PENOBSCOT COUNTY
UTILITY INSTALLATION ORDINANCE

1. PURPOSE & APPLICATION

This ordinance is established to regulate the accommodation of facilities within the right-of-way of County roads, which are located in the Unorganized Territories for purposes of permitting under Title 35-A, Chapters 23 and 25. It provides certain administrative procedures and establishes minimum requirements for the location, method of installation, adjustment and maintenance of facilities so accommodated.
This ordinance is developed in the interests of safety, protection, utilization and future development of County roads with due consideration given to the public welfare afforded by adequate and economical facility installations.

2. SCOPE

As of the effective date of this ordinance, the location standards defined herein shall apply to all new facilities and any additions, alterations, adjustments, relocations or replacements of existing facilities and appurtenances within the limits of County roads.

3. LOCATION PERMITS

A Utility may not construct new facilities within the limits of County roads without applying for and obtaining a Location Permit from the Land Use Planning Commission except as specified herein.

Location Permit Required:
A location permit is required in each of the following circumstances.
A) All facilities except as specifically exempted.
B) Replacement of more than 5 poles or 150 feet of underground facilities, regardless of whether those facilities were previously permitted or deemed legal structures in accordance with 35-A MRSA §2309. For the purpose of this section, facilities that exceed these limits are hereby considered new facilities and not "replacements" or "additions".
C) Installation of cabinets, transformers or other similar system components that are mounted on pads or multiple poles, not to include standard pedestals or those that are supported on an existing, single pole. Replacement of such facilities requires permitting only if the existing supporting pad or poles are to be replaced.
D) Replacement of any above ground facility or appurtenance resulting from damage caused by a vehicle two or more times within the past 12 months.

Location Permit Not Required:
A location permit is not required in the following circumstances, providing the facility or appurtenance being installed meets the standards defined herein unless otherwise

specified. Where an exception is required, an application shall be submitted in accordance with Section 4.

A) Attaching additional wires, cables or appurtenances to existing poles, providing the Utility making such attachment has permitted or legally located facilities under 35-A MRSA §2309 upon all of the same poles.
B) Services, as defined in 35-A MRSA §2503 (10).
C) Replacement of up to 5 poles or 150 feet of underground facilities. Utilities shall not replace facilities in greater amounts than authorized herein by dividing projects having one primary engineering purpose into multiple, smaller projects.
D) New wires or cables in existing conduit that is either permitted or legally located under 35-A MRSA §2309.
E) Emergency Replacements: Replacement of facilities that present an immediate hazard or are needed to restore utility service, providing after-the-fact permitting occurs within 60 days when required.

Highway Opening Permits:
Applicants are advised that, depending upon the type of installation proposed, a separate Highway Opening Permit may also be required.

4. RESPONSBILITIES & LIABILITY OF UTILITIES

A. The Utility must submit sufficient documentation to demonstrate compliance with all the rules, including the Technical Standards set forth below.
B. The Utility shall be fully responsible for the design, construction, maintenance and operation of its facilities and, to the extent provided by 35-A M.R.S.A. §2503 (6), for any damages resulting from the Utility's negligence in the installation or maintenance of said facilities and its appurtenances.
C. The Utility shall be fully responsible for all costs associated with moving a facility if it is installed in violation of this ordinance.

5. COUNTY POWERS

A. Penobscot County may require that a utility meet additional and/or more stringent design standards than those contained in this ordinance, including greater pole offsets, when the County reasonably determines that such standards are in the best interests of public safety due to the specific characteristics of the proposed installation or specific location. Prior to imposing additional and/or more stringent design standards than those contained in this ordinance, the Licensing Authority shall notify the Utility and afford it the opportunity to comment on the proposed standard.
B. If, through accident reports or public complaints, an individual pole or facility is identified as an impediment to the free and safe flow of traffic, Penobscot County will consult the owner(s) of the facility and consider possible means of reducing the impediment. Alteration of the utility facility at Utility expense may be required pursuant to Title 35-A, M.R.S.A. §2503.

6. GENERAL REQUIREMENTS

A. In order to install a facility pursuant to this ordinance, a Utility must submit two copies of an approved Location Permit as required under Section 3 and the supporting data described below to the Licensing Authority or their designee.

B. When a location permit is NOT required under Section 3, the Utility must submit two copies of the following documentation to the Licensing Authority or their designee:

Narrative

A. The Utility must describe, in narrative format, the proposed installation including:
   1) Description of the general location
   2) Description of the proposed installation including, as appropriate,
      - The number of poles
      - (For electric facilities, the voltage and number of phases
      - (For television or fiber optic cable and telephone facilities, the number of cables, wires or strands and
      - Any anchor guys that cross a drainage ditch or are to be located closer to the roadway than the pole.
   3) The proposed minimum roadway vertical clearance if the facility is to cross a roadway.

General Location Map

A. For each proposed installation, the Utility must submit an accurate area map identifying the general location of the proposed installations.
B. A specific location plan shall be submitted for each proposed installation. This plan shall show the relative location of the roadway and each of the proposed facilities. Longitudinal distances between control points, poles, etc. shall be given. Offset distances from the highway centerline, edge of pavement, or other well defined applicable reference shall be given. The edges of the traveled way or assumed or apparent right-of-way lines, and other pertinent highway features shall be indicated.

Supporting Data

The Utility must also submit the following supporting data:

A) A statement as to whether the Utility has or intends to publish notice of the proposed installation in an appropriate newspaper and, if so, the text of the notice to be published;

B) A statement as to whether joint use or ownership of the facility is reasonably anticipated at the time of submission and a brief description of such anticipated joint use or ownership. If the proposed installation involves attachment to the poles of another Utility, a copy of the lease or agreement showing evidence of the right to occupy the poles shall be included with the application.

C) Whether or not there are any existing facilities of others which are located within the minimum clearance offset specified in Section 9 (I).
D) The name, address and telephone number of a Utility contact person available to review proposed locations at the site.

Bridges

A) If a proposed installation is to be made over or within 25 feet, as measured horizontally, of the outermost edge of a bridge deck, the specific location plan must also include the location of the proposed installation relative to the bridge deck, the method of support, the method of construction, clearances and other data pertinent to the safety and use of the bridge.
B) If a proposed installation is to be made over or near a M.D.O.T. owned and/or maintained bridge, the Utility shall contact M.D.O.T. for specific instruction.

7. PROCEDURAL REQUIREMENTS

A. The Utility may give public notice of the proposed installation by publishing a brief but accurate description of the general location and proposed installation once in a newspaper circulated in the unorganized territories encompassing the limits of the general location. The applicant must publish such notice if the proposed installation will carry 50,000 volts or more.
B. If publication is made, the notice shall also include a statement equivalent to the following: "Any person, firm or corporation owning property which abuts the public way described above and claiming to be adversely affected by this proposed installation, may file a written objection with the Licensing Authority c/o Chairman of the Board of the Penobscot County Commissioners, 97 Hammond Street, Bangor, ME 04401 within fourteen (14) days after the publication of this notice. The objection must state the reason for such objection." If the Utility elects to not publish any notice, the Utility is advised that, pursuant to 35-A M.R.S.A. §2503(3)(b), objections may be filed in certain cases up to 90 days after installation that may require the Utility to move the facility at its expense.
C. If the Utility is not notified of any objections by the Licensing Authority within forty-five (45) days from the date of receipt of properly filed documents as required by this ordinance, then the proposed installation is deemed approved without any further notification from the Licensing Authority.
D. If the Licensing Authority denies an application for an installation, an aggrieved party may appeal the denial to the Maine Superior Court in accordance with M.R.Civ.P. 80B.

8. ON-SITE INSPECTION

An on-site inspection of the proposed facility installation is not required by this ordinance. However, the Licensing Authority may require an on-site inspection if it determines it is in the best interest of public safety to do so. **The Utility may also request an on-site inspection, and is encouraged to do so, if it has any specific questions or concerns regarding a particular highway or proposed installation.**

9. GENERAL LOCATION REQUIREMENTS

This section outlines the general requirements for all facilities and appurtenances within the County road limits. Additional standards that are specific to the type of facility or the type of right-of-way are discussed in subsequent chapters.

1) Design/Construction

The Authorized Entity is fully responsible for the design of any of its facilities and appurtenances to be installed within the road limits.

A. National Standards

All facilities and appurtenances within the road limits must also comply with any applicable National Standards. Where those standards differ from what is stated herein, the higher degree of protection shall prevail.

B. Public Laws/Orders

Nothing in this ordinance is intended to interfere with the applicability or enforcement of any laws, rules or orders of the MPUC.

C. Design Life

All permanent facility and appurtenance installations on, over, or under the highway or attached to any highway structure shall be of durable materials designed for long service life expectancy with due consideration given to the overall needs of the highway corridor. Facilities and appurtenances shall be designed to be relatively free from routine servicing and maintenance.

D. Uniform Alignment

Longitudinal installations shall be designed and installed on as uniform an alignment as possible to minimize potential conflicts and to aid in locating underground facilities in the future.

E. Minimize Interference

Whenever possible, facilities and appurtenances shall be located to minimize the possibility of interference with other facilities or highway work.

F. Crossings

To the extent feasible and practicable, facility crossings of the highway shall be generally perpendicular to the highway alignment.

G. Permits

The Authorized Entity is required to secure all permits necessary for the installation, adjustment or maintenance of its facilities.

H. Cooperation With Other Authorized Entities

Throughout the design and installation of any facilities and appurtenances within the limits of County roads, Authorized Eentities must address the needs of all other Authorized Entities with regard to their existing or proposed installations

located in the vicinity of another proposed installation. This shall include maintain sufficient offsets from other facilities and appurtenances and assuring that all other Authorized Entities have reasonable access to their own facilities and appurtenances during construction. Where Authorized Entities are unable to resolve conflicts in accordance with this ordinance, Penobscot County shall make the final determination.

I. Clearance Between Facilities

The following defines the minimum clearance standards for facilities with the highway limits. Greater clearances are encouraged and may be required whenever possible. Authorized Entities are encouraged to undertake joint construction whenever possible, and Penobscot County may issue an exception to these standards when all affected parties agree to a lesser requirement that is consistent with the applicable National Standard(s).

(1) Horizontal Clearance Between Longitudinal Facilities: Unless specifically permitted otherwise, a 3-foot minimum horizontal clearance shall be maintained between all underground facilities and appurtenances. Measurement between underground facilities and appurtenances shall be taken horizontally from the closest edge of the facility or appurtenance. Aboveground pole lines (excepting crossings and services) shall also be included in this standard where those poles occupy a reasonably consistent offset. Measurement to a pole line shall be to the nearest face of pole or to the vertical plane established longitudinally through the center of the pole line between poles.

(2) Vertical Clearance Between Facilities: Where underground facilities must cross other facilities or appurtenances, the angle of such crossing shall be as close to 90 degrees as possible, with a minimum vertical clearance of 1 foot. Facilities of one Authorized Entity shall not be constructed longitudinally over or under another Authorized Entity's underground facilities.

J. Erosion Control and Restoration of Vegetation

Authorized Entities shall stabilize the soil in all work areas within the highway limits to minimize erosion. Restoration of loam, grass or other landscaping vegetation is required following the completion of backfill as soon as weather conditions and/or seasons of the year allow. Temporary mulch shall be used until permanent treatments can be applied.

2) Preferred Corridors

To obtain consistency and maximize the use of the highway, "preferred corridors" have been specified below for each type of facility. In the process of establishing plans, Authorized Entities are encouraged to utilize these corridors whenever practicable.

Type of Facility	**Preferred Corridor**
Gas Lines	Under the Shoulder
Telephone/Electric Conduit	Under the Shoulder

Direct-bury Communications	2 Feet from the Edge of Shoulder
Pole Line	As close to R/W limit as practical

10. UNDERGROUND INSTALLATIONS

A) Depth of Cover

The minimum depth of cover for any facility within the right-of-way limits is 36 inches. Additional requirements are specified herein for each type of facility.

Any wires, pipes, conduits or cables that are presently located within the highway limits at a depth of less than 1 foot and not specifically permitted to be at that depth, shall be relocated in accordance with this ordinance.

B) Encasement

Casings shall be used under bridge approach slabs and in close proximity to highway structure footings. Due to the wide variety of designs and the differing schedules for construction or maintenance, Penobscot County will need to determine casing requirements near footings on a case-by-case basis. Where encasement is to employed in other areas, such encasement shall be provided within the pavement structure limits to a point beyond the ditch line for cut sections and 5 feet beyond the toe of a slope for fill sections.

C) Markers and Detection Aids

(1) Warning Tape: Upon installation, all underground facilities installed by open cut shall include warning tape, of a color consistent with the APWA Uniform Color Code, located roughly 18 inches directly above and parallel to the entire installation.

(2) Signs: All underground utilities crossing the entire right-of-way (from one boundary to the other) shall have a readily identifiable marker installed at each right-of-way line crossed to indicted the type of facility, the name of the owner and a telephone number to call. Signs shall be maintained with current, legible information.

(3) Pedestals: All pedestals shall have a readily identifiable marker installed on each pedestal to indicate the type of facility, the name of the owner and a telephone number to call. Markers shall be maintained with current, legible information.

(4) Detection Aids: All nonmetallic underground facilities shall include some metallic component installed directly above, below, or as an integral part of the facility to aid in the future detection and location of the facility.

D) Methods of Installation

(1) Trenchless Installation Methods: All pits associated with trenchless installation methods shall be located as far from the edge of the travel lane as possible. Pits shall be located and constructed so as not to compromise public safety or the integrity of any highway structure. The bottom of the roadway edge of all pits shall, at a minimum, be located beyond a line created by a 1:1 slope projected

down from the edge of the travel lane. Penobscot County may require the use of support structures to achieve the proper degree of protection.

(2) Blasting: 24 hours notice must be given to Penobscot County prior to any blasting within the highway limits. When blasting is to occur within 100 feet of a highway structure, prior approval must specifically be obtained from the Penobscot County Commissioners or their designee.

(3) Pavement Cuts: Wherever pavement is to be cut, all edges shall be cut neat and reasonably straight.

(4) Backfill/Compaction: Backfill compaction shall equal that of the surrounding soil outside of the pavement structure limits.

E) Locations of Installations

(1) Undesirable Locations: Locations in deep cuts, near footings or bridges or retaining walls, within areas of special materials, across intersections at grade or in areas where it will be difficult to attain minimum cover shall be avoided whenever possible.

(2) Clearance from Highway Structures: Vertical and horizontal clearance between any facility or appurtenance and a highway structure shall be sufficient to permit maintenance of both without interference. Clearances shall comply with Section 9 (1) (I).

(3) Road Side of the Utility Pole Line: Mainline underground facilities should normally be installed on the travel lane side of the pole line.

(4) Additional Requirements: The location of any facilities or appurtenances may be further restricted by Penobscot County to insure that a proposed facility or appurtenance will not interfere with existing or currently planned highway construction and/or maintenance activities.

(5) Highway Drainage Pipes: Highway drainage pipes and structures shall be protected during any facility and appurtenance installation and maintenance. Utilization of existing drainage pipes as sleeves is not permitted.

F) Gas, Liquid Petroleum and Other Hazardous Transmittant Pipelines

(1) Cover: Hazardous transmittant pipelines shall have a minimum cover of 36 inches.

(2) Multiple Lines: In the event that a Utility proposes to install two active hazardous transmittant pipelines along the same corridor, the two lines shall be placed one above the other, as reasonably vertical as practicable, considering safe operation and maintenance of the lines. The lower-pressure line shall be installed above the higher-pressure line and must meet the minimum cover requirement specified in Section 10 (7) (A).

G) Vents

One or more vents shall be provided for each casing or series of casings. For casing longer than 150 feet, vents shall be provided at both ends. On shorter casings, a vent shall be located at the high end with a marker placed at the low end. Vents shall be placed at the right-of-way line immediately above the pipeline, situated so as not to interfere with highway maintenance or be concealed by vegetation. Ownership of the lines and an emergency contact name shall be shown on the vents.

H) Drains

Drains for hazardous transmittant pipelines will not be permitted to outfall into drainage ditches, natural watercourses or onto the highway.

I) Electric Supply Lines

(1) Cover: The minimum cover for underground electric supply lines and services within the highway limits shall be 36 inches.

(2) Conduit: All underground electric supply lines within the highway limits shall be in steel or PVC conduit. PVC conduit shall be encased, above, below and on both sides, with a minimum of 4 inches of concrete, that shall have a minimum compressive strength of 2900 psi and a maximum aggregate size of 1 inch.

(3) Services: In addition to complying with all other applicable standards specified herein, underground electric supply line services within the highway limits, shall be in steel or PVC conduit. Both steel and PVE conduit shall be encased, above and on both sides, with a minimum of 4 inches of concrete, that shall have a minimum compressive strength of 2900 psi and a maximum aggregate size of 1 inch.

J) Communication Lines (Telephone, CATV, etc.)

The minimum cover for underground communications lines within the highway limits shall be 36 inches for either encased or non-encased installations.

11. ABOVEGROUND INSTALLATIONS

General

Vertical Clearances: The vertical clearance of new overhead lines above highways and intersecting public ways shall be a minimum of 18 feet. When existing roadway elevations are increased, existing overhead facilities that meet vertical clearances defined within applicable National Standards may be allowed to remain unless otherwise directed by Penobscot County. New or adjusted overhead lines running parallel to the highway and not crossing intersecting public ways shall have a minimum vertical clearance as defined within applicable National Standards.

A) Utility Poles

(1) Pole Construction: Poles within the highway limits shall be single-pole construction.

(2) Multiple Pole Lines: Multiple pole lines are not permitted within the highway limits. Stub poles or service poles that must be located within the right-of-way are not considered a separate pole line, but shall conform to all applicable offset criteria. Existing areas having multiple pole line shall be reduced to a single, joint use pole line whenever:

a) Penobscot County undertakes a project having a scope that would require existing poles to be relocated.

b) Penobscot County determines a particular area to present a significant hazard to the traveling public.

If any Authorized Entity undertakes a project in an area with an existing multiple pole line that consists of the replacement of ten or more consecutive poles, one of the following must occur:

a) The owners of the aboveground facilities must agree to combine their facilities onto a single pole line as part of the proposed project, or
b) The Authorized Entity undertaking the pole replacements must install poles of sufficient height to accommodate the other facilities when they are upgraded.

Existing multiple pole lines, which involve electric supply lines owned by different Authorized Entities, will not be forced to combine onto a single pole line providing all offset criteria are met.

(3) Services Poles: Unless vertical clearances and the local terrain dictate otherwise, all poles used to exclusively provide service to a customer shall normally be installed at or beyond the highway limits.

(4) Anchors: Utility pole anchors shall not be installed on the travel lane side of a pole unless located behind guardrail and in compliance with Section 11 (3)(A). Anchors shall be adequately designed and installed to enable shared-use whenever possible with standard utility equipment.

B) Offsets

Aboveground offsets define the horizontal clearance required to provide a Recovery Area and room for adequate highway maintenance. Although specific offset values are defined herein, it is important to recognize that these offsets are minimum values. Greater setbacks (preferably in accordance with Clear Zone standards, defined in the Roadside Design Guide published by AASHTO) should be provided whenever possible to provide improved safety and to minimize the potential for conflicts with future highway construction. Unless otherwise noted, all offsets are to the portion of the aboveground facility or appurtenance that is below a vertical height of 13 feet and located closest to the edge of the travel lane.

Existing aboveground facilities and appurtenances that are located within the limits of County road projects, which would require relocation of said facilities and appurtenances shall be adjusted to meet the standards designed in the ordinance. Existing aboveground facilities and appurtenances in other areas that do not presently meet the minimum offset standards may remain in place until Penobscot County determines that those facilities or appurtenances present a safety problem or otherwise conflict with the use, construction or maintenance of the highway.

(1) Offset From Edge of Shoulder: Unless site-specific conditions pertaining to guardrails as described under Section 11(3)(1), no offset shall result in an aboveground facility or appurtenance being located within 6 feet from the edge of the shoulder.

(2) Breakaway Devices: Aboveground facilities and appurtenances may be permitted within the minimum offsets specified when authorized by Penobscot County, and when a breakaway system is utilized.

(3) Mid Span Poles: New poles located between two existing poles may be permitted at lesser offsets than defined herein provided that the new pole is “in line” with

the two existing, adjacent poles and that the offset of the new pole is equal to or greater than the smallest offset of the adjacent poles.

C) Site-Specific Conditions

(a) Guardrail: For steel beam guardrail, aboveground facilities and appurtenances shall be set back a minimum distance of 3 feet from the back of post. Where space permits, greater offsets are encouraged to facilitate snowplowing.

(b) Ditches: No aboveground facilities or appurtenances shall be set in the flow area of a ditch. New facilities and appurtenances installed in areas with ditches shall generally be installed behind the ditch and at least 2 feet up the back slope (as measured horizontally) unless the offset of the ditch exceeds the required aboveground offset by at least 8 feet. Existing facilities or appurtenances that meet offset standards in the inslope of a ditch area may be permitted to remain in their present locations until replaced.

(c) Culverts: Aboveground facilities and appurtenances are not permitted within 8 feet of the end of any culvert.

(d) Restricted Right-of-Way; If there is insufficient right-of-way to attain the minimum offset requirements defined herein, Penobscot County may elect to permit aboveground facilities as close as practicable to the existing right-of-way limit.

12. BRIDGES AND OTHER HIGHWAY STRUCTURES

A) Where other arrangements are not feasible, Penobscot County will consider permitting attachment of facilities on highway structures. Each such attachment will be considered on an individual basis, and permission to attach will not be considered as establishing a precedent for granting subsequent requests for attachment. The following requirements are establish for attachment to any highway structure:

B) P. E. License & Certification; A Maine Licensed Professional Engineer shall design all proposals fr attachments to highway structures in accordance with the latest AASHTO standards. In the case of bridges, each design proposal shall be fully evaluated in accordance with the latest edition of AASHTO LRFD Bridge Design Specifications or AASHTO Standard Specifications for Highway Bridges, 16^{th} edition to assess the effect of the attachment(s). A statement certifying that the additional loading will not exceed allowable limits is required as part of the design submittal.

C) Out-of-Service Facilities: All facilities that are taken out-of-service shall be removed in accordance with Section 15 (D). If any such facilities are not removed, Penobscot County may elect to remove such facilities at the Authorized Entity's expense.

D) Other Applicable Permits: Authorized Entities are responsible for acquiring any and all permits that may be applicable to their proposed work.

E) Identification Tag: A permanent tag shall be affixed to each end of the attached facility identifying the Authorized Entity, the type of attachment, and a contact telephone number. All tags shall be maintained in a legible condition with current information.

F) Electric Supply Lines/Communication Lines: Communication and electric supply lines shall be suitably insulated, grounded, and carried in protective conduit or pipe from the point of attachment to the point of exist per applicable National Standards.

G) Hazardous Transmittants: Mutually hazardous transmittants shall be isolated by compartmentalizing or by auxiliary encasement of incompatible carriers. This shall include electric supply lines, gas lines and effluent lines.

H) Casing Vents: Where a pipeline on or in a structure is encased, the casing shall be effectively opened or vented at each end to prevent possible buildup of pressure and to detect leakage of gases or fluids.

I) Unencased Attachments: Where a casing is not provided for a pipeline on or in a structure, additional protective measure shall be taken, such as employing a higher factor of safety in the design, construction and testing of the pipeline than would normally be required for encased construction.

J) Pipeline Shutoffs: Pipeline shutoffs, preferably automatic, shall be required within close proximity of attachments unless other sectionalizing devices can isolate segments of the lines. Shutoff valves shall be located on both sides of a highway structure footing.

K) Connection Type: All attachments shall be bolted. Bolt holes are normally drilled 1/16 inch larger than the bolt diameter. No stainless steel bolts shall be used except on concrete or timber structures.

1. Bridges

The following standards are specific to bridges and in addition to the general standards listed above.

A) General

1) First Girder Beam: All facilities attached to a bridge shall not be located outside the first girder or beam, except for precast box beam and voided slab as long as they were originally designed for facility installation.

2) Precast Bridges: Attachments that are not incorporated in the original bridge design will not be permitted on either precast concrete bridges.

3) Conduits in New Bridges: When a request is made during the design phase of a proposed bridge, Penobscot County may allow conduits to be incorporated into the construction of the bridge. The Authorized Entity will be responsible for the additional costs relating to such accommodation. Facilities shall not be allowed in the bridge sidewalk, bridge rail or hollow bridge members that are not of sufficient size to allow maintenance personnel to maintain the structure while protecting the facility.

4) Connections to Bottom of Bridge Decks: No facility connections shall be allowed to the bottom of the bridge deck.

B) **Connection Requirements**

1) Flanges/Webs: Drilled holes in the web area, which are located at least 6 inches from the flanges, are permitted. Attachments to the flanges are not permitted.

2) Diaphragms: For any attachments located between two steel beams, replacement of the diaphragms with facility support brackets may be

permitted, provided the replacement is equal in strength to the original and of compatible materials.

3) Holes Through Abutments: Any holes through concrete abutments shall be core drilled and sealed with a waterproof seal, such as a link seal, to prevent water leakage and migration of fines.
4) Approach Slabs: Cutting through concrete approach slabs may be permitted providing the slab is repaired to achieve the same strength as the original design. The method of these proposed repairs are to be reviewed and accepted by Penobscot County.
5) Electric Supply Lines/Communication Lines: Buried cable shall be carried to a manhole located beyond the backwall and/or approach slabs of the bridge. Carrier and casing pipe should be suitably insulated from electric supply line attachments.
6) Clearances:
    a) A minimum offset of 12 inches from any point on the main carrying members (flanges and webs) and substructure units (foundations) to the edge of the outer face of the pipe or insulation is required. Additional clearance may be required for smaller beams or facilities over 12 inches to ensure adequate access for future maintenance.
    b) Brackets shall be located a minimum of 6 inches above the bottom flange of the steel beams to allow sufficient clearance for rolled staging.
    c) A minimum 2-foot clearance is required on at least one side of any facility attachment located between beams to allow access for maintenance.
    d) Any attachments to concrete members (such as abutments, piers, and concrete slab superstructures) require a minimum 12 inch clearance.

C) Buried Highway Structures

1) Clearance: For buried highway structures, the preferred location for any facilities is at the edge of the right-of-way or at least 15 feet upstream or downstream from the end of the structure. If it is not possible to be located in this manner and the facility must be buried in the roadway, a 12 inch vertical clearance from the structure to the facility is required.
2) Additional Design Requirements: All facilities and appurtenances must be located and designed to allow reasonable replacement of highway structures. In most cases, excavation slopes will be at least 1.5:1. For example: a 10 foot pipe with 3 feet of fill will necessitate an excavation width at the roadway surface of at least 50 feet in length. Facilities installed within such areas shall be designed and constructed with due consideration given toward providing temporary support of the facility during replacement or repair of the highway structure.

13. TECHNICAL STANDARDS

The Utility must comply with the following technical standards. Any exception to the standards set forth below must have prior approval by the Penobscot County Commissioners or their designee.

A) Pole Offset Measurement

The pole offsets shall be measured from the face of the pole to the edge of the designed travel lane or to other reference points as noted.

B) Minimum Pole Offsets

Minimum pole offsets are dependent upon the maximum speed limit and shall be in accordance with the attached Appendix A. Greater setbacks are encouraged when space permits.

C) Vertical Clearances

Minimum vertical clearance for overhead wires, guys, etc., shall in no case be less than prescribed by the National Electrical Safety Code, National Bureau of Standards, United States Department of Commerce. Notwithstanding the preceding sentence, minimum roadway vertical clearances measured at 60 degrees Fahrenheit with no wind, shall be at least eighteen (18) feet.

D) NESC Compliance

Design and construction of all wire and cable line, electrical, telephone, fire alarm, etc., shall comply with the National Electrical Safety Code.

E) Traffic Control During Construction

The Utility shall provide such protective services, including flaggers as may be necessary to safeguard traffic during construction, inspection, maintenance and operation and shall remove all equipment and materials not in actual use for construction, inspection, maintenance and operation from highway as expeditiously as possible. Such protective services shall be in compliance with the Manual of Uniform Traffic Control Devices.

F) Maximum Allowable Variation From Specific Location

The Utility may install the proposed facility up to 10 feet at variance from the Specific Location Plan or replace an existing facility up to 10 feet at variance from the current location if:

a.) The change in location is necessary due to an unexpected variation in field conditions, (e.g. ledge),

b.) The 10 foot moving of the facility is ”in-line”, (usually approximately parallel to the roadway),

c.) Otherwise complies with the Technical Standards.

G) Installation Farther From Roadway Allowed

The Utility may install the proposed facility farther away from the roadway than specified in the Specific Location Plan provided the facility is actually installed

a.) Within the highway right-of-way

b.) Otherwise complies with the Technical Standards

H) Guardrail Setbacks

Poles shall be set back a minimum of three (3) feet from the back of the guardrail posts to the face of the pole. Where space permits, greater pole offsets are encouraged to facilitate snow removal.

I) Poles, Anchors and Ditches/Anchor Guys Toward Roadway

No poles or anchors shall be set in a flow area. If anchor guys are proposed to cross a ditch or are to be located closer to the roadway than the pole, then the Utility shall (a) notify Penobscot County of this situation by including a description of said guy in its description of the Proposed Installation and (b) in the design and installation of the guy, consider the ditch maintenance responsibilities of Penobscot County to the maximum extent practical with reference to geometric conditions, the right-of-way width, and the

configuration of property boundaries. The Utility shall be responsible for the cost of moving such anchor guys if Penobscot County reasonably determines that such moving is required.

J) Culverts

Poles shall not be permitted within eight (8) feet of the end of any culvert.

K) Mid-Span Poles

A Utility may install a pole that is located in the span between two existing poles and closer to the roadway than the minimum pole offsets described in Appendix A, provided that

a.) The proposed mid-span pole is "in-line" with the two adjacent poles, and

b.) The offset of the proposed mid-span pole is equal to or greater than the smaller of the pole offsets of the two adjacent poles. Notwithstanding the preceding sentence, this subsection does not permit a utility to place mid-span poles within more than two adjacent spans between existing poles.

14) UNAUTHORIZED FACILITIES

Any facility installed within the County right-of-way and not in compliance with the terms of this ordinance is considered an Unauthorized Facility. As such, there is no legal right for that facility to be located or maintained within the County right-of-way unless the location is otherwise authorized by deed or easement. Upon notice from the Licensing Authority, the entity owning or operating the Unauthorized Facility is fully responsible for correcting any Unauthorized Facility and all appurtenances as directed by the Licensing Authority or their designee, which may include after-the-fact permitting or removal of the facility and all appurtenances.

15) FACILITY MAINTENANCE OBLIGATIONS

This section outlines the requirements for all authorized entities having facilities that are permitted, licensed or deemed legal structures within the right-of-way of County roads. These requirements are applicable to all new and existing facilities and appurtenances.

A. Maintenance of Facilities

Every authorized entity is responsible for keeping its facilities and appurtenances sufficiently maintained so as not to degrade the integrity of the road or reduce the overall level of safety. Any deficiencies in a facility or appurtenance that create a potential hazard to the roadway users or maintenance crews shall be promptly corrected upon notice from Penobscot County.

B. Records and Locating Facilities

Every authorized entity is responsible for maintaining records regarding the following:

1) The township and road in which each facility is located,
2) Evidence of all applicable permits, easements, deeds or other applicable rights for any facilities and appurtenances within the County right-of-way,
3) The specific installed location of underground facilities and appurtenances within the limits of the County right-of-way.

Authorized entities not having the records specified above shall be responsible for obtaining that information for Penobscot County to the extent requested by Penobscot County and reasonably necessary for County activities.

Authorized entities are responsible for marking the location of underground facilities and appurtenances at the request of Penobscot County prior to survey or other preliminary engineering or maintenance activities to ensure the location of these facilities and appurtenances is properly considered.

C. Services

Each utility is responsible for assuring proper adjustment, relocation or repair of any portion of a service that is located within the limits of the County's right-of-way and connected to that Utility's distribution system or network.

D. Out of Service Facilities

All facilities and appurtenances taken out of service and located either aboveground or attached to highway structures shall be removed within 60 days of their last use. If a Utility is required to obtain MPUC approval, the facilities and appurtenances may be removed within 60 days of said approval, providing the process is initiated within 60 days of their last use. Underground facilities and appurtenances that are taken out of service may remain in their existing locations providing the authorized entity retains full responsibility for the facility and appurtenances as provided herein. Should a remaining Out-of-Service facility or appurtenance degrade the highway or interfere with its use, construction or maintenance, the authorized entity is responsible for either correcting the conflict or removal of the facility or appurtenance at Penobscot County's option.

E. Utility Pole Replacement and Wire Transfers

Unless otherwise approved by the Penobscot County Commissioners, all wire transfers and removal of replaced poles shall not extend beyond one year from the installation date of the new pole(s). Poles that remain beyond this one-year, maximum tolerance, or otherwise approved completion date, are not considered maintained in accordance with the terms of this ordinance. All replaced poles are deemed Out of Service upon transfer or removal of all wires and/or cables and shall be removed from the County's right-of-way in accordance with section 15 (D).

F. Maintenance of Traffic

Any work performed by any party within the limits of the County right-of-way, whether new construction, adjustment or maintenance operations, shall be conducted in a manner to protect the public. Traffic control methods consistent with the current version of the MUTCD shall be implemented to ensure the safe and expeditious movement of the traveling public.

G. Railroad Crossings

Any work performed within the area defined by the crossing of the roadway and the railroad limits shall also comply with all reasonable requirements of the Railroad Company to ensure the safety of the workers, the traveling public and the safe operations of the trains.

H. Non-compliance

Should any person fail to comply with the requirements set forth above, the Penobscot County Commissioners or their designee may suspend the work until the noted deficiency is corrected.

16) TREE TRIMMING

General

Authorized entities are responsible for all work associated with any tree clearing and/or trimming required to install and maintain their facilities and appurtenances.

A) Notification

Authorized entities must notify Penobscot County, in writing, at least 30 days prior to any trimming, cutting or removal of trees by the authorized entity within the County's right-of-way. Such notification shall include:

a.) The name of the township where the operations are to be performed,
b.) A description of the maintenance operations
c.) The name and work phone number of the person(s) responsible for the maintenance operations, and

All notifications shall be sent to the Director of Unorganized Territory Administration, 97 Hammond Street, Bangor, ME 04401.

B) Notification Exceptions

When 30 days notice cannot be provided for "hot spot" work or new construction line clearance work that was not anticipated, the Director of Unorganized Territory Administration may be contacted by phone at 207-942-8566 and the 30 day notice will be waived. This does not apply to typical tree maintenance operations. Emergency trimming and removal of trees to restore power or communications do not require notification.

PENOBSCOT COUNTY COMMISSIONERS

_____ _____

Date Adopted Thomas J. Davis, Jr., Chairman

_____

Peter K. Baldacci

_____

Laura L. Sanborn

DEFINITIONS

Anchor	A device wholly or partially impeded in the ground used to provide increased support to a utility pole.
Anchor Guy	A cable running from a utility pole to an anchor used to provide support to said pole.
Appurtenance	Any manhole, pull box, junction box, vent, riser, anchor, guy wire, push brace or other incidental component of a utility system, whether aboveground or belowground, excluding facilities.
Authorized Entity	Any entity authorized to have facilities within County right-of-way limits.
Bridge	Any structure used to convey vehicular traffic over roadways, water, railroads, etc. that has a span over 10 or more feet and/or an open area of 80 or more square feet.
Bridge Deck	The surface span of a bridge over which pedestrian or vehicular traffic travels.
Conduit	A structure containing one or more ducts.
Day(s)	Each day shown on the calendar, including Saturdays, Sundays and holidays.
Direct Burial	Installing a facility underground without conduit, duct, sleeve or any type of encasement.
Drainage Ditch	A ditch or swale where water will collect and flow.
Duct	A single enclosed raceway for conductors or cable.
Edge of Pavement	The outside edge of the paved portion of the road constructed and surfaced for normal travel.
Edge of Shoulder	The outside edge of the shoulder not adjacent to the travel lane.
Edge of Travel Lane	The outside edge of the travel lane adjacent to the shoulder of the road.
Electric Supply Line	Those conductors used to transmit electric energy and their necessary supporting or containing structures.
Facilities	Poles, guys, cables, wires and related above ground equipment.

Flow Area	The strip of land four (4) feet in width and located two (2) feet on either side of the line marking the bottom of the drainage ditch.
General Location	The location along the public way to be occupied or crossed by the Proposed installation established by reference to some point easily Identifiable on reference maps and on the ground. Acceptable points of reference include town lines, readily identifiable intersections, major stream crossings, railroad crossings, or bridge numbers. The distance from the center of the point of reference to the beginning or end of the proposed installation shall be given. Further, the general location must include reference to the township of the proposed installation and the relevant highway name.
Highway/Street/Road	A general term denoting a public way for the transportation of people, materials, goods, and services but primarily for vehicular travel including the entire area within the right-of-way and all appurtenant easements.
Highway Structure	A general term referring to any part of the highway that has been designed and constructed with structural considerations to serve a specific highway purpose. Included under this term are bridges, retaining walls, major drainage structures and other similar structures.
Highway Opening Permit	A permit that authorizes making any underground installation as provided in chapter 23 (Title 35-A MRSA and Title 23, Sections 54 and 3351 to 3359.
Location Permit	A permit that authorizes the location of an authorized entity's facility within the right-of-way limits.
MPH	Miles per hour.
MUTCD	Manual on Uniform Traffic Control Devices
Minimum Roadway Vertical Clearance	The minimum distance between the roadway and the wire or cable crossing said roadway.
Multiple Pole Lines	Two or more sets of utility poles located along a roadway for the conveyance of transmission or distribution wires or cables, not including service lines.
National Electrical Safety Code (NESC)	A set of national, industry accepted standards that are designed to safeguard persons from hazards arising from the installation, operation, or maintenance of: 1) Conductors and equipment in electric supply stations, and 2) Overhead and

	underground electric supply and communications lines. It also includes work rules for the construction, maintenance, and operation of the electric supply and communication lines and equipment.
Out of Service Facility	A facility or appurtenance that is disconnected from the system and not intended to be used in the future by the operating authorized entity. Such facilities may also be considered "abandoned" by the MPUC.
Pavement Structure	The portion of the highway specifically designed or designated to support vehicular travel including the full width of the travel lanes, the full width of adjacent shoulders and the area beyond the edge of the shoulder to the limits of the subgrade.
Pole Offsets	The distance from a stated reference point to the face of a pole nearest to the reference point.
Poles	Vertical structures used to support wires, cables, and lighting.
Proposed Installation	The facilities to be constructed within the general location including reasonably anticipated future replacements or additions. A description of the proposed installation shall include, as appropriate, the number and kind of poles, voltage and the number of phases of electrical line, number of cables or strands, anchors and anchor guys.
Recovery Area	The unobstructed portion of the highway beyond the edge of the travel lane that is preserved to provide drivers of errant vehicles a reasonable opportunity to stop safely or otherwise regain control.
Right-of-Way	A general term denoting land, property, or any interest therein, usually in the shape of a strip, acquired for or devoted to transportation purposes.
Roadway	The portion of the highway; including shoulders, used for vehicular purposes.
Service	A facility that connects a customer to a utility distribution system or network.
Shoulder	The portion of the roadway outside of the travel lanes.
Special Materials	A general term referring to any materials that have been designed with structural considerations to treat special or unique conditions of the highway. Included under this term are geotextiles, geofoams, lightweight fills, tire chips and other similar materials.

Specific Location Plan	A plan that indicates the location of facilities and significant appurtenances along a roadway. The plan may or may not be to scale, but must be adequately dimensioned to accurately identify the location of a proposed installation. Longitudinal distances are provided between control points, bends, poles and other similar features. Horizontal offset distances are provided from the centerline of the travel lane, the nearest edge of the travel lane, the nearest edge of the shoulder or other well defined, applicable reference. Offsets indicated are to the centerline of underground installations or to the travel lane side of aboveground installations. The edge of the travel lane, right-of-way lines (assumed or otherwise) and other pertinent highway features shall also be indicated on the plan.
Travel Lane	The portion of the roadway for the movement of through traffic.
Utility	All persons or entities engaged in the business of the transmission of communications, electricity, or television signals by wire.
Vent	An appurtenance to discharge gaseous emissions from a casing.

APPENDIX A

POLE SETBACK REQUIREMENTS FOR NEW POLES OR APPLICABLE POLE RELOCATIONS

Speeds over 35 MPH

6 feet from edge of shoulder or

10 feet from edge of travel lane

(whichever is farther from the roadway)

Speeds 35 MPH or Less

3 feet from edge of shoulder