

## ROUTE AND POLE NUMBERING

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#### 1. GENERAL

- 1.1 This section is issued to provide REA borrowers, consulting engineers and other interested parties with information for use in the design and construction of REA-financed telephone systems. It discusses in particular a numerical route and pole numbering plan applicable to such systems.
- 1.2 Pole line numbering systems provide means for indicating location of outside plant, identifying units of plant for record purposes, indicating exact locations of trouble or incipient trouble, locating work to be performed under programmed maintenance, work order projects, and service order work.
- 1.3 A basic pole numbering plan should remain unchanged upon the addition or removal of plant, permit "pin-pointing" locations with minimum reference to maps or other records and should employ short pole numbers in logical sequence.
- 1.4 The pole numbering plan described herein embodies the desired features and is adaptable to any terrain or area. The plan outlined herein is an "ARBITRARY" method of route and pole numbering. It provides for numbering all poles in the base rate area and each fifth pole, plus all junction poles outside the base rate area. Rural and toll pole numbers are generally placed on poles 1, 5, 10, etc., and on all cable terminal poles. Routes and poles are numbered from the central office pole without regard to the base rate area or city limits as indicated on Exhibits A and B.

- 1.5 It is desirable to designate the last pole inside the base rate area as indicated in Exhibit C, Figure 4 and Exhibits A and B. This information is helpful for subscriber location determinations where the base rate area line is not otherwise clearly defined.
- 1.6 To permit ready identification all characters should be placed on the traveled side of the pole, except poles numbered one (1) where the characters are placed toward the feeder route.

## 2. POLE LINE ROUTE NUMBERING

- 2.1 The pole numbering plan discussed in this section utilizes numerals only for main routes and numerals and letters for drop poles and short spurs not subject to extension. Punctuation, symbols, lines or other special characters are not required, see Exhibit C. In initial engineering and layout work the longest pole line routes should carry the 1 to 9 route designations to minimize the quantity of characters needed.
- 2.2 In normal operations it will develop that additional routes will have to be constructed and the next higher unused route number, as indicated on the route and pole record, should be assigned.
- 2.3 Drop wire poles and short deadend spur line poles take the same number as the main route pole with which they are associated, with the addition of an A, B, or C suffix. See poles 5-6A and 5-6B, Exhibit B. Two or more spurs off the same junction pole will be numbered as shown in Exhibit C, Figures 2 and 3.
- 2.4 Exhibit D illustrates height and spacing of characters on poles.

## 3. CABLE TERMINAL NUMBERING

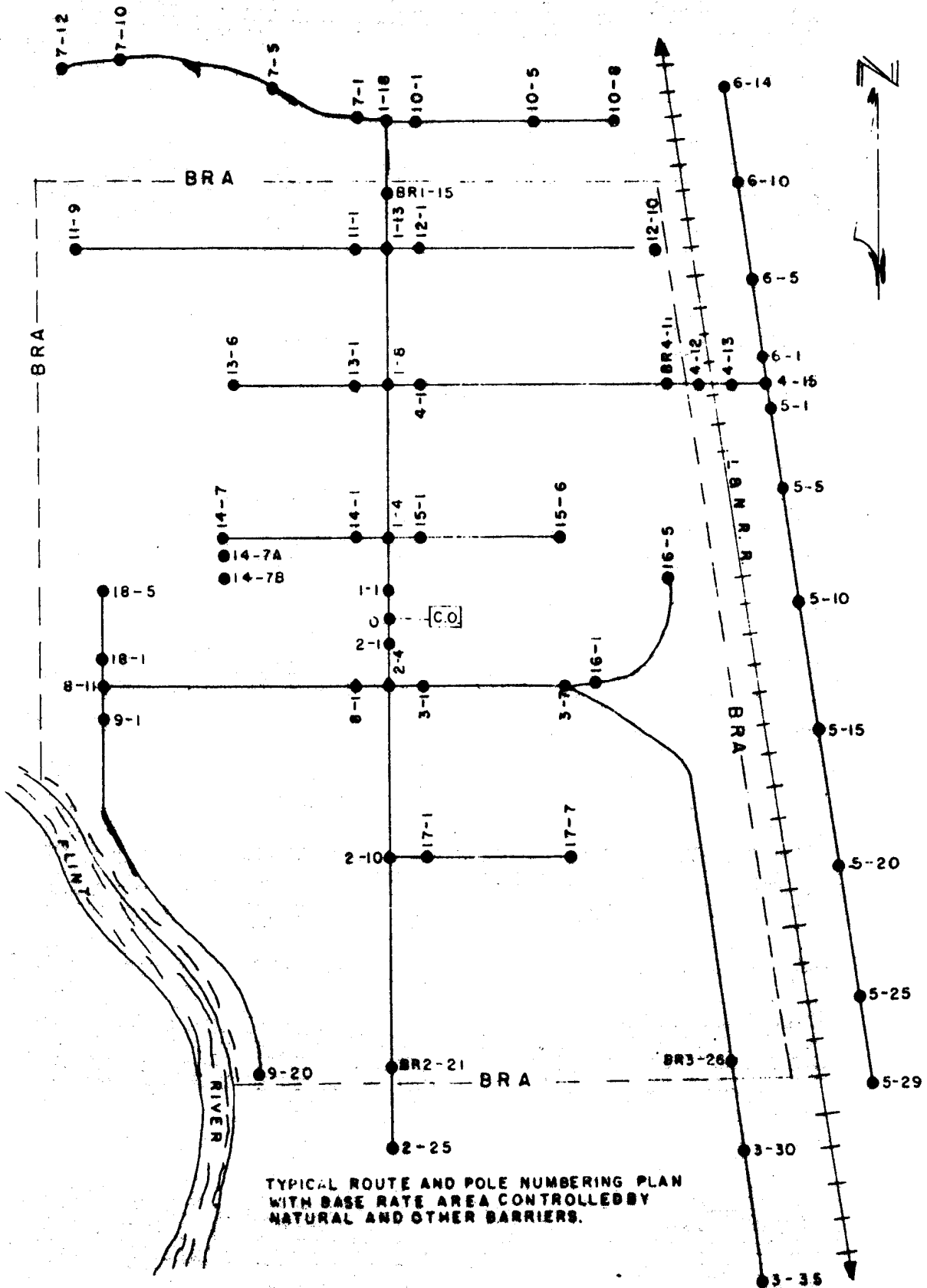
- 3.1 It is recommended that a plan of using the pole number for the terminal number be adopted. By so doing, placing additional characters to designate the terminal number would not be required except in some instances outside the base rate area. Such a scheme provides terminal number and location with one set of characters.

## 4. POLE ROUTE ASSIGNMENT RECORD

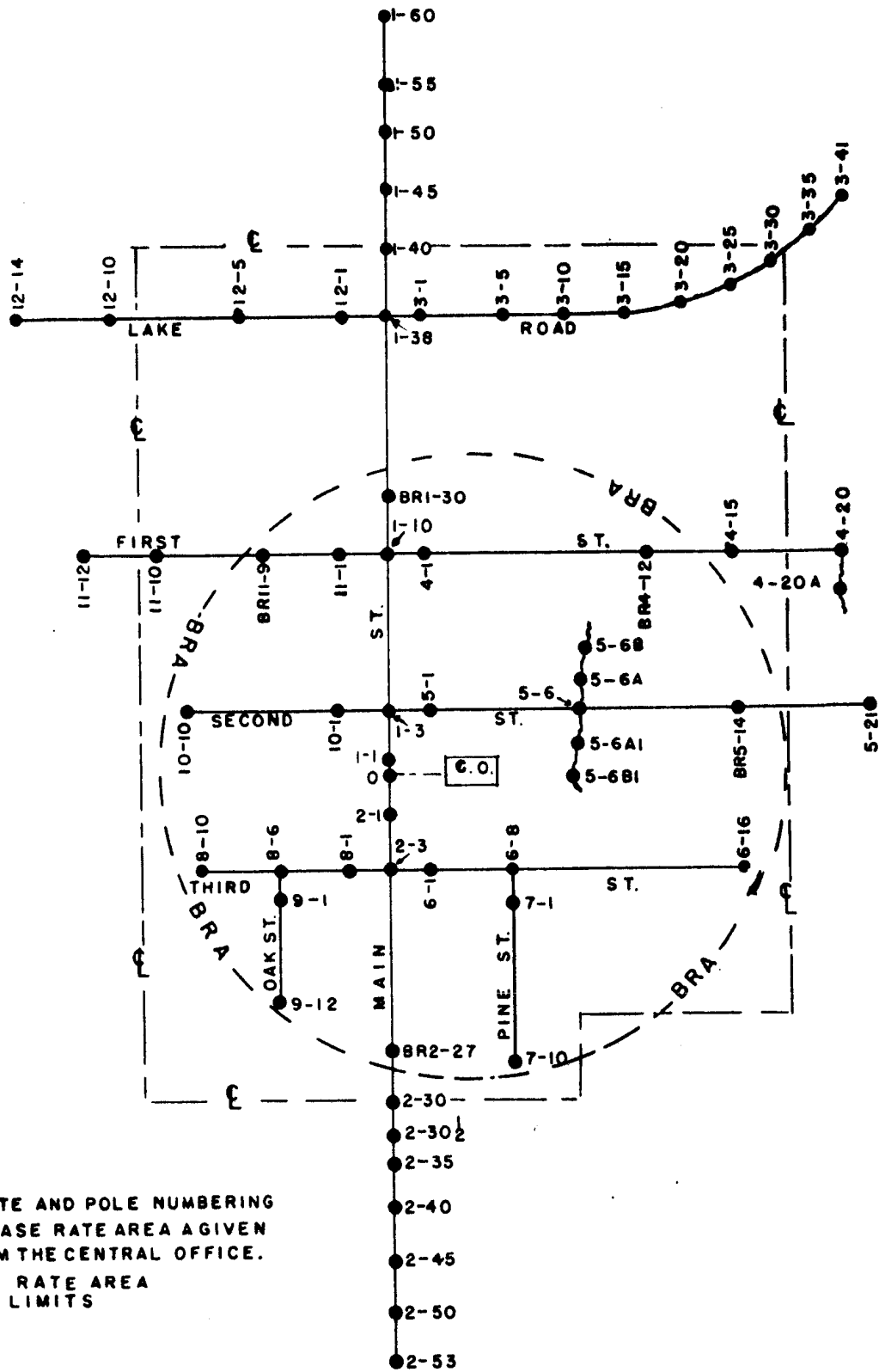
- 4.1 The route and pole record, Exhibit E, serves as an index of the route numbers assigned and the approximate geographical location of each route and is the key to the staking sheet records. The example shown on Exhibit E is taken from Exhibit B.

5. TRANSPOSITION NUMBERING

- 5.1 The letters and numbers listed in a horizontal row at the bottom of toll transposition diagrams should be placed on the pole corresponding to that point in the line. The location of the transposition number is illustrated by Exhibit D. Exchange line transposition poles should not be numbered.
- 5.2 The arrow on the transposition diagram shows the direction of transposing. Transposition pole numbering should be consecutive in the same direction regardless of exchange pole numbering.
- 5.3 When phantom transpositions are employed, it is desirable to attach a numeral to the crossarm to indicate the type of phantom transposition at that point. See Figure 6, Exhibit C.
- 5.4 TE and CM Section 662, Trunk Line Transpositions, and Section 663, Carrier Transpositions should be followed when numbering transposition poles.



TYPICAL ROUTE AND POLE NUMBERING PLAN WITH BASE RATE AREA CONTROLLED BY NATURAL AND OTHER BARRIERS.



TYPICAL ROUTE AND POLE NUMBERING  
 PLAN WITH BASE RATE AREA A GIVEN  
 RADIUS FROM THE CENTRAL OFFICE.  
 BRA - BASE RATE AREA  
 C - CITY LIMITS

First-Pole-Route One

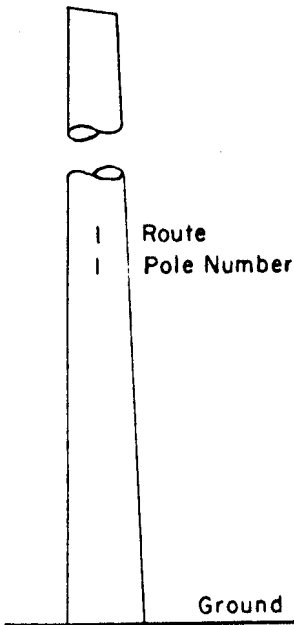


Figure 1

Drop or Spur Line Poles

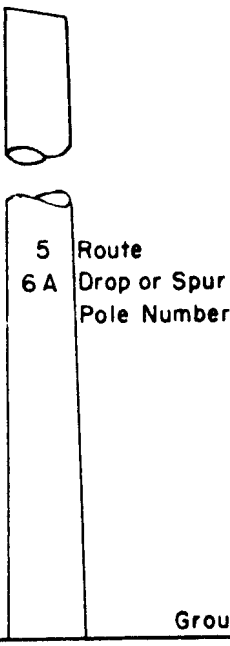


Figure 2

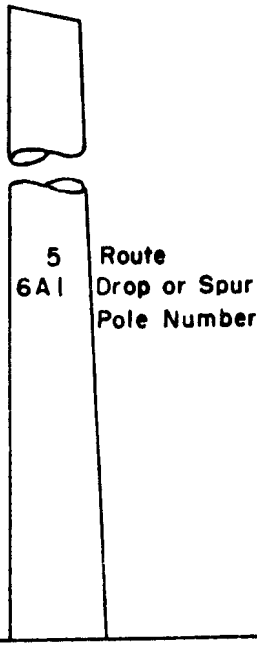


Figure 3

Last Pole Inside Base Rate Area

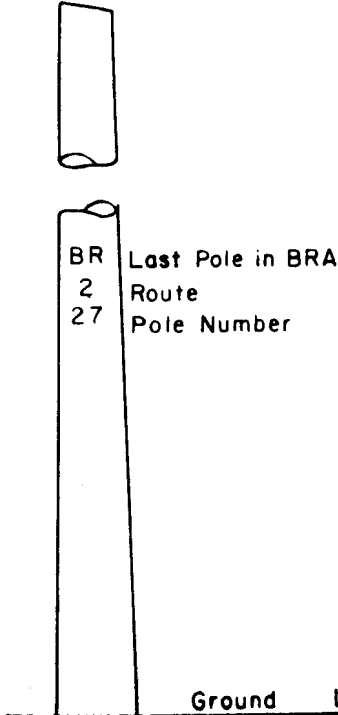


Figure 4

Intermediate Pole Placed After Initial Construction

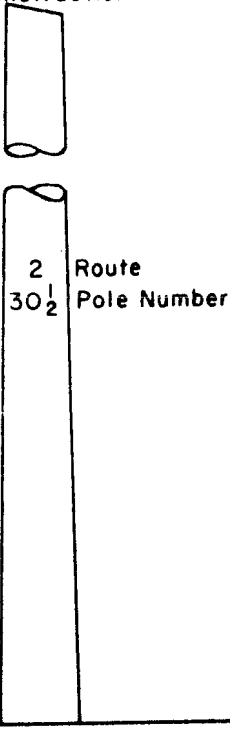


Figure 5

Designates Type 3 Transposition

Phantom Transposition Numbering

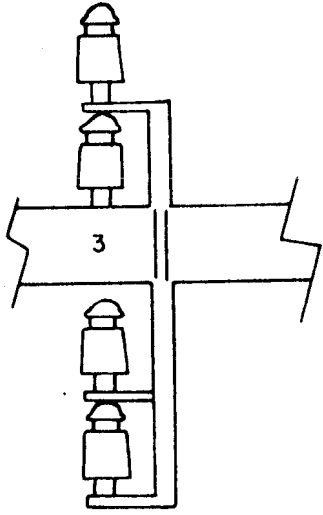
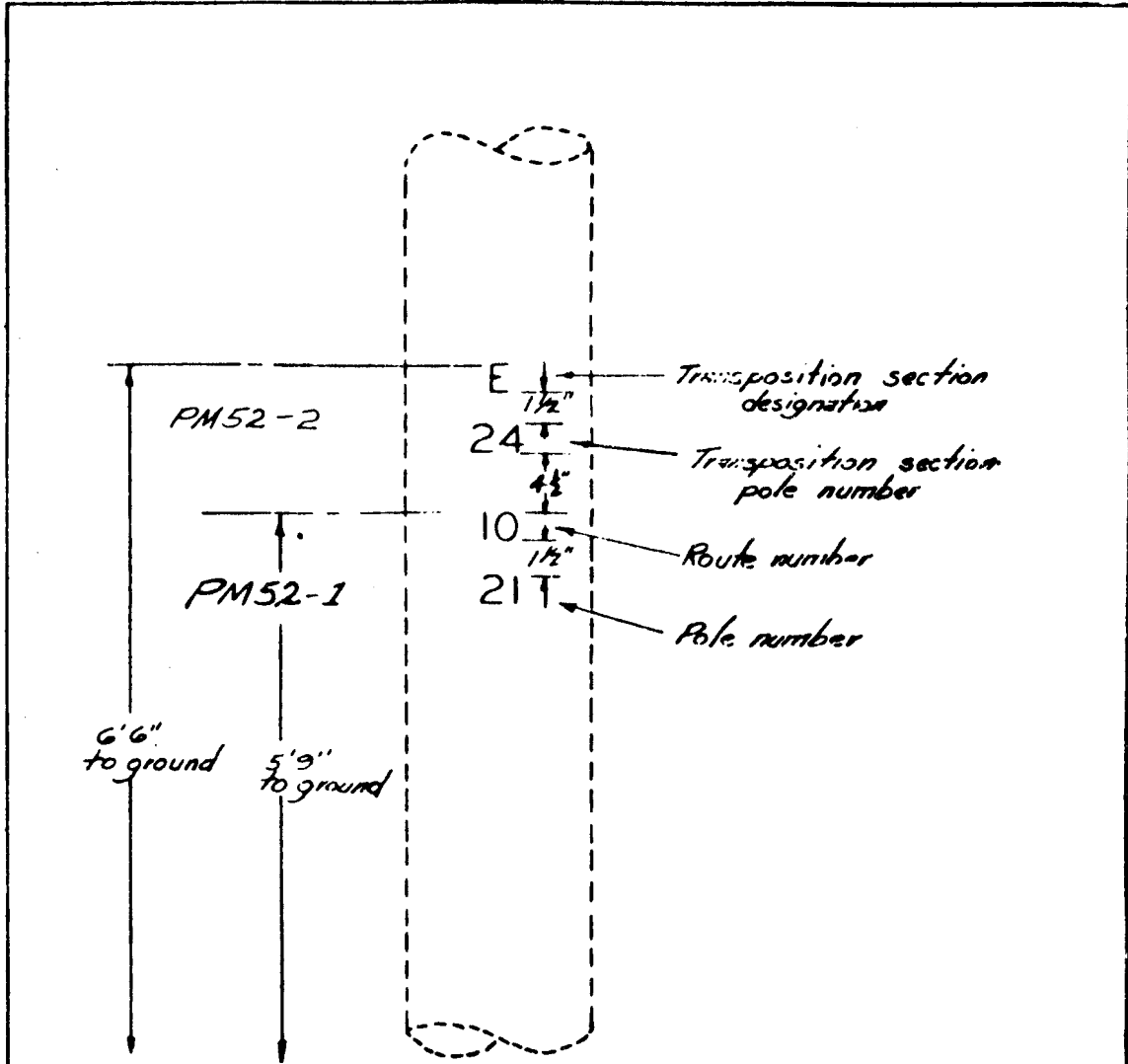


Figure 6



Note: PM52-1, consists of an average of 4 characters.  
 PM52-2, consists of an average of 3 characters.

ITEM	NO. REQD.	MATERIAL			
32	35 reqd.	Number, pole, 1 1/2" high			

RURAL TELEPHONE CONSTRUCTION PRACTICES  
 POLE NUMBERING

Scale NTS. November 1, 1954  
PM52-1, PM52-2

ROUTE AND POLE RECORD (Made up for Exhibit B)

Route No.	Connects to			End Pole Number	Location
1	0			60	MAIN ST. NORTH.
2	0			53	MAIN ST. SOUTH.
3	1-38	0		41	LAKE ROAD. EAST.
4	1-10	0		20	EAST FIRST ST.
5	1-3	0		21	EAST SECOND ST.
6	2-3	0		16	EAST THIRD ST.
7	6-8	2-3	0	10	PINE ST. SO. of 3rd.
8	2-3	0		10	THIRD ST. WEST
9	8-6	2-3	0	12	OAK ST. SO. of 3rd
10	1-3	0		10	SECOND ST. WEST
11	1-10	0		12	FIRST ST. WEST
12	1-38	0		14	LAKE ROAD. WEST.
13					
14					
15					