

# 12 Signal Plan Details and Pole Entrance Chart

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The Detail sheet(s) shall contain all information that relates to the equipment mounted on the signal pole, mast arm, strain pole, span wire, vehicle or pedestrian pedestal. Any other unique details not shown on the standard drawings shall be shown on a detail plan sheet.

All contract plans shall be plotted “B” size (11”x17”) The Detail sheet is typically scaled at 100:1. This is set with Annotation Scale. You can turn this on and off from many different locations including

- The drawing scale toolbar
- The place active cell dialog
- The place text dialog

For additional information on using Annotation Scale click on the following link:

[MicroStation Users Guide](#).

All pole entrance charts shall include:

- Pole by number
- Drawing number that the pole is shown on.
- Type of pole:
  - SM-1 thru SM-5 (standard mast arm poles)
  - SM-X (non-standard mast arm poles)
  - STP-1 thru STP-7 (standard strain poles)
  - STP-X (non-standard strain poles)
- Strain pole span wire attachment height “AH”
- Pedestrian signal degrees. (Note 1)
- Terminal cabinet degrees. (Note 1)
- Sign degrees, for signs mounted to the pole shaft. (Note 1)
- Traffic signal degrees, for vehicle signals mounted to the pole shaft. (Note 1)
- Photoelectric cell mounting degrees. (Note 1)
- Video camera degrees. (Ped Video)
- Mast Arm Poles:
  - Mast arm length.
  - Distance of equipment from tip of pole. (Signs, Video, Preemption, etc).
- Foundations:
  - Foundation number (from TM653).
  - Required foundation depth (from Geotech report).
- Luminaires:
  - Arm Length
  - Arm degrees (Note 1)
  - Mounting height of the luminaire above the ground.
  - “Type” of Luminaire i.e. High pressure sodium (HPS)

- Fixture:
  - Type of luminaire fixture i.e. M-S-III
  - Wattage of luminaire fixture
- Orientation diagrams for:
  - Mast arm poles
  - Strain poles
  - Pedestrian and vehicle pedestals
- Geotechnical report date

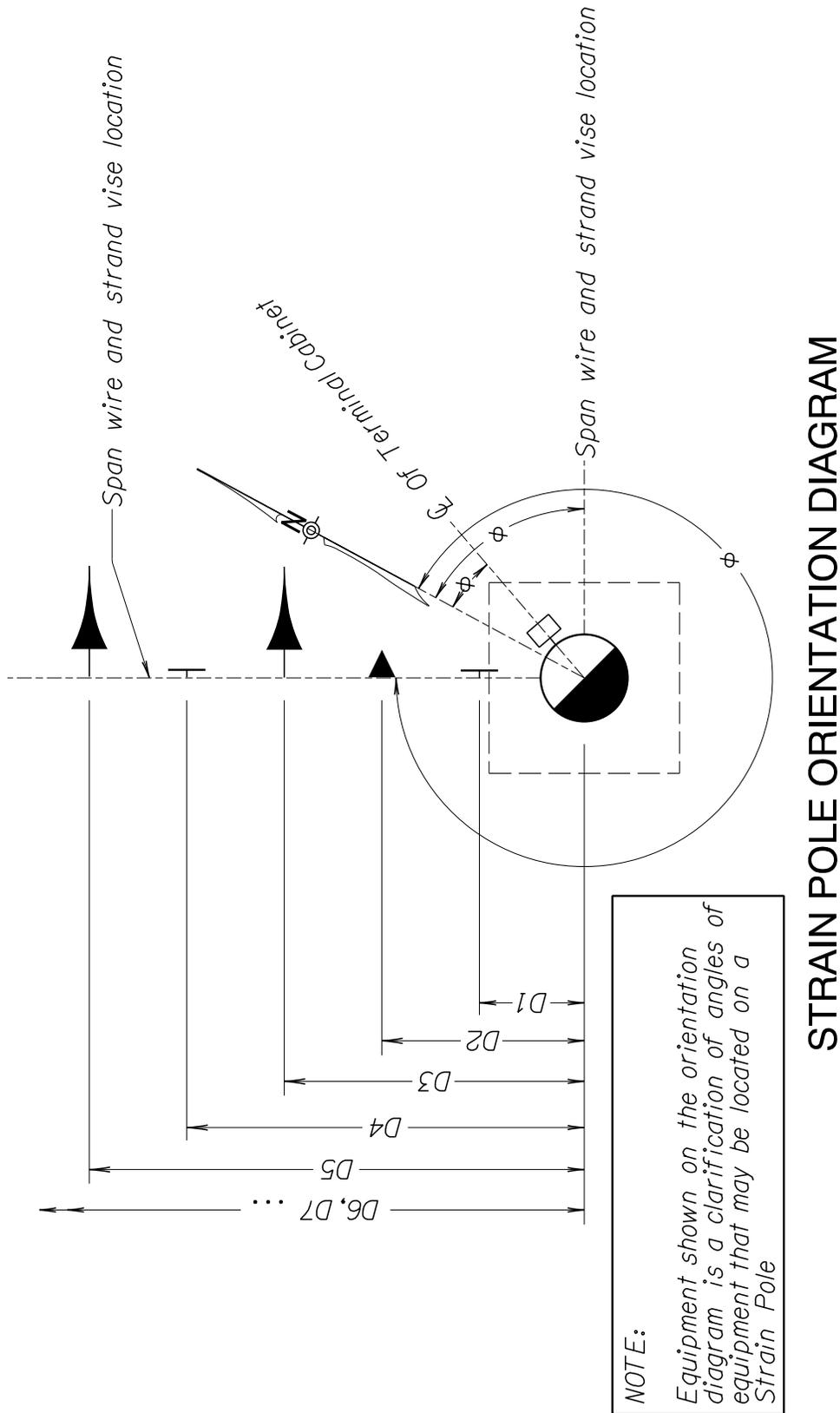
**Note:** In relation to the mast arm at 0 degrees or the North arrow:

If no mast arm is used, use the North arrow. For strain poles, vehicle pedestals, & pedestrian pedestals. See examples of degree orientation diagrams in the tasks & workflows. Look under Signal Plans tab, Pole Ent Chart.

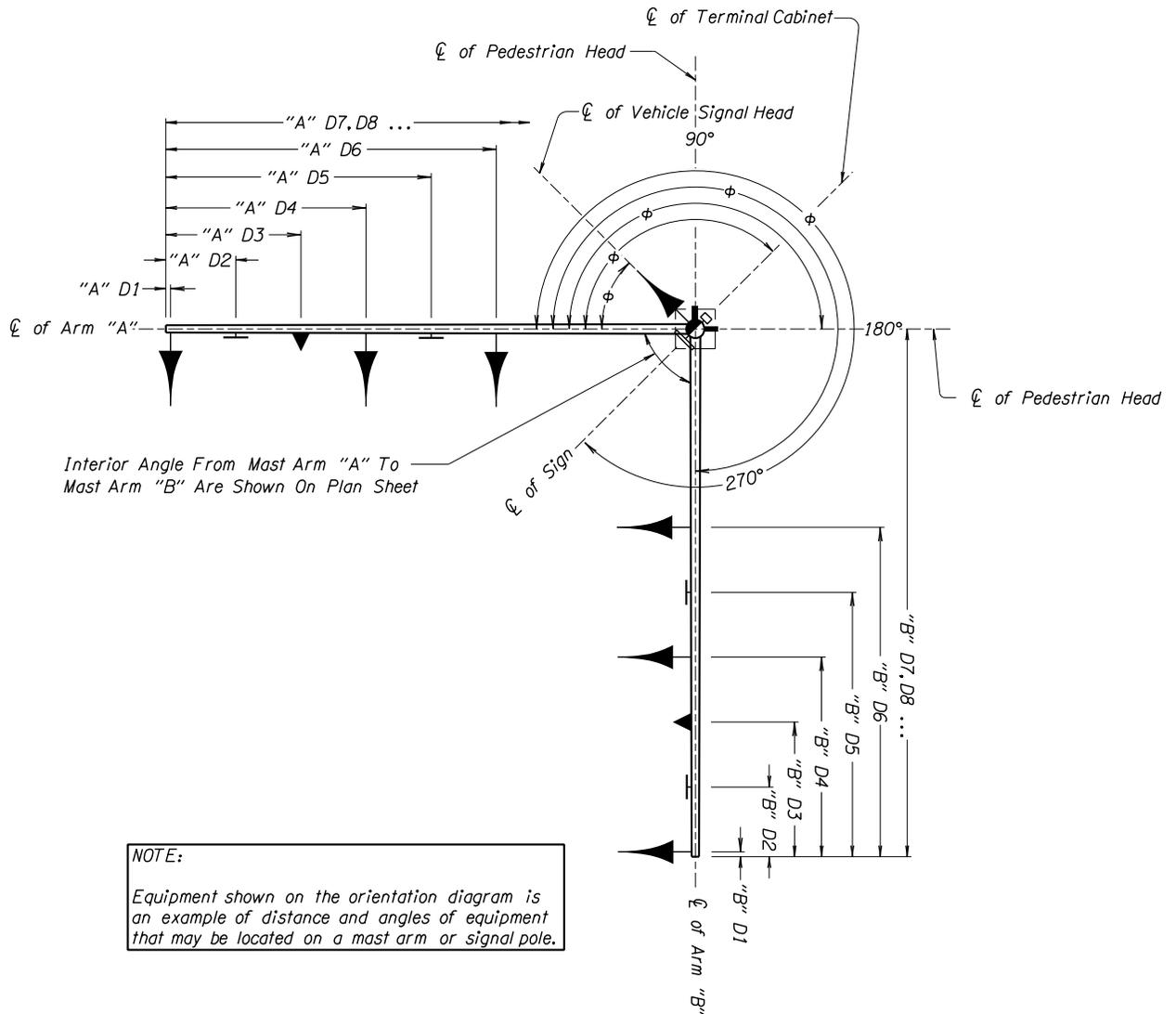
See the examples on the next 2 pages.



Figure 12-2 | Sample Strain Pole Orientation Diagram

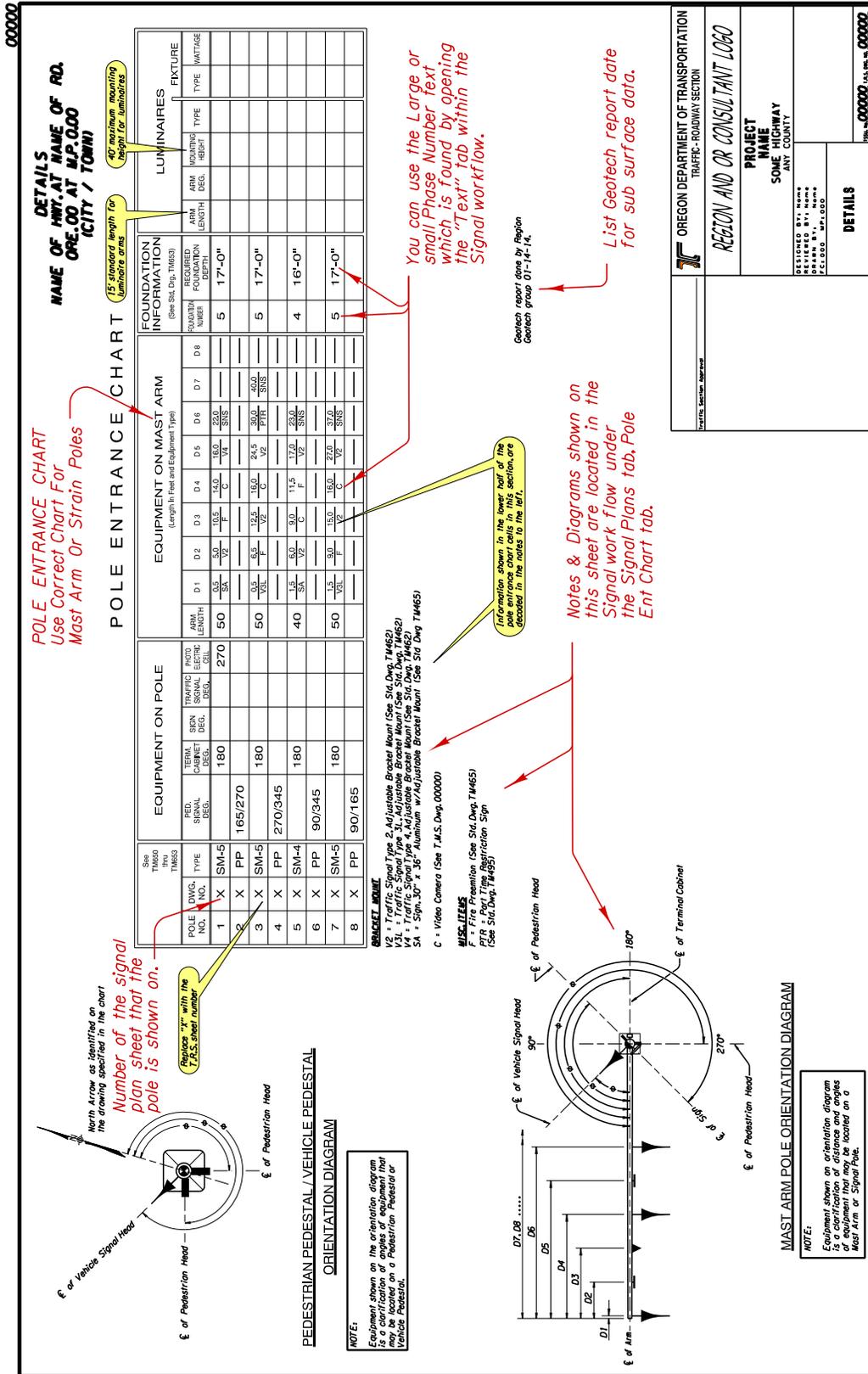


**Figure 12-3 | Twin Mast Arm Pole Orientation Diagram**



**TWIN MAST ARM POLE ORIENTATION DIAGRAM**

Figure 12-4 | Sample Pole Entrance Chart and Details

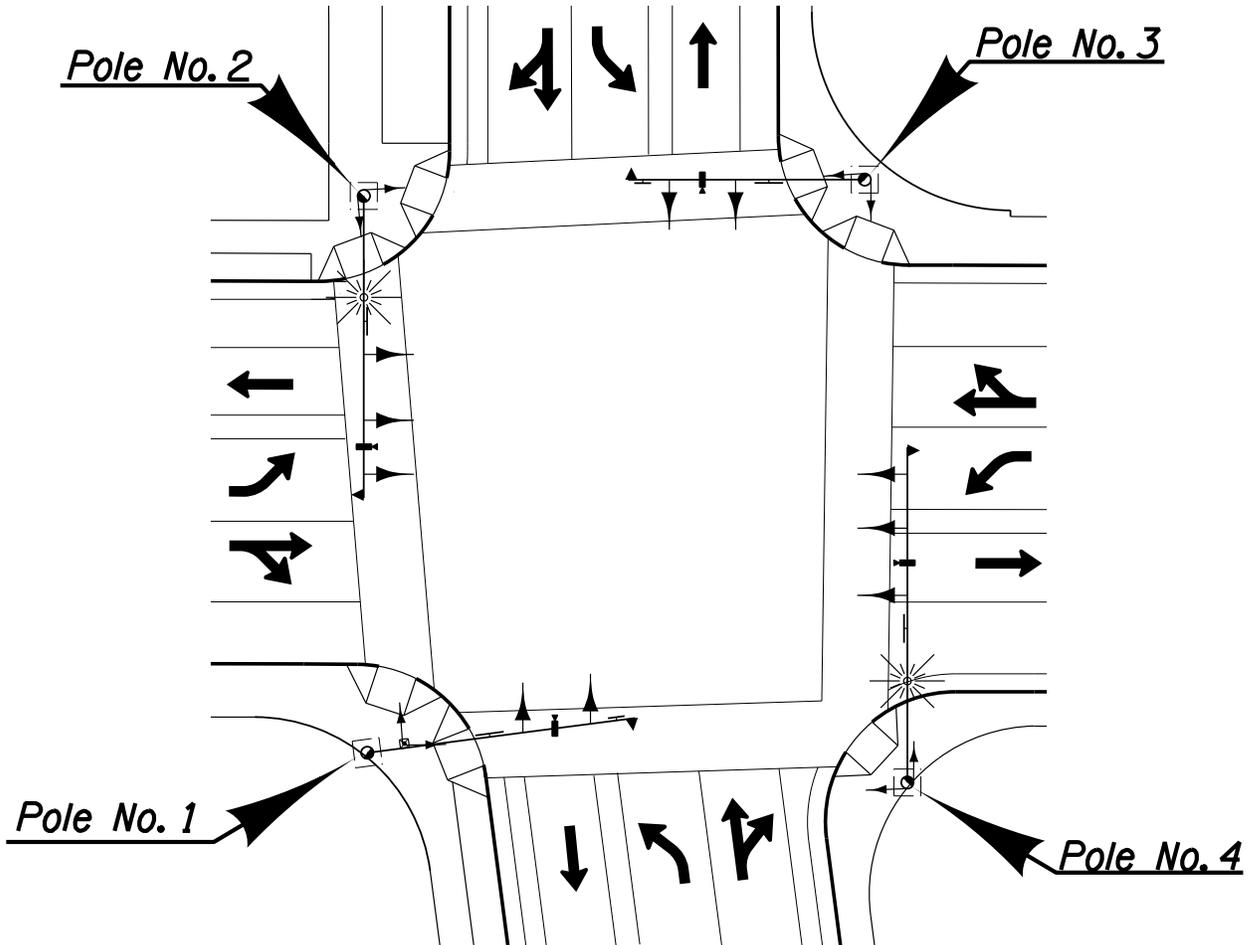


## Pole Numbers

Poles and pedestals are numbered starting from the **lower left-hand corner of the intersection in a clockwise direction**. Plans having poles at more than one intersection shall have the **poles numbered consecutively** starting with the first intersection shown in the plans and ending with the last intersection shown in the plans.

This also includes vehicle pedestals, pedestrian pedestals and pushbutton posts.

*Figure 12-5 | Pole Numbering Convention*



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