the headquarters SUE Agreement Manager to set up a task order for the work.
- Task Orders with a cost estimate in the \$10,000 to \$20,000 range, the Region must solicit a minimum of three (3) consultants from the on-call list, do phone interviews, at a minimum, and the region can make a choice based on the interview process. The Region will notify the consultants of the choice and makes a request to the headquarters SUE Agreement Manager to set up a task order for the work.
- Task Orders with a cost estimate in excess of \$20,000 require a Second tier selection review process. The Region solicits all agreement holders from the on-call list to submit a Request for Additional Information (RFAI). After the proposal is submitted it undergoes an independent evaluation by 3 evaluators. The results of the evaluations are sent to the Project or Agreement Manager to review and the successful consultant best suited for the project is awarded the work. Region contacts the headquarters SUE Agreement Manager to set up a task order for the project.

During the life of the project, and the Master Agreement, amendments for cost increases (which do not exceed funds available for the Master Agreement) or time extensions can be executed by contacting the headquarters SUE Agreement Manager and requesting a Task Order Amendment.

At the end of the project the Task Order dollars needs to be reduced to actual cost by processing an amendment to the Task. In addition, the Project office fills out the consultant performance evaluation, EF 272-019 Performance Evaluation - Consultant Services, and sends it to consultant services and the headquarters SUE Agreement Manager.

600.11 Preliminary Engineering Agreements

Utilities that have a property right and require relocation should be identified as soon as possible in the design process. Preliminary Engineering Agreements can be started between WSDOT and the utility at any time. These agreements define the circumstances and payment for preliminary engineering of relocated utilities. (See [Chapter 2, Utility Agreements](#), for detailed guidance.)

600.12 General Plans Review (60%)

At this stage in the project development process, utility conflicts and relocation details should be well defined, understood, and agreed to by all parties. Detailed SUE investigations should be complete. Utility relocation engineering design should begin (if not already started) for all impacted utilities. Environmental permitting and documentation should be nearing the approval process with the appropriate lead agency.

Detailed utility coordination should now be undertaken. The Region Utilities Office should coordinate highway construction relocation preplanning, identify construction-dependent utility relocations, and negotiate appropriate coordination and installation measures between WSDOT and the utility.

Begin developing and negotiating utility agreements with utility owners that define relocation responsibilities, payments, costs, and other necessary issues.

(1) Utility Relocation Meeting

The Utility Relocation meeting should identify specific utility conflict relocation needs relating to the project. The goal of the meeting should be development of a Utility Relocation Plan, a related schedule, utility relocation responsibilities, and other deliverables and responsibilities between WSDOT and the utility owner.

The Utility Relocation meeting agenda should include some or all of the following items, depending on the needs and circumstances of the project:

- General discussion of WSDOT's utility relocation requirements.
- The addition of any necessary utility relocations to the WSDOT project contract.
- Joint trench and joint pole occupation and responsibilities, both in the utility's current locations and relocated positions.
- Environmental permitting responsibilities.
- A request for utility easement documents or other property rights documents.

General expectations and meeting responsibilities for specific attendees will vary between projects. The following are general meeting deliverables:

(a) Utility Owner

Each impacted utility owner should provide a general description of its utility impacts and provide alternatives for relocation. The utility owner should also provide a written scope of utility relocation work necessary for consideration by WSDOT prior to the department's submittal of the project environmental documentation and permit applications to permitting agencies.

Utility owners will determine whether the information provided in the General Plans Review is sufficient to begin a relocation design. Within a short period after the Utility Relocation meeting, the utility owner should notify the Project Engineer's Office if additional information is required. The Project Engineer's Office should provide a projected schedule indicating when additional information will be delivered to the utility once the utility owner makes the request.

(b) Region Utilities Office

The Region Utilities Office should invite utility owners to the Utility Relocation meeting. Within a reasonable period prior to the meeting, WSDOT should provide utility owners with a General Plans Review identifying existing utility facilities and how those facilities are affected by the highway project. The General Plans Review will include information necessary to enable utility owners to design and plan the layout for the removal and relocation of existing utility facilities as well as the placement of relocated or additional facilities within the project limits.

At the meeting, WSDOT may be able to identify timelines for project right of way negotiations and the completion of the project PS&E. Participants will discuss the impact of the proposed timelines on the relocation of utilities affected by the General Plans Review.

(2) Utility Relocation Planning

After the Utility Relocation meeting, WSDOT should work closely with utility owners to develop a Utility Relocation Plan and schedule. Discussion should include possible cost-effective project design changes that might decrease the amount of or eliminate the need for utility relocation and disruption to utility customers' services.

To ensure the relocation of a utility to a location that avoids proposed highway improvements, other coordination considerations may include:

- Relocation ahead of highway construction.
- Facilitation of joint trench and joint pole occupancy relocation coordination issues.
- Relocation dependent upon some highway improvement and coordination of utility relocation with the highway construction element.
- Coordination between WSDOT's contractor with the utility's contractor to ensure smooth relocation that does not impact the highway project's schedule.
- Relocation work as an element of the highway project, therefore becoming the responsibility of WSDOT's contractor and a project bid item.

Best Practice

Best Practice

In addition to coordination and scheduling issues, utility relocations must also meet WSDOT's accommodation policies. Some accommodation requirements that must be addressed include:

- Control Zone Guidelines compliance for surface and aerial utility installations.
- Scenic Classification.
- Subsurface utility installation depths with cross sections.
- Trench backfill.
- Future service connection issues.
- Bridge and structure connections.
- Future maintenance access within full access control rights of way.
- Abandoned utility documentation.
- As-built documentation for accommodation records.

Refer to [Chapter 1, Utility Accommodation](#), for detailed utility installation requirements and guidance.

(a) Utility Relocation vs. Design Changes

During Utility Relocation Planning, WSDOT and utility owners may mutually agree to design changes to accommodate or avoid utility relocations. The Project Engineer's Office should revise the General Plans Review accordingly.

Compensation from the utility for such redesign may be appropriate, depending on the compensable rights of the utility and the circumstances of the redesign.

If compensation from the utility is appropriate, the utility owner will compensate WSDOT for the preliminary engineering costs necessary to revise the design to accommodate the utility owner's desired relocation option.

(b) Preliminary Engineering Agreements

If not already done, the Region Utilities Office and the Project Engineer's Office should work with utilities to develop and execute Utility Preliminary Engineering Agreements with the utility owners.

(c) Service Agreements

Working with information provided by the Project Engineer's Office and at its request, the Region Utilities Office should submit requests for utility service connections to the utility owners.

(3) Utility Relocation Plan Development

The Project Engineer's Office and the utility owners should negotiate the schedule for completion of the Utility Relocation Plan; however, plan development should start as soon as possible. Depending on the circumstances of the project, Utility Relocation Plan development can start anytime in the design process. If possible, start the plan development before the Utility Relocation Planning meeting.

Each utility owner should develop a Utility Relocation Plan for the project based on its own information and information supplied by WSDOT. The plan must include the completed Utility Object Relocation Record (UORR) for surface and aerial utilities and applications for utility permits and/or utility franchises for utilities that have no easement or other property right.

Every Utility Relocation Plan should identify the highway project construction elements that must be completed before utility relocation can begin. The Utility Relocation Plan should also provide a construction window sufficient to allow time for utility relocation construction.

If revisions or changes occur to the project after the Utility Relocation Planning meeting that affect a Utility Relocation Plan, WSDOT should promptly notify any affected utility owners. The Region Utilities Office and the Project Engineer's Office should work with affected utilities to modify Utility Relocation Plans as necessary to adjust to the changes to the project.

The utility owner should track only the increase (if any) in utility relocation design costs attributable to WSDOT's changes to the project, which are provided to the utility owner at the completion of the Utility Relocation Planning endeavor.

WSDOT may reimburse the utility owner, if requested, for appropriate increases in utility relocation design costs directly attributable to design changes made after the Utility Relocation Planning endeavor. Revisions to the project that are caused by factors outside the control of the department, such as "forces of nature," entities outside WSDOT's control, or other causes beyond the department's control, should not be considered for reimbursement.

(4) Utility Relocation Plan Submittal and Approval

Once a utility has completed its Utility Relocation Plan, the Project Engineer's Office, Construction Office, and Region Utility Office will review and approve the plan.

Submittals should include UORRs and a completed Utility Accommodation Application (see [Appendix B](#)) if the utility has no easement or other property right.

Check the Utility Relocation Plan to ensure it is compatible with WSDOT's Utilities Accommodation Policy, meets previously-agreed-to terms, and is at locations previously agreed to by the utility and the department. Constructibility issues should be discussed and incorporated into the project schedule.

Other WSDOT engineering disciplines may also need to be involved in the Utility Relocation Plan review, including the following:

- Traffic
- Maintenance
- Right of Way (for impacts to monumentation and surveying reference points)
- Region engineering managers
- Hydraulics
- Environmental
- Bridge and Structures
- Materials Lab
- Geotechnical

The Region Utilities Office will coordinate the review of the Utility Relocation Plan, request that the utility owner provide additional information, and revise the plan as necessary to obtain WSDOT approval. The Region Utilities Office should notify the utility of plan approval. Following confirmation that the utility owner has obtained all permits and environmental approvals, utility permits or franchises will be issued to the utility owner and relocation work may begin.

Insert Utility Relocation Plan requirements, specifications, Special Provisions, and plans into WSDOT's construction contract as necessary if utility relocation is to be included in the department's construction contract.

(5) Utility Agreement Preparation and Execution

The Region Utilities Office, in conjunction with the Project Engineer's Office and any necessary specialty groups, should prepare and execute Utility Relocation Construction Agreements with the utility owners once utilities have completed their Utility Relocation Plans and those plans have been reviewed and approved by WSDOT.

600.13 Preliminary Contract Review (90%)

At or near the 90% plan completion stage of project design, all necessary utility relocation issues should be identified, and relocation details such as Relocation Plan Approval, environmental permitting and documentation approvals, and other details should be nearing completion. A final Construction Planning meeting should be held with utilities to confirm utility relocation circumstances and schedules. Preconstruction highway contract relocations should be starting or nearing start-up.

(1) Construction Planning Milestone

The Project Engineer's Office and the Region Utilities Office should review the construction schedule in relation to expected utility relocation work by the utility owner or its contractor to ensure any relocation work will not negatively affect highway project delivery. The Project Engineer's Office should provide utility owners with the project construction schedule and current project information for utility relocation construction.

(2) Letter of Understanding

The Region Utilities Office should prepare a Letter of Understanding (LOU) describing the scope and schedule for the minor adjustment of existing utilities (such as valve boxes or manhole covers) and transmit the letter to the utility owner. The utility owner should sign and return the letter agreeing to the construction schedule. Refer to [Chapter 2, Utility Agreements](#), for detailed information on Letters of Understanding.

(3) Utility Agreement Execution

Utility agreements should already be executed or at least nearing execution. Delay of execution of any utility agreements may delay the processing of utility payments and should therefore be a priority. All efforts should be made to conclude and execute utility agreements prior to Award in order to get the payment information into the Contract Administration and Payment System (CAPS).

(4) Utility Relocation

Utilities with approved Utility Relocation Plans may be relocating utility facilities to approved locations, while other utility relocations may be pending. Give unresolved relocation issues immediate attention at this point in the project. Schedule additional meetings with utility owners and use any available resources to resolve latent issues to avoid last-minute delays to project delivery.

(5) Project Ad and Award Risk Level Assessment

Evaluate and classify each project regarding utility relocations and the level of risk of those relocations to the successful delivery of the project. Risk levels are divided into the following three classifications:

Risk Level 1: Utility relocations are complete.

Risk Level 2: Utility relocations are ongoing but will be completed by the bid opening.

Risk Level 3: Utility work will be concurrent with construction or is dependent upon a construction element in order to occur.

Ideally, every project would go to Ad at Risk Level 1. For those at Risk Level 2 or 3, exception reporting needs to be presented.

600.14 Preadvertisement

Any relocation issues should be resolved at this stage of project development. Existing utilities that can be relocated ahead of construction should already be moved or in the process of relocation.

All utility agreements and Letters of Understanding relating to utility relocation-dependent highway improvements should be executed and entered into WSDOT's accounting system.

Once WSDOT's project is on Ad, a Prebid Opening meeting may be held (if necessary) with prospective bidders to discuss Utility Relocation Plans and scheduled utility relocation windows.

600.15 Design/Construction Utility Relocation Facilitation

Regions where design and construction responsibilities are not shared by the same Project Engineer's Office may benefit from relocation facilitation assistance from the Region Utilities Office. In these situations, detailed project information, relationships, and knowledge can often be lost when a project is transferred from the Project Development Office to the Construction Office. This is especially critical with projects in urban areas where there may be significant utility relocation issues or where there is significant subsurface utility congestion that has potential for impacting a project. Traditionally, early and continuing coordination between the Design Office and the Construction Office goes a long way toward making a smooth transition of information and relocation of utilities.

600.16 Project Award and Construction

Following the Award of the highway contract, WSDOT's contractor must provide the department with a project schedule. Among other scheduling responsibilities, by specification in the project Special Provisions, WSDOT's contractor is required to:

- Provide the Project Engineer's Office and the affected utility owner with a notice specifying the number of working days before project work is expected to be completed, so the utility owner may begin its relocation work.
- Issue a notice through the Project Engineer's Office to proceed with utility construction work, giving a specified number of working days before the utility work is to commence.
- Notify the Project Engineer's Office and the affected utility owner at least 24 hours prior to the utility relocation construction start date identified in the Notice to Proceed if circumstances arise that prevent the WSDOT contractor from completing the work by the date specified in the Notice to Proceed.

The Project Engineer's Office is responsible for ensuring the inclusion of utility relocation construction windows within the WSDOT project contractor's construction schedule.

(1) Preconstruction Meeting

Prior to commencement of construction operations, the Project Engineer's Office holds a Preconstruction meeting. The Project Engineer's Office should request utility owners and SUE consultants' attendance at the meeting. Utility owners should be encouraged to attend the meeting and any other project meetings where issues affecting utility owners might be discussed.

For those elements of the Utility Relocation Plan dependent upon WSDOT's contractor's work, the Project Engineer's Office, department contractor, and utility owner will develop a utility relocation schedule, consistent with the Letter of Understanding and contract provisions, that includes the utility relocation work windows, notices to proceed, and work notification requirements.

After the Preconstruction meeting, the Project Engineer's Office should send copies of meeting minutes to utility owners.

The utility owner should promptly proceed with the utility relocation work as described in the Utility Relocation Plan.

In the event of unforeseen conditions requiring changes to either the project scope of work or the schedule of work, the Project Engineer's Office and the utility owners should make every effort to coordinate said changes in a manner that minimizes impacts to the project's contractor.

Excusable delays encountered by WSDOT or the utility owner related to utility relocation work to be performed by the utility owner or its agent should be documented in writing by the party encountering the delay. Documentation should then be sent to either the Project Engineer's Office or the utility owner, as appropriate, within five days of the start of the delay.

600.17 Developer Projects and Utility Relocation

In the past, differences in law and policy have created misunderstandings and delays in coordinating utility relocations when a developer is required to improve the roadway facility as mitigation for the developer project. WSDOT, representative utilities, and developers have created a guideline to handle these relocations and the responsibility for the expenses incurred. For further information, refer to WSDOT's *Development Services Manual*.