

PLANT MAINTENANCE

RAILROAD CROSSINGS - ANNUAL INSPECTIONS

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1. GENERAL

1.01 This Section outlines the procedures to be followed and defines the responsibilities of the various plant forces in connection with the annual inspection of aerial railroad crossings. It is issued to establish a uniform method for making the inspection, together with the preparation and maintenance of the associated records and reports.

1.02 Crossings over major or minor railroads are made in accordance with Bell System Practices, "G" Series, entitled "Railroad Crossings."

1.03 Where crossings of railroad property or rights of way are made, the telephone company usually enters into license agreements with the railroad company.

1.04 Where crossings are made at dedicated street locations, the railroad company (except Los Angeles Transit Lines where no notification is required) is advised that crossing is to be made but no agreement is entered into. (See G.I. 226-B.)

1.05 In general, the creation of new railroad crossings requiring agreements or notification to the railroad company are covered in engineering plans by the plant engineer and the procedures

followed by the engineering forces are covered under other instructions. If the field forces have occasion to create a new crossing not covered by engineering plans or to exceed the limitations of the present railroad crossing agreement, the matter should be referred to the district plant engineer or district toll engineer for plan of procedure before starting the work.

1.06 In general, on maintenance work it is also necessary to contact the railroad company before starting work, and the foreman should arrange for this notification.

2. DEFINITIONS

2.01 The definitions of major and minor tracks and street railway tracks are covered in the section of the Practices devoted to Railroad Crossings - General.

2.02 Where there is doubt as to the interpretation of these definitions it shall be the responsibility of the District Plant Superintendent to determine the classification of the tracks involved.

3. MAINTENANCE OF RECORDS

3.01 It shall be the responsibility of each district plant superintendent or district toll plant superintendent (hereinafter referred to as district plant superintendent) to maintain a complete record of all railroad crossings within his district, showing location of each crossing, whether "major" or "minor" track, and details of the crossing structure shown on form PF-1049 or PF-1050 (Southern Pacific).

3.02 In addition to form PF-1049 or PF-1050, the district plant superintendent shall also maintain a complete file of all information furnished him on railroad crossing agreements.

3.03 The right of way superintendent shall be responsible for furnishing the district plant superintendent with the data required to establish the initial record and file on existing railroad crossings.

3.04 On all future crossings the plant engineer shall prepare one extra copy of form PF-1049 or PF-1050 and forward it to the right of way superintendent, for use of the district plant superintendent.

3.05 The right of way superintendent shall be responsible for furnishing the district plant superintendent with these sketches showing the actual plant placed upon completion of the work, together with such essential information from the agreement or the agreements as may be required. The completed marked copy of form PF-1049 or PF-1050 shall be signed by the foreman and forwarded by the construction department to the record department where, after posting, it shall be forwarded to the right of way superintendent to be filed with the agreement.

3.06 In establishing these records the district plant superintendent shall verify that he has a record of all crossings within his district. He shall notify the division construction office of those cable crossings on which no record was furnished, giving the locations of such crossings together with any other pertinent information available and also forward PF-540 for recording the inspection. The district construction superintendent at the time of making the initial physical inspection in these cases as covered in succeeding paragraphs shall prepare a pencil copy of form PF-1049 or PF-1050. This pencil copy of forms PF-1049 or PF-1050 shall be forwarded to the district plant engineer for reproduction and distribution as required when establishing new crossings. The inspection form PF-540 shall be returned to the district plant superintendent with the results of the inspection and a notation that the PF-1049 or PF-1050 has been forwarded to the district plant engineer.

3.07 In connection with his annual inspection the district plant superintendent shall prepare form PF-1049 or PF-1050 for all existing open wire and drop wire crossings for which no record was furnished him by the right of way superintendent. Those forms PF-1049 or PF-1050 for open wire crossings and drop wire crossings over private railroad rights of way shall be forwarded to the district plant engineer or district toll engineer, if applicable, for reproduction and distribution as in the case of cable crossings. For drop wire crossings found on dedicated streets the district plant superintendent shall prepare form PF-1049 or PF-1050 for his files sending a duplicate copy to the right of way superintendent.

4. RESPONSIBILITY FOR INSPECTION

4.01 Plant Service Forces or Toll Maintenance Forces

(a) It shall be the responsibility of the plant service forces or toll maintenance forces to make an annual maintenance inspection of all aerial railroad crossings in their respective districts (street railway crossings excepted).

- (b) This annual inspection should be programmed throughout the year and cover the maintenance features of the original crossing and also any additional plant placed subsequent to the establishment of the original crossing rather than an annual verification of the original design features. This will generally consist of observing for deterioration, clearances, hazards, etc., as covered in succeeding paragraphs on "method of inspections."
- (c) Form PF-540 shall be used to record the results of inspections of railroad crossings.
- (d) Where assistance from the engineers, cable maintenance, construction, or repair forces is required to complete the inspection of a particular crossing, the supervisor in charge of the inspection work shall arrange for such assistance. Conditions observed which require attention, such as improper open wire sag, defective drop wire attachments, etc., shall in general, be corrected at the time of the inspection. If the repair work is beyond the scope of the inspection forces, it shall be referred to the construction-engineering forces on form P-3028.
- (e) It shall be the responsibility of the district plant superintendent's forces to follow up items reported for correction.
- (f) The stipulations included in railroad crossing agreements shall be checked annually in conjunction with the railroad crossing maintenance inspection to see that limitations have not been exceeded. Where revisions, cancellations, or new agreements are required, the matter shall be referred to the district plant engineer.
- (g) Where crossings consist of aerial cable or a combination of aerial cable and open wire or drop wire all inspection forms pertaining to the crossing shall be forwarded by the plant service forces or toll maintenance forces to the appropriate division construction office for the initial and subsequent physical inspections when actual inspections in the span are necessary. These forms include PF-1049 or PF-1050 together with any essential information shown on the agreement which is required by the construction forces or a copy of the agreement itself; also form P-3028, and form PF-540 in duplicate.

4.02 Construction and Engineering Forces

- (a) The construction forces shall be responsible for the initial annual inspection of all strand and cable crossings or combinations of strand and cable with open wire or drop wire crossings as outlined in succeeding paragraphs.
- (b) The construction forces will also make subsequent physical inspections of strand and cable crossings when actual inspections in the span are necessary as requested by the plant service or toll maintenance forces.
- (c) A report of the inspection on form PF-540, together with the other forms furnished by the plant service or toll maintenance groups from their files shall be returned upon completion of the physical inspection to the district plant superintendent responsible for the particular crossing.

5. METHOD OF INSPECTION

- 5.01 Poles - Make a visual inspection, taking into consideration the kind of treatment, year placed, condition of top, and deterioration at butt.

Note: Ordinarily, poles that are fully treated which have been placed in the last 10 or 15 years and show no sign of physical defects shall be considered satisfactory. If there is reason to suspect the below ground line condition, the matter shall be referred to the plant engineer in the regular manner.

- 5.02 Crossarms, Pins, Insulators, Etc. - Check for cracks, splits, breakage, or general deterioration.
- 5.03 Guys - Inspect strand for evidence of corrosion, check clamps, guards, etc.
- 5.04 Strand and Cable - Check at pole for evidence of corrosion, condition of rings, grade clamps, etc. Visually inspect in the span for discoloration of strand, spacing, and condition of rings, etc.

Note: In connection with establishing the procedures outlined in these instructions, the initial annual inspection of all strand and cable crossings shall be made by the construction forces. The district plant superintendent shall submit

requests as outlined in preceding paragraphs to the construction forces for this initial inspection which shall include an actual inspection in the span. A report of the inspection on form PF-540 shall be sent to the district plant superintendent responsible for the particular crossing. This report shall indicate the approximate time interval before the next actual inspection in the span should be made. However, the plant service or toll maintenance forces may recommend subsequent inspections at a lesser time interval if, in their opinion, conditions in the field at the time of making their annual visual inspection indicate the need for a more detailed inspection in the span by the construction forces. When the construction forces make a detailed inspection of a strand or cable crossing, a copy of the report submitted to the district plant superintendent shall be sent quarterly to the superintendent of construction and plant engineering.

5.05 Wire - Check line and drop wire crossings for sag, clearances, absence of splices in the span, and physical condition to determine if crossing is in accordance with requirements of railroad crossing specifications.

6. REPORTS

6.01 A summary report shall be prepared by each district plant superintendent to cover the inspections made during the calendar year. The report shall be forwarded by letter to the division plant manager not later than February 15th of the following year.

6.02 The report may consist of a copy of each inspection report (form PF-540) with appropriate comments or a narrative report covering total number of crossings in the district, total inspected with dates, number requiring corrective measures, and the status of each case on which repairs have not been completed.

6.03 The method of preparing and distributing the forms required to make the inspections and report the defects are outlined in detail in the section entitled, Plant Maintenance - Reports, Preparation, Use, and Distribution.