Using star pickets at roadwork sites

Star pickets may be used at roadwork sites throughout Queensland, however it is important that certain guidelines are followed to ensure their safe and effective use.

This fact sheet details a number of these guidelines, and provides some examples of correct use.

Considerations and requirements for using star pickets

- Star pickets are considered frangible in the event of an impact by a vehicle.
- If they are bent or damaged, they must be replaced or repaired.
- They must be installed vertically as installing them at an angle may result in a spearing hazard.
- They must be fitted with end caps to reduce the potential of pierce injuries.
- They are generally black, but may be any colour.
- Always check for the presence of underground services before installing star pickets.

Star pickets as supports for delineation

- Star pickets may be used as supports for roadwork delineators (reflectors) and:
  - for speeds of 80 km/h or more, must be located a minimum of 1 m from the traffic lane;
  - for speeds less than 80 km/h, it is recommended that they be located a minimum of 1 m from the traffic lane unless required to be placed closer to protect or delineate a hazard.
- Star pickets may also be used at roadworks to support devices used to delineate the works, including temporary fencing and flagging and should be located a minimum distance of 1 m from the traffic lane.
- Star pickets may be used to support temporary fencing and flagging. The fencing or flagging system used must:
  - not become a hazard if struck by a vehicle.
  - not deflect into traffic or pedestrian areas due to wind loads and traffic wind buffeting.

Star pickets as sign supports

- Star pickets must not be driven into the ground at an angle to provide bracing, for example, to provide bracing for signs/posts, temporary fences or other items.
- A sign support post must **NOT** be inserted over a star picket to enable fixing of the sign at height using standard post fittings.
**Short term works**

- Temporary roadwork signs may be installed on or near a batter using a standard frame leg and one star picket. In many cases, where signs are installed on or near the batter, it is likely that the standard sign frame legs closest to the road will be placed directly at ground level while a star picket would be used on the batter to ensure the sign is installed level.
- Temporary roadwork signs may be installed on two star pickets.
- Temporary roadwork signs installed on standard frame legs may be stabilised using a single star picket installed vertically behind the sign.
- Signs must be fixed securely to the star picket and be stable in both windy conditions and due to the effects of traffic wind buffeting.

**Long term works**

- Star pickets may be used as sign supports for long term works if supported by a risk assessment.
- It is recommended that temporary roadwork signs be mounted on normal fixed sign supports.
- Star pickets may be used to stabilise temporary roadwork signs that are installed on standard frame/legs.

**Examples of correct use**

**Example 1: As a sign support in a rural environment**

- The sign is located away from dense vegetation, in clear view and clear of any traffic lanes.
- The sign is installed level and is positioned a minimum of 200mm above the ground.
- The ends of star pickets are fitted with end caps to reduce the potential of pierce injuries.
- The star pickets are installed vertically (not driven at an angle to provide bracing support to the sign).

**Example 2: As a sign support in an urban environment on the verge**

- The sign is located clear of traffic and does not interfere with pedestrian/cyclist activity.
- The sign is positioned in clear view of approaching traffic and is not obstructed (also consider parked cars).
- The sign is installed level and is positioned a minimum of 200mm above the ground.
- The ends of star pickets are fitted with end caps to reduce the potential of pierce injuries.
- The star pickets are installed vertically (not driven at an angle to provide bracing support to the sign).
Example 3: Star pickets used as support for delineation

- The row of star pickets are located in a consistent line and clear of the traffic lane.
- The ends of star pickets are fitted with end caps to reduce the potential of pierce injuries.
- The flagging is installed at a consistent height and is unlikely to deflect into traffic under wind loads or due to traffic wind buffeting.
- In this illustration, devices to provide delineation at night (such as delineators / reflectors) should have been included.

Example 4: Star pickets used as support device for delineation of temporary works

- The star pickets are located away from traffic and clear of the footpath
- The ends of star pickets are fitted with end caps to reduce the potential of pierce injuries.
- The star pickets are closer than 1 metre of the traffic lane but are located behind the kerb. However they are required at this location to adequately delineate the exposed or unfinished works (and are supported by a risk assessment).
- In this illustration, if not located in an area with adequate ambient street lighting, devices to provide delineation at night (such as delineators / reflectors) should have been included.
- In this illustration, the mesh fencing should have been installed tighter to minimise the impact of sagging and deflection due to the wind.
Example 5: Star pickets used as support device for pedestrian containment fencing

• The star pickets are located away from traffic.
• The star pickets are installed on the edge of the pedestrian walkway forming a constant line and at a similar height.
• The temporary mesh fencing is installed at a consistent height and is sufficiently tight that it is unlikely to deflect under wind loads.
• The ends of star pickets are fitted with end caps to reduce the potential of pierce injuries.
• In this illustration, if not located in an area with adequate ambient street lighting, devices to provide delineation at night (such as delineators / reflectors) should have been considered for pedestrians or cyclists that may use this path at night.

If you have a query about this fact sheet, please email trafficengineering.support@tmr.qld.gov.au