

# SCHEDULE "C"



Town of Cardston

## **Licensed Occupant: Attachment Guide & Process**

Electrical Distribution System Operational Documents

Version 1.023



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## 1. Scope

- This document outlines Town of Cardston's Electric Utility requirements and application process for Licensed Occupant requests.

## 2. Purpose

- This document is intended to guide the Licensed Occupant to understand the Licensed Occupant application process and Cardston Electric Utility's requirements.
- This document will facilitate the interaction between Cardston Electric Utility and the customer for Licensed Occupant applications.

## 3. Roles and Functions

- The roles that are included in this document and its annexes are as follows:
  - Licensed Occupant (Communication or cable company, 3rd party) representative
  - Cardston Electric Utility representatives
- Contact email: [Electrical@cardston.ca](mailto:Electrical@cardston.ca)

## 4. Types of Attachments

- Wireline Attachments
  - These include telecommunications cables including copper, coaxial, and fiber optic cables lashed on messenger wires.
  - Telecommunication cables/conductors are typically attached to Cardston Electric Utility's poles using a 3-bolt clamp on tangent constructions and dead-end eyebolts on dead-end structures. Other types of material attachments must be referred to Standards Department for review and approval.
- Licensed Occupant Laterals and Underground Risers
  - Laterals and underground risers refer to the installation of telecommunication wireline facilities to transition from overhead to underground, or vice versa.
  - Laterals and underground risers must be attached on stand-off brackets. The Licensed Occupant party shall be responsible to supply and to arrange for the installation of the stand-off brackets.

### 4.1 Licensed Occupant Guys and Anchors

- Licensed Occupant guy wires and lead distances shall be specified by the Licensed Occupant party in their drawings and submissions.





- The Licensed Occupant party 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 Licensed Occupant pole.
- The minimum distance between multiple anchors on the pole shall be 2 meters. If plate anchors are required, it must be installed 3 meters away from other anchors.

**4.2 Licensed Occupant Equipment and Devices**

- Licensed Occupant equipment and devices include cabinets, wireless devices, antennae, microcell (small cell), and 5G devices.
- Licensed Occupant equipment and devices shall be installed by the Licensed Occupant party in accordance with all applicable codes and regulations.
- Equipment and devices will typically require an electric service. Requests for Licensed Occupant attachment of new wireless and new wireline attachments, including electric service requests, should be made as one application to Cardston Electric Utility.
- Equipment and devices shall only be attached below the Licensed Occupant zone of a wood pole.
- When choosing structures for Licensed Occupant of equipment and devices, the tangent poles (i.e., primary, and/or secondary attachments only) are recommended. Licensed Occupant equipment and devices are not allowed to be attached on switching structures and structures with equipment (i.e., riser pole, transformer pole, MVIs, regulators, capacitors, switch poles, etc.) due to climbing access and operational issues.
- Licensed Occupant equipment and devices must be attached on stand-off brackets to allow for climbing access on the pole. As a general guideline, 2/3 of the wood pole must be free for climbing.
- The maximum number of attachments (Licensed Occupant Party) allowed to attach equipment and device on a pole is 1.

**5. Schedule of Fees**

<b>SCHEDULE OF FEES</b>			
<b>ITEM NO.</b>	<b>ATTACHMENT TYPE</b>	<b>APPLICATION</b>	<b>FEE</b>
1	Wireline Attachments	One-time application fee per pole	\$181
2	Equipment and Devices	One-time application fee per pole	\$145
		One- time application fee per new device	\$2,500
3	Interconnection	Interconnection fee per pole. Includes the installation of a load center by Cardston Electric Utility.	\$321





## 6. General requirements

### 6.1 Licensed Occupant Agreement

- The customer must maintain a Licensed Occupant agreement with Cardston Electric Utility.
- The customer may contact Cardston Electric Utility 403-653-5672 or email ([electrical@cardston.ca](mailto:electrical@cardston.ca)) to obtain information or to proceed with an application for a Licensed Occupant agreement.
- Cardston Electric Utility charges an annual Licensed Occupant fee, per pole, for wireline (i.e., copper and fiber optic cables) attachments.
- Cardston Electric Utility also charges a separate annual Licensed Occupant fee, per pole, for devices and equipment (i.e., security cameras, cabinets, small cells, wireless devices, dual LED obstruction light, etc.).

### 6.2 Department Approval

- The Licensed Occupant must obtain an approval from the local municipality for Licensed Occupant of facilities within municipal rights-of-way.
- The Licensed Occupant must obtain approval from Cardston Electric Utility before attaching Licensed Occupant facilities on Cardston Electric Utility structures.

### 6.3 Additions and modifications that will require submission for Licensed Occupant

- Addition of messenger and cables on new or existing Licensed Occupant structures
- Lashing of new cables to existing messenger
- Addition of overhead cable taps (with messenger)
- Adjusting existing messenger or cable attachment heights
- Addition of aerial equipment and devices (i.e., cabinets, security cameras, wireless devices, antennae, microcell, dual LED obstruction light; etc.)
- Addition of streetlight banners and festive lighting.

### 6.4 Additions and modifications that will not require submission on existing Licensed Occupant structures

- Addition of stand-off brackets and laterals (i.e., communication underground risers off a pole)
- Addition of service drops.

**NOTE:** 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 tension.





## 7. Licensed Occupant – Research and Design

- The Licensed Occupant is responsible for the design and installation of their Licensed Occupant facilities.
- Cardston Electric Utility is required to meet the requirements of the Alberta Electrical Utility Code (AEUC). Therefore, the customer proposing to attach on Cardston Electric Utility facilities must also follow and meet the requirements of the Alberta Electrical Utility Code (AEUC).
- The Licensed Occupant must obtain and provide the following information to Cardston Electric Utility for Licensed Occupant applications. Applications lacking information will be returned for resubmission. Refer to: Town of Cardston Communication Licensed Occupant Checklist.

### 7.1 Plan and Profile View

- The following information is required for all spans and poles affected by the proposed Licensed Occupant attachments.
- Starting and ending point of proposed change
- Span lengths
- Dead-end structures for each affected span
- Guy locations and lengths
- Tap locations and lengths
- Conductor changes on double dead-end structures
- Tabulated list of existing and proposed changes
- Proposed height of attachments for all new communication or cable facilities
- Profile view showing vertical clearances of communication or cable facilities crossing roads, alleys, driveways, highways, etc.

### 7.2 Technical Cable Data (existing & proposed)

- Cable name/description
- Bundled cable diameter and mass
- Tension Type (Slack / Tight)
- Cable bundle diameter for 3rd party communication 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.
- Refer to: Technical Cable Data for full chart details.

### 7.3 Devices and Equipment Details

- Mass (kg)
- Dimensions (mm) (height, width, depth)
- Proposed Height of Attachments (top of box) (mm)
- Safety Code 6 information, as applicable





- Power requirements
- Maximum Wattage
- Voltage
- Number of phase (i.e., single phase)

## 8. Licensed Occupant Process

### STAGE 1: Licensed Occupant Application

- Call Town of Cardston: 403-653-5672 or complete an application form on the Town of Cardston website <https://www.cardston.ca/government/municipal-services/electrical>
- Provide the following information:
  - contact information
  - address and Legal Land Location of the Licensed Occupant project
  - 3rd party Authorization (i.e. For Consultants)
  - number of poles to attach
- Electric service requests (for devices and equipment) in addition to Licensed Occupant of facilities should be made as one application to Cardston Electric Utility.
- The customer must indicate if they require a “budgetary estimate” or a “firm quote”. Details of budgetary estimate and a firm quote are discussed in Section 8.2, Stage 2.
- The customer should have the required Licensed Occupant information, as listed in Section 7, prepared in an electronic format and ready for submission.

### STAGE 2: Initial Analysis (Cardston Electric Utility)

- Budgetary Estimate
  - Town of Cardston Electrical Department will only provide a budgetary cost of replacing the poles.
  - If the customer would like to proceed with their project and obtain a “Firm Quote”, the customer must notify The Town of Cardston Electrical Department and follow Section “Firm Quote”

**NOTE:** Cardston Electric Utility will only complete a structure analysis on Licensed Occupant poles for firm quote requests.

- **Firm Quote**
  - The Licensed Occupant must maintain a Licensed Occupant agreement with the Town of Cardston.
  - The Licensed Occupant has provided all required information listed in Section 7.
  - Cardston Electric Utility will complete a structure analysis on each Licensed Occupant pole to determine if the pole needs replacement or not.





- Cardston Electric Utility will provide a firm quote.

### **STAGE 2B: Technical Analysis (Designer and Engineer)**

- Cardston Electric Utility will complete an evaluation and study (i.e. detailed pole analysis, identifying conflict, additional work) based on the project scope and information provided by the customer.
- The Licensed Occupant must provide additional or missing information as identified and requested by Town of Cardston Electrical Department.

### **STAGE 3: Suggested Solutions for Deficiencies**

- Cardston Electric Utility will identify and notify the Licensed Occupant of deficiencies or conflicts (i.e. future upgrades, conflicts, structural failures, not meeting code requirements, etc.) that will affect the Licensed Occupant application and may offer solutions (i.e., pole replacement, add guy, etc.) for consideration.

**NOTE:** Cardston Electric Utility is not responsible to develop designs (acting as consultants) but to act primarily as an approving official.

- If the Cardston Electric Utility has notified the customer of deficiencies or conflicts, the customer must provide a solution and re-submit their design to the Cardston Electric Utility.

### **STAGE 4: Estimate**

- Cardston Electric Utility will provide an estimate including the scope of work based on the provided prints and provide a Quote Package to the Licensed Occupant.

### **STAGE 5: Quote Accepted**

- The Licensed Occupant must review the quote package. If accepted, the Licensed Occupant must return a signed copy of the quote letter back to the Cardston Electric Utility, and with the required payment.
- The Cardston Electric Utility will start with the billing of Licensed Occupant attachments after the Town of Cardston received the signed quote letter from the Licensed Occupant.

### **STAGE 6: Final Design and Drawings**

- The Licensed Occupant must submit two hard copies (electronic format is accepted) of the final design and stamped with "Issued for Construction (IFC)".
- The IFC prints must include and show the plan view of proposed Licensed Occupant attachments.
- Cardston Electric Utility will review and accept (or reject) the Licensed Occupant's IFC prints.

**NOTE:** The 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







Licensed Occupant 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.

- Upon acceptance by the Cardston Electric Utility, the Cardston Electric Utility will return one copy. The Cardston Electric Utility will sign the IFC print and return one of the accepted IFC print to the Licensed Occupant. The Licensed Occupant must reproduce the Cardston Electric Utility's accepted IFC print for use in construction.
- The Town of Cardston accepted IFC prints are deemed "final" and frozen. All construction by the customer must be carried out in accordance with the Cardston Electric Utility accepted IFC prints.

**NOTE:** If the Cardston Electric Utility does not need to complete any work (i.e., replace pole), the customer may proceed to Stage 8: Communication Construction.

### **STAGE 7: Construction**

- Cardston Electric Utility will proceed with construction of its facilities and will notify the Licensed Occupant after the work is complete.
- The Licensed Occupant must not attach any Licensed Occupant facilities on Cardston Electric Utility structures until after the required Town of Cardston work is complete.
- The Licensed Occupant may proceed to construction after receiving a notification from the Cardston Electric Utility of completed construction.

### **STAGE 8: Communication Construction**

- The Licensed Occupant must call 403-653-5672 and arrange for a Cardston Electric Utility employee for an overhead power line orientation and start-up construction meeting for the installation of Licensed Occupant's facilities on Cardston Electric Utility's poles.
- Overhead orientations, start-up meetings, and inspections
- The Licensed Occupant should arrange an overhead orientation and start-up construction meeting on any additions or modifications of attachments as listed in Section 4.
- The Cardston Electric Utility's employee must have a copy of the Cardston Electric Utility IFC print before proceeding to have a start-up meeting and overhead orientation.
- The Licensed Occupant's construction representatives must have a copy of the Cardston Electric Utility accepted IFC print during the start-up and overhead orientation meeting.
- The Town of Cardston's employee reserves the right to inspect and to schedule inspections on customer's facility installations on Cardston Electric Utility structures.

### **Proposed Changes to Accepted IFC Prints**



- If the Licensed Occupant must make minor design or construction changes, the Licensed Occupant must coordinate with the Cardston Electric Utility employee.
- If the Licensed Occupant must make major changes, the Licensed Occupant's representative must coordinate with the Cardston Electric Utility and request in writing (i.e., letter, email, fax) indicating the proposed changes and the reasons for the changes, including sufficient details and/or plans to clearly outline or depict the scope of the proposed changes.
- The Cardston Electric Utility representative will review the request and check if the proposed changes can be completed and recorded as "red-line" as-built changes or whether the proposed changes are significant enough to warrant the submission of revised IFC engineering drawings for Cardston Electric Utility acceptance again.
- If construction has begun and a physical obstruction requires changes to the proposed design or layout, it is the customer's representative responsibility to coordinate the request as outlined above.
- Approved deviations or changes in the Cardston Electric Utility's accepted IFC prints shall be marked with a red ink pen on the IFC print. This will help ensure that Cardston Electric Utility's facilities are not put into jeopardy and that the changes will not affect the proposed design.

### **STAGE 9: Receipt of As-Built Drawings**

- No changes or deviations from Issued for Construction (IFC) print:
- If there are no deviations from the Cardston Electric Utility accepted IFC print, the Licensed Occupant's representative must notify Cardston Electric Utility in writing, within thirty (30) days, of Licensed Occupant facilities construction completion.
- With changes or deviations from Issued for Construction (IFC) print:
- The Licensed Occupant's representative is responsible for all corrective actions and costs related to correcting any deficiencies or any non-approved alterations made with reference to the Cardston Electric Utility accepted IFC prints.
- If there are changes or deviations from the accepted IFC prints, the Licensed Occupant must note these changes with red ink on the Cardston Electric Utility accepted IFC prints (referred to "as-built" drawings). The Licensed Occupant must provide the "as-built" drawings to the Cardston Electric Utility within thirty (30) days upon completion of their work so that Cardston Electric Utility may verify the proper installation of the communication facilities.

## **9. CONTACTS FOR FURTHER CLARIFICATION**

- Please forward your questions to the Cardston Electric Utility ([electrical@cardston.ca](mailto:electrical@cardston.ca))



