

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G55.110.5
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AT&T Co Standard

UNDERGROUND CABLE PLACING TYING, TEMPORARY BONDING AND TAGGING DUCT SPLICES

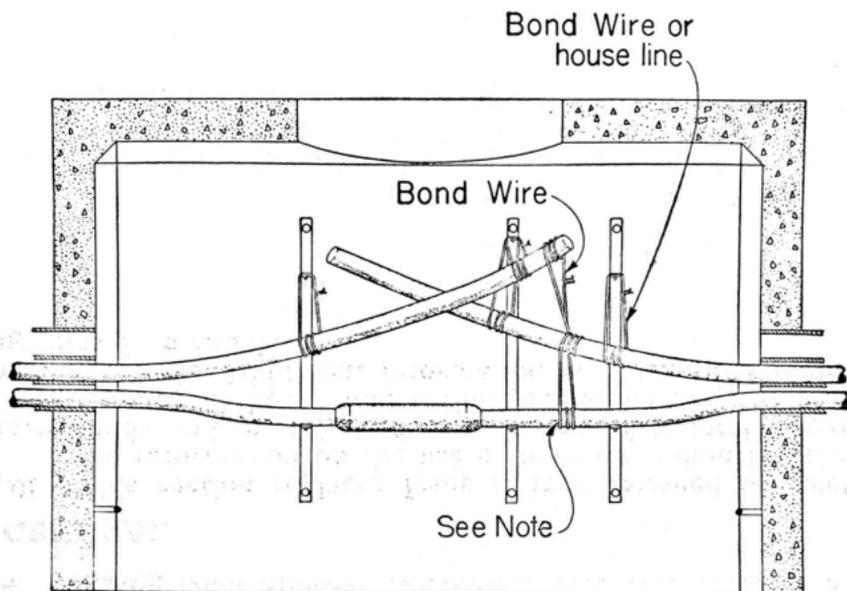
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1. GENERAL

1.01 This section replaces Issue 1. It is reissued to delete the information on the use of bonding ribbon for temporary bonds and to include the treatment of stalpeth sheath as well as alpeth sheath under the general heading of polyethylene sheath. Additional information is given on handling long ends in manholes.

2. TYING CABLE ENDS

2.01 To prevent damage to the cable ends in the manhole and at the duct, tie them to the cable racks as shown below. Any bending required should be done carefully so as to avoid possible injury to the sheath.



Wrap bond wire around each cable as shown, and fasten by pigtailing

2.02 If there is an excessive length of cable in the manhole it should be looped around the hole in long sweeping bends and tied securely in a location where it will not obstruct the working space in the manhole.

2.03 Place a standard duct shield around the cable in the end of the duct at each end of the section under the following conditions:

- (a) Where the ends of the ducts of single or multiple vitrified clay conduit, fibre or cement conduit are broken or in such condition as to make it seem likely that the sheath may become damaged.
- (b) Where the cable is installed in iron pipe conduit.

2.04 Do not leave the cable in contact with any foreign pipes in the manhole.

3. TEMPORARY BONDING

Lead Sheath

3.01 Bond the cable ends in the manhole to each other and to an existing cable with steel construction wire as illustrated in Paragraph 2.01. Do not bond to a cable in which there is an insulating joint. The bond shall be installed as soon as the cable is placed.

3.02 When placing the first cable in a new subway, it sometimes happens that some sections of cable are missing, due to later shipments of cable and other causes. In these cases, the cable placed shall be bonded to the threading wire in the adjacent missing sections and where two or more consecutive sections are missing, the threading wires in these sections shall be spliced together in the manholes.

Polyethylene Sheath

3.03 No bonds shall be placed on polyethylene sheath cable ends.

3.04 The metal cap and pulling eye should not touch any lead sheath or hardware in the manhole. In placing a tie on the pulling eye use a length of houseline.

4. TAGGING DUCT SPLICES

4.01 A section of cable containing a duct splice shall be tagged by means of a triangular shaped lead tag placed near the duct entrance at each end of the section. The tags shall be stamped to show the number of feet from the face of the manhole wall to the duct splice.