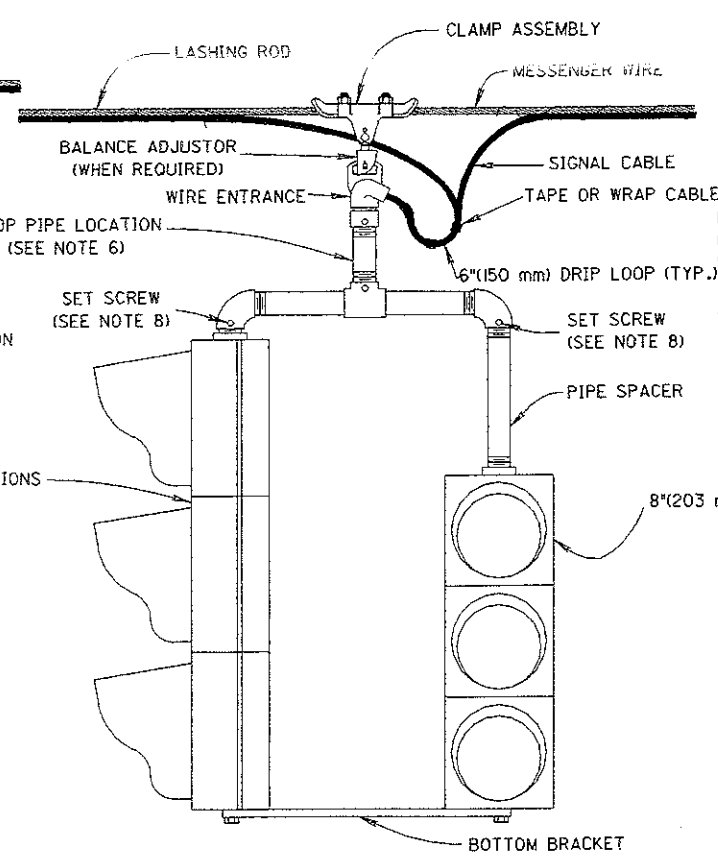
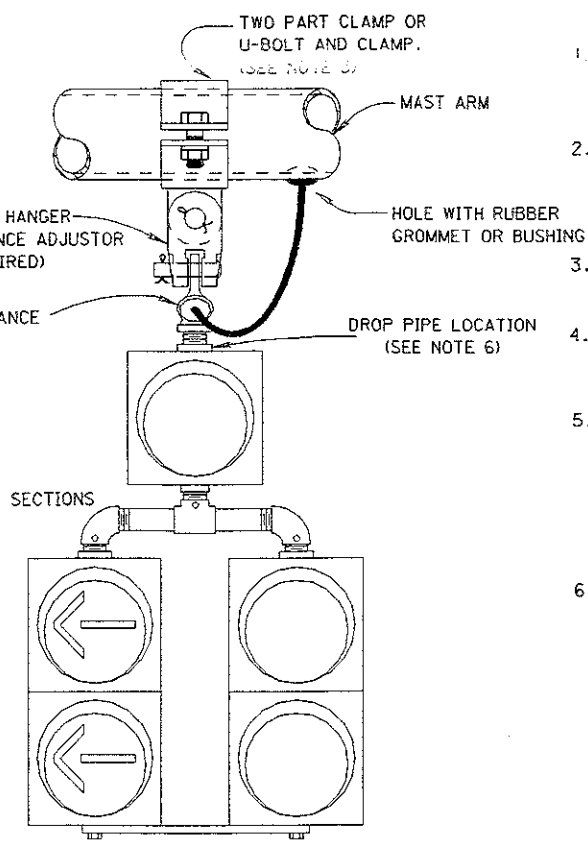


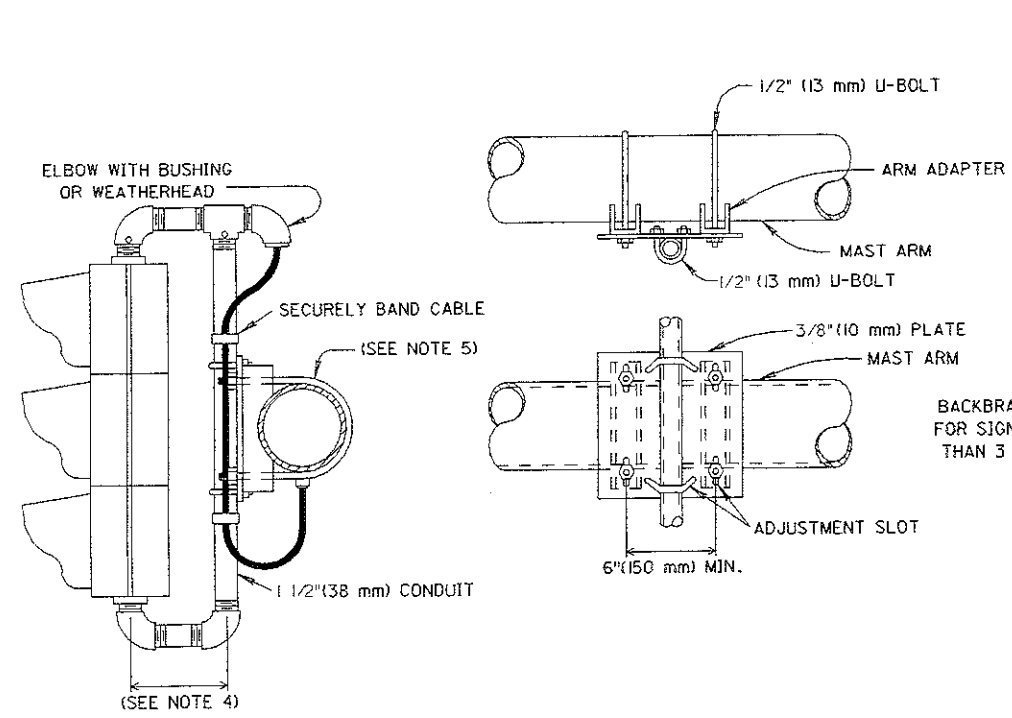
**SIGNAL HEAD SUSPENSION  
WITH DISCONNECT**



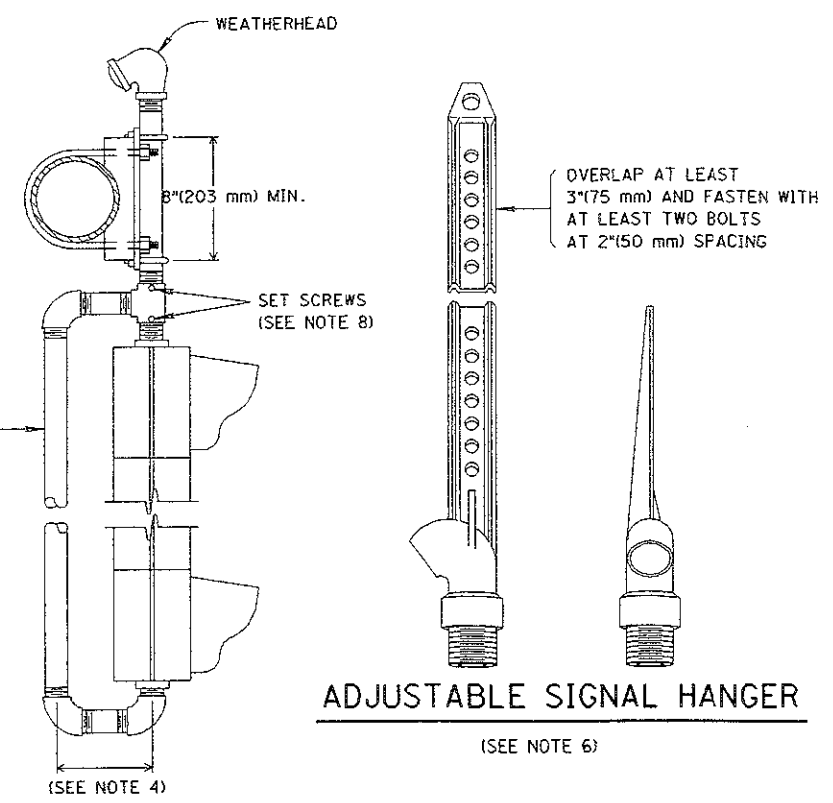
**SIGNAL HEAD SUSPENSION**



**MAST ARM SIGNAL HEAD MOUNTING**



**RIGID SIGNAL HEAD MOUNTING FOR MAST ARMS**



**ADJUSTABLE SIGNAL HANGER**

**NOTES**

1. Signal head conduit brackets and conduit fittings shall be galvanized and painted to match the body of the signal head.
2. All signal head assemblies shall be installed in a plumb position and perpendicular to the approach lane. Balance adjustors or other approved methods may be used if necessary.
3. The mast arm clamp shall have a minimum strength at yield to support a 200 pound (900 Kg) load.
4. A minimum of 17 in. (430 mm) is required for optically programmed signalheads and a minimum of 6 in. (150 mm) for standard signalheads.
5. Alternate rigid signal head mounting devices for mast arms may be approved by the Engineer upon demonstration that they provide adequate rigidity, equal range of adjustment and can be tightened sufficiently to prevent movement and loosening under vibration.
6. Signal heads shall be installed with a clearance above pavement elevation at the center of the roadway of 16 ft. (4.9 m) minimum, 18 ft. (5.5 m) maximum. It is intended that this clearance be obtained without the use of drop pipes, but rather by the careful selection of foundation heights, attachment heights, arm rise, span wire sag and other factors during the construction of the installation. If the installation cannot be adjusted to the proper clearance the Contractor shall advise the Engineer of all signals which exceed the maximum. The Engineer will, in consultation with the maintaining agency, direct the use of drop pipes or waive the maximum clearance requirement for each head. If drop pipes are necessary, adjustable signal hangers as detailed may be used.
7. Cable entrance openings on disconnect hangers shall rigidly clamp cable to prevent movement of the cable within the enclosure.
8. Signal head rotation shall be prevented by the use of serrated rigns, set screws or other positive devices incorporated in the signal housing and at critical locations in the supporting hardware.
9. All conductors shall have adequate clearance between hangers, thimbles, bullrings, etc. in order to avoid damage from rubbing.