C RURAL WIRE
CLEARANCES
LIGHT LOADING AREA

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1. GENERAL

1.01 This section covers the recommended clearances for C rural wire installed in the light loading area. The values specified meet the requirements of the National Electrical Safety Code (1981 Edition). They apply under conditions of 60°F with no wind or ice. This section contains the information formerly contained in Section 624-700-015.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 ***Construction*** clearances for span lengths over 500 feet generally contain some allowance for extra sag which will be introduced as a result of permanent stretching of the wire under storm-loaded conditions. It should not be necessary to resag C rural wire unless the storm loading experienced is quite severe.

1.04 ***Maintenance*** clearances should exist after the wire has been through one or more cycles of storm loading and the temperature returns to 60°F. Wire should be resagged only if clearances at 60°F are less than the maintenance values shown in this section. Clearances above ground or fixed objects will, however, ***decrease*** as the temperature ***rises*** above 60°F since the sag increases. The amount by which clearances should be adjusted for temperature may be determined by comparing the sags shown for the actual temperature with the sags shown for 60°F (Section 624-710-011).

1.05 The clearances shown for ***wire overhanging*** the traveled part of the road are considerably larger than clearances required where no such overhang is involved (Fig. 1).

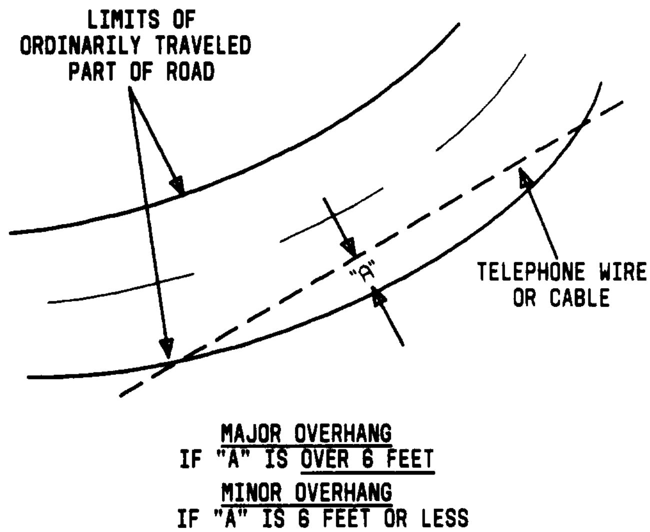

Fig. 1—Overhang—Running Along Public Roads

1.06 The clearances for ***wire crossing alleys, roads, etc,*** show one set of values for general use and a second (generally lower) set of values when one pole is within 50 feet of the edge of the road as shown in Fig. 2.

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1.07 Where poles can be located within 50 feet of the far edge as shown in Fig. 2, it will not always be necessary to base the height of attachment upon 100 percent of the midspan sag. The approximate percentage of sag which should be used in determining the height of pole attachments when Fig. 2 applies is shown below. This procedure should be ignored for spans under 180 feet.

SPAN (FT)	PERCENT OF MIDSPAN SAG "X"=50 FT
180-200	80
201-225	75
226-250	70
251-275	65
276-305	60
306-340	55
341-385	50
386-440	45
441-515	40
516-600	35

Example: A 560-foot span crossing a residential driveway has a sag of 55 inches. The far edge of the driveway is within 50 feet of the pole. The far edge of the driveway is 2 feet lower than the ground where the pole is located. From Part 2 of this section, the construction clearance is 10 feet 8 inches. The sag 50 feet from the pole will be 35 percent of 55 or 19 inches. Minimum height of pole attachment is then 10 feet 8 inches plus 19 inches minus 24 inches (2 feet) or 10 feet 3 inches.

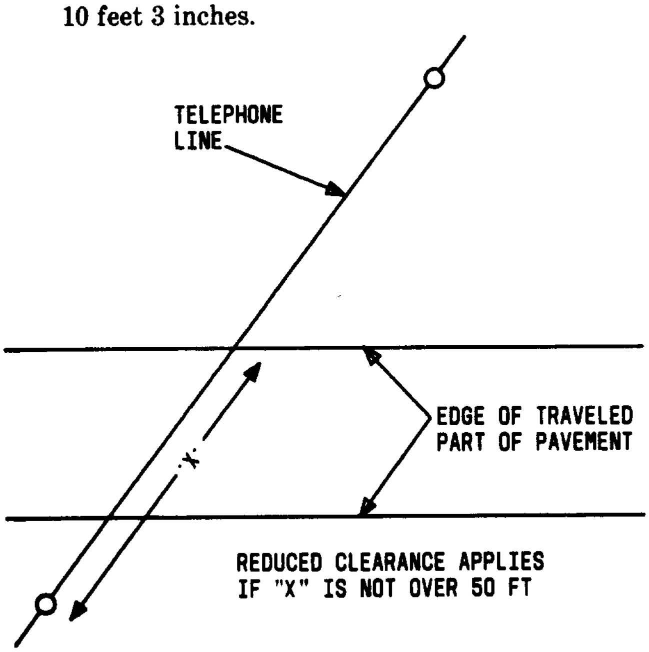


Fig. 2—Midspan Sag Diagram

1.08 Pole lines ***crossing private property*** (fields, woods, etc) and constructed before 1977 did not require specific clearances. The clearances for this construction was considered a "designer's choice" to accommodate the existing conditions. Very often clearances of 12, 14, or 16 feet were adequate for the terrain. The ***1977 National Electrical Safety Code*** specified that, if wire or cable was added to such a facility, the new addition must have road-crossing clearances of 18 feet at 60° F. The ***1981 Edition*** of the code states that the ***existing*** clearances can be maintained when facilities are added on lines built ***prior*** to 1977. For lines constructed ***after*** 1977, road-crossing clearances must be maintained where pole lines cross fields, go through woods, etc. In either case, road-crossing clearances must be maintained where pole lines cross nonresidential driveways.

1.09 To determine the ***clearances required from power conductors,*** it is necessary to know the voltage of the power wires and also whether they are, or are not, part of a grounded system. Clearances for grounded power systems are based upon their voltage to ground; for other systems, clearances depend upon the voltage between wires. Most grounded power systems include a grounded conductor which has many connections to ground. Such conductors are called multigrounded neutrals and are generally considered to be effectively grounded.

READ

Power companies occasionally attach the neutral ABOVE the phase wire as shown in Fig. 3. Therefore, it is important to identify the neutral wire before determining separation requirements. The neutral can usually be identified by observing the presence of the following.

(a) ***The neutral is usually bonded to a vertical ground wire at least every 1300 feet and more often when transformers are present.***

(b) ***The neutral is normally bonded to power guys which do not contain insulators.***

(c) ***Neutrals are sometimes carried on smaller insulators than those carrying phase wires.***

(d) ***The neutral is sometimes carried on a lighter-colored insulator than the phase wires.***

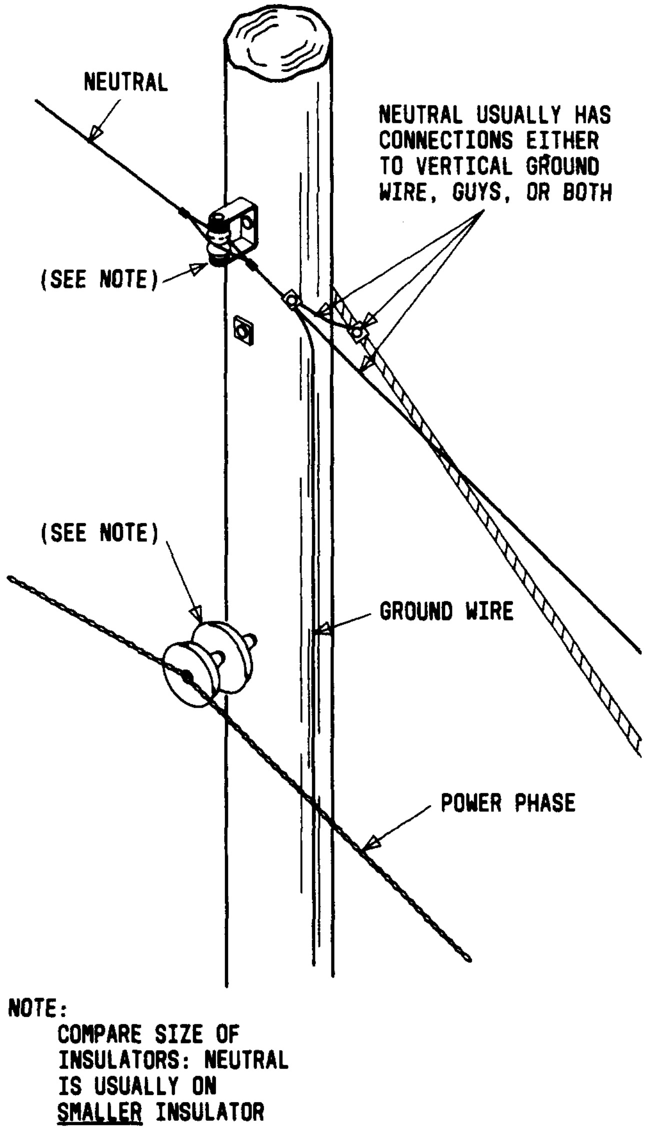


Fig. 3—Inverted Power Construction

(e) ***On transformer poles, the bushing for the neutral is usually smaller than the bushing for the phase connection. The neutral bushing is often located near the secondary bushings (Fig. 4).***

(f) ***Where secondaries are dead ended, if the phase wire is carried through, the neutral will also be carried through.***

Note: If, after considering these factors, sufficient identification of the neutral wire has not been made, consult your supervisor or the electric utility company. However, if the neutral is attached ***above*** the phase wire, provide the clearance specified for phase wires of appropriate voltage.

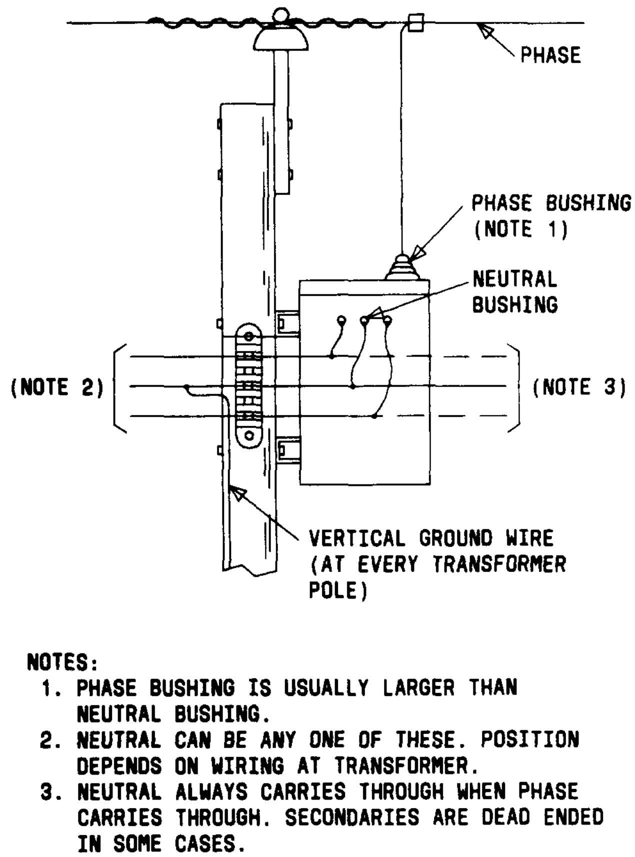


Fig. 4—Identification of Neutral at Transformer Location

1.10 The clearances from streetlights show one value for grounded fixtures and a larger value for nongrounded fixtures. Streetlight fixtures bonded to cable suspension strand that is connected to a low-impedance ground or a ground wire of a multigrounded neutral (MGN) power system are considered to be sufficiently well grounded to use the smaller clearance. Fixtures which are merely grounded to a ground rod are ***not*** considered sufficiently well grounded to use the smaller clearance.

1.11 The clearances from grounded transformers, capacitors, etc, are smaller than for nongrounded transformers, etc. ***Local instructions will designate areas where transformer and/or capacitor cases are grounded, since it is not generally possible to determine by sight*** whether ***or not*** power equipment is grounded.

1.12 Clearances shown in this section should be used unless the detail plans show other values. Clearances shown on the plans may be less than those shown in this section where engineering forces have recognized factors not allowed for in this section. Clearances for span lengths, voltages, and conditions not shown in this section are an engineering responsibility and will be shown on the detail plans.

Note: Work prints may, in some cases, show greater clearances since the values recommended are based upon a maximum vehicle or equipment height of 14 feet. In cases where greater equipment height might be expected, the engineer may elect to show greater clearances.

2. CLEARANCE ABOVE GROUND OR RAILS

2.01 The required C rural wire clearances above various ground or rail environments and in relation to span lengths are shown in Table A. Figures 1, 2, 5, 6, and 7 are referenced in Table A.

TABLE A

SITUATION	REF	350-LESS		351-375		376-400		401-433		434-466	
		CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.
Crossing Above: Railroad Tracks Generally Special Case	 Fig. 5	 27-0 25-0	 (27-0) (25-0)	Span lengths over 150 feet require supporting strand							
Public Roads * Generally Pole not over 50 ft from far edge	 Fig. 7 Fig. 2	18-0 18-0	(18-0) (18-0)	18-3 18-0	(18-3) (18-0)	18-6 18-0	(18-6) (18-0)	18-10 18-0	(18-10) (18-0)	19-2 18-0	(19-2) (18-0)
Public Alleys Generally Pole not over 50 ft from far edge	 Fig. 7 Fig. 2	15-0 15-0	(15-0) (15-0)	15-3 15-0	(15-3) (15-0)	15-6 15-0	(15-6) (15-0)	15-10 15-0	(15-10) (15-0)	16-2 15-0	(16-2) (15-0)
Residential Dwys Generally Pole not over 50 ft from far edge	 – Fig. 2	10-0 10-0	(10-0) (10-0)	10-3 10-0	(10-3) (10-0)	10-6 10-0	(10-6) (10-0)	10-10 10-0	(10-10) (10-0)	11-2 10-0	(11-2) (10-0)
Flat Roof Bldgs	–	8-0	(8-0)	8-0	(8-0)	8-0	(8-0)	8-0	(8-0)	8-0	(8-0)
Peak Roof Bldgs Billboards	–	2-0	(2-0)	2-0	(2-0)	2-0	(2-0)	2-0	(2-0)	2-0	(2-0)
Neon Signs †	–	4-0	(4-0)	4-0	(4-0)	4-0	(4-0)	4-0	(4-0)	4-0	(4-0)
Waterways		Must be shown on detail plans									
Running Along: Public Roads Major Overhang	 Fig. 1	18-0	(18-0)	18-3	(18-3)	18-6	(18-6)	18-10	(18-10)	19-2	(19-2)
Minor Overhang Urban Rural (Lt Traffic)	Fig. 1 –	 18-0 14-0	 (18-0) (14-0)	 18-3 14-3	 (18-3) (14-3)	 18-6 14-6	 (18-6) (14-6)	 18-6 14-6	 (18-10) (14-10)	 19-2 15-2	 (19-2) (15-2)
Parking Lots (crossing includes rooftop parking)	–	18-0	(18-0)	18-0	(18-0)	18-0	(18-0)	18-0	(18-0)	18-0	(18-0)
No Overhang Back of Obstr Not back of Obstr	 Fig. 6	 8-0 13-0	 (8-0) (13-0)	 8-0 13-0	 (8-0) (13-0)	 8-0 13-0	 (8-0) (13-0)	 8-0 13-0	 (8-0) (13-0)	 8-0 13-0	 (8-0) (13-0)
Public Alleys	–	15-0	(15-0)	15-3	(15-3)	15-6	(15-6)	15-6	(15-10)	16-2	(16-2)

* Road crossing clearance also applies to nonresidential driveways as well as any land traveled by vehicles (ie, grazing land, forests, orchards).

† Wire guard required for span lengths over 200 feet if pole is over 50 feet from neon sign.

TABLE A (Contd)

SITUATION	REF	467-500		501-533		534-567		568-600	
		CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.	CONST FT. IN.	(MTCE) FT. IN.
Crossing Above: Railroad Tracks Generally Special Case	Fig. 5	Not recommended for these span lengths							
Public Roads * Generally	Fig. 7	19-7	(19-6)	20-0	(19-10)	20-4	(20-2)	20-9	(20-6)
Pole not over 50 ft from far edge	Fig. 2	18-0	(18-0)	18-1	(18-0)	18-1	(18-0)	18-1	(18-0)
Public Alleys Generally	Fig. 7	16-7	(16-6)	17-0	(16-10)	17-4	(17-2)	17-9	(17-6)
Pole not over 50 ft from far edge	Fig. 2	15-0	(15-0)	15-1	(15-0)	15-1	(15-0)	15-4	(15-3)
Residential Dwys Generally	–	11-7	(11-6)	12-0	(11-10)	12-4	(12-2)	12-9	(12-6)
Pole not over 50 ft from far edge	Fig. 2	10-1	(9-11)	10-5	(10-5)	10-8	(10-7)	11-0	(10-11)
Flat Roof Bldgs	–	8-1	(8-0)	8-2	(8-0)	8-2	(8-0)	8-3	(8-0)
Peak Roof Bldgs Billboards	–	2-1	(2-0)	2-2	(2-0)	2-2	(2-0)	2-3	(2-0)
Neon Signs †	–	4-1	(4-0)	4-2	(4-0)	4-2	(4-0)	4-3	(4-0)
Waterways	–	Must be shown on detail plans							
Running Along: Public Roads Major Overhang	Fig. 1	19-7	(19-6)	20-0	(19-10)	20-4	(20-2)	20-9	(20-6)
Minor Overhang Urban	Fig. 1	19-7	(19-6)	20-0	(19-10)	20-4	(20-2)	20-9	(20-6)
Rural (Lt Traffic)	– †	15-7	(15-6)	16-0	(15-10)	16-4	(16-2)	16-9	(16-6)
Parking Lots (crossing-including Rooftop Lots)		18-0	(18-0)	18-1	(18-0)	18-1	(18-0)	18-1	(18-0)
No Overhang Back of Obstr	Fig. 6	8-1	(8-0)	8-2	(8-0)	8-2	(8-0)	8-3	(8-0)
Not back of Obstr		13-1	(13-0)	13-2	(13-0)	13-2	(13-0)	13-3	(13-0)
Public Alleys		16-7	(16-6)	17-0	(16-10)	17-4	(17-2)	17-9	(17-6)

* Road crossing clearance also applies to nonresidential driveways as well as any land traveled by vehicles (ie, grazing land, forests, orchards).

† Wire guard required for span lengths over 200 feet if pole is over 50 feet from neon sign.

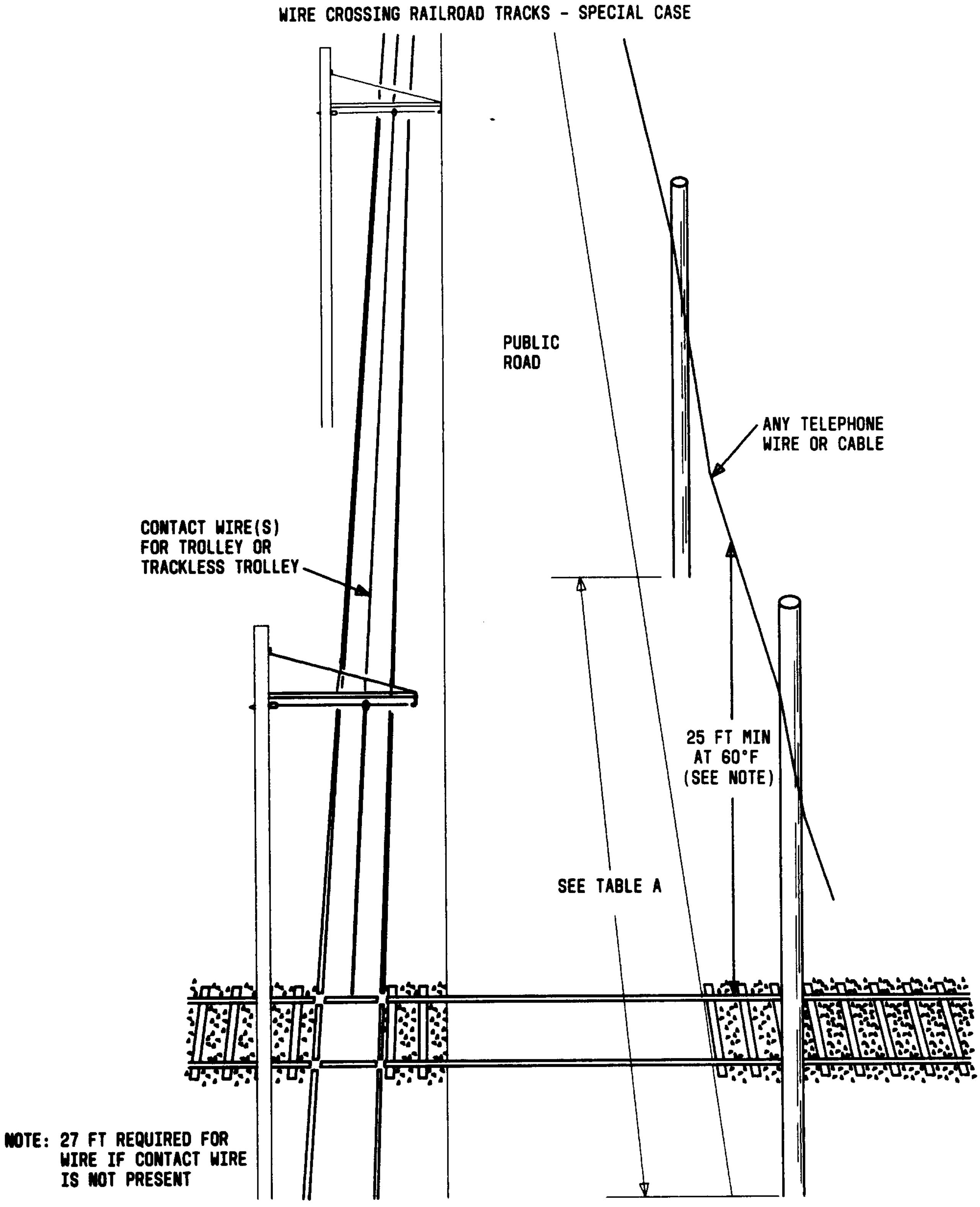


Fig. 5—Wire Crossing Railroad Tracks—Special Case

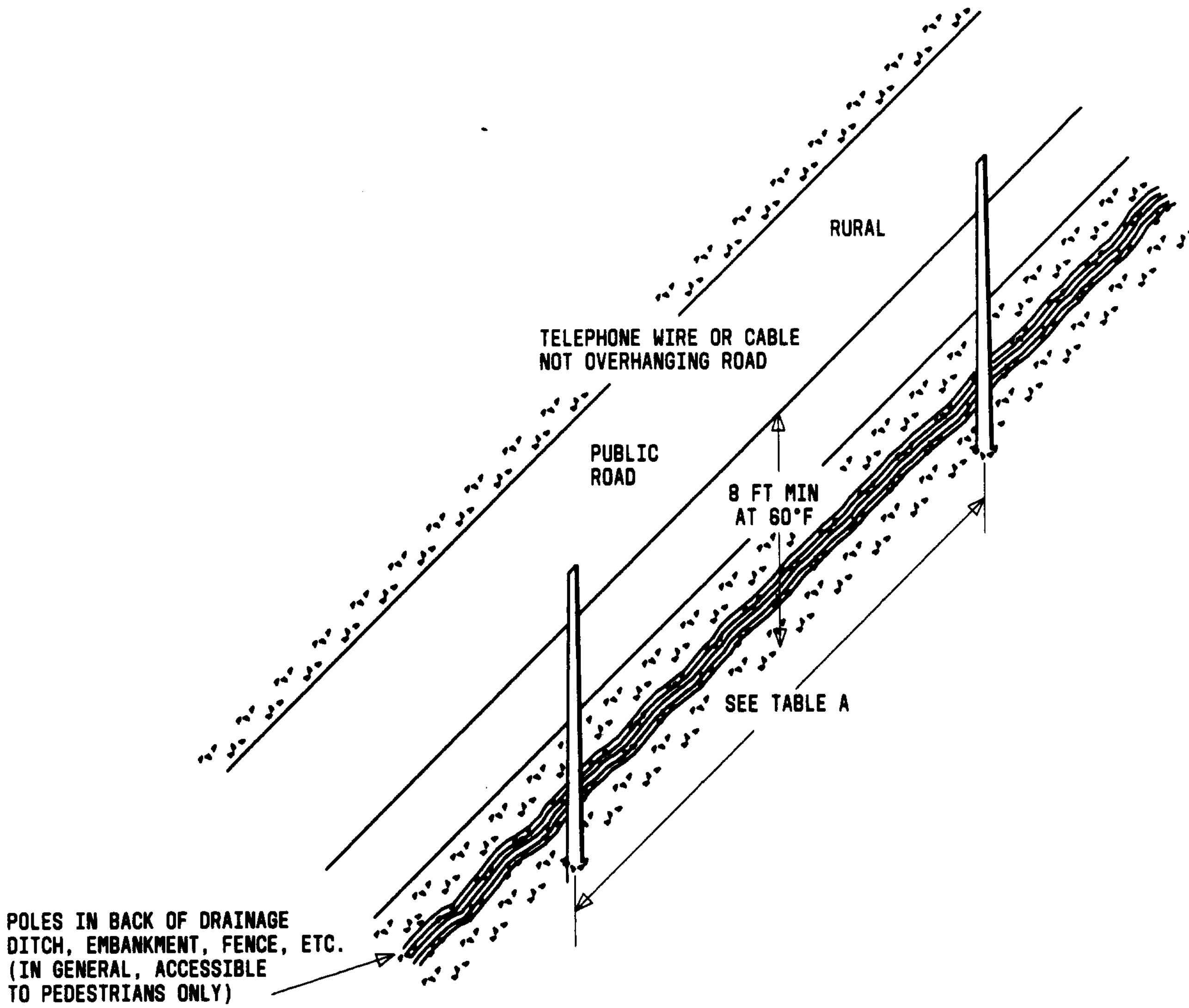


Fig. 6—Running Along Rural Public Roads—Back of Ditches, Etc (No Overhang)

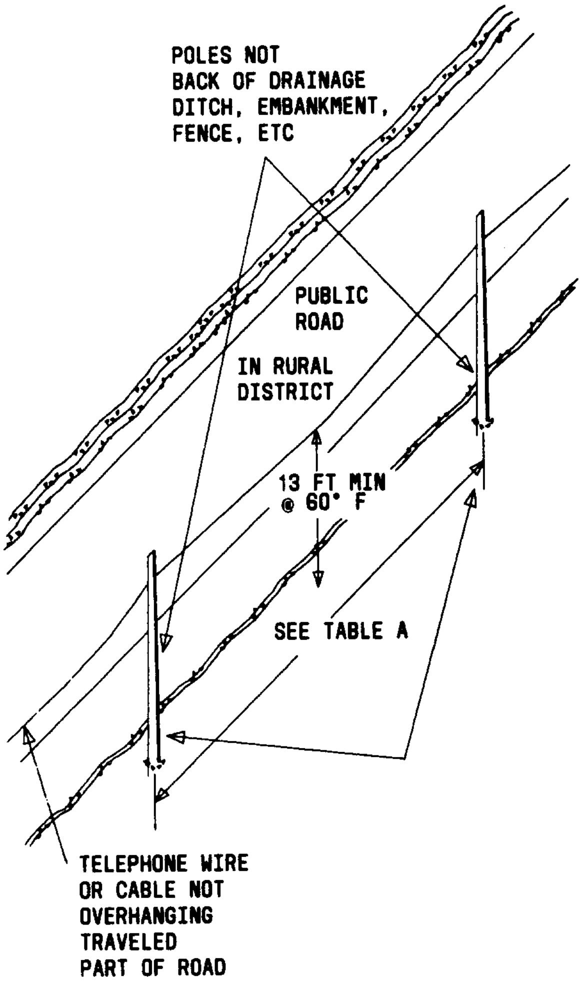
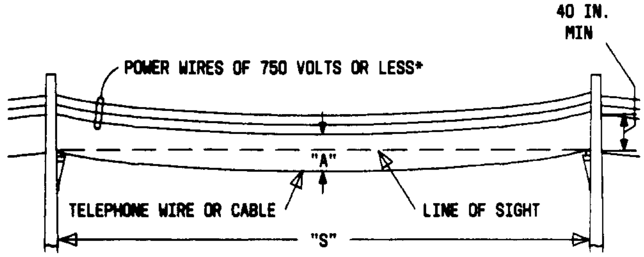


Fig. 7—Running Along, But Not Overhanging, Public Roads (Not Back of Obstruction)

spacing at the pole will provide a midspan separation of (40 − 30) + 28, or 38 inches, which is adequate.



750 VOLTS OR LESS: INCLUDES NEUTRALS, OTHER THAN MULTIGROUNDED, ASSOCIATED WITH CONDUCTORS OF 750 VOLTS OR LESS			
SPAN LENGTH (S) IN FEET	MIDSPAN SEPARATION (A) IN INCHES		CLEARANCE AT THE POLE IN INCHES
	CONSTRUCTION	MAINTENANCE	
150 or Less	32	30	40*
150-350	36 or sag of tel plus 6 if greater†	30 or sag of tel if greater†	40*

* May have to be greater than 40 inches to meet midspan requirements.

† Lowest power wire must be above the line of sight.

Fig. 8—Separation—Power 750 Volts or Less

3. JOINT-USE SEPARATION IN THE SPAN AND ON THE POLE FROM POWER CONDUCTORS

3.01 Clearance requirements between C rural wire and power conductors of 750 volts or less are shown in Fig. 8.

Example:

Span length is 200 feet.

Power secondaries have a 30-inch sag.

Telephone wire has a 28-inch sag.

Required separation at midspan is 36 inches or telephone sag + 6 inches, if greater. However, telephone sag (28 inches) + 6 is only 34 inches; thus the 36-inch requirement governs. Standard 40-inch

3.02 Clearance requirements between C rural wire and power conductors of over 750 volts are shown in Fig. 9.

Example:

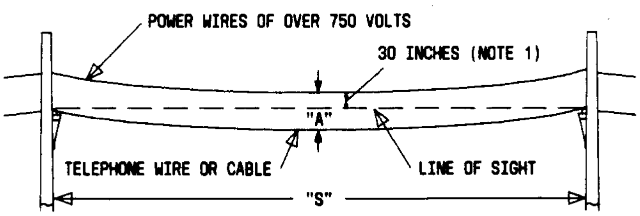
Span length is 340 feet.

Power conductors carry 34,000 volts between wires (20,000 volts to ground) and have a 36-inch sag.

Telephone wire has a 40-inch sag.

Required midspan separation is 51 inches or telephone sag + 36, if larger. The latter, 40 + 36, or 76 inches, is greater than 51 inches and therefore controls. Note that the standard 60-inch spacing at the pole will provide (60 − 36) + 40, or 64 inches, which is 12 inches less than the required 76 inches. The spacing at the pole would therefore have to be increased to 72 inches.

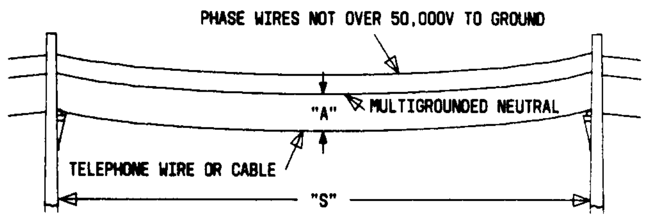
3.03 Clearance requirements between C rural wire and multigrounded neutrals are shown in Fig. 10.



GROUNDED POWER SYSTEMS OF UP TO 15,000 VOLTS BETWEEN WIRES (8700 VOLTS TO GROUND) AND OTHER SYSTEMS OF UP TO 8700 VOLTS BETWEEN WIRES			
SPAN LENGTH (S) IN FEET	MIDSPAN SEPARATION (A) IN INCHES		CLEARANCE AT THE POLE IN INCHES (NOTE 2)
	CONSTRUCTION	MAINTENANCE	
150 or Less	32	30	40
150-350	36 plus sag of tel wire	30 plus sag of tel wire	40
GROUNDED POWER SYSTEMS OF 15,000-86,500 VOLTS BETWEEN WIRES (8700-50,000 VOLTS GROUNDED AND OTHER SYSTEMS OF 8700-50,000 VOLTS BETWEEN WIRES			
150 or Less	47	45	60
150-250	48 or tel sag plus 33 if greater	45 or tel sag plus 30 if greater	60
250-350	51 or tel sag plus 36 if greater	45 or tel sag plus 30 if greater	60

Notes:
1. Power wires must be at least 30 inches above the line of sight if "S" exceeds 150 feet.
2. Clearance at the pole is minimum. Greater clearance may be necessary to meet midspan requirements.

Fig. 9—Separation—Power Over 750 Volts

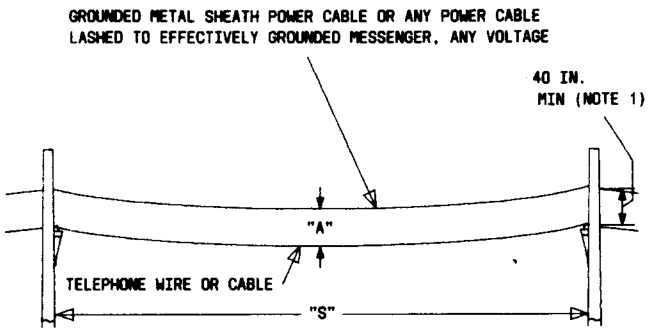


SYSTEMS OF: 22,000 VOLTS OR LESS TO GROUND 38,000 VOLTS OR LESS BETWEEN WIRES			
SPAN LENGTH (S) IN FEET	MIDSPAN SEPARATION (A) IN INCHES		CLEARANCE AT THE POLE IN INCHES (NOTE)
	CONSTRUCTION	MAINTENANCE	
150 or Less	32	30	40
151-350	36	30	40
SYSTEMS OF: 22,000 TO 50,000 VOLTS TO GROUND 38,000 TO 86,500 VOLTS BETWEEN WIRES			
150 or Less	47	45	60
151-350	51	45	60

Note: Clearance at the pole is minimum. Greater clearance may be necessary to meet midspan requirements.

Fig. 10—Separation—Multigrounded Neutrals

3.04 Clearance requirements between C rural wire and power cables (except spacer cables) are shown in Fig. 11.

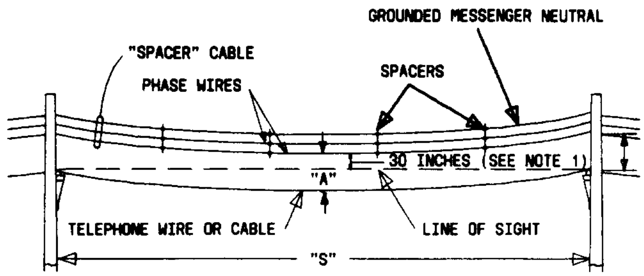


SPAN LENGTH (S) IN FEET	MIDSPAN SEPARATION (A) IN INCHES CONSTRUCTION AND MAINTENANCE	CLEARANCE AT THE POLE IN INCHES (NOTE 1)
GROUNDED POWER CABLE (EXCEPT SPACER CABLE) GROUNDED METALLIC SHEATH, NONMETALLIC SHEATH CABLES LASHED TO GROUNDED MESSENGER, ETC		
Any	30	40
NONGROUNDED POWER CABLES (NOTE 2) 8700 VOLTS OR LESS		
Any	30	40
NONGROUNDED POWER CABLES (NOTE 2) 8700 - 50,000 VOLTS		
Any	45	60

Notes:
1. Clearance at the pole is minimum. Greater clearance may be necessary to meet midspan requirements.
2. Generally excludes spacer cable since the supporting messenger is usually grounded.

Fig. 11—Separation—Power Cables

3.05 Clearance requirements between C rural wire and spacer-type power cables are shown in Fig. 12.



SPAN LENGTH (S) IN FEET	MIDSPAN SEPARATION (A) IN INCHES CONSTRUCTION AND MAINTENANCE	CLEARANCE AT THE POLE IN INCHES (NOTE 2)
SYSTEMS OF: 8700 VOLTS OR LESS TO GROUND 15,000 VOLTS OR LESS BETWEEN WIRES		
150 or Less	30	40
151-Over	30 plus sag of tel	40
8700 - 50,000 VOLTS TO GROUND 15,000 - 86,500 VOLTS BETWEEN WIRES		
150 or Less	45	60
151 and Over	45 or if larger, 30 plus sag of tel	60

Notes:
1. Power wires must be at least 30 inches above the line of sight if "S" exceeds 150 feet.
2. Clearance at the pole is minimum. Greater clearance may be necessary to meet midspan requirements.

Fig. 12—Separation—Spacer-Type Power Cables

4. CLEARANCES ON JOINT-USE POLES—OTHER

4.01 Clearances from power transformers, voltage regulators, capacitors, pins, racks, and crossbars are shown in Table B. Tables C and D and Fig. 13 and 14 are referenced in Table B.

TABLE B

POWER FACILITY	SEE TABLE	FIG. OR NOTE
Power transformers, capacitors, regulators	C	Fig. 13
Secondary racks	C	Fig. 14
Steel Pins	C	Fig. 14
Metal crossarm braces: Attached to metal crossarms within 1 inch of nongrounded transformer, capacitor cases, or their supports	C	Fig. 13
Attached to wood crossarms less than 1 inch below top of arm	C	Fig. 13
Attached to wood crossarm 1 inch or more from nongrounded transformer, etc	D	Fig. 13

TABLE C

FOR GROUNDED POWER CIRCUITS		
VOLTAGE TO GROUND	VOLTAGE BETWEEN LINES	CLEARANCE (INCHES)
8700V or Less	15,000V or Less	40*
8701V - 50,000V	15,001V - 60,000V	60*
FOR OTHER POWER CIRCUITS		
-	5000V or Less	40

* May be 30 inches if case is effectively grounded as a uniform procedure over a well-defined area.

TABLE D

FOR GROUNDED POWER CIRCUITS		
VOLTAGE TO GROUND	VOLTAGE BETWEEN LINES	CLEARANCE (INCHES)
8700V or Less	15,000V or Less	12
8701V - 50,000V	15,001V - 86,500V	30
FOR OTHER POWER CIRCUITS		
-	8700V or Less	12
-	8701V - 50,000V	30

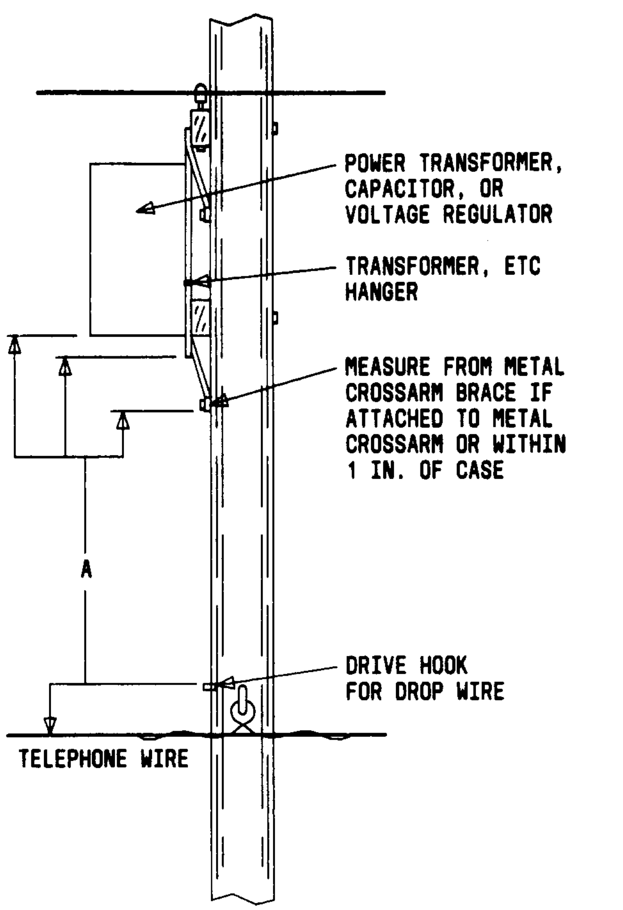
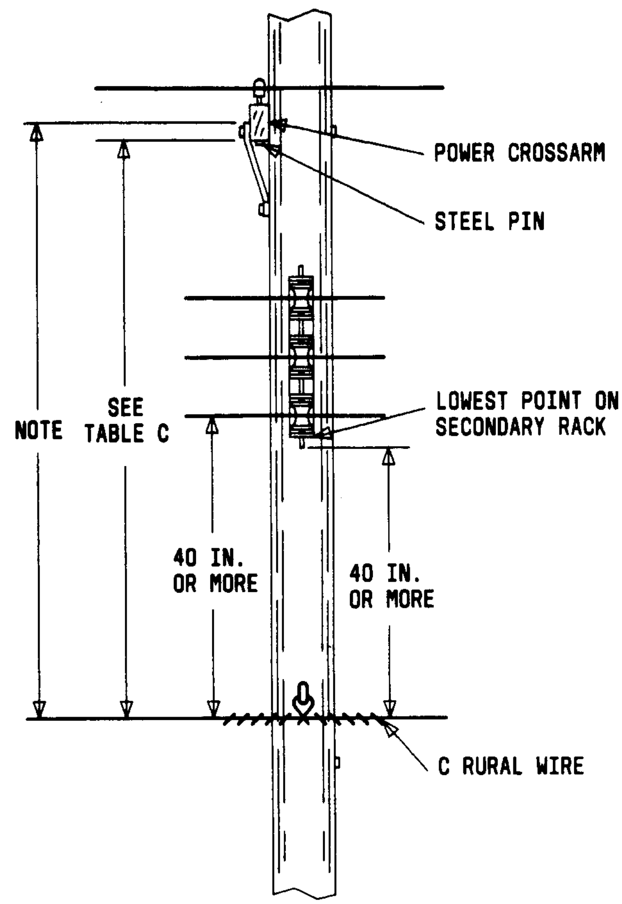


Fig. 13—Vertical Clearance From Power Transformer, Crossarm Braces, Etc



NOTE:
FOR GROUNDED CIRCUITS 8700V OR LESS NEED 48 IN., FOR 8701V TO 50,000V NEED 72 IN. VOLTAGES STATED ARE PHASE TO GROUND.

Fig. 14—Vertical Clearance From Secondary Racks, Steel Pins, and Crossarms

4.02 Clearances from streetlights, traffic lights, trolley wires and associated fixtures, brackets, and wiring are shown in Table E. Figures 15, 16, and 17 are referenced in Table E.

TABLE E

FACILITY	CLEARANCE IN INCHES	
	GROUNDED	NOT GROUNDED
STREETLIGHT FIXTURES AND ASSOCIATED WIRING (FIG. 15 AND 16)		
Streetlight fixtures and span wires above or below tel*	4	20
Drip loop entering fixture from surface of pole	12	
Vertical feed on pins and insulators	6	
Vertical feed on surface of pole	2-minimum 1/8 pole circumference generally	
Vertical feed from crossarm to fixture 40 inches from pole	20	
TRAFFIC LIGHT FIXTURES AND ASSOCIATED WIRING		
Traffic light fixtures and span wires	4	20
Vertical runs for traffic light fixtures and controls	Same clearances as power vertical runs	
TROLLEY SPAN WIRES AND BRACKETS (FIG. 17)		
Span wires and brackets	4	4

* If voltage is ≤ 150V to ground when luminaire is below messenger. If voltage is > 150V and luminaire is below, 20 inches is required.

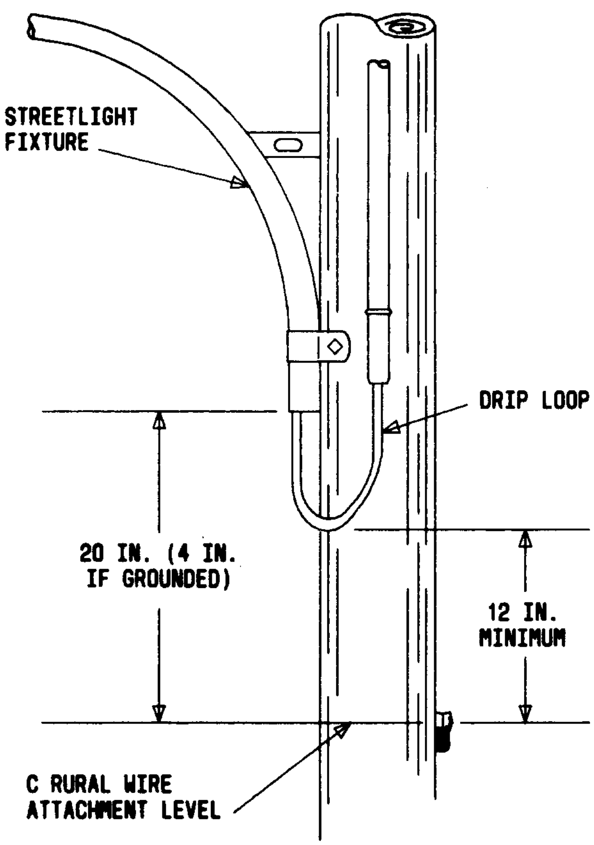


Fig. 15—Clearance From Streetlight Fixture Drip Loop Above C Rural Wire

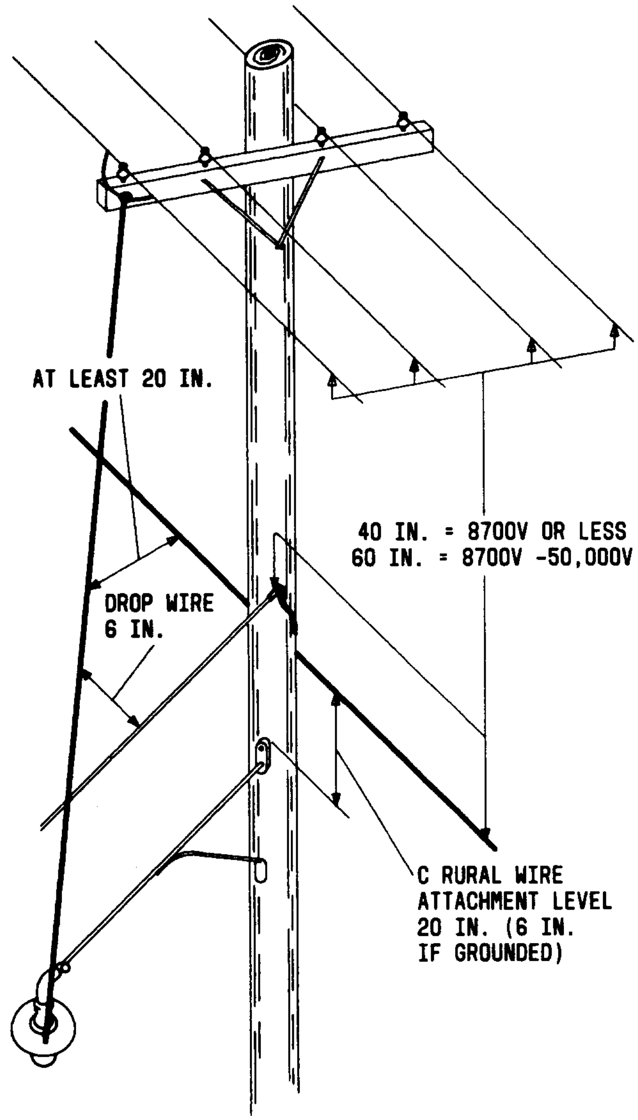


Fig. 16—Clearance of Streetlight Vertical Feed Wire From C Rural Wire

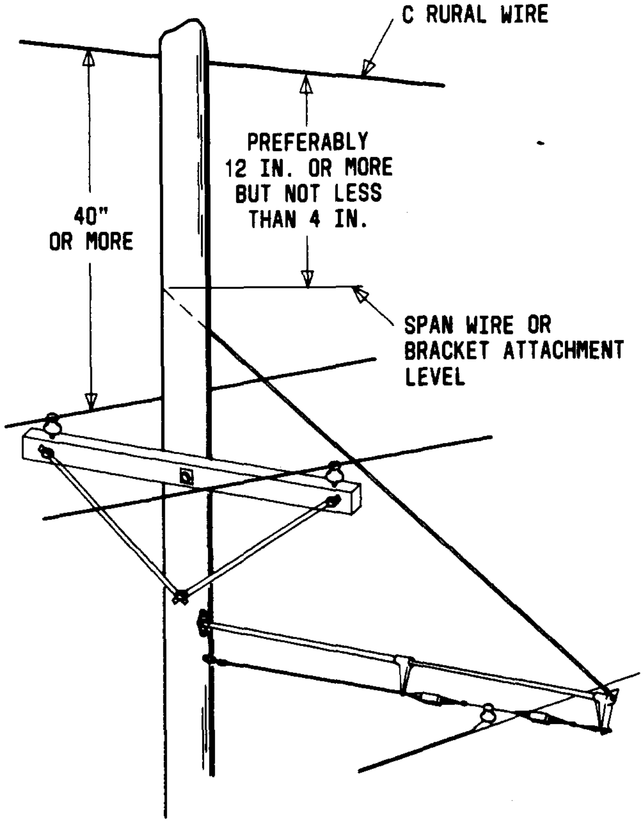


Fig. 17—Clearance Between C Rural Wire and Trolly Wire and Attachments

4.03 Clearances from power guys and of telephone guys from telephone wire are shown in Table F and Fig. 18.

TABLE F

CONDITION	CLEARANCE IN INCHES
POWER GUYS (Fig. 18)	
Power side guys attached above primary wires	40*
Pole-to-pole power guy attached above primary wires	30
Power guys attached to transmission line poles 15,000 volts to ground or higher	24
Pole-to-pole power guys not attached above primary wires but within 12 inches of bare secondary wires and within 12 inches of telephone wires	3†
TELEPHONE GUYS	
From telephone wire	6 where practical, but not less than 3

* From any part of guy which lies between guy insulator and pole. Refer to Section 621-405-201 for information on placing insulators.

† Power guy should be grounded, covered with suitable insulation where they pass power conductors or contain insulator below lowest power conductor and above highest telephone facility. If none of these conditions have been met, notify your supervisor before continuing work operations.

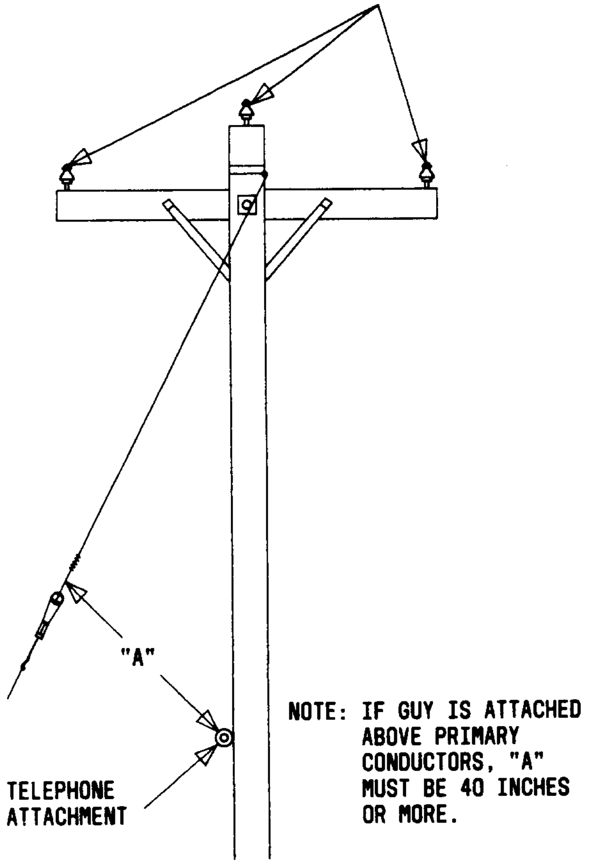
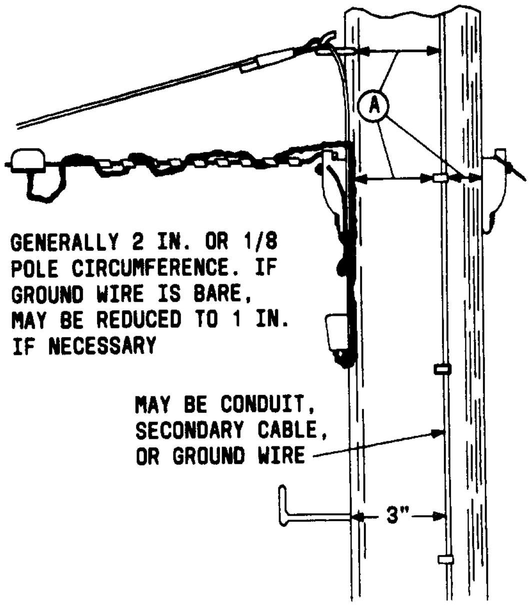


Fig. 18—Clearance Between Power Guys and Telephone Wire

4.04 Clearance from power vertical runs is shown in Fig. 19.



VERTICAL RUNS	
KIND OF VERTICAL RUN	**CLEARANCE IN INCHES**
Power service under 750 volts on pins and insulators	3
Power service on surface of pole from telephone hardware	2-minimum 1/8 pole circumference generally
Bare grounding conductors from telephone hardware	1

Fig. 19—Clearance From Power Vertical Runs on Pole Surface

4.05 Clearances from licensee cable, wire, and attachments are shown in Fig. 20.

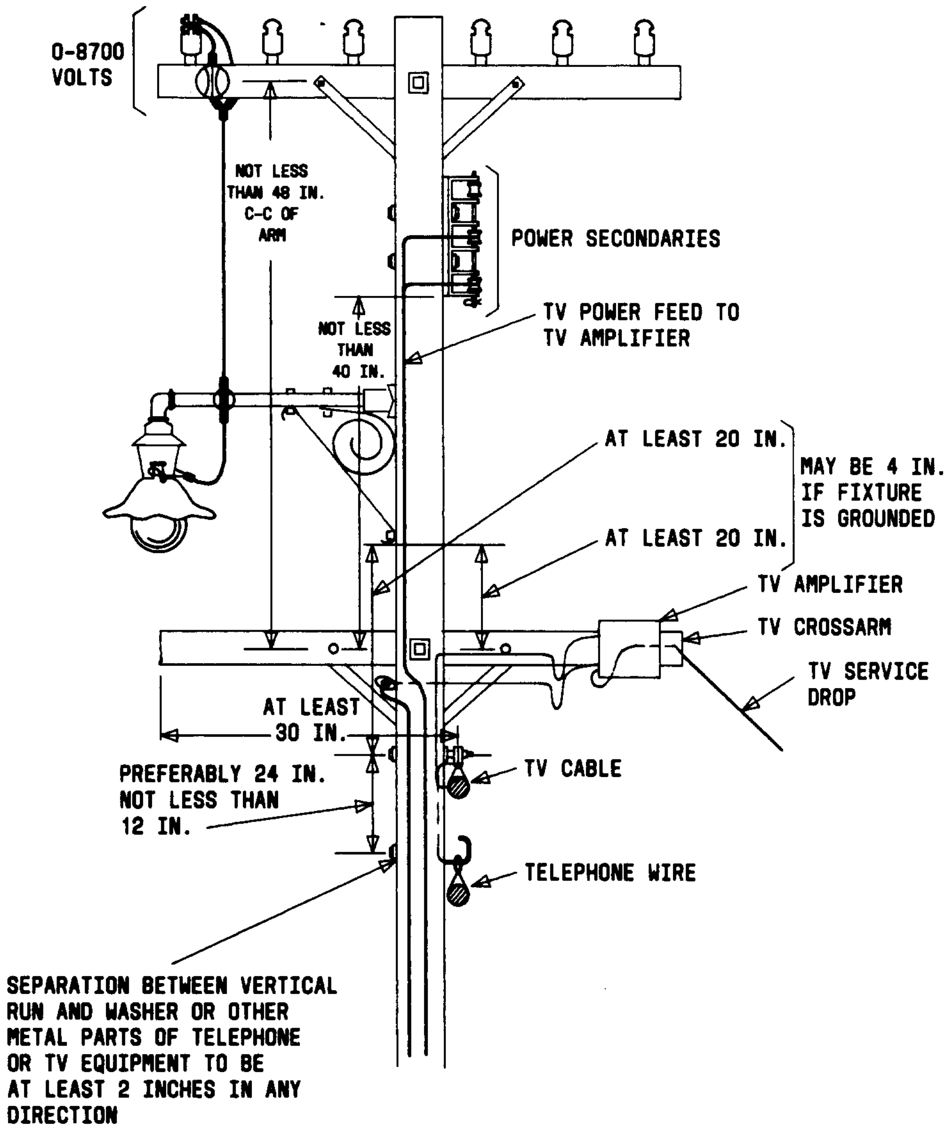


Fig. 20—Clearances of C Rural Wire From Licensee Attachments

5. CLEARANCE FOR C RURAL WIRE AND POWER WIRES OR CABLE

5.01 Clearances for C rural wire crossing below power wires or cable (nonjoint) are shown in Table G.

TABLE G

POWER FACILITY	SPAN LENGTH IN FEET			
	CONSTRUCTION			MAINTENANCE
	100 OR LESS	101-150	151-175	175 OR LESS
	CLEARANCE IN FEET-INCHES			
Nonmetallic sheath on a grounded messenger over 750V	4-0	4-0	4-0	4-0
8701-50,000 volt phase wires*	6-0	6-6	7-0	6-0
Grounded neutrals 22,000 volts or less to ground	2-0	2-6	3-0	2-0
Over 22,000 volts to ground Other neutrals	Same as associated phase wires			
Any metal clad cable lashed to grounded strand, any voltage	2-0	2-0	2-0	2-0
750 volts and less	4-0	4-0	4-0	4-0
751-8700 volts* Within 6 feet tel pole†	4-0 6-0	4-0 6-0	4-0 6-0	4-0 6-0
8701-50,000 volts	6-0	6-0	6-0	6-0
750 volts and less Grounded metal clad service drops	2-0	2-0	2-0	2-0
Messenger supported & cables nonmetallic sheath line conductors	4-0	4-0	4-0	4-0
Messenger supported nonmetallic sheath service drops	2-0	2-0	2-0	2-0
Open conductors - service drops	2-0	2-6	3-0	2-0
Open conductors - line wires	4-0	4-6	5-0	4-0

* Voltage to ground if power circuit is grounded; voltage between wires if not grounded.

† Every effort should be made to avoid these situations and establish a common crossing pole instead.

6. MISCELLANEOUS CLEARANCES

6.01 Miscellaneous clearances for C rural wire are shown in Table H.

TABLE H

FACILITY	SPAN LENGTH IN FEET	CLEARANCE IN FEET-INCHES CONSTRUCTION AND MAINTENANCE
C RURAL WIRE ABOVE		
Power service drops or power wires 300 volts or less – foreign guys, communication cables, or trolley span wires	350-Less 351-383 384-417 418-450	2-0 2-6 3-0 4-6
Trolley contact wires 750 volts or less	250-Less	4-0*
C RURAL WIRE BELOW		
Foreign communication guys or cables	Any span length	4-0†
Neon signs		4-0
C RURAL WIRE ALONGSIDE		
Neon signs	Any span length	2-0

* Place wire guard at point of crossing.

† Span length of foreign cable not over 350 feet.