OUTSIDE PLANT SYMBOLS

WIRE

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1. GENERAL

1.01 The identification codes and symbols listed in this section pertain to wire plant and associated items. They are for use primarily on construction work prints and records, although some of them may be used on maps. A complete list of abbreviations used in conjunction with outside plant symbols is contained in Section 620-040-020.

1.02 This section is reissued to add and revise codes and symbols. Since this is a general revision, arrows ordinarily used to indicate changes have been omitted.

2. SYMBOLS FOR WIRE

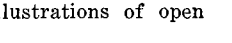
2.01 *Open wire* should be illustrated by a 3-digit number to indicate the diameter of the wire in mils. If the type of wire is not apparent from this number, the following supplemental codes should be used for identification:

C	Copper
CS	Copper steel
S	Steel
H	High strength
F	Extra high strength
D-TW	D tree wire (copper steel)
RC	River crossing strand

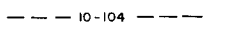
2.02 The following are illustrations of open wire:

(a) Ten 104 copper line wires. (The 10 indicates the number of wires.)

(b) Six 109 steel line wires.



(c) Ten 128 copper-steel line wires having 30 percent conductivity.

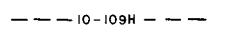


(d) Ten 109 high strength steel line wires.

(e) Two 109 extra high strength steel line wires.

(f) Four 080 D-type copper-steel tree wires.

(g) Six 165 steel river crossing strand.



(h) Method of indicating a change in the type or number of wires.

Note: The number of wires precedes the size and type of wire.

2.03 ***Multiple line or drop wire*** supplied by the Western Electric Company is to be coded on construction work prints as follows:

(a) ***First Letter:*** Sequence of standardization.

(b) ***Subsequent two or three letters:*** Type of multiple line or drop wire, that is:

DRW D rural wire

CRW C rural wire

CMDW C multiple drop wire

(c) ***Number of Pairs***

Note: If more than one multiple line wire is to be indicated, the number of multiple line support wires should precede the code letters of the wire.

2.04 The following are illustrations of multiple line or drop wire:

(a) Two 6-pair D rural wires — — — 2 DRW-6 — — —

(b) A 12-pair E rural wire — — — ERW-12 — — —

(c) A 1-pair C rural wire — — — CRW-1 — — —

(d) A 6-pair C multiple drop wire ~~CMDW-6~~

Note: The manufacture of urban multiple line wire has been discontinued. Multiple line wire not supplied by Western Electric Company should be coded as MLW (multiple line wire), followed by number of pairs and gauge. For example,

A 12-pair, 22-gauge multiple line wire — — MLW-12 PR 22 — —

2.05 Block or drop wire is shown as follows:

Three drop or block wires ~~3~~

2.06 Buried wire should be shown by type of wire, followed by the number of pairs in the wire. If more than one buried wire is to be indicated, the designation is preceded by the number of such wires. The B in the wire symbol line indicates buried wire.

2.07 The following are illustrations of buried wire:

(a) Two buried 1-pair D underground wires —B— — 2-D1 — —B—

(b) Two buried 2-pair B service wires —B— —2-B2 — —B—

(c) Slack loop placed in buried wire —B— — (6') — —B—

3. SYMBOLS FOR WIRE TERMINALS OR PROTECTORS

3.01 The following basic symbols are used for wire terminals or protectors:

(a) Nonprotected wire terminal

(b) Wire terminal or protector equipped with cable protection units

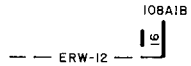
(c) Wire terminal or protector equipped with station protection units

3.02 The following are illustrations of wire terminals and protectors:

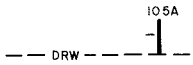
(a) Two buried D underground wires terminated in a D buried wire terminal. —B— — 2-D1 — D 14

(b) A 116-type protector used as a protected wire terminal on 6-pair D rural wire. — — DRW-6 — — 116D2B 10

(c) A 108-type wire terminal equipped with cable protection terminating a 12-pair E rural wire. (The capacity of the terminal is 16 pairs.)

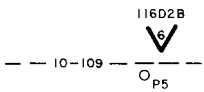


(d) A 105-type 1-pair nonprotected wire terminal.



Note: The pair capacity and the type of terminal or protector are indicated on construction work prints.

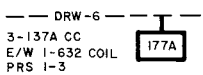
3.03 The symbol for indicating auxiliary protection on open-wire circuits. The number of protector units (6) and type of protective equipment (116D2B) are indicated. (The protector is located at pole number 5.)



4. SYMBOLS FOR WIRE LOADING AND BRIDGE LIFTERS

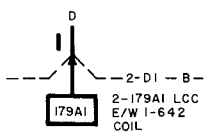
4.01 The following symbols are used in connection with wire loading and bridge lifters:

(a) Coil case on multiple line wire. Illustrated is a 177A coil case containing three 137A coil cases equipped with 632 load coils. (Pairs 1 through 3 are loaded.)

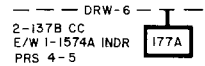


(b) A 178A1 coil case containing one 632 loading coil on C rural wire.

(c) 179-type coil cases installed in a D buried wire terminal. (The arrow indicates that cases are located in the terminal.)



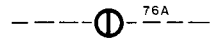
(d) Bridge lifters on multiple line wire. Illustrated is a 177A coil case containing two 137B coil cases equipped with 1574A inductors.



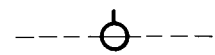
5. OPEN-WIRE SYMBOLS FOR MISCELLANEOUS EQUIPMENT AND USAGE

5.01 The following symbols represent miscellaneous equipment associated with open wire, along with the usage of open-wire circuits:

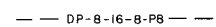
(a) The presence of a repeating coil in a branch circuit is shown by the use of the coil-type designation beside the symbol that indicates the branch circuit.



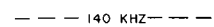
(b) Filter of any type. Additional data should be furnished in a supplementary note when necessary.



(c) Method of indicating open-wire circuit specifications. Type of insulator (DP), wire spacing on the crossarms (8-16-8), and 8-inch point transposition brackets (P8) are shown.



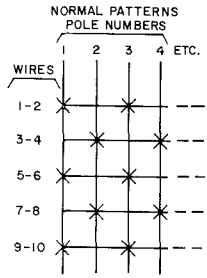
(d) Open-wire pair transposed for carrier operation. Numeral indicates the top of the nominal frequency range (140 kilohertz). The actual type of carrier transposition system (J1) may be indicated if desired.



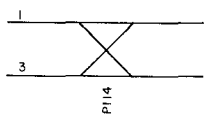
6. USE OF SYMBOLS IN CIRCUIT DIAGRAMS AND TOLL WIRE RECORDS

6.01 The following illustrate the use of symbols in connection with open-wire circuit diagrams and toll open-wire records:

(a) The crossed lines (×) on this symbol indicate that the circuit is transposed, e.g., wires 1 and 2 are transposed at poles 1 and 3, etc.



(b) The crossed lines (×) of this symbol indicate that two circuits are phantom transposed, e.g., the circuit on wires 1 and 2 is phantom transposed with the circuit on wires 3 and 4 at pole 114.



(c) Typical circuit diagram.