## Overhead Electric Distribution Standards

## POLES

## INTRODUCTION

1. The JEA integrated standards outlined on the following pages depend on strict adherence to these guidelines. Construction varying from these standards must be covered in NOTED FORM on the drawing by the design engineer.
2. Concrete and wood poles are predrilled in accordance with the pole drilling details of this Section. However, some holes will have to be drilled in the field and will require the engineer to call for either the plate DRILL-W or DRILL-C if he or she is aware of the extra holes to be drilled.
3. Equipment attachment locations called for on a construction standard or the following drilling details are denoted by the hole number at which the bolt will be placed.
4. Birthmark location on the pole varies with length and type. Larger poles may have two birthmarks -- if the pole is set extra deep, at least one birthmark will still be visible for identification. Unless special circumstances prevail, always set every pole with the birthmark facing the street (roadside). Split the angle on curves.
5. If concrete poles are set deeper than their normal setting depth, the crew installing the pole shall attach piece of \#4 CU to the pole grounding loop to make it accessible from the groundline.
6. Poles shall be raked such that the side opposite to the face on which the load is applied shall be 90 degrees or perpendicular to the ground as shown.
7. Poles shall be oriented so that the unbalanced force bisects the conductor angle perpendicular to the load bearing face of the pole.
8. The split bolt assembly (SH3O) is included in the 45 to 65 foot wood pole plates and should be installed in hole 7.
9. Additional washers, connectors, and \#4 bare copper are issued with the concrete pole plates to be used for grounding purposes (See hardware grounding detail in the GROUNDING Section).
10. Unless otherwise stated, holes shown on the pole drilling details are in inches from the tip or the bottom of the pole roof. Holes are 1 inch in diameter on concrete poles and $7 / 8$ of an inch in diameter on wood poles. Pole drilling details are not to scale.
11. A tag holder is issued with each pole plate for the purpose of identifying the pole address when the pole is installed. Adhesive for these tag holders is also issued with concrete poles.

## POLES

## POLE INSPECTION AND MANUFACTURER'S MARKINGS



TYPICAL TOP MARK


## POLE INFORMATION

| POLE SETTING DEPTHS |  |  |
| :---: | :---: | :---: |
| LENGTH (FT) | WOOD POLE | CONCRETE POLE |
| 30 | 5'-6" | $6^{\prime}$-0" |
| 35 | $6^{\prime}-0^{\prime \prime}$ | $6^{\prime}-6{ }^{\prime \prime}$ |
| 40 | $6^{\prime}-0$ " | 7'-0" |
| 45 | $6^{\prime}$-6" | 7'-6" |
| 50 | 7'-0" | $8^{\prime}-0^{\prime \prime}$ |
| 55 | 7'-6" | $8^{\prime}-6{ }^{\prime \prime}$ |
| 60 | 8'-0" | $9^{\prime}-0{ }^{\prime \prime}$ |
| 65 | 8'-6" | $10^{\prime}-0^{\prime \prime}$ |
| 70 | 9'-0" | $11^{\prime}-0^{\prime \prime}$ |
| 75 | $9^{\prime}-6{ }^{\prime \prime}$ | $12^{\prime}-0^{\prime \prime}$ |


| WEIGHTS OF CCA TREATED WOOD POLES (IN POUNDS) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| LENGTH | CLASS 1 | CLASS 2 | CLASS 3 | CLASS 4 |
| 30 | 1,224 | 1,068 | 924 | 798 |
| 35 | 1,572 | 1,368 | 1,182 | 1,026 |
| 40 | 1,956 | 1,692 | 1,470 | 1,272 |
| 45 | 2,358 | 2,046 | 1,770 | 1,536 |
| 50 | 3,029 | 2,626 | 2,275 | 1,976 |
| 55 | 3,530 | 3,062 | 2,652 | 2,301 |
| 60 | 4,069 | 3,523 | 3,055 | 2,646 |
| 65 | 4,622 | 4,004 | 3,471 | 3,016 |
| 70 | 5,207 | 4,518 | 3,913 | -- |
| 75 | 5,816 | 5,051 | 4,375 | -- |
| 80 | 6,455 | 5,597 | 4,849 | -- |
| 85 | 7,124 | 6,169 | 5,350 | -- |
| 90 | 7,807 | 6,760 |  | --863 |


| TIP DIMENSIONS OF WOOD POLES (IN INCHES) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| DIMENSION | CLASS 1 | CLASS 2 | CLASS 3 | CLASS 4 |
| MIN. TIP DIA. | 8.6 | 8.0 | 7.3 | 6.7 |
| MIN. CIRCUMFERENCE | 27 | 25 | 23 | 21 |

## POLE INFORMATION - CONTINUED

| DIMENSIONS OF WOOD POLES SIX FEET FROM BUTT (DIAMETER IN INCHES) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| POLE LENGTH | CLASS 1 | CLASS 2 | CLASS 3 | CLASS 4 |
| 30 | 11.6 | 10.8 | 10.2 | 9.4 |
| 35 | 12.4 | 11.6 | 10.8 | 10.0 |
| 40 | 13.1 | 12.3 | 11.5 | 10.7 |
| 45 | 13.7 | 12.9 | 11.9 | 10.3 |
| 50 | 14.3 | 13.4 | 12.4 | 11.6 |
| 55 | 14.8 | 13.8 | 12.9 | 12.1 |
| 60 | 15.3 | 14.3 | 13.4 | 12.4 |
| 65 | 15.8 | 14.8 | 13.8 | 12.9 |
| 70 | 16.2 | 15.3 | 14.3 | 13.2 |
| 75 | 16.7 | 15.6 | 14.6 | -- |
| 80 | 17.2 | 16.1 | 15.0 | -- |
| 85 | 17.5 | 16.4 | 15.3 | -- |
| 90 | 17.8 | 16.9 | 15.6 | -- |


| APPROXIMATE WEIGHTS OF CONCRETE POLES (IN POUNDS) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| AND DIMENSIONS (INCHES SQUARE) |  |  |  |  |
| POLE LENGTH | CLASS OR TYPE | WEIGHT (LBS.) | TIP DIMENSION | BUTT DIMENSION |
| 30 | 1 | 1,340 | 4 | 8.86 |
| 35 | 1 | 1,820 | 4 | 9.67 |
| 35 | 2 | 2,360 | 6 | 11.67 |
| 40 | 3 | 2,900 | 6 | 12.48 |
| 45 | 3 | 3,510 | 6 | 13.29 |
| 50 | 3 | 4,050 | 6.5 | 14.60 |
| 50 | H | 8,100 | 9 | 17.10 |
| 55 | H | 9,500 | 9 | 17.91 |
| 55 | LT | 18,100 | 13.25 | 22.16 |
| 55 | HT | 18,100 | 13.25 | 22.16 |
| 60 | H | 11,060 | 9 | 18.72 |
| 60 | LT | 20,400 | 13.25 | 22.97 |
| 60 | HT | 20,400 | 13.25 | 22.97 |
| 65 | LT | 22,900 | 13.25 | 23.78 |
| 65 | HT | 22,900 | 13.25 | 23.78 |
| 70 | HT | 25,100 | 13.25 | 24.59 |
| 75 | HT | 27,500 | 13.25 | 25.40 |
| 80 | HT | 30,000 | 13.25 | 26.21 |
| 80 | XHT | 37,375 | 16.55 | 29.51 |
| 85 | HT | 32,600 | 13.25 | 27.02 |
| 85 | XHT | 40,775 | 16.55 | 30.32 |
| 90 | HT | 35,600 | 13.25 | 27.83 |
| 90 | XHT | 44,275 | 16.55 | 31.13 |
| 95 | HT | 38,900 | 13.25 | 28.64 |
| 95 | XHT | 47,875 | 16.55 | 31.94 |
| 100 | HT | 42,100 | 13.25 | 29.45 |
| 100 | XHT | 51,475 | 16.55 | 32.75 |
| 105 | HT | 45,500 | 13.25 | 30.26 |
| 110 | HT | 49,000 | 13.25 | 31.07 |

## POLE DRILLING DETAIL



## POLE DRILLING DETAIL



## POLE DRILLING DETAIL



## POLE DRILLING DETAIL



BIRTHMARK FACE


SIDE VIEW

45 \& 50 FOOT WOOD POLE - CLASS 3

## POLE DRILLING DETAIL



## 50 THRU 65 FOOT WOOD POLE - CLASS 1 OR 2

## POLE DRILLING DETAIL



30 FOOT CONCRETE POLE - TYPE 1

## POLE DRILLING DETAIL



35 FOOT CONCRETE POLE - TYPE 1

## POLE DRILLING DETAIL



BIRTHMARK FACE


35 FOOT CONCRETE POLE - TYPE 2

POLE DRILLING DETAIL


## POLE DRILLING DETAIL



## 45 FOOT CONCRETE POLE - TYPE 3

## Overhead Electric Distribution Standards

## POLE DRILLING DETAIL



BIRTHMARK FACE


## 50 FOOT CONCRETE POLE - TYPE 3 OR H

## POLE DRILLING DETAIL



55 FT AND TALLER CONCRETE POLE - TYPE H, LT, HT \& 80-100 FT XHT

