



TRICO
AN ENERGY COOPERATIVE

Pole Attachment Procedures & Guidelines

January 25, 2024



Trico Electric Cooperative, Inc.

Pole Attachment Procedures and Guidelines

The Purpose of these Procedures and Guidelines is to provide a simplified reference for companies with attachments on Trico poles. In order to make any attachment to a Trico pole a company must have a valid, executed Pole Attachment Agreement with Trico. Nothing in these Procedures and Guidelines will alter the terms of the Pole Attachment Agreement, which shall control. For additional detail, please see the Pole Attachment Agreement or reach out to Trico at (520) 744-2944 Ext. 1339

Contents

1. Introduction

1.1 Definitions

- **"Administrative Processing"** -- The processing of the application for a Pole Attachment, the preparation of the Make-Ready Work orders, the coordination of work requirements and schedules for Make-Ready Work by Trico and the random verification of the pre-license survey.
- **"Alden One"** -- Platform that connects utility asset owners, applicants, engineering and construction firms during the application and project process.
- **"Anchor"** -- An assembly (rod and fixed object or plate owned solely by Trico or by others), designed to resist the pull of a Guy Strand.
- **"Application"** -- The Pole Attachment Application and required Exhibits submitted by applicant electronically via Alden One.
- **"Attachment"** -- Any wire, cable, equipment, or other appurtenance not belonging to Trico on Trico owned poles.
- **"Attached Pole"** -- A Distribution Joint Use Pole owned or maintained by Trico that contains at least one attachment by an entity other than Trico.
- **"Authorization"** -- Trico's grant of authority to Applicant to affix Attachments to Trico's Distribution Poles.
- **"Drop/Lift Pole"** -- An ancillary pole necessary to extend service from a Distribution Pole to an individual customer(s).
- **"Applicant/Occupant"** -- Any person applying to attach to Trico owned poles.
- **"Make Ready"** -- All Actual Costs necessary for Trico to prepare its Distribution Poles for Applicants attachments, including the costs of materials, labor, engineering, supervision, overhead, and a share of Tree Trimming costs. Engineering includes design, proper conductor spacing and bonding, calculations to determine proper ground clearances and pole down guy and anchor strength requirements for horizontal and transverse loading. Also included among "Make Ready Costs" are the Actual Costs required to install or change out primary poles, secondary poles and Drop/Lift Poles, including the Actual Costs of installation or removal of guys, anchors, stub poles, materials and equipment, temporary construction and all other construction.
- **"Overlashing"** -- The practice whereby Applicant or any service provider physically ties or otherwise attaches new wiring to any wiring that already has been affixed to a Distribution Pole.
- **"Pole Attachment Rental Fee"** -- The annual amount per Attachment that Applicant must pay to Trico.
- **"Pole License Fee"** -- The fee that Applicant must pay to reimburse Trico for the administrative and other Actual Costs incurred by Trico in processing Application and is not the annual Pole Attachment Rental Fee.

1.2 Overview

Trico Electric Cooperative Pole Attachment Procedures and Guidelines includes the processes, procedures and guidelines necessary for any Occupant to attach their facilities (“Attachments”) to overhead distribution facilities (“Attached Pole”) owned by Trico. These procedures and guidelines will facilitate a timely completion of the “Application” request with minimal delays or conflicts. These procedures and guidelines are controlled by, and are not intended to supersede, amend or replace, the terms of the required Pole Attachment Agreement between Trico and Applicant.

For Additional information regarding attachments to poles, please contact Trico at.

Trico
Attn: Joint Use
PO Box 930
Marana, AZ 85653
JointUse@Trico.coop
Website: www.Trico.coop

1.3 Outline

Trico Pole Attachment process.

1. Pole Attachment Agreement between Trico and Occupant
2. Attachment Application Process
3. Make ready and approval review process.
4. Post Construction Inspection process.

2. Pole Attachment Agreement

Occupants must have a valid, executed and binding Pole Attachment Agreement with Trico authorizing and establishing the terms and conditions applicable to application request. Applicants can email JointUse@Trico.coop for a draft Pole Attachment Agreement.

**Occupant is responsible for coordinating with any other third-party occupants as needed to facilitate shared use of a pole.

3. Attachment Application Process

3.1 Permit to Attach Required

Applicants will be eligible to apply for a new permit to attach, modification of existing attachments or Overlashing.

3.2 Application request submitted through Alden One

Applications must contain the following.

- Exhibit C
- Exhibit C1 with Pole numbers and Proposed heights
- Sag/Tension Report

Application requests are to be submitted through Alden One with the required contacts and company assigned.

****Account can be made at identity.aldenone.com**

3.3 Application Review Time

Trico requires at least thirty (30) business days to review a completed package.

3.4 Rejection of Attachment Permit Applications

Trico may reject or condition its approval of any Attachment Permit Application for non-compliance with the terms of a Pole Attachment Agreement, the NESC, any applicable law, regulation, or code provision or for any other reason allowed by law.

3.5 Attachment Permit Fees

Trico's attachment fee schedules will be available and kept current per the Pole Attachment agreement on file.

3.6 Trico Electric Pole Attachment and Span/Sag/Tension Calculation Worksheets

The Pole Attachment Spreadsheet consists of data necessary for Trico to track attachments. All Applicants shall provide the spreadsheets at application submission. The sample forms are attached to page 14 and 15 of this document. The spreadsheets can be downloaded from Trico's website.

4. Attachment Requirements

4.1 Power Supply equipment

- Any attachments of power supply or equipment to any Trico Poles and/or structures is required to receive an approved “Attachment Permit” prior to attaching to any Trico owned poles.
- Should Occupant require a power supply for any attachment that is located within Trico service territory, power supply must be provided by Trico. Requests for electrical service shall be made with our New Service Technicians at ConstructionApplications@Trico.coop or call (520) 744-2944 Ext. 2731.

****No power supply will be permitted on Trico owned primary poles**

4.2 Operations and Maintenance

Trico shall, at its own expense, inspect and maintain the Joint Use Poles in accordance with industry practices, and shall replace, reinforce, or repair such Poles as are determined to be defective. Occupants are required to maintain their own facilities on Trico Owned poles.

4.3 Grounding and Bonding

- Insulation shielding of cable and joints shall be effectively grounded.
- Cable sheaths or shields that are connected to ground at a manhole shall be bonded or connected to a common ground.
- Bonding and grounding leads shall be of a corrosion-resistant material suitable for the environment or suitably protected.

4.4 Easements and Permits

Occupants are solely responsible for obtaining any easements, permits or other permissions that may be necessary for Occupant to make and maintain an attachment to pole located on private property or in the public rights of way based upon current Arizona laws. Trico shall not be responsible for obtaining any easements or permits that benefit or allow Occupant’s attachments.

4.5 Attachment Identification

- Be non-metallic.
- Be of a distinctive and uniform design.
- Include an identification code as agreed upon by the parties.
- Be legible, clearly visible, and recognizable from the ground by a person having normal vision.
- Not show occupants name, tag, brand, or insignia, unless prior consent of Trico is obtained.

Occupant shall be responsible for ensuring that its Attachments have permanent identification markers. Should Trico encounter any of Occupants Attachments without permanent

identification markers, Trico may notify Occupant of this condition. Occupant shall have thirty (30) days from the date of notice to place such permanent identification markers on those Attachments. If the markers are not placed within thirty (30) days, then Occupant shall be deemed in Default and as a remedy, at its option, Trico may then remove such Attachments without incurring any liability to Occupant, and Occupant shall reimburse Trico for the cost of such removal.

5. Clearance Requirements

Table 1 – Minimum Clearance requirements for Communication Attachments from NESC tables 232-1 and 242-1 (Must follow ALL NESC requirements)

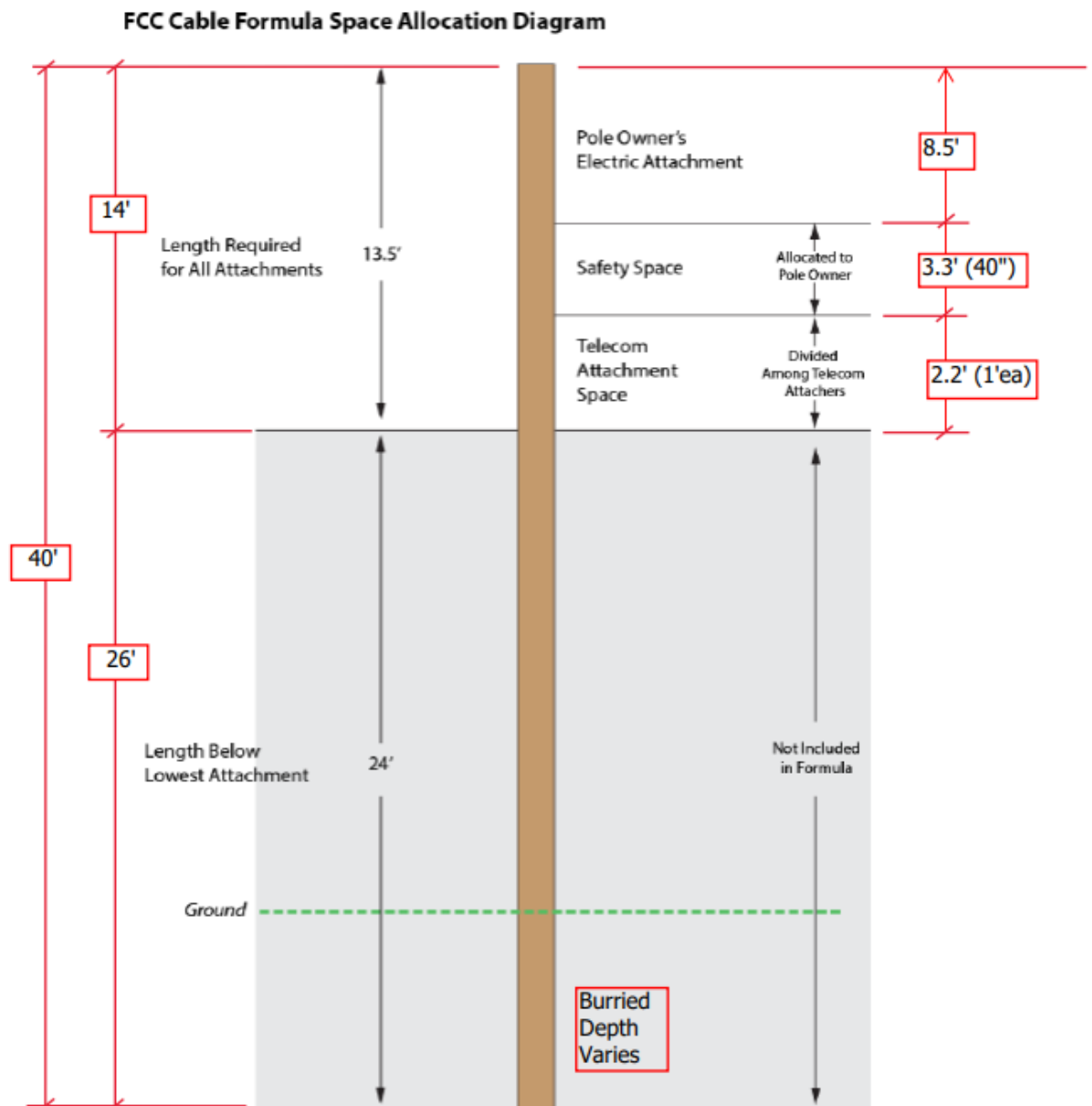
Nature of Surface Under Utility	Mid-Span Vertical Clearance (feet)	Grade of Construction	Note
Railroads	23.5	B	Railroad Company may require greater clearance
Roads, streets, and other areas subject to trucks over eight (8) ft	15.5	B or C	DOT may require a greater clearance
Driveways, established parking areas and alleys	15.5	C	
Other Areas traversed by vehicles over 14' (cultivated, grazing, forest, orchard lands, industrial site and commercial site)	15.5	C	Based on horseback and riding and vehicles over 14'
Spaces and ways subject to pedestrians or restricted traffic only	9.5	C	No vehicle traffic
Water Areas (No Sailboats)	14.0	B	When crossing permit is required

Table 2 – Communication Worker Safety Zone

Application	Mid-Span Vertical Clearance (inches)
Communication Top Lowest Duct, Primary, or Secondary Electrical Cables on Structures (i.e. lowest power cable/equipment including drip loop, secondary duct, transformer, etc.)	40.00
Communication to Neutral on Structures	40.0
Communication to Neutral in Mid-Span	12.0
Communication to Communication on Structure	12.0
Communication to Communication in Mid-Span	4.0
Communication to Grounded Guy	6.0
Communication to Drip Loop Serving Street Light	12.0
Communication to Effectively Grounded Street Light Arm	4.0

**TRICO 40-4 BASE POLE
ON 1-PHASE LINE**

FCC Cable Formula Space Allocation Diagram



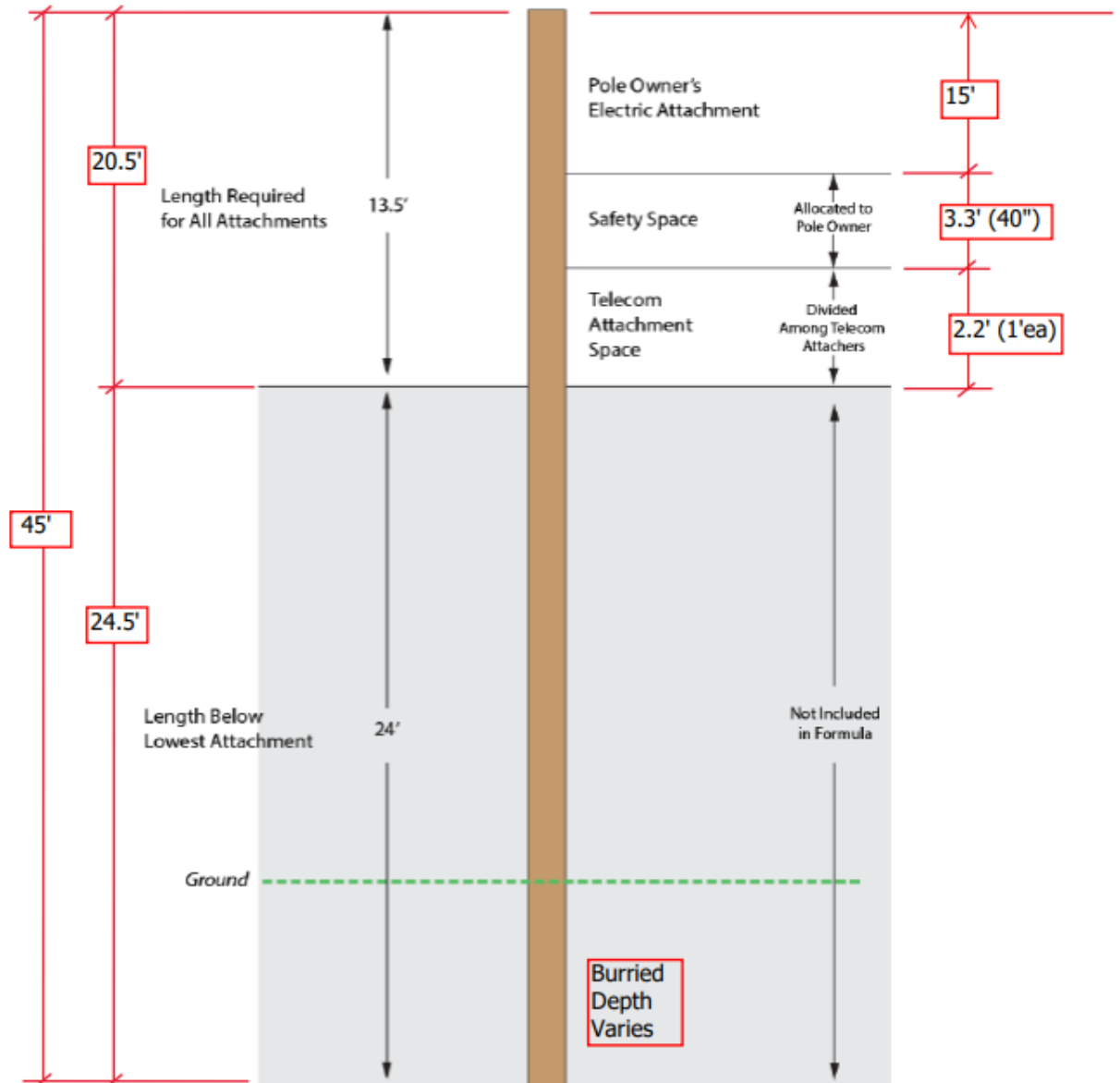
Note: The FCC assumes a 37.5 foot pole with 13.5 feet required for attachments and 24 feet below the lowest attachment, including the length in the ground.

Source: 47 Code of Federal Regulations 1.1418.

TRICO 45-H1 BASE POLE ON SINGLE-CIRCUIT 3-PHASE LINE

FCC Cable Formula Space Allocation Diagram

FCC Cable Formula Space Allocation Diagram



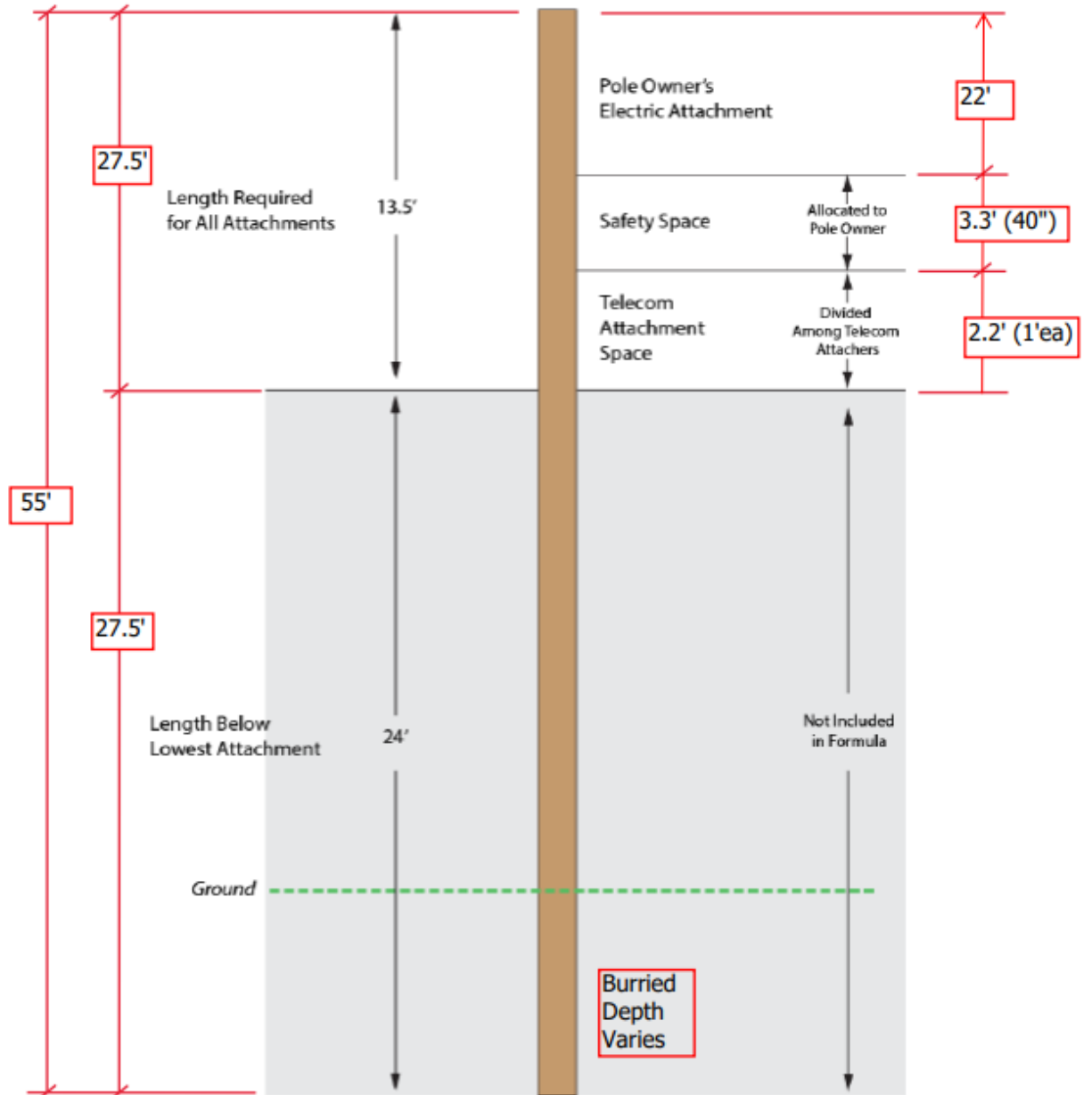
Note: The FCC assumes a 37.5 foot pole with 13.5 feet required for attachments and 24 feet below the lowest attachment, including the length in the ground.

Source: 47 Code of Federal Regulations 1.1418.

TRICO 55-H4 BASE POLE ON
DOUBLE-CIRCUIT 3-PHASE LINE

FCC Cable Formula Space Allocation Diagram

FCC Cable Formula Space Allocation Diagram

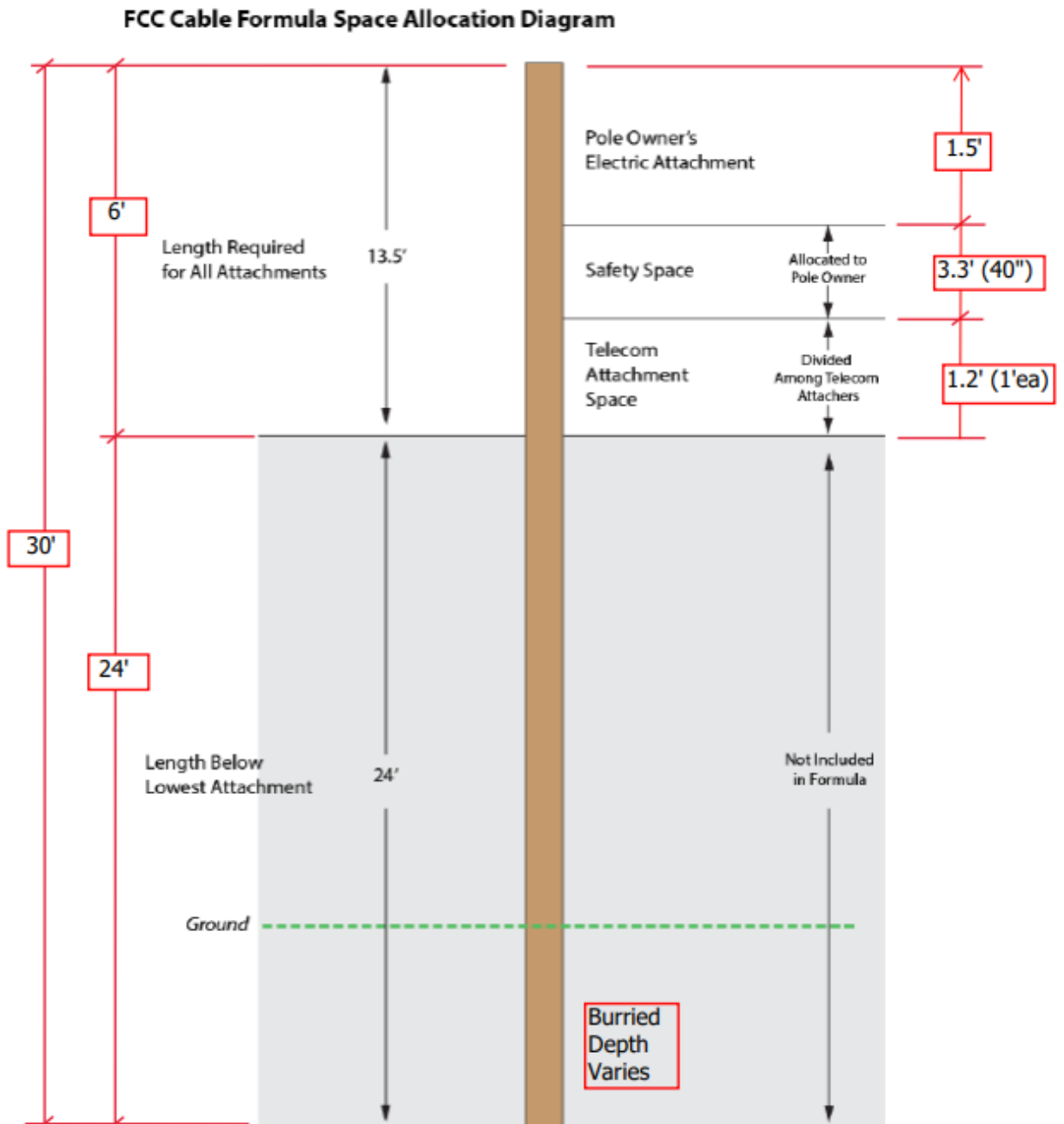


Note: The FCC assumes a 37.5 foot pole with 13.5 feet required for attachments and 24 feet below the lowest attachment, including the length in the ground.

Source: 47 Code of Federal Regulations 1.1418.

**TRICO 30-6 BASE POLE
ON SECONDARY LINE**

FCC Cable Formula Space Allocation Diagram



Note: The FCC assumes a 37.5 foot pole with 13.5 feet required for attachments and 24 feet below the lowest attachment, including the length in the ground.

Source: 47 Code of Federal Regulations 1.1418.

6. Make Ready & Approval Process

If the Occupant's Attachment Permit Application has been approved subject to completion of Make-Ready, Trico will provide applicant a written estimate of the time and cost of such Make-Ready. If Occupant authorizes Trico to complete the Make-Ready work, then occupant shall prepay the entire cost estimate. Trico will notify the applicant that the Make-Ready is complete, and the pole is ready for attachment.

7. Construction Guidelines

7.1 General Requirement

Prior to proceeding with physical installations on Trico owned poles, Occupant shall ensure that its workers (whether employees or contractors) are qualified to work near electrical lines.

7.2 Installation

- When installing or maintaining an attachment, the Occupant's construction crews, whether employees or contractors, must be able to show written permission covering the specific construction.
- Communication cables must be properly guyed and anchored before tensioning. This means the occupant must install separate guying and anchoring devices to secure their cables. Trico does not allow piggyback on any Trico Anchors.

7.3 Pole Replacements

At the occupant's request, an existing pole may be replaced with a taller or stronger pole in order to accommodate an Attachment. The operator shall pay the actual and documented cost of the pole replacement including but not limited to all labor and material and will follow our make ready approval process in Section 6 of this document.

7.4 Cable Installation Crew

The occupant shall only use authorized, qualified, and licensed contractors to install cable near or around the electric supply space on a pole. Refer to the most recent edition of the NESC; including but not limited to, Part 4 Work Rules for the Operation of Electric Supply and Communication Lines and Equipment; Section 41 – Supply and Communications Systems – Rules for Employers; Subsection 411E – Identification and Location.

7.5 Guys and Anchor Attachments

When applicable, attachments must be properly guyed and anchored before tensioning. Trico does not allow piggyback on any Trico anchors.

8. Post-Construction Inspection Requirements

- Once Occupant has completed installation of its attachment, the occupant will notify Trico.
- Trico will inspect the attachment. If the installation is not in compliance with the terms of the Permit, the Pole Attachment Agreement, the NESC or other applicable laws, regulations or codes Trico will notify Occupant.

8.1 Safety Violations

If during an inspection or at any time, Trico Determines that any of the Occupant's attachments do not conform with the technical requirements and specifications, Occupant shall upon notice of Trico, pay a Safety Violation Fee of \$300 per individual violation and shall correct violation(s)

within a reasonable time. Should Occupant fail to correct violation(s) within a reasonable time, or if safety considerations so require, Trico may elect to perform the work itself, and Occupant shall reimburse Trico for all costs incurred. Trico shall not be liable for any loss or damage to the Occupant's facilities which may result, and Occupant shall be responsible for any additional damages resulting from its failure to act in a timely manner in accordance with these requirements.

8.2 Unauthorized Attachments

The Occupant shall pay Trico an Unauthorized Attachment Fee of \$150 for each unauthorized Attachment within forty-five (45) days of notification. Trico may require that such unauthorized Attachment(s) be removed by Occupant, or Trico itself may remove the unauthorized Attachment without liability, at the Occupant's expense. Nothing herein shall act to limit any other remedies, including a remedy for trespass, that may be available to Trico as a result of any unauthorized Attachment. No act or failure to act by Trico with regard to any unauthorized Attachment shall be deemed to ratify or license the unauthorized Attachment. If an application for such Attachment is subsequently approved, such approval shall not operate retroactively to constitute a waiver by Trico of any of its rights under this agreement regarding the unauthorized Attachment, and the Occupant shall be subject to all liabilities, obligations and responsibilities of this agreement from its inception with regard to any such unauthorized Attachment.

9. Annual Rental Fees

The Annual Rental Fee to be charged is stated in the Occupant's most recent executed Pole Attachment Agreement. If additional information is needed concerning your agreement on file email JointUse@Trico.coop

10. Requirements Summary

- By submitting the Application Package and fee, the applicant authorizes Trico to proceed with the necessary review. The fee is non-refundable even if the Proposed Application Package is rejected by Trico or withdrawn by Applicant.
- Trico reserves the right to reject an Attachment Permit Application due to insufficient Pole capacity, safety concerns, and any other reason allowed by law.
- No Attachments may be made or modified on a Pole prior to Trico's approval. Any unauthorized Attachments are subject to sanctions and other legal remedies pursuant to the executed agreement.
 - Verbal permission to install an Attach shall not be given under any circumstance.
 - If Make Ready Work is required on Trico's part, this must be paid and time allowed for Trico to perform this work prior to attachment, even if permission is granted in writing.
 - Applicant is not permitted to Overlash any Attachments without submitting an Attachment Permit Application for prior approval.
 - Service drops only require written approval prior to installation when the Drop/Lift Pole or other Joint Use Poles have not been previously licensed and authorized. In this circumstance application must be made prior to attachment.
 - Service drops on previously licensed and authorized poles require application within thirty (30) days of attachment.
- Trico may reserve space on its Poles as needed for the present and future operation of Trico's utility system.
- The Applicant is responsible for any design related to its Attachments.
 - All designs shall comply with the current version of the NESC and applicable state and local rules and regulations.
 - Attachments shall be installed without the use of extension arms, standoff brackets, or similar hardware unless approved in advance by Trico.
- All Attachments shall be marked with a permanent company identifier as set forth herein.
- In the event Make-Ready work is required, the Applicant will not be authorized to make its attachment until such work is fully completed.
 - All Make-Ready costs shall be the sole responsibility of the applicant. Trico will perform all the necessary make-ready work consistent with prudent utility practice.

Sample "Exhibit C1"



TRICO CABLE/FIBER OPTICS APPLICATION FORM - EXHIBIT "C1"

Directions: Fill in application info with new or existing facility info, pole number, existing attacher, measurement to Trico's lowest point.

New Facilities

Material :
Outside Diameter combined (inches) :
Messenger Size:
Weight per Foot combined (lbs):
Tension (this should be the same from anchor point to anchor point):

Existing Facilities (when overlashing)

Material :
Outside Diameter combined (inches) :
Messenger Size:
Weight per Foot combined (lbs):
Tension (this should be the same from anchor point to anchor point):

Pole Number	# of Attachers	Existing Attachment Height							NEW ATT		Comments Make/Ready Required
		CABLE	PHONE	OTHER	Trico Neutral	Trico Transformer (Bottom of Can)	Trico OH Service Wire	Trico Riser	Proposed New Attachment Height	Span Sag of New Facilities	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Sample “Span/Sag/Tension Calculation Worksheet”



Span / Sag / Tension Calculation Worksheet

Date: _____ Company: _____ Project No.: _____

Address: _____

	Pole Number	Tension	Span Sag	Bundle Diameter	Bundle Weight	Span Length
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						