

PLANT MAINTENANCE
SCHEDULED INSPECTION
OF EXCHANGE OUTSIDE PLANT

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1. GENERAL

1.01 This section outlines the methods to be followed by the plant service forces in making regularly scheduled inspections of exchange outside plant. It establishes uniform procedures for making the inspection, reporting the defects found, and maintaining the associated records and reports. It is rewritten to include an exhibit and to generally revise the text.

1.02 The general policies to be followed and the departmental responsibilities for the correction of specific types of outside plant defects are outlined in the section entitled, Plant Maintenance - Inspection of Outside Plant - General.

1.03 All hazardous plant conditions observed shall be classified and processed in accordance with the provisions of the section entitled, Plant Maintenance - Safety Hazards - Classification, Reporting, and Clearing.

1.04 The scheduled inspection plan is designed to remove from plant all safety hazards, state law infractions, and service hazards. A service hazard is defined as a plant condition that will cause a service interruption within approximately 90 days. This condition will normally be reported to the plant service center and handled in the same manner as other employee trouble reports. If the manpower is available, the district plant superintendent may elect to include other maintenance conditions in the scheduled inspection plan. However, the clearing of state law infractions and safety hazards shall not be delayed by the inclusion of other maintenance conditions in the program.

2. PURPOSE AND OBJECTIVES

2.01 The scheduled inspection of exchange outside plant is designed to provide supervision with the following:

- (a) A continual review of the general condition of the outside plant within each plant service center area.
- (b) Factual data for forecasting force requirements.
- (c) Permits the scheduling and clearing of defective plant conditions, dependent on the urgency of their needs, together with the manpower available.
- (d) Provides a check on the effectiveness of the visual inspection procedures prescribed in the section entitled, Plant Maintenance - Inspection of Outside Plant on Normal Work Visits.
- (e) Establishes a method for detecting service or safety hazards and state law violations in rural or other areas that are infrequently visited.

3. FREQUENCY OF INSPECTIONS

3.01 All exchange outside plant shall be inspected once every three years.

3.02 Special inspection intervals shall be established to detect service affecting tree conditions involving aerial cable or aerial wire plant. Tree trimming lists shall be processed in accordance with the provisions of the section entitled, Plant Maintenance - tree trimming.

3.03 The annual inspection of railroad crossings shall be scheduled and completed as outlined in the section entitled, Plant Maintenance - Railroad Crossings Annual Inspection.

4. METHOD OF SCHEDULING AND ASSIGNING INSPECTIONS

4.01 The method of scheduling and assigning outside plant inspections by the plant service forces shall be in accordance with the following:

- (a) The scheduling of outside plant inspections shall be administered by the supervising foreman responsible for the maintenance activity within each plant service center area.
- (b) The supervising foreman shall obtain 3 copies of the plant service center area map. One copy shall be reserved for use as a master map per Paragraph 5.01. The other 2 copies shall be cut into sections. The number of sections shall correspond to the number of installation and repair foreman available for inspection activity within the plant service center area. The section of the plant service center area shall be marked on the master map. (See Exhibit 1.)
- (c) All available installation and repair foreman shall be assigned an inspection area.
- (d) Each foreman shall be provided with 2 copies of the section map. One copy shall be used in accordance with Paragraph 5.03. The other copy of the division map shall be cut into 36 subsections according to the amount of aerial plant involved.
- (e) Each subsection map shall indicate the street names and boundaries and be attached to a separate divider sheet and the 36 divider sheets retained in a standard binder. (See Exhibit 1.)
- (f) Each divider sheet, with map attached, shall be numbered in the upper right-hand corner. The numbers shall run serially from 1 to 36. One subsection shall be inspected each month.
- (g) Upon completion of the monthly inspection, the foreman shall enter the date of completion and his name in the upper left-hand corner of the divider sheet. The divider sheet with map attached, together with the recorded defects found on inspection, shall be forwarded to the supervising foreman.

5. MAINTENANCE OF RECORDS

5.01 A master map of the plant service center area shall be maintained in the office of the supervising foreman or the plant service center. This map should, if possible, be mounted on suitable backing to facilitate posting. The following entries shall be posted to illustrate the progress of the inspection and maintenance activities in the area.

- (a) A red pencil shall be used to denote the subsections that have been inspected.
- (b) A green pencil shall be used to denote the subsections in which the defects have been cleared.

Note: This information will be available upon receipt of the completed work copy of form P-900 and the map per Paragraph 4.01.

5.02 The divider sheets with the maps attached shall be retained by the supervising foreman until the 3-year cycle has been completed. At this time they will be returned to the field foreman for use on other inspection cycles.

5.03 The foremen shall record on their respective maps that portion of the area covered at the time the inspection is made. This shall be done by marking the individual streets, alleys, etc., with a red pencil.

5.04 The maps specified above should be of sufficient size to facilitate posting. In general, a standard outside plant map, in the scale range of 400 to 1200 feet to the inch, will be suitable. The maps shall be ordered through the office of the district plant engineer.

6. METHODS OF INSPECTING

6.01 In general, the foreman shall make the inspection while walking. In rural or sparsely settled areas, involving long aerial wire or cable leads, a motor vehicle may be used, provided it is safe to do so.

6.02 In applying these instructions, it should be kept in mind that because equipment, materials, and methods are continually being improved, the average plant contains types that may not be

used for new construction but which will continue to give good service, and in the interest of economy should be maintained in plant. It is intended, in general, that only those conditions which present a safety or service hazard or state law violations shall be reported for correction.

Example: Drop, block wire, and slack spans shall not be reported for replacement on the basis of age, as determined by a visual inspection. These types of defects should be detected and cleared through the proper application of the insulation test procedures.

6.03 The supervising foreman shall make frequent field checks of the defects listed for correction to assure a uniform understanding and application of these instructions. In general, no items shall be cleared for appearance reasons.

6.04 The supervising foreman shall review with each foreman the sections in the Bell System Practices, "G" Series entitled, Drop and Block Wiring - Preventive Maintenance and Aerial Wire - Inspecting.

7. RECORDING DEFECTS FOUND ON INSPECTION

7.01 All defective plant conditions requiring correction shall be segregated and reported in accordance with the following:

- (a) Defects involving aerial cable plant shall be reported on Form PF-697, Cable Defect Report.
- (b) Forms P-900, Outside Plant Routine Inspection Report, shall be used to record defects to be cleared by the plant service forces.
- (c) Forms PF-1032, Tree Trimming, shall be used to record tree conditions that require trimming.
- (d) Forms P-3028, Report of Plant Condition Requiring Correction, shall be used to record defective plant conditions that are to be referred to the construction and engineering forces for correction.

8. TYPES OF PLANT TO BE INSPECTED

8.01 The common items of outside plant to which attention shall be given when making an inspection are listed below. No safety, service hazard, or state law violation shall be excluded because it is not itemized.

(a) Aerial Cable Plant,

- (1) Impaired clearance or climbing space.
- (2) Sheath cracks, bug holes, etc.

(b) Cable Terminal,

- (1) Loose terminals on poles or buildings.
- (2) Guard rails in place when required.
- (3) Broken or damaged terminal covers.

(c) Aerial Wire

- (1) Slack or missing arm guys.
- (2) Line wire slack or improperly sagged.
- (3) Impaired clearances or climbing space.
- (4) Impending tree interference.
- (5) Broken or loose tie wires.
- (6) Broken, missing, or floating insulators.
- (7) Rusty or corroded wire.
- (8) Damaged or missing protector (99A and 83A) ground wire etc.

(d) Poles, Towers, Crossarms, Anchors, and Guys, including plant used to serve special services, for instance, radio systems, etc.

- (1) Bent or missing steps.

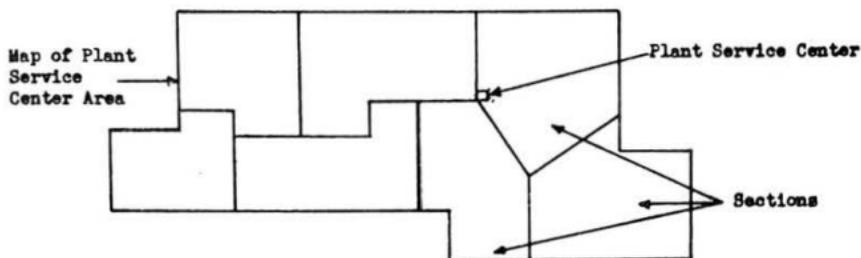
- (2) Improperly spaced pole step mountings.
 - (3) General condition, and load on pole for safety hazards. This also includes antenna poles and towers.
 - (4) Impaired clearance or climbing space.
 - (5) Foreign attachments such as clotheslines, nails, antennas, unauthorized signs, or other climbing obstruction.
 - (6) Anchor rods and guys for loose clamps, or hazard to the public.
 - (7) Slack guys.
 - (8) Guy wire equipped with shields.
 - (9) Broken or split crossarms.
 - (10) Loose or missing crossarm braces.
 - (11) Broken or missing crossarm pins, brackets, etc.
- (e) Drop and Block Wires.
- (1) Overloaded attachments at poles or buildings.
 - (2) Impaired clearances or climbing space.
 - (3) Wire ends improperly stored at terminals.
 - (4) Drop obviously damaged and in need of repairs.
 - (5) Improperly spaced rings on poles or buildings.

9. PREPARATION OF REPORTS AND FORMS

9.01 The preparation, use, and disposition of the various forms required to record and report the results of the inspections are covered in detail in the section entitled, Plant Maintenance - Reports - Preparation, Use and Disposition.

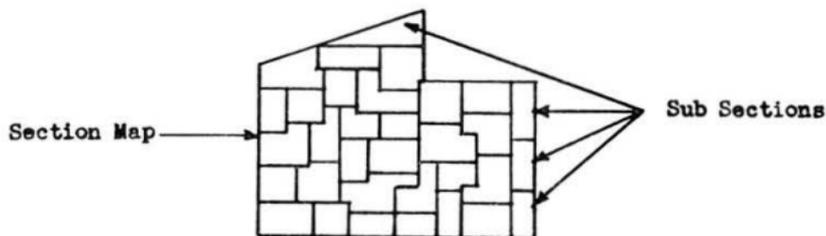
EXHIBIT NO. 1

4.01(b)



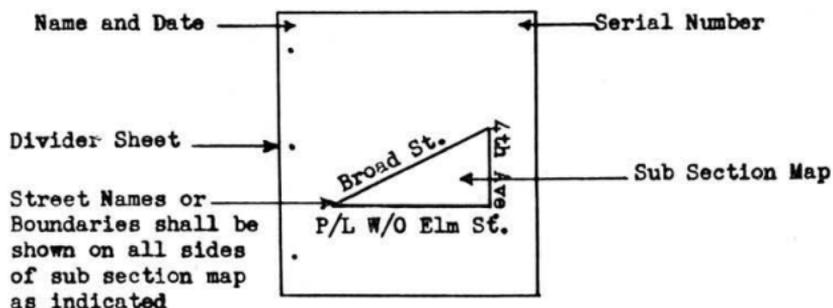
- (1) Obtain 3 copies.
- (2) Cut 2 copies into section according to number of foremen.
- (4) Mount copy on suitable backing for use under Paragraph 5.01.

4.01(d)



- (1) Obtain 2 copies of section map from supervising foreman.
- (2) Cut 1 copy into 36 subsections according to amount of aerial plant.
- (3) Mount other copy on suitable backing for use per Paragraph 5.03.

4.01(e)



- (1) Mount each subsection map on divider sheet.
- (2) Number divider sheets serially from 1 to 36.
- (3) Disposition of map, on completion of inspection, is covered in Paragraph 4.01(g).