

SCHEDULE "B"



Town of Cardston

Licensed Occupant: Attachments

Electrical Distribution System Operational Documents

Version 1.023



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1. Scope

- This document outlines Town of Cardston's (Cardston Electric Utility) requirements and application process for Licensed Occupant requests.
- This document provides the guidelines and technical requirements of telecommunication attachments on poles.
- The requirements and instructions in managing and approving municipal attachments on Cardston Electric Utility poles are provided in *Schedule "F" - Licensed Occupant Guide: Municipal Attachments*.
- The requirements and instructions in managing and approving attachment and servicing of small connected devices on Cardston Electric Utility poles are provided in Town of Cardston Licensed Occupant: Small Connected Devices.
- The process for applications is provided in *Schedule "C" - Licensed Occupant Attachment Guide & Process*.

2. Purpose

- To provide details and requirements for the safe installation and operation of telecommunication wireline attachments on Cardston Electric Utility's poles and to meet applicable codes and regulations.
- This document will facilitate the interaction between Cardston Electric Utility and the customer for Licensed Occupant applications.

3. Legislation

Alberta Electrical Utility Code (AEUC) (See Annex A)

- The Alberta Electrical Utility Code (AEUC), provides the minimum safe limits of approach for persons and equipment performing activities near overhead power lines and definitions of utility worker and qualified utility worker.
- A person must notify Cardston Electric Utility (by calling 403-653-5672) before any activities are undertaken or equipment is operated within 7.0 meters of Cardston Electric Utility's electric distribution system, to:
 - Determine the voltage of the power line; and
 - Establish the same limit of approach distance as listed in section 2-014 and table 1.
- Section 2-014 and Table 1, safe limits of approach



- 0 – 750 V insulated, or polyethylene covered conductors.....0.3 m
- 0 – 750 V bare, uninsulated.....1.0 m
- Above 750 V insulated conductor1.0 m
- 0.75 kV – 40 kV3.0 m
- The required safe limits of approach do not apply to movement of persons, equipment, buildings, vehicles, or objects under Cardston Electric Utility’s overhead power lines.

Occupational Health and Safety Code

- Occupational Health and Safety Code – Alberta Regulation 191/2021 and Explanation Guide provides further guidance on the safe limit of approach distances as specified in the AEUC.
- Section 225 (2), An employer must notify the operator of an energized overhead power line before work is done or equipment is operated in the vicinity of the power line at distances less than the safe limits of approach as specified below and obtain the operator’s assistance in protecting workers involved.
 - 0 – 750V insulated or polyethylene covered conductors0.3 m
 - 0 – 750V bare, uninsulated.....1.0 m
 - Above 750V insulated conductors.....1.0 m
 - 0.75V – 40kV3.0 m

CSA C22.3 No. 1-20, Overhead Systems

- Table 23, Minimum vertical separation on a Licensed Occupant structure
- This section specifies the Minimum Vertical Separations at a Licensed Occupant structure and working space to allow workers to have access to equipment and conductors and to allow for the installation of the equipment on the structure. Cardston Electric Utility’s interpretation is that these separations do not include the minimum approach distance required by AEUC.
 - 0 – 750V supply conductors and Communication line plant.....1.0m
 - On lateral communication drop wire plant.....0.6m
 - > 0.75kV up to and less than 22kV supply conductors.....1.2m
 - Luminaires span wires or brackets and communication line plant:
 - Not effectively grounded1.0m
 - Effectively grounded0.1m





- Section 4.2.4.2 Mechanical protection of supply cables on Licensed Occupant poles
- Supply riser cables that have a grounded metal sheath or concentric neutral on poles jointly used with communication systems shall have a protective covering extending at least 1 meter above the communication plant.
- Section 5.10.1.2 Luminaires and associated brackets on Licensed Occupant poles
- Supply cables and wires associated with the luminaire shall be insulated and protected by a covering that provides suitable mechanical protection unless they are located more than 1 meter above the communication plant.
 - In addition, Cardston Electric Utility standard is to bond luminaires and connect the ground wire and the neutral wire to the system neutral.
- Section 5.10.1.3 Switch handles and communication plant
- Switch handles shall be separated by at least 100 mm from the communication plant. The metal frames and operating rods in the vicinity of the Licensed Occupant space shall be effectively grounded or shall be insulated above the communication working space.

4. Glossary

Licensed occupant: the party that has entered into an agreement with Town of Cardston that allows it to attach its facilities on Cardston Electric Utility poles. The licensed occupant is referred to as the Licensee within the Licensed Occupancy Agreement.

Make Ready Work: the work required by Cardston Electric Utility in preparing the pole to be ready and fit (compliant to applicable safety code, engineering standards, and by-law) for the required licensed occupant attachment or alterations.

Cardston Electric Utility: A department within the Town of Cardston organization. Whose purpose is to construct, maintain and distribute electricity within the service area of the Town of Cardston.

5. General Requirements

Code and Regulations

- Licensed occupant proposing to attach on Cardston Electric Utility poles are responsible to comply with the latest edition of the Alberta Electric Utility Code - ground clearance requirements.
- Cardston Electric Utility's interpretation of the AEUC ground clearance requirement is provided in Town of Cardston Ground Clearances for Aerial Lines document. This Document provides all other factors that are needed to be considered when designing, building, and maintaining ground clearances. As such, the licensed occupant is required





to meet the specified ground clearances in the document when attaching on Cardston Electric Utility poles.

Licensed Occupancy Agreement

- A licensed occupancy agreement is an agreement between Cardston Electric Utility and the licensed occupant, where the latter wishes to install telecommunication equipment on poles, and Cardston Electric Utility is agreeable upon the terms and conditions contained in this agreement.
- Any company proposing to attach on Cardston Electric Utility's electric distribution poles shall complete and maintain a licensed occupant agreement with Cardston Electric Utility, prior to any work or attachment is made on Cardston Electric Utility poles.
- To obtain more information, please contact Electrical@cardston.ca

Issued For Review (IFR) Prints

- A telecommunication occupant proposing to attach wireline attachment on poles shall submit Issued for Review (IFR) prints for review by Cardston Electric Utility representative. IFR prints must be stamped "Issued for Review" and signed by an Engineer.

NOTE: IFR documents should be reviewed and signed by an Engineer to help ensure completeness and compliance of submission and to avoid delays due to multiple submissions and reviews.

Issued For Construction (IFC) Prints

- The IFC prints must include and show the plan view and Licensed Occupant Survey Sheet of proposed wireline attachments.
- Upon acceptance of IFR prints, the licensed occupant shall submit Issued for Construction (IFC) prints to Cardston Electric Utility representative, for final review and acceptance. IFC print submissions shall be authenticated.

NOTE: Cardston Electric Utility will not accept responsibility for any engineering errors and omissions shown on, or relating to, the plans and drawings, or in any way reduce or relieve the customer and its representative's responsibility to meet the standards and requirements provided in this document, and to comply with all applicable Municipal, Provincial or Federal statutes, laws, ordinances, codes, and regulations governing the performance of the proposed Work.

- The Cardston Electric Utility accepted IFC prints are deemed "final" and frozen. All construction by the licensed occupant must be carried out in accordance with the Cardston Electric Utility accepted IFC prints.





- The inspections and verification of licensed occupant attachments on poles, by Cardston Electric Utility representatives, shall be based on the Cardston Electric Utility accepted IFC prints.

Orientation and Start-up Construction Meeting

- Before any activities are undertaken or equipment operated to install telecommunication wireline attachments on Cardston Electric Utility poles, the licensed occupant shall call 403-653-5672 and arrange for an orientation and start-up construction meeting with a Cardston Electric Utility representative.
- Cardston Electric Utility accepted IFC prints shall be available to all parties on site, which includes but not limited to the licensed occupant construction crews and Cardston Electric Utility representative, before an orientation and start up meeting begin.

NOTE: Orientation and start-up meeting will not begin without a Cardston Electric Utility accepted IFC prints copies available on site. IFR prints or preliminary IFC prints shall not be used as reference for licensed occupant installations nor for Cardston Electric Utility inspections.

Power line and Telecommunication Wireline Construction

- The licensed occupant must not attach any facilities on the poles until after the required Cardston Electric Utility Make Ready Work is complete.
- During construction, it is important that Cardston Electric Utility and the licensed occupant:
 - Accurately place conductors and messengers on the pole in accordance with the Cardston Electric Utility Make Ready Work prints and Accepted IFC prints.
 - Accurately sag conductors and messengers as per accepted design and based on their respective standard stringing sag criteria.
- Structure integrity critical changes that will require Cardston Electric Utility field and design review and approval.
- The integrity of a structure is affected by (but not limited to) changing the following:
 - Height, class, setting depth, location, and deflection of pole.
 - Lead distances of anchors.
 - Height of attachment of the structure framing.
 - Structure framing.
 - Material change.
 - Conductor size, sag, and tension.
 - Alignment of new facilities.





Notification of Construction Complete and submission of As-Built Drawings

- The licensed occupant shall notify the Cardston Electric Utility representative in writing upon completion of installation of telecommunication facilities. Note: This will trigger inspection and field acceptance of the telecommunication wireline installations.
- The licensed occupant shall submit an as-built drawing within 30 days of the completed installation of telecommunication facilities on Cardston Electric Utility poles.

NOTE: The as-built drawings will be used to update and confirm Cardston Electric Utility licensed occupant mapping records.

6. Application for Licensed Occupancy on the Pole

- All telecommunication wireline applications for licensed occupancy on Cardston Electric Utility poles shall follow the Town of Cardston Licensed Occupant Licensed Occupant Guide & Process document.
- An application is required for the following wireline attachment requests:
 - All wireline attachments include tangents, taps, dead-end, and angle deflections; Wireline attachments refer to the addition of telecommunication cables lashed on messenger wires on the pole;
 - All required changes in height of attachments of existing supply/communication facilities on pole;
 - Lateral and underground risers on pole;
 - Addition of splices, devices, and equipment on pole.
- An application is not required for the following:
 - Telecommunication service drops originating from a pole already approved for wireline attachments. Telecommunication mid-span service drops are allowed.

NOTE: A service drop must be no more than 25 m; no strands/supporting cable (is not lashed on messenger wires); and no more than 1400 N of maximum tension.

7. Analysis and Gathering of Pole Information

- The licensed occupant shall be responsible for gathering pole information proposed for the telecommunication wireline attachments. The licensed occupant is responsible for the design and installation of its attachments on poles. The list of information needed for analysis is listed in Section 17.
- Cardston Electric Utility will perform the structural analysis of the poles proposed for telecommunication wireline attachments based on the project scope and information provided by the licensed occupant. The pole class and height must be selected to meet





the requirements of all parties including Cardston Electric Utility and all licensed occupants on the pole.

8. Structure Loading

- Weather Loading Conditions
 - Condition A: CSA C22.3 No.1-20 heavy loading condition of 12.5 mm of radial ice on the conductors with 400 Pa of wind at -20°C.
 - Condition B: Cardston Electric Utility loading condition of 1900 Pa at 4°C.

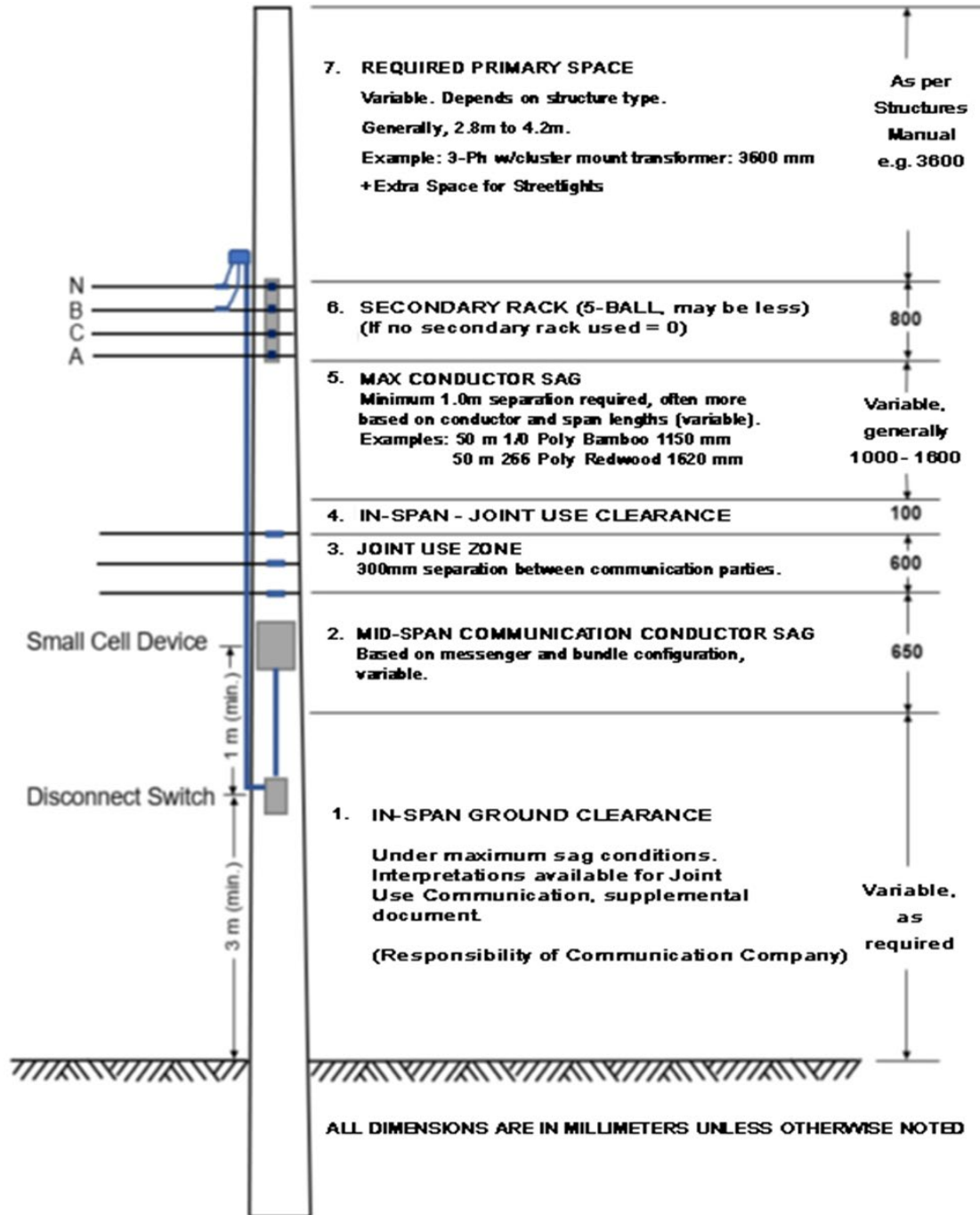
9. Supply and Installation of New Pole for Licensed occupant Attachment

- If the licensed occupant requires a new or additional pole to attach its telecommunication facilities, a request can be made to have Cardston Electric Utility supply and install the pole.
- The licensed occupant shall be responsible to pay for the associated costs for the supply and installation of the new pole.
- This installation is subject to applicable laws, approvals, land rights and engineering requirements.
- Locations are generally restricted to acceptable locations within government road allowances and utility right of ways as determined by Cardston Electric Utility. Cardston Electric Utility will not supply a pole on private property in a location that requires regular land access costs, or one that has accessibility concerns.
- The addition of a pole may affect the adjacent structures, such as with uplift issues or additional loading. As such, the licensed occupant shall pay the required changes in the system in accommodating this new pole.



10. Clearances and Vertical Separations on Poles

Cardston Electric Utility requires the following clearances and minimum vertical separations at the pole and in-span circuit clearances.





Licensed occupant Zone (on wood pole)

- By default, licensed occupant zone does not exist on the pole since Cardston Electric Utility will not normally account for licensed occupant attachment on poles when providing electric services to its customers.
- The licensed occupant zone on the pole will only exist where the licensed occupant requests and is approved to attach on the pole. The licensed occupant shall pay for the needed changes on the pole to allow for its attachment to the pole.
- Each licensed occupant on the pole is provided with a 300 mm zone.
- The maximum number of licensed occupants attaching wireline attachments on the pole is 3. As such, the total available licensed occupant zone on a wood pole is 600 mm.

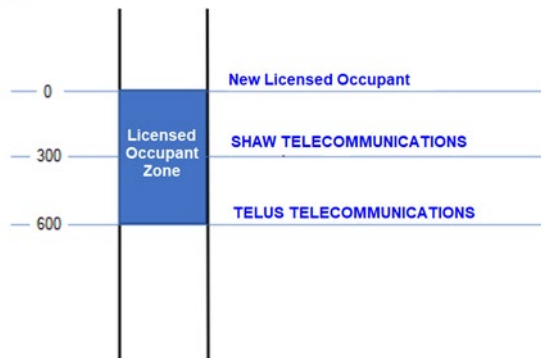
Separations between wireline attachments within the licensed occupant zone

- The vertical separations of telecommunication wireline attachments within the licensed occupant zone shall be 300 mm.
- On an existing pole where the 300 mm separation requirement cannot be met, the telecommunication wireline attachment may be attached with a minimum vertical separation of 100 mm from another telecommunication wireline attachment within the licensed occupant zone.

NOTE: The Alberta Government Telecommunications (AGT) historically owned the telecommunication facilities on Cardston Electric Utility poles and were typically placed at the lowest position within the licensed occupant zone. Since TELUS communications bought out the AGT telecommunication facilities, telecommunication facilities (copper, lashing of additional fibre) continue to be placed at the lowest position (600 mm) in the licensed occupant zone. Likewise, cable TV (e.g., SHAW) wireline attachments are placed and located in the middle (300 mm) of the licensed occupant zone. New telecommunication wireline licensed occupants will normally take the upper and last position (0 mm) in the licensed occupant zone. As such and in keeping licensed occupant facilities placed consistently on existing poles and to avoid crisscrossing between facilities, the placement of telecommunication wireline attachments shall be maintained as follows:

- New licensed occupant – upper position (0 mm)
- SHAW licensed occupant – lower position (300 mm)
- TELUS licensed occupant – lower position (600 mm)





- The standard placement of wireline attachments will also place the heavier telecommunication facilities at the lower position and the lighter telecommunication facilities placed at the higher position within the licensed occupant zone. This will allow for the proper sag between telecommunication facilities and order (i.e., no crisscrossing of telecommunication lines and guys) in installation. This will also allow for efficient use of the pole with the heavier and bigger diameter telecommunication facilities attached lower in the pole (i.e., lesser loading and bending moments).
- Telecommunication equipment and small connected devices shall be attached below the licensed occupant use zone.
- Telecommunication wireline attachments such as copper lines, coaxial cables, and fibre optic cables, intended for main and service lines, are to be attached on wood pole structures.
- Telecommunication wireline attachment on streetlight poles is not allowed.

11. Telecommunication Splices and Devices on Poles

- Telecommunication splices, amplifiers, nodes, and wireline devices attached on the messenger shall be made within 1 to 2 metres from the pole.
- Fibre storage loops (snowshoe) additions shall be identified where required. As such, additional weight, and tensions due to these additions should be presented at time of application.

NOTE: This would be presented as distributed load equivalent (kg/m or N/m) and overwrite the bundle weight (add distributed load) while preserving cable bundle size.

12. Climbing Space, Working Space, and Minimum Approach

Distance

- The climbing space, working space, and minimum approach distance to supply facilities are detailed in Annex B. Climbing Space, Working Space, and Minimum Approach Distance.





13. Types and Methods of Telecommunications Attachment on Poles

Wireline Attachments

- Telecommunication wireline attachments include copper, coaxial, and fiber optic cables. Telecommunication cables are typically lashed on a messenger wire. Messenger wires are attached on poles which holds and supports the telecommunication cables.
- Telecommunication wirelines – Pole to pole attachments
 - For tangent (straight line) attachments – the use of a 3-bolt attachments (single through bolt and 2x bolts holding a clamp).
 - For dead-end attachments – the use of dead-end eyebolts.
- Telecommunication service drops – Pole to residential service
 - A service drop must be no more than 25 m; no strand/supporting cable (is not lashed on messenger wires); and no more than 1400 N of maximum tension.
 - A service drop is not allowed to run from pole to pole.

Telecommunication Laterals and Underground Risers

- Telecommunication laterals and underground risers refer to the installation of telecommunication and cable wireline facilities transitioning from overhead to underground, or vice versa.
- Telecommunication laterals and underground risers on wood poles must be attached on stand-off brackets. All materials needed for the installation of telecommunication laterals and underground risers shall be supplied and installed by the licensed occupant.

NOTE: The installation of laterals and underground risers on stand-off brackets will keep the duct away from the pole to allow workers to climb up the pole.

- In case where telecommunication laterals are attached directly on pole and where there is a request for a rebuild or application for additional telecommunication laterals on these poles, the existing telecommunication laterals and underground risers shall be brought to current standards and shall have all telecommunication laterals installed on stand-off brackets.

NOTE: The determination of who pays for the costs of rebuilding shall be consistent with the licensed occupant agreement.

Telecommunication Guys and Anchors

- Telecommunication guys and anchors are to be designed separate from Cardston Electric Utility facilities and to support the intended telecommunication attachments on the pole. The licensed occupant shall be responsible to assess and evaluate the strength of their own guys and anchors to have appropriate capacity to support the tensions of their facilities on the pole.





- The size of telecommunication guy wires and its corresponding lead distances shall be specified by the licensed occupant in their drawings and submissions.
- Telecommunication guys and anchors shall maintain a minimum horizontal separation of 2 meters from Cardston Electric Utility helix anchors.

14. Placement of Above Ground Equipment in Proximity to Poles

- Telecommunication above ground facilities such as pedestals and equipment should be placed at least 3 meters away from poles. This is to avoid obstructions and to allow workers access and ability to climb up the pole. It will also offer flexibility and avoid damage to the telecommunication facility when replacing the pole.

15. Telecommunication Vertical Clearances to Ground

- The following outlines the ground clearance requirements for telecommunication wireline attachments on poles.
- For the purposes of maximum sag, these are defined in the CSA C22.3 No.1-20 code as the worst of two conditions:
 - Thermal sag, at 50°C for communication
 - Vertical sag at -20°C with a vertical load that is equivalent in magnitude to the total resultant loading calculated from the ice (12.5mm radial) and wind (400 Pascals) conditions specified.
 - For the vertical ice loaded sag condition above, an alternative vertical sag condition below (sometimes referred to as warm ice) is considered acceptable for ground clearance checks.
 - Acceptable alternative to the vertical ice loaded sag condition above: Vertical sag at 0°C with 12.5 mm radial ice and no wind.

16. Land Rights and/or Rights of Ways

- The licensed occupant shall secure needed land rights and or rights of way for their proposed facilities on the pole. This includes but is not limited to the installation of anchors and overhanging of facilities on private property.
- Where Cardston Electric Utility has an existing land right for its facilities may not mean that additional licensed occupant attachments on the pole will be covered and included in the agreement. Due diligence is required to confirm scope and content of the rights of ways agreement before approving and attaching on poles.





17. Gathering of Pole Information

- Prior to making an application for wireline attachments, the applicant shall gather and provide the following information for each pole proposed for attachment. This information will be used by Cardston Electric Utility in assessing poles to determine if poles are fit for attachments, requires alterations, or replacement.
- **Pole Stamp**
 - Pole stamps are usually on and metal tag - located approximately 6 feet from the ground level at the pole. Pole lengths are in 5-foot increments, typically from 35' to 50'. Pole classes range from class 5 (skinny) to class 2 (thick).
 - In cases where pole stamps are not readable or available, the diameter of the pole at the ground line and height of pole above ground shall be provided instead.
- **Technical Cable Data (existing & proposed)**
 - Cable name/description
 - Bundled cable diameter and mass
 - Fibre storage loop (Snowshoe)
 - Tension Type (Slack / Tight)
 - Cable bundle diameter of licensed occupant cables existing at the structure
 - Maximum tension of bundle(s)
 - If not known for tight spans, they will be conservatively approximated.
 - Slack spans are required due to variability in tensions and stress on the poles.
 - The following additional data may be provided but is not required
 - Ultimate Tensile Strength (UTS) or Rated Tensile Strength (RTS) of messenger wire.
 - Stringing table indicating temperature, loading tensions and sags for all proposed bundles.
 - Profile view showing vertical clearances of communication or cable facilities crossing roads, alleys, driveways, highways, etc.
- The licensed occupant shall provide a plan view of their proposed telecommunication facilities on poles. The provision of a profile view is preferred, but not required. The profile and plan view plans shall show the following information in all spans and poles proposed for wireline attachments.
 - Starting and ending point of proposed change
 - Span lengths
 - Dead-end structures for each affected span
 - Guy locations
 - Tap (include power and telecommunication main line and service drops) locations, distance, and angle deflections
 - Conductor changes on double dead-end structures



- Tabulated list of existing and proposed changes
- **Licensed occupant Checklist (Licensed Occupant Checklist)**
 - The Licensed occupant Checklist can be provided as a quick reference of the information required by Cardston Electric Utility on poles proposed for wireline attachment.

18. Grounding and Bonding Requirement

Multi-Grounded Neutral (MGN) Requirements

- A multi-grounded neutral is required on poles proposed for telecommunication wireline attachments.
- A multi-grounded neutral shall be installed in isolated multi-grounded systems that are bridged by telecommunication circuits.
- Telecommunication wireline attachments are not allowed on earth-return-neutral and ungrounded primary systems.
- Where both primary and secondary exist on the same structure, the secondary open wire neutral (i.e., top poly-covered circuit of the secondary rack) is acceptable to be used as the multi-grounded neutral.
- The size of a neutral conductor shall meet the minimum size as per Table 1.

Table #1 – Accepted neutral sizes (primary and secondary circuits)

Primary	Secondary	Neutral Minimum Size
#2 ACSR Haddock to #1/0 ACSR	#2 Ebony to #1/0 Bamboo	#2 Haddock or #2 Ebony

- The messenger conductor on plex cables (duplex, triplex, quadplex) is not to be used as a multi-grounded neutral where both primary and secondary circuits exist on the same structure. A separate multi-grounded neutral conductor shall be installed before a telecommunication wireline attachment can be strung on the pole.
- Telecommunication wireline attachments can be strung on secondary poles (no primary) with existing plex (duplex, triplex, quadplex) cables. The messenger conductor on plex cables maybe used as a multi-grounded neutral on secondary poles (where no primary circuit is present).





Bonding of telecommunication messenger to supply multi-grounded neutral system

- The telecommunication messenger (i.e., support strands) shall be bonded to the multi-grounded neutral system of the supply system at a maximum of 300m intervals, and at common crossing structures, using a minimum conductor size of No. 6 AWG copper or equivalent.

NOTE: The bonding between telecommunication and supply system should be completed on poles with existing grounding electrode (i.e., ground rod and down lead).

- Where grounding and bonding of telecommunication messenger is required on the pole, Cardston Electric Utility will install and maintain the grounding electrode (i.e., ground rod and down lead) on the pole.
- The licensed occupant shall bond and ground the telecommunication wireline attachment to the grounding down lead on the pole (as provided by Cardston Electric Utility). The connection shall be made by a qualified utility worker. This is typically coordinated between Cardston Electric Utility and the licensed occupant representative, where Cardston Electric Utility personnel may perform that actual work if the licensed occupant representative is not qualified, and it is agreed upon.

19. Obtaining Approvals from Another Licensed occupant on the Pole

- In situations where a licensed occupant proposes changes (i.e., lowering or increasing height of attachments) to another licensed occupant attachment on the pole, the licensed occupant proposing the changes must secure approval from the other licensed occupant on the pole
- The licensed occupant applicant must provide a copy of the approval from the other licensed occupant on the pole to the Cardston Electric Utility representatives.
- The licensed occupant must manage and complete the required work in accordance with the terms of the approval and agreement with the other licensed occupant on the pole.





ANNEX A

Alberta Electrical Utility Code (AEUC), 6th Edition (Normative)

This annex contains some applicable code clauses. Refer to the full AEUC for more details.

2-012 Interference with Systems

- 1) No person shall interfere with, tamper with, or willfully damage electrical utility systems covered by this Code.
- 2) Electrical utility system poles and structures shall be kept free of all materials and equipment not required for the system, unless permitted by the operator of the utility system.
- 3) No person shall make attachments to electrical utility system poles and structures unless authorization has been received from the operator of the utility system.
- 4) No person shall climb electrical utility system poles or structures or make connections or disconnections to electrical utility system equipment unless the person has been authorized to do so by the operator of the utility system.
- 5) No person shall enter an electrical utility system generating station, substation, subsurface chamber, equipment room, or similar location unless that person is authorized to enter by the operator of the utility system.

2-014 Activities near Overhead Power Lines (See Appendix B.)

- 1) This Rule applies to activities near overhead powerlines and not the movement of persons, equipment, buildings, vehicles, or objects under overhead powerlines.
- 2) A person must contact the operator of the utility system before activities other than those in Subrule (1) are undertaken or equipment is operated within 7.0 meters of an energized overhead line to:
 - (a) determine the voltage of the power line; and
 - (b) establish the appropriate safe limit of approach distance listed in Table 1.
- 3) Except as provided for in Subrule (4), a person must ensure that the safe limit of approach distance, as established in Subrule (2), is maintained and that no activities are undertaken, and no equipment is operated at distances less than the established safe limit of approach distance.
- 4) A person must notify the operator of the utility system before activities are undertaken or equipment is operated in the vicinity of the power line at distances less than the safe limit of





Licensed Occupant: Attachments

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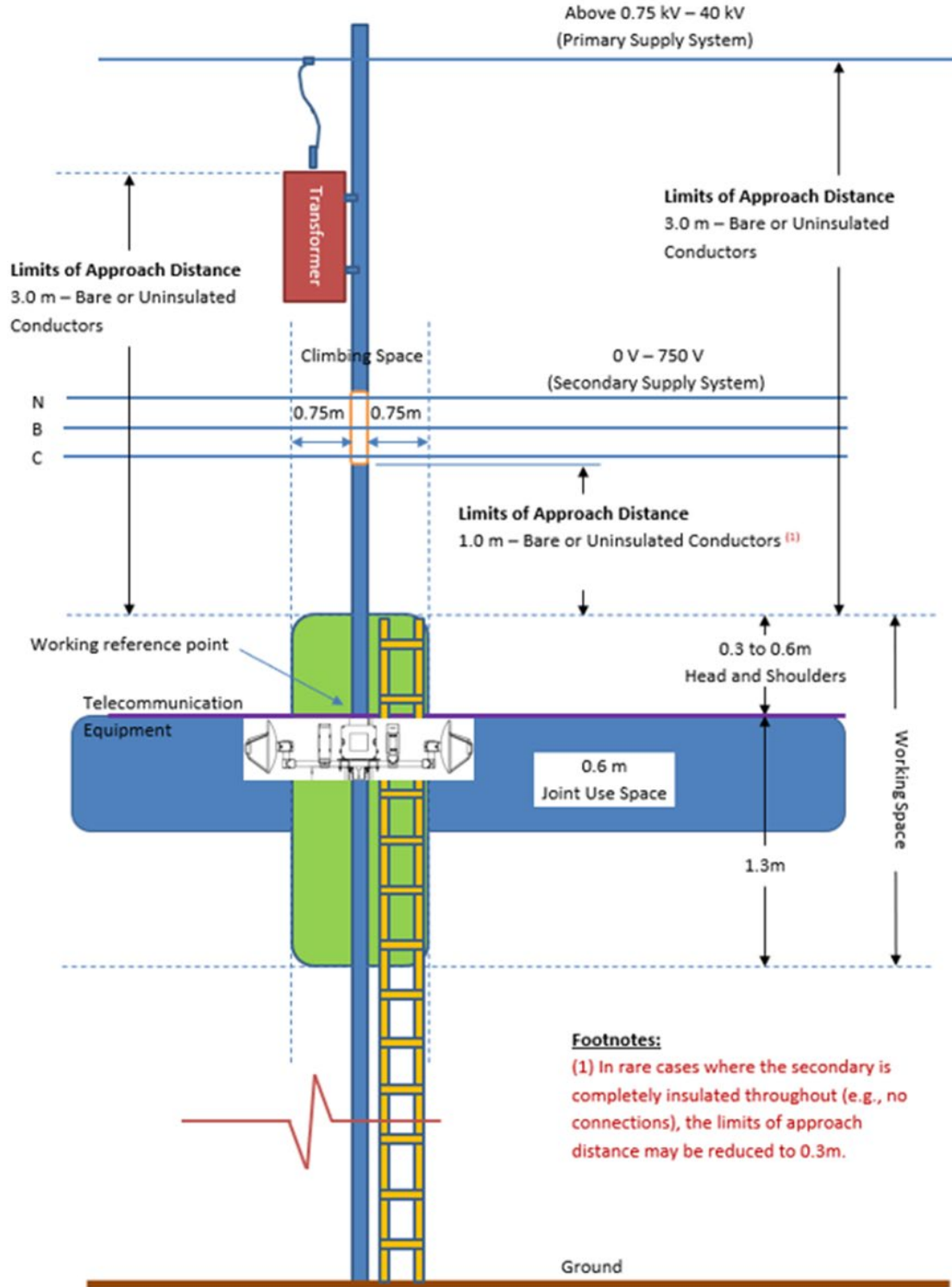
approach distances listed in Table 1 and obtain the operator's assistance in protecting persons involved.

- 5) Notwithstanding Subrules (1) through (4), Table 1 does not apply to utility workers falling under the OH&S Code, Part 40 Utility Workers – Electrical.
- 6) A person must ensure that earth or other materials are not placed under or beside an overhead power line if doing so reduces the safe clearance to less than the Minimum Vertical Design Clearances above Ground or Rails as defined in Table 5 of this Code and the safe limit of approach distances listed in Table 1.
- 7) A person must follow the direction of the operator of the utility system in maintaining the appropriate safe clearance when conducting activities near an overhead power line.
- 8) If an activity is being carried out near the safe limits of approach distances specified in Table 1, the person completing the activity shall assign a competent person to act as an observer whose only responsibility is to ensure that the safe limit of approach distances will be maintained.
- 9) A person shall not excavate or perform similar operations in the vicinity of an overhead or underground power line if it reduces the electrical and structural integrity of the power line including associated grounding equipment.



ANNEX B

Climbing space, Working Space, and Minimum Approach Distance



Footnotes:

(1) In rare cases where the secondary is completely insulated throughout (e.g., no connections), the limits of approach distance may be reduced to 0.3m.





ANNEX C

Counting of Wireline Attachments

General

- Telecommunication wireline attachments on Cardston Electric Utility poles are billed in accordance with the Agreement for Licensed Occupancy.
- Adherence to the "Licensed Occupant" Process is needed to ensure proper installation and counting of licensed occupant attachments on poles.

Telecommunication Wireline Attachment

- The following attachments qualify to be counted as one attachment on the pole as long as they occupy within the licensed occupant zone.
 - Tangent attachment – 3-bolt attachments (single through bolt and 2x bolts holding a clamp).
 - Deadend/tap attachment – deadend eyebolts or bolt eye

NOTE: A double dead-end; a tap from an existing tangent attachment; a corner run attachment; are all considered as one attachment as they occupy the same licensed occupant zone.

NOTE: Multiple attachments from the same licensed occupant that are at different heights but support lines that are in the same direction (i.e., one line on top of another line in-span) shall each be counted separately as they occupy different licensed occupant zones.

