3. Accommodation and Utility Permits

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The procedures in this chapter outline how the Department meets state and federal requirements pertaining to permitting the installation and maintenance of utility owned facilities on DOT&PF managed lands (federal aid highway, non-federal aid highway, airport and others).

3.1. History

The FHWA requirements for accommodating utilities in public rights-of way are found in 23 CFR 645, Subpart B. Utilities within the rights-of-way of a federal-aid project must be controlled to preserve operational safety, function and the aesthetic quality of the highway facility. Written arrangements are required under 23 CFR 645.213 and set forth the terms of use. They must include or incorporate by reference:

- a. The highway agency standards for accommodating utilities
- b. A general description of the size, type, nature, and extent of the utility facility being located within the highway right-of-way
- c. Adequate drawings showing the existing and proposed location of utility facilities within the right-of-way with respect to the existing and/or proposed highway improvements, the traveled way, the right-of-way lines, and where applicable, the control of access lines and approved access points
- d. The extent of liability and responsibilities associated with future adjustment of the utilities to accommodate highway improvements
- e. The action to be taken in case of noncompliance

To meet the federal requirements the State of Alaska enacted legislation and regulations that cover the accommodation and issuance of written permission, in the form of a "Utility Permit" for utilities that wish to cross or otherwise occupy DOT&PF managed lands.

The regulations pertaining to permits and permit fees are found in 17 AAC 15.

3.2. Utility Accommodation and Permitting Policy

The Department accommodates and permits utility facilities in Department rights-of-way, airports and other managed lands to ensure:

- The safety of the travelling public and other users
- The integrity of the Department's facility
- The Department's normal operation and maintenance activities are not compromised The utility facility will not impact the Department's immediate or long term construction program

- The accurate and current recording of utility ownership and location
- The needs of the utilities are met

Utilities installed in highway rights-of-way must be located as near as practicable to the right-of-way line.

The Department may impose additional restrictions or requirements on the utility installation if deemed appropriate, advisable, or necessary.

Agreements between a utility and a third party, regarding the use of state right-of-way to which the Department is not signatory, are not binding on the Department.

3.3. Utility Permits

Utility permits establish the terms under which the utility may install, operate, and maintain its facilities; provisions for indemnification of the state and the Department; and the administration of the permit.

Utility permits define utility ownership, type, size, location, construction methods, maintenance frequency, duration, and other information considered necessary by the Department.

Utility permits have no expiration date and should be reviewed thoroughly for impacts to the Department's planned and potential projects as they establish eligibility for future utility relocation.

The utility permit distinguishes when relocation rights commence and to what extent, per AS 02.15.104, 19.25.020 or 35.10.22 and 17 AAC 15 as follows:

- Rights on Execution of the utility permit
- No relocation rights for five years from date of issuance of the utility permit
- Or other mutual agreements between the utility and the Department concerning future relocation rights

3.3.1. Types of Utility Permits

The Department uses two types of utility permits to authorize utility installations: major utility permit and minor utility permit.

Major Utility Permit

A major utility permit is required for new utility installations or the reconstruction or modification of existing facilities meeting the following criteria:.

- Any underground utility within the roadway prism (below the finished roadway surface and underlying structural layers out to and including any paved shoulders, curbs, and attached pathways)
- Aerial or underground distribution and transmission lines
- Underground duct systems, utilidors and utility tunnels, including crossings and extensions
- Structures or appurtenances including manholes, utility poles, pedestals, switch cabinets, transformers and other features of a similar nature
- A crossing or installation, including service connections, requiring boring, trenching or opening a roadway surface
- Aerial service lines over 200 linear feet or requiring installation of poles

Minor Utility Permit

Minor utility permits are required for the following utility installations:

- Aerial service lines that do not require the installation of poles in the right-of-way and are less than 200 linear feet in length.
- Underground service lines that are located outside the roadway prism and do not require installation of a pedestal, manhole, or structure and are less than 200 linear feet in length.

3.3.2. Permit Amendments

The Department may amend an existing permit at its discretion for the following:

- Extension of time
- Material change
- Location change or modification
- Additional cable/conductor installed in a duct system or utilidor where the linear footage fee was previously collected

3.4. Utility Permit Fees

The applicant shall pay a non-refundable fee in a form acceptable to the Department for a utility permit, based on fees established under 17 AAC 15.041.

No permit fees are required for the following work:

- Facilities relocated at Department expense.
- FAA navigation aids and related control facilities that enhance state owned airports.
- Utility distribution facilities installed to serve a Department facility under a Line Extension Agreement.
- Reciprocal agreements exist with various government agencies agreeing to waive collection fees. For example, the Department has signed a memorandum of understanding with the U.S. Forest Service waving collection of permit fees.

Utility permits or amendments can be issued as a nocost, minor or major permit, at the discretion of the regional utility engineer.

3.4.1. Major Permit

The non-refundable fee for a major permit is \$600. If the proposed facility is greater than 200 feet in length a non-refundable footage fee of \$1 per linear foot for footage in excess of 200 feet is added to the permit fee. Total linear footage fees shall not exceed \$10,000.

3.4.2. Minor Permit

The fee for a minor permit is \$100.

3.5. Field Review/Inspection Charges

The Department may require a permittee to reimburse the Department for actual costs of field reviews that are considered necessary for issuance of the permit or inspections during construction.

Such reviews will only be undertaken by prior mutual, written agreement. The special provisions should indicate need for inspections and an estimated cost.

Typically a Utility Reimbursable Services Agreement (URSA) is established through Project Control allowing the Department to charge inspection costs and bill those costs to the utility.

3.6. Bonds/Sureties

Bonds or sureties may be required, at the discretion of the Department, to recover the cost of repairs to the highway or other state property caused by faulty, unsafe, negligent, or other impacts caused by the utility installation. The sureties must indemnify the Department as to contractual liability and must provide the Department with a means of recovering costs in the event the utility does not meet the obligations established in the utility permit.

Sureties are not required for utility accommodation involving other state or federal agencies.

The following are the minimum requirements for all sureties submitted to the Department:

- Must be an original surety document
- Assignments of escrow account must be from a legally licensed banking institution
- Bonds must be issued from a bonding agent licensed within the State of Alaska

3.6.1. Surety Classes

There are two types of surety classes used in conjunction with utility installations.

Individual Surety

An individual surety is a one-time surety attached to a single utility installation project. The surety is released upon satisfactory completion of the project as determined by the Department.

Individual surety bonds and escrow accounts shall be a minimum of \$5,000. Surety amounts may be higher if deemed necessary or prudent to recover foreseeable expenses.

The surety holder or surety agent must request a surety release in writing through the regional utilities engineer. Upon satisfactory review, a letter authorizing the release of the surety will be sent to the bonding agent or banking institution where the surety is held.

Blanket Surety

A blanket surety is acceptable for multiple utility installations by a single utility owner and may be valid throughout the State of Alaska, as long as the surety remains in effect. Depending on the circumstances of the specific utility project a blanket surety may be supplemented by an individual surety if the Department deems it necessary. Blanket surety shall be a minimum of \$10,000. However an individual surety may be used to supplement a blanket surety on a case by case basis for individual projects.

The regional utility engineer should use discretion when considering requiring increased or additional amounts beyond the minimum. Reasons or conditions for requiring increased surety amounts include but are not limited to the following:

- Open cuts on paved highways
- Crossings of major roadways not involving open cut
- Larger projects along several miles of roadway
- Bridge attachments
- Demonstrated poor performance issues

Requests for release of a blanket surety must be made in writing to the regional utility engineer. All projects covered under the surety must be reviewed for satisfactory completion to ensure that the surety duration has been satisfied.

Surety Durations

Sureties will remain in effect for authorized utility work until all work has been completed and all construction issues have been resolved to the Departments satisfaction.

3.7. Permitting Process and Procedure

In general, all utility permit applications go through a four step process from the time the application is received to the completion of the utility installation. This process can be very short, as in the case of a single service connection, or as long as several years depending on the nature and complexity of the proposed utility installation. The four steps are:

- 1. Application and review
- 2. Application approval
- 3. Construction authorization and utility installation
- 4. Inspection, certification, and surety release

Figure 3-1 is a general outline of the utility permit process, however regional practices may vary.

3.8. Application and Review

Applications for utility permits are submitted using the Application for Utility Permit on State Rights-of-Way Form 25D-261. Instructions for preparation of the form including sample applications, plan sheets, and permits are available to prospective applicants at regional permit offices.

A separate utility permit application is required for each route (by CDS route number) for highway ROW and for each type of facility being requested. For example, water and sewer require separate utility permits.

A completed utility permit application consists of:

- Application for Utility Permit, Form 25D-261
- Pipe Carrier Facility Description Form 25D-261A or
- Electrical and Communications Facilities Form 25D-261B and/or
- Structures Facility Description, Form 25D-261C
- Plan Sheets
- Letters of Non-objection (if required)
- Other regional forms (if required)

One copy of the utility permit application is required.

Other permits or authorizations may be required. It is the responsibility of the utility to obtain all permits and authorizations prior to work.

3.8.1. Application Screening

Applications are reviewed to ensure they are complete and signed by the applicant.

Determine that the proposed facility meets the Department's utility accommodation standards contained in 17 AAC.

Utility Permit Process



Figure 3-1: Utility Permit Flow Chart

3.8.2. Assigning Permit Application Number

The permit number is constructed as follows:

- The first number in the application number is the region number:
 - 1=(Central) 2=(Northern) 3=(Southeast)
- The second part of the permit number is the route number.
 - For highways, the route number is determined from the Coordinated Data System (CDS) log.
 - For airports, harbors, and buildings, the assigned maintenance number is used.
 - For section-line easements, the second part of the number will contain references to the township, range, and section.
- The third part of the number is the year in which the permit is issued which is indicated by the last two digits of the year.
- The fourth part of the permit number is a sequentially assigned three-digit number.

An example of a completed highway permit number is 2-190000-12-006. Example of Section Line Permit Number for Township 12, Range 4, Section 1, is 1-120401-006.

3.8.3. Research and Detailed Application Review

Review the application and plans to determine that they accurately represent:

- Property or management interest.
- The proposed location and alignment of the facility as related to highway centerline, right-of-way, and pertinent structures
- The location of existing utilities and other existing structures. (Existing non-functional facilities, abandoned or to be abandoned, shall be clearly delineated on the plans.)

Ensure that applications for an overhead or underground crossing of a roadway and/or that propose surface mounted structures include a cross section at each crossing or structure location.

Ensure that applications for an attachment to a bridge, structure, or an installation within a controlled access highway right-of-way have attached additional justification of the need for the proposed location.

Research the Statewide Transportation Improvement Program (STIP) and regional Project Status Reports to determine if the proposed utility installation will be located within a current or future Department project. Consider the impact of the utility installation and make location design recommendations to minimize the impact to both current and future projects.

Determine if the applicant is an Alaskan Native Village recognized under law as a sovereign nation. Permits issued to a sovereign entity must include an express waiver of sovereign immunity signed by both the Native village and federally chartered Indian Reorganization Act corporation, as appropriate.

3.8.4. Application Review by Functional Groups and Other Agencies

When the application is deemed complete it is ready for review by other DOT&PF functional groups. Depending on the complexity of the application the review may be quick and routine or may require significant effort.

The permit officer determines if other DOT&PF functional groups should be consulted based on the type and location of the proposed utility. DOT&PF functional groups may include, but are not limited to:

- Airport Leasing
- Airport Managers
- Bridge
- Construction Project Manager
- Construction Project Engineer
- Design Manager
- Environmental
- Hydraulics
- Maintenance
- Materials
- Planning

- Traffic & Safety
- ROW

The review process may also involve other agencies that may include:

- Federal Highway Administration
- Federal Aviation Administration
- U. S. Army Corps of Engineers
- State of Alaska Department of Environmental Conservation (DEC)
- State of Alaska Department of Natural Resources (DNR)
- Municipal Governments/Boroughs
- Tribal Governments
- Other utility companies

3.8.5. Consolidation of Review Comments

Review the comments from the Department's functional groups and other reviewers and incorporate them into the permit as appropriate. Incorporate special provisions necessary for the permit.

3.8.6. Communication with Applicant

Notify the applicant of any discrepancies, inconsistencies, errors, or other issues discovered during the review process, return to the applicant for correction and re-submittal. Once all issues have been addressed the permit can be processed for signature.

Applications that propose installations not in accordance with the Department's Utility Accommodation Policy will be returned to the applicant with a formal denial letter.

3.9. Application Approval

The permit is approved by the regional utility engineer once all comments are resolved, the permit type is determined and fees are calculated.

Process the fees in accordance with regional procedures.

Two copies of the utility permit are transmitted to the applicant for original signatures once all issues are resolved. The applicant signs and has the signature notarized and returns them to the Department for signature. Provide a complete copy to the applicant.

3.10. Construction Authorization

An executed permit authorizes the utility to construct and maintain the facility in accordance with the permit terms.

3.10.1. Preconstruction Meeting

Depending on the complexity of the utility installation a preconstruction meeting may be required or desirable. Issues that should be discussed include but are not limited to:

- Traffic control
- Project scheduling
- Coordination with other contractors or utilities
- Erosion and sediment control
- Inspection requirements

3.10.2. Construction Inspection

Depending on the complexity of the project, the Department may require varying levels of inspection of the utility construction and installation operations. The method, frequency and reimbursement for the inspection are established through the utility permit. The inspections may be performed by the following staff:

- Department Utility inspectors
- Department Construction inspectors
- Utility inspectors
- Consultant inspectors
- Department Maintenance personnel

The Department may require documentation of backfill compaction, approval of asphalt or concrete mix designs and sampling and testing of construction materials to verify compliance with permit requirements.

A copy of the utility permit, lane closure permit (LCP), and SWPPP (if required), must be on-site during construction and installation operations. These documents must be available to any Departmental representative or law enforcement officer upon request.

3.11. Inspection, Certification, and Surety Release

3.11.1. Final Inspection

A final inspection of the utility installation may be conducted to ensure compliance with the provisions of the permit. As a minimum the following should be verified:

- Drainage and drainage structures are restored to original condition
- Pavement restoration is acceptable to the Department
- Utility facilities have been installed in accordance with the permit
- Other existing structures and signs are restored to original condition
- All portions of the alignment have been permanently stabilized with seeding or other appropriate measures

3.11.2. As-Built Plans

As-built plans shall show the actual location of the utility after adjustments made during construction.

As-built plans shall be submitted by the utility owner within the specified days after work is complete, unless the owner has agreed in writing that they will provide no cost utility locates to DOT&PF at the Department's request. As-built plans will be stamped by a registered land surveyor licensed in the State of Alaska.

As-built plans may be submitted on new plan sheets or on the existing plan sheets with changes marked in red. The plans will show the location of the facility in both the vertical and horizontal planes. Locations shall be referenced to a centerline survey, section corners, block or lot corners, or other points as directed by the Department.

3.11.3. Surety Release

Final acceptance of the project establishes the cutoff date for the duration of the surety specified in the utility permit. The utility owner will request release of the surety in writing after the duration of the surety is done.

3.12. Permit Expiration, Suspension, and Revocation

A utility permit expires if construction has not begun within one year from the date of issuance. The utility may apply for an extension. Fees will be assessed at the discretion of the regional utility engineer.

The Department may issue a stop work order or suspend a utility permit if:

- Work is being performed without an approved permit
- The facilities are not being constructed in accordance with the provisions of the permit
- The facilities do not conform to applicable standards
- The utility fails to maintain the facility after written notice by the Department
- Inadequate traffic control or to failure to secure an approved Lane Closure Permit.

A permit may be revoked for non-compliance with the permit provisions after written notice to correct those conditions has been ignored. In such case, the installation becomes an unauthorized encroachment (17 AAC 15.091).

3.13. Assignment or Transfer of Ownership

One of the key objectives of the utility accommodation process is to maintain accurate records of the ownership of each utility located in the highway rights-of-way, airports, or other Department managed facilities.

A transfer of ownership is required whenever an existing utility transfers ownership or changes its name. The new utility is required to inform the Department in writing within 30 days after the date of transaction and shall furnish the Department with names and addresses of the new officials responsible for the utilities facilities (17AAC 15.071).

The utility permits are by nature perpetual documents. There should be little administrative impact to utility permits due to an ownership transfer. Surety issues and database name changes shall be addressed.

3.14. Abandoned, Deactivated, or Discontinued Utilities

The utility owner shall completely remove at its expense any utility facility no longer required, unless determined by the regional utility engineer that removal is not feasible and the facility does not constitute a future liability to the Department.

When removal of the utility is not feasible, document the location, status and ownership of the abandoned, deactivated, or discontinued utility. Abandoned facilities such as pipes or casings may aide future utility installations. Consider the condition of the facility and code compliance. Abandoned pipe may have to be filled with sand slurry or grout to avoid subsidence or settlement affecting a Department facility. Utility pipelines that transported hazardous/flammable materials must be removed at the owner's expense and may not be abandoned.

3.15. Unauthorized Encroachments and Undocumented Utilities

Abandoned, deactivated, or disconnected utilities are often discovered during Department projects. Efforts should be made to determine ownership of the facilities and they should be removed at the owner's expense (17 AAC 15.111).

Utility facilities located on Department rights-of-way, airports or other managed lands without a valid utility permit are considered an unauthorized encroachment, unless one of the following criteria is met:

- Facility was installed prior to July 1, 1960
- Installed before the road became a part of the state's highway system
- Existed within a section line easement prior to the Department's need
- The owner can provide proof of a valid prior existing right

When an undocumented utility is discovered determine ownership. The Department will, at its discretion, permit the facility if it meets the accommodation policy. Utility staff should follow 17 AAC 15.111.

3.16. Maintenance and Repairs

When maintenance activities or repairs are scheduled that require excavation and/or closure of the roadway or a portion of the roadway or pathway, the utility shall notify the Department. The utility will obtain a Lane Closure Permit from the Department's ROW Section if required. No work shall commence until the Department approves the LCP.

3.16.1. Routine Maintenance

Routine maintenance of a utility facility is authorized through the utility permit, where minimal risk and no delay to vehicular or pedestrian traffic is involved. An annual lane closure permit may be issued at the Department's discretion (See CE Directive dated March 7, 2002)

3.16.2. Emergency Repairs

Emergency repairs may be performed by a utility owner as required, when an outage or break has occurred which jeopardizes the safety of the public. The utility must notify and coordinate the immediate response with the appropriate emergency services. The owner must contact the Department and provide notice of the situation.

The owner is responsible for providing traffic control. All repairs to Department facilities, whether temporary or permanent, will be done to the Department's satisfaction.

3.17. General Design Requirements

Utility facilities should be located so that the need to adjust for future Department facility improvements is minimized and utility servicing or maintenance causes minimum interference with traffic or facility users.

The utility is responsible for proposing the location and design of the new facilities, with appropriate detail provided to allow the Department to fully evaluate the design. Installations will conform to design standards that are acceptable to the Department.

Installation of utility facilities should avoid locations where installation and maintenance is difficult or where there is potential for impacts to the utility or Department facilities, such as the following;

- Side slopes on deep cuts or large fills
- Proximity to bridge abutments or retaining wall footings
- Crossings of at grade intersections or ramp terminals
- Stream crossings where water flow, drift, or stream bed load may be obstructed

- Within pump drained underpass basins
- Where minimum burial depth is difficult to obtain

If facilities are installed at these types of locations, ensure that appropriate measures are included to minimize hazards to the utility and Department facilities. In all cases, full consideration will be given to sound engineering principles and economic factors.

Utility facilities such as electrical vaults, switch cabinets, junction boxes, transformers, telecommunication vaults, handholes, pedestals, or other facilities which do not provide a direct service to the Department, should not be located in the proximity of intersections, approaches or where future expansion is likely to occur.

Longitudinal facilities should maintain a uniform alignment and shall be located as close to the edge of the right-of-way as practicable.

Where utility corridors are provided, both surface and underground facilities should occupy the same corridor if, in doing so, it is consistent with safety standards, aesthetics, and space provided.

Longitudinal installation of facilities will not be permitted in the median areas of highways, except where the utility demonstrates all alternatives are impracticable. If allowed, the Department may require suitable protective devices be installed to protect the highway user.

No utility facility will be allowed to be installed through a Department drainage culvert. Utility facilities will not be allowed to be installed parallel and directly above or against any Department culvert, unless approved by the regional utility engineer. Provide sufficient separation to allow the Department access for maintenance excavation of the buried culvert.

Where the utility has a compensable interest in the land occupied by its facilities, and such land is to be jointly owned and used for Department and utility purposes, the Department and the utility shall agree in writing as to the obligations and responsibilities of each party.

All variances to applicable statutes, codes, regulations, and policies require advance approval by the Department.

3.17.1. Airports

For utility installation on airports, the Federal Aviation Administration (FAA) is the authority that determines what constitutes a hazard. Surface mounted utility facilities shall be located outside the Object Free Zone of the airport runways and taxiways and may be beneath, but not penetrating, the minimum glideslope. The FAA design circular for the type of airport and design aircraft will determine required clear areas.

3.17.2. Bridges and Structures

Any utility proposal that requires attachment of a facility to a bridge structure, approach slab, or appurtenance must have the approval of the chief bridge engineer. Acceptable installations are generally those which are beneath the bridge deck and above the low chord of girders or stringers.

3.17.3. Clearing

The Department shall evaluate utility proposals that require clearing in the right-of-way and prescribe the manner and limits of the operation. Indiscriminate cutting or disfiguring trees is not permitted. When tree and brush cutting is permitted, they shall be cut less than 4 inches to the ground surface.

The utility is not allowed to leave felled trees and cut brush within the ROW. The debris shall either be removed or chipped and spread, at the discretion of the Department (17 AAC 15.271).

Trees left for the public shall be limbed and stacked in a location where loading does not interfere with the safe operation of the travelled way.

3.18. Controlled Access Right-of-Way (Access Control)

Utility facilities may not be installed within the controlled access right-of-way unless the utility demonstrates to the Department's satisfaction that:

- A feasible alternative does not exist
- The proposed facility will not adversely affect the design, construction, maintenance, safety, or operation of the highway

Access for facility maintenance within the controlled access limits of the highway, or from the entrance or exit ramp is prohibited, unless alternative access locations are unavailable.

3.19. Environmental Considerations

3.19.1. Hazardous Waste

If contamination is found during work under a utility permit, the utility shall immediately stop work and notify the Department's regional utility engineer.

The utility will not be responsible for the cost involved with investigation, cleanup, or disposal of contaminated soils discovered unless:

- The utility fails to notify the Department of contamination, or;
- The contamination is attributed to the utility's facility, the actions of the utility, its agents, or contractors.

3.19.2. Erosion Sediment Control

The utility is required to comply with the provisions of the Alaska Construction General Permit (ACGP), which authorizes stormwater discharges from construction activities that result in:

- A total land disturbance equal to or greater than one acre, or
- Discharges entering waters of the United States, either directly or through Municipal Separate Storm Sewer System (MS4)

For utility permit projects that require ACGP coverage, a Stormwater Pollution Prevention Plan (SWPPP) is required. The SWPPP is a site-specific stormwater management plan that demonstrates how the utility intends to comply with the requirements of the ACGP.

The utility is responsible for submitting the SWPPP, and any other required documentation, to the Department of Environmental Conservation (DEC) and/or an MS4 operator for review prior to filing the Notice of Intent (NOI) and beginning construction activities.

Both the utility and the utility contractor are "operators" as defined by the ACGP, and are therefore "co-permittees" in developing and implementing the SWPPP.

The Department, in accommodating utilities within state rights-of-way and lands, is not an "operator."

3.19.3. Archeological

If cultural, historic, or archeological resources are encountered during work under a utility permit, the utility shall immediately stop work and notify the State Historic Preservation Office and the Department's regional utility engineer.

3.20. Federal Agency Indemnification

The Alaska Administrative Code requires the permittee to indemnify and hold the state harmless from all liability for damage to property, injury, and death of persons arising wholly or in part from any action taken by the permittee in relation to their facilities located on the Department's right-of-way or other permitted locations.

Federal Agencies are prohibited from signing the Department's standard permit indemnification language by the Anti-Deficiency Act, (31 U.S.C. 1341). This act precludes agencies from obligating future funds that they do not have. The existing indemnification language in the utility permit will be changed to the following language or other language that is agreeable to both the Department and the federal agency, often through a Memorandum of Agreement:

"Any liability of the PERMITTEE for property damage, personal injury, or death shall be governed by the Federal Tort Claims Act (FTCA), 28 U.S.C. 2671 et seq. Pursuant to the provisions of the FTCA, the PERMITTEE assumes responsibility for any negligent acts, PERMITTEE shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. 1341 (17 AAC 15.061)"

3.21. Joint Use

The Department encourages joint use and may require bundling when two or more utilities propose to use the same location. Utilities that jointly use facilities must enter into a formal agreement concerning the joint use facility. A copy of the agreement must be furnished to the Department upon request.

A separate utility permit is required for each utility using the joint facility.

The Department may require joint use where right-ofway widths are a minimum, and highway improvements reduce available corridor space for utility facilities, or where separate facilities would require additional removal of natural growth in scenic areas. The Department may reject any proposal for a new facility installation that is inconsistent with policies to minimize clutter along the highways (17 AAC 15.081).

3.22. Scenic Classification Policy

It is a state and national policy that special effort should be made to preserve the aesthetic qualities and scenic nature of the countryside, public parks and recreation lands, wildlife and waterfowl refuges, and historic sites (23 CFR 645.205, 645.211, 17 AAC 15.191).

Overhead utility installations shall not be permitted in scenic areas, unless the utility can show that there are no feasible and prudent alternatives. A list of the roadways classified as Scenic Byways can be found on the DOT&PF website.

A proposed utility installation within the right-of-way of a highway that passes through public park lands, as described under 23 USC 138, shall include comments from the agencies having jurisdiction over the land through which the highway passes.

3.23. Section Line Right-of-Way

Utility permits are required only for section-line rights-of-way either used or proposed to be used by DOT&PF. The DOT&PF Statewide Transportation Improvement Program (STIP) and other long range planning documents should be researched to determine if there are proposed uses of the sectionline right-of-way.

Before a utility permit is issued, the Department must be satisfied that a section line right-of-way exists at the location of the proposed utility installation. The applicant shall provide proof of the existence of the right-of-way.

The applicant shall provide a copy of the approved permit for utility installation within a Department controlled section-line right of way to DNR.

The Department will notify DNR if a utility permit application within a section-line is denied (17 AAC 15.031[e])

3.24. Storm Drainage and Irrigation

Any proposal to connect to a Department drainage system must be approved by the Department, through the regional ROW and Maintenance and Operations Sections, prior to issuing an encroachment or specialuse permit for the facility. A longitudinal irrigation or drainage canal or ditch is not permitted within a DOT&PF right-of-way unless the applicant can demonstrate to the Department's satisfaction that an alternate location is not feasible and that construction will not adversely affect the design, construction, maintenance, safety, and operation of the highway or other Department structures.

Flume, pipe, or siphon crossings must be installed in accordance with the Department's minimum burial depths.

Storm drain facilities that do not collect or discharge water, but simply express through the Department's right-of-way, under AS 19.59.001, meets the definition of a utility and may be issued a utility permit. Provisions should be included that no future collection or discharge be allowed within Department right-of-way.

3.25. Surface Mounted Utilities

Surface mounted facilities will be allowed within the guidelines of the Department's "Clear Roadside Concept" as specified in the *Alaska Highway Preconstruction Manual* (HPCM).

The clear roadside concept provides for the improvement of safety and traffic operations on highways by designing, constructing, and maintaining highway roadsides as free as practicable from physical obstructions such as trees, drainage structures, massive sign supports, highway lighting standards, utility poles, and other ground-mounted obstructions.

This policy is also directed toward the removal of roadside obstacles which are likely to be associated with accident or injury to the highway user.

Where such obstacles are essential, consult the Traffic and Safety Section for guidance.

The minimum horizontal offset from the edge of the traveled way to a surface mounted facility must comply with clear zone requirements found in the HPCM. To the extent practicable, pedestals and other ground-mounted appurtenances must be placed near the right-of-way line and outside of the highway maintenance operating area.

Controlling factors for locating poles, guys, and related appurtenances at or near the right-of-way line are governed by terrain considerations, facility design requirements, roadside developments, and the utility's ability to obtain easements for anchors and guys beyond the right-of-way line.

Minimum clearances of overhead communication and electric power lines will comply with the National Electrical Safety Code, with the following exceptions under 17 AAC 15.201:

- Existing overhead lines within the right-ofway shall have a minimum vertical clearance of 18 feet above the roadway or ground.
- New overhead lines shall be installed with a minimum vertical clearance of 20 feet in all locations in the right-of-way.

3.26. Underground Utilities

Buried utilities within the roadway prism must be able to support traffic and superimposed loads. Encasement, when required will be detailed in the utility permit special provisions. Underground crossings shall be as nearly perpendicular to the highway centerline as practicable.

In evaluating proposed underground utilities consider future roadway and airport project improvements. Anticipate future design elements such as widening, storm drain systems, and signal systems.

To the extent possible, the utility shall locate manholes, valves, corrosion protection test stations, junction boxes, cabinets, or other surface facilities outside the area of future project improvements.

The special case of combined roadway/railroad crossings are subject to additional requirements under Alaska Railroad Corporation (ARRC) regulations.

Where limited right-of-way exists, longitudinal distribution lines for gas, sewer, water, telecommunications, and electrical power may be installed within roadway prisms. Make provisions to minimize disturbance of roadway surfaces for future connections.

3.26.1. Depth

The minimum depth of burial for underground facilities constructed or installed under pavement, roadway, or runway surfaces is four feet, measured from the surface of the pavement, roadway, or runway, to the top of the cable, conduit, pipeline, or encasement. The four-foot minimum burial depth shall extend 10 feet beyond the catch point of the back slope of the ditch in a cut section, and 10 feet beyond the toe of slope in a fill section. Examples of crossing details are in Figure 3-2.

Underground facilities constructed or installed under other surfaces shall be buried a minimum of three feet, measured from the surface to the top of the cable, conduit, pipeline, or encasement.

The Department may require underground facilities to be rerouted or protected with casing or other mechanical protection when it is impractical to achieve the minimum depth of bury.

3.26.2. Crossings

The Department policy is to bore or drill all roadway crossings in lieu of open-cutting the road surface. For DOT&PF to approve an open-cut crossing, the utility must prove that boring or drilling is not feasible.

If an open cut is allowed, the Department specifies the backfill and compaction requirements to be used. In no case shall the depth of the structural section or the quality of materials be less than what was used in the original road construction. Consolidation by saturation or ponding is not permitted.

Underground facility crossings in Department rightsof-way shall conform to the specifications set out in the utility permit special provisions.

3.26.3. Boring and Directional Drilling

It is Department policy that boring, jacking, insertion, or receiving pits shall be located and constructed outside the roadway clear zone and outside structural section of the embankment.

At a minimum, pits shall be located outside a distance determined by projection of a 1½:1 (horizontal to vertical distance) from the outside edge of the embankment pavement (or back of sidewalk in urban sections). This situation only applies if protection is provided between the travelling public and the pit, or the work is continuous with 24 hour operations until the pit is backfilled. Equipment, stockpiled materials and excavated materials can also be a hazard to the travelling public and will also need protection if located within the clear zone.

3.26.4. Pipelines

Burial depths for gas and hazardous liquid pipelines have been adopted by state regulatory agencies, from the:

• Natural Gas Pipeline Safety Act of 1968, amended 1976;

- the Pipeline Safety Improvement Act of 2002;
- Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006.

Certain pipelines will be subject to permitting by the State of Alaska Office of Pipeline Safety. Interstate pipelines are subject to approval by the Federal Energy Regulatory Commission under the Energy Policy Act of 2005.

For pipelines that carry flammable, corrosive, expansive, energized, or unstable products place markers at both ends of road crossings and at any change in alignment.

Pipelines which carry petroleum products or other materials defined as hazardous by the Environmental Protection Agency (EPA) or other authority shall be constructed to minimize contamination of the surrounding soil in case of failure of the pipe, pipe connections, or valves.

Hazardous spill avoidance measures shall conform to industry "state-of-the-art" design with consideration given when applicable, to a lined trench, double wall pipe, or other Department approved solution.

Install automatic shutoff valves on pipelines at or near ends of structures and near unusual hazards, unless other devices can be used to isolate hazardous pipeline segments within a reasonable distance from the structure or hazard.

3.26.5. Encasement and Mechanical Protection

Encasement of underground facilities may be required for crossings under controlled-access highways or other Department rights-of-way, unless DOT&PF agrees with a utility-proposed alternative. Underground pipelines carrying flammable, corrosive, or other hazardous materials will meet the Department requirements for encasement. It is within the Department's discretion to permit a utility bridge, tunnel, utilidor, utiliduct or other mechanical protection in lieu of encasement.

Ensure that encasement structures are designed to support both current and anticipated future traffic and superimposed loads. Seal these structures at the ends with material that will prevent flowing water and debris from entering the space not occupied by the utility. Make sure the encasement length is adequate to protect the roadway prism from damage during its use by the utility. Markers are used to indicate the location or route of underground utilities. Reference markers may not be required where a locate service is provided.

Utility tunnels or bridges may be considered as an alternative where several utilities cross a Department facility in relatively close proximity. Ensure they conform to Department culvert and bridge standards.

Utilidors and utiliducts may be used in areas where limited space exists for underground utility lines or where local laws or ordinances prohibit overhead lines. The proposed design is subject to Department approval.

3.27. Utilities in Material Sites

The regional utility engineer is responsible for determining the necessity of utility adjustment or relocation within a material site.

When utility facilities are located within the limits of material sites that are owned, leased, or used by DOT&PF, the regional construction or maintenance engineer in charge is responsible to ensure the utility facilities are not damaged when Department authorized mining operations are in progress.

3.28. Construction Methods and Traffic Control

The utility will describe its proposed method of construction in its application for a utility permit, or in the agreement for installation, adjustment, or relocation of utilities within the Department's rightof-way. Evaluate the proposed methods before authorizing any construction within the right-of-way to assure the integrity of the highway and other facilities within the right-of-way are protected.

Traffic control during utility work within the Department's right-of-way must conform to the Alaska Traffic Manual.

The utility provides a traffic control plan that DOT&PF will review for approval.

When an emergency involving a utility's facility results in road closure, the utility will clear the existing roadway, or provide a detour acceptable to the Department, and provide traffic control devices as required within the emergency area to safeguard the traveling public.



Figure 3-2: Utility Crossing Cross-Sections

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