# BRISBANE CITY COUNCIL

# REFERENCE SPECIFICATIONS FOR ENGINEERING WORK

# S606 TRAFFIC SIGNAL HARDWARE – POLES, MAST ARMS AND COLUMNS

## Amendment Register

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| --- | --- | --- | --- |
| Ed/Rev Number | Section Number | Description | Date |
| 1.0 |  | Original issue | Apr 2014 |
| 2.0 | 1.3 | Referenced documents list updated | May 2016 |
| 3.0 | General | Document name changed from ‘Reference Specifications for Civil Engineering Work’ to ‘Reference Specifications for Engineering Work’ | Mar 2021 |
| 1.1 and 3.1 | Alignment between Section 1.1 (*Scope*) and Section 3.1 (*Technical Requirements – General*) |
| 1.2 | Definitions wording and layout revised for clarity. |

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## GENERAL

### Scope

This specification outlines the technical acceptance criteria for Posts, Joint Use Columns, Mast Arms, Joint Use Mast Arms and Fold Down Columns.

### Interpretation

Definitions

Superintendent: Refer *Reference Specification for Civil Engineering Works S110 General Requirements, Clause 1.1*.

Contractor: Refer *Reference Specification for Civil Engineering Works S110 General Requirements, Clause 1.1*.

Interested parties:

* Where the Principal is Brisbane City Council: the Contractor and the Superintendent;
* Where the Principal is any other person or agency: Brisbane City Council, the Superintendent, and the Contractor.

### Standards

|  |  |  |
| --- | --- | --- |
| Australian Standard | AS1074 | Steel tubes and tubular for ordinary service |
| Australian/New Zealand Standard | AS/NZS1163 | Structural steel hollow sections |
| Australian Standard | AS1170.2 | Structural Design Actions |
| Australian Standard | AS1214 | Hot-dip galvanised coatings |
| Australian Standard | AS1554 | Structural steel welding |
| Australian Standard | AS2339 | Traffic Signal posts and attachments |
| Australian Standard | AS2979 | Traffic signal mast arms |
| Australian/New Zealand Standard | AS/NZS3678 | Hot-rolled structural steel plates, floor plates and slabs |
| Australian/New Zealand Standard | AS/NZS4680 | Hot-dip galvanised (zinc) coatings |
| Australian/New Zealand Standard, International Standards Organization | AS/NZS ISO 9001 | Quality management systems – Requirements |

### References

Refer to the following other Reference Specifications for Engineering Work:

|  |  |
| --- | --- |
| S120 | Quality |
| S230 | Structural Steel |

Refer to the following Standard Drawing:

|  |  |
| --- | --- |
| BSD-4122 | Post details |
| BSD-4123 | Joint Use Column Details (BCC Type) |
| BSD-4124 | Mast Arm Details 2.5 & 5.0m Outreach (BCC Type) |
| BSD-4125 | Joint Use Traffic Signal And Road Lighting Pole (BCC Type) |
| BSD-4126 | Joint Use Mast Arm 2.5 & 5.0m Outreach (Rate 2) |
| BSD-4127 | 8.5m Outreach Joint Use Mast Arms Baseplate Mounted |
| BSD-4128 | 11.0m Outreach Joint Use Mast Arms Baseplate Mounted. |

Refer to the following Queensland Department of Transport and Main Roads Standard Drawing:

|  |  |
| --- | --- |
| SD 1403 | Traffic Signals – Mast Arm Footing Installation Details |

## QUALITY SYSTEMS

### General

The Superintendent responsible for the management of the quality of work under the contract must maintain a Quality Assurance System with third party accreditation to *AS/NZS/ISO 9002*.

Responsibility for preparation of an inspection and test plan may rest with the Contractor or the Superintendent. Where the Contractor is responsible for the plan, submit it to the Superintendent for approval. Where the Superintendent is responsible for the plan, submit it to the Principal for approval. *Refer annexure.*

## TECHNICAL REQUIREMENTS

### General

This specification covers Posts, Joint Use Columns, Mast Arms, Joint Use Mast Arms and Fold Down Columns used in conjunction with traffic signals.

### Compliance Testing

All materials and manufacturing of Posts, Joint Use Columns, Mast Arms, Joint Use Mast Arms and their components are to comply with all standards and specifications referenced in this document. Conformance shall be demonstrated by submitting current certificates of all specified test results issued by a registered NATA laboratory.

### Identification

Clearly visible and indelible, a pole shall have the following markings:

* Manufacturer’s name
* Equipment type
* Date of manufacture