# project specific requirements

DIPL Std Spec Roadworks PSRs – January 2021

Reference

Read these Project Specific Requirements (PSRs) in conjunction with the Standard Specification for Roadworks (SSRw) and the Drawings if any. Only those parts of the Standard Specification which refer to the works being carried out apply.

Standard Specification for Roadworks – Reference Text

The technical specification for this project is the Standard Specification for Roadworks V 4.2 which is a separate document of reference text.

Site Copy

Retain a current copy of the Standard Specification for Roadworks on site for the duration of the Contract. Retain a copy of these Project Specific Requirements on site for the duration of contract. Electronic copies are acceptable.

Electronic copies of the Standard Specification for Roadworks are available via: <https://dipl.nt.gov.au/industry/technical-standards-guidelines-and-specifications/technical-specifications/roads>

Project Specific Requirements

The selection of specific items or materials for the works being carried out are as specified in these Project Specific Requirements or shown as notes on the drawings.

Clause Numbering

The clause numbers in the Project Specific Requirements remain consistent and refer back to the relevant clause and section in the Standard Specification for Roadworks.

Precedence

Any provision in these Project Specific Requirements or on the project drawings shall override any conflicting provision in the Standard Specification.

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SSRW Section 30 UPDATES OVERVIEW

[Edit the Project Specific Requirements to include only those sections required for the project. Do not change any section or clause numbers as they refer directly to the section and clause numbers in the standard specification.

If any clauses are amended by these PSRs, show the clause number in its numbering order place; State the requirement and state that the clause in the PSR overrides the equivalent clause in the Standard Reference text.

Delete any PSR clause which is not used or not relevant to the contract project.]

**SSRW Section 1 MISCELLANEOUS PROVISIONS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause** **1.18 Project Notice Boards**

Design the Project Notice Boards in accordance with drawing number(s) *[enter data]*

[Insert the required drawing number(s).]

Include the following project specific wording on the boards;

*[enter data]*

*[enter data]*

[Provide the required wording.]

Remove the boards within 2 weeks after the Certificate of Practical Completion has been issued.

[Use this paragraph for NT roads.]

Remove the boards 52 weeks after the Certificate of Practical Completion has been issued.

[Use this paragraph for Federal roads.]

**SSRW Clause 1.22 Cycle And Pedestrian Shared Paths**

[Add any required information.]

**SSRW Clause 1.28 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 2 PROVISIONS FOR TRAFFIC**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 2.6 Traffic Management Plan**

The Traffic Management for this contract may be subject to audit.

**SSRW Clause 2.6.1 Traffic Management Plan – Document Control**

Register of TMPs and TGSs for this project is – Required / Not required.

[ Do not require a project specific register for simple jobs where it is unlikely that revisions of TGSs will be required during the works.]

**SSRW Clause 2.6 Traffic Management Plan**, and

**SSRW Clause 2.8 Traffic Management Audit Requirements**, and

**SSRW Clause 2.9 Conformance Auditing Results**;

The Traffic Management for this contract is;

* subject to audit
* **not** subject to audit

[Delete the redundant option.]

**SSRW Clause 2.18 Detours, Side Tracks, and Crossovers**

[Determine with the Regional Project Officer whether construction requires a detour or will be done under traffic. Delete as appropriate.]

Side Track required or not required; *[enter data]*

**SSRW Clause 2.18.1 Construction**

Side Track Type; *[enter data]*

[Specify either sealed or gravelled. Specify sealed side tracks when the detour will be in operation for longer than 4 weeks. Discuss the side track type and requirements with the Regional Project Officer. Delete if side track not required.]

Construct side tracks with a finished surface level crown height 250 mm above the natural surface.

[Delete this requirement for short duration projects on local roads which are unlikely to be affected by rain.

Ensure that primer sealing is included in the SPRAY SEALING Section. Note here that the paragraph “Sealed side tracks to be primer sealed with 7 mm aggregate as specified in the SPRAY SEALING Section.” is deleted if it is not applicable.]

**SSRW Clause 2.27 Other Requirements**

[Add any additional requirements.]

**SSRW Section 3** **CLEARING, GRUBBING AND REHABILITIATION**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 3.2 Clearing**

SALVAGED ITEMS

A list of items to be salvaged are as follows;

[Add a list of items to be salvaged.]

**SSRW Clause 3.11 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 4 EARTHWORKS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 4.3 Definitions**

SUBGRADE

Top *[enter data]* mm of material below subgrade surface.

[Amend default (150mm) if designer specifies different thickness. Delete this sub-clause if thickness is 150mm.]

**SSRW Clause 4.4.2 Excess Material – Hold Point**

Haul and dump and/or spread excess material at the following site(s): *[enter data]*

[If some excess material is to be spread and some to be stockpiled specify sites, indicating if they are for stockpiles or for spreading of excess material.]

The material is to be; - Spread and sheeted with topsoil

- Stockpiled

[Delete option not required.]

**SSRW Clause 4.5 Earthworks In Fill**

**SSSRW Clause 4.5.5 Construction Methods**

**Fill by** *[enter data]* method.

[Select "Compacted Layer", "Rocky Material" or "Rock Fill" method.]

**SSRW Clause 4.6 Fill Material**

[Specify selected values for properties if any differ from values in Standard Specification.]

**SSRW Clause 4.6.1 General Fill**

Minimum CBR *[enter data]* %

MMDD of *[enter data]* %,

Maximum particle size – Subgrade layers *[enter data]* mm

Maximum particle size – Layers other than subgrade *[enter data]* mm

Plasticity index between *[enter data]* % and *[enter data]* %.

[To AS 1289]. Ensure specified minimum CBR is consistent with locally available materials and the proposed pavement design. Delete this clause if the CBR in the Std Spec is achievable.]

**SSRW Clause 4.6.2 Standard Fill**

Minimum CBR *[enter data] %*

MMDD of *[enter data]* %,

Maximum particle size – Subgrade layers *[enter data]* mm

Maximum particle size – Layers other than subgrade *[enter data]* mm

Plasticity index between *[enter data]* % and *[enter data]* %,

Linear shrinkage between *[enter data]* % and *[enter data]* %.

[Enter data if values required are different from the default values in the Std Spec. To AS 1289. Ensure specified minimum CBR is consistent with locally available materials and the proposed pavement design. Delete this clause if the CBR in the Std Spec is achievable.]

**SSRW Clause 4.6.3 Select Fill**

Minimum CBR *[enter data]* %

MMDD of *[enter data]* %,

Maximum particle size – Subgrade layers *[enter data]* mm

Maximum particle size – Layers other than subgrade *[enter data]* mm

Plasticity index between *[enter data]* % and *[enter data]* %,

Linear shrinkage between *[enter data]* % and *[enter data]* %.

[Enter data if values required are different from the default values in the Std Spec. To AS 1289. Ensure specified minimum CBR is consistent with locally available materials and the proposed pavement design. Delete this clause if the CBR in the Std Spec is achievable.]

**SSRW Clause 4.6.4 Sand Clay Fill**

Minimum CBR *[enter data]* %

MMDD of *[enter data]* %,

Maximum particle size – Subgrade layers *[enter data]* mm

Maximum particle size – Layers other than subgrade *[enter data]* mm

Plasticity index between *[enter data]* % and *[enter data]* %,

Linear shrinkage between *[enter data]* % and *[enter data]* %.

[Delete if sand clay fill not permitted. Enter data if values required are different from the default values in the Std Spec. To AS 1289. Ensure specified minimum CBR is consistent with locally available materials and the proposed pavement design. Delete this clause if the CBR in the Std Spec is achievable.]

**SSRW CLAUSE 4.8 Earthworks For Drainage**

**SSRW Clause 4.8.1 Stream Diversions**

[Delete this clause if it not required. Add information regarding excavations and fill for stream diversions if not shown on drawings.]

**SSRW Clause 4.8.2 Levees**

[Delete this clause if it not required. Add information regarding locations and dimensions of levees if not shown on drawings.]

**SSRW Clause 4.8.4 Table Drain Offlets**

Divert table drains into offlet drains at intervals not exceeding *[enter data]* m.

[Insert intervals if other than 150m. Add any additional requirements or any alteration to the reference text. Delete this clause if it not required.]

**SSRW Clause 4.12 Batter Protection by Grassing**

**SSRW Clause 4.12.1 Grassing**

Batters to be treated from ch. *[enter data]* to ch. *[enter data]*.

[Insert start and end chainages. Add extra rows if more than one section of batter is to be treated.]

**SSRW Clause 4.12.2 Seed Mixture And Fertiliser**

SEED MIXTURE AND FERTILISER

Seed required *[enter data] .*

FERTILISER APPLICATION RATE

Apply at rate of *[enter data]* kg/ha.

[Insert number of kilograms required per hectare.]

**SSRW CLAUSE 4.13 Bridge Foundations**

**SSRW Clause 4.13.1 Conditions**

Original core samples for inspection at: *[enter data]*

[Insert location of original core samples.]

**SSRW Clause 4.13.2 Excavation**

Dimensions: *[enter data]*

[Insert information.]

Reduced levels: *[enter data]*

[Insert information.]

Blinding concrete: *[enter data]*

[Required/not required. Required if foundation is NOT homogeneous sound rock.]

**SSRW CLAUSE 4.14 Fill Adjacent To Bridge Structures**

[Indicate which processes, if any, are not required.]

**SSRW CLAUSE 4.15 Compaction**

[Indicate which processes, if any, are not required.]

**SSRW CLAUSE 4.16 Conformance**

[Indicate which processes, if any, are not required.]

SSRW Clause 4.16.1 Existing Surface Levels

Material to replace stripped layer: *[enter data]*

[Indicate requirements, if any.]

SSRW Clause 4.16.2 Tolerances

Subgrade width: *[enter data]*

[Indicate if kerbs are, or are not, included in the project.]

**SSRW Clause 4.17 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 5 CONFORMANCE TESTING**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 5.10 Conformance Testing Results**

|  |  |
| --- | --- |
| **Table - Remote areas additional days permitted for testing and reporting completion times** | |
| **Area/Location** | **Number of additional days allowed \*** |
|  |  |
|  |  |
|  |  |
| \* In addition to the Time Allowed for NATA Endorsed Report in Days (Monday to Saturday) in the ***Tables - Testing and Reporting Completion times - Parts 1, 2, & 3***. | |

**SSRW Clause 5.12 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 6 PAVEMENTS AND SHOULDERS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 6.3 Material Properties**

**SSRW Clause 6.3.1 Table – Natural Gravel Particle Sizes**

Conformance requirements; - Base – sealed or unsealed - Type *[enter data]*

[Insert 2 or 3 for Type.]

- Sub Base – Type *[enter data]*

[Insert 1, 2, 3 or 4 for Type.]

- Shoulders – Type 3

[Alter if a different Type is required.

Delete any items not required in the contract.]

**SSRW Clause 6.3.2 Fine Crushed Rock**

[Indicate if Required or Not Required.]

**SSRW Clause 6.3.3 Blends Of Natural Gravel And Fine Crushed Rock**

[Indicate if Required or Not Required.]

**SSRW Clause 6.3.4 Sand Clay**

[Indicate if Required or Not Required. Use when it forms an integral part of the pavement and/or shoulder design.]

**SSRW Clause 6.4.1 Process Control Testing**

[Indicate if All Required or list activities and elements Required or indicate None Required.]

**SSRW Clause 6.5.2 Strengthening by Granular Overlay on Existing Pavement**

[Indicate if there is no seal to be removed.]

**SSRW Clause 6.5.3 Strengthening by Granular Overlay on Re-worked Existing Pavement**

[Indicate if there is no seal to be removed, and mixed-in.]

**SSRW Clause 6.7.6 Dry Back Requirement**

Nominal pavement thickness: *[enter data]*mm.

[Indicate if thickness is other than top 75 mm, or delete.]

**SSRW Clause 6.7.7 Remedial Work**

Pavement thickness: *[enter data]*mm.

[Indicate if thickness is other than 200 mm, or delete.]

**SSRW Clause 6.8 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 7 STABILISATION AND MODIFICATION**

[Add changes to the existing clauses in this section here, in correct number order]

**SSRW Clause 7.3 Materials**

**SSRW Clause 7.3.4 Water**

The maximum salt content for water in Alice Springs is *[enter data]* mg/litre

The maximum salt content for water in Tennant Creek is *[enter data]* mg/litre

[Delete if max. salt level in Std Spec is achievable.]

Materials to be stabilized are : *[enter data]*

**SSRW Clause 7.4 In Situ Stabilization and Modification**

**SSRW Clause 7.4.1 Preliminary Field Trial**

Preliminary field trial *[enter data] .*

[Insert required/not required.]

**SSRW Clause 7.4.4 Binder Spreading**

[Insert details if it is a small job and bag spotting is necessary..]

**SSRW Clause 7.4.4.2 Spread Rates for Tender Purposes**

Adopt the following binder spread rates for tender purposes:

Cement Stabilisation: *[enter data]* kg/sq.m.

Cement Modification: *[enter data]* kg/sq.m.

Hydrated Lime Modification: *[enter data]* kg/sq.m.

[Insert required spread rate if different from rates in Std Spec.]

**SSRW Clause 7.4.4.3 Spreading Requirements – Lime slurry**

Lime:water ratio to be *[enter data]*

[Insert required lime:water ratio.]

**SSRW Clause 7.5 Plant Mix Stabilisation**

**SSRW Clause 7.5.1 Binder Content**

Adopt the following cement content for tender purposes: *[enter data]* %*.*

[Insert required percentage.]

**SSRW Clause 7.5.2 Preliminary Field Trial**

Preliminary field trial *[enter data] .*

[Insert required/not required.]

**SSRW Clause 7.5.7 Laying**

Grader laying *[enter data]* .

[Insert permitted / not permitted. Suitable for minor jobs only.]

**SSRW Clause 7.6 Conformance**

**SSRW Clause 7.6.1 Tolerances**

Binder distribution values for other types of binding agent.

|  |  |  |
| --- | --- | --- |
| **Table – Stabilised and Modified Layer Conformance – Other Types of Binding Agent** | | |
| **Binding Agent** | [i] Apply if a preliminary trial is carried out (i.e. total area over 1000m2) | [ii] Apply if a preliminary trial is not carried out (i.e. areas under 1000m2) |
| Binder content shall not vary by more than the percentage shown absolute between top and bottom half of a layer at any location as determined in accordance with NTTM 204.8. | Binder content shall not vary by more than ± the percentage shown from the field application rate in any point. |
| *[enter data]* | *[enter data]* % | *[enter data]* % |
| *[enter data]* | *[enter data]* % | *[enter data]* % |
| Take samples for Liquid Limit, Plastic Limit, Linear Shrinkage, California Bearing Ratio from the unstabilised pavements. | | |

**SSRW Clause 7.7 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 8 SPRAY SEALING**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 8.4 Material Requirements**

**SSRW Clause 8.4.6 Bitumen Emulsion**

Bitumen emulsion to be;

Type; *[enter data]*

Binder Grade; *[enter data]*

%Binder; *[enter data]*

[Specify type of emulsion, based on the following types, if the default values in the Standard Specification are not to be specified:

A - anionic

C - cationic.

AM - aggregate mixing

RS - rapid setting

SS - slow setting

Specify Binder Grade, either 170 or 320

Specify percent bitumen content, usually 60%

Example: ASS-170‑60 is anionic, slow setting, class 170 bitumen, with 60% bitumen content.]

**SSRW Clause 8.8.2 Prime, Primer Seals And Enrichment Coats**

Cut back requirements are:

Prime: AMC *[enter data]* to AMC *[enter data]*

[Generally AMC 00 to AMC 1 – Default AMC 0 to AMC 00.]

Primer Seal: AMC *[enter data]* to AMC *[enter data]*

[Generally AMC 2 to AMC 4.]

Enrichment Coat: AMC *[enter data]* to AMC *[enter data]*

[generally AMC 0 to AMC 3. – Default – Emulsion based – to be advised.

Specify the bitumen cut back and delete inapplicable items.]

**SSRW Clause 8.8.5 Binder Coats, Tender Quantities**

Spray rates used as a basis for calculating tender quantities are as follows:

Enrichment Coat: *[enter data]* litres/m2

[Generally 0.2 to 0.4 L /m2.]

Prime: *[enter data]* litres/m2

[Generally 0.8 to 1.2L /m2.]

Primer Seal

*[enter data]* mm aggregate): *[enter data]* litres/m2

[Generally 1.1 to 1.4 L /m2 for 10mm size.]

First Coat

*[enter data]* mm aggregate): *[enter data]* litres/m2

[Generally 1.4 to 1.8 L /m2 for 14mm size.

1.0 to 1.5 L /m2 for 10mm size.]

Second Coat

*[enter data]* mm aggregate): *[enter data]* litres/m2

Reseal

*[enter data]* mm aggregate): *[enter data]* litres/m2

[Generally 1.7 to 2.3 L /m2 for 14mm size, 1.2 to 1.8 L /m2 for 10mm size, 0.8 to 1.0 L /m2 for 7mm size.]

Geofabric Tack Coat: *[enter data]* litres/m2

[Generally 0.6 to 0.7L /m2, but seek advice from Design Branch.]

**SSRW Clause 8.21 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 9 DENSE GRADED ASPHALT**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 9.6.1 Mix Type And Design Traffic Category**

Supply as follows: Mix Type *[enter data]* for Wearing Course

Mix Type *[enter data]* for Structural Course

Mix Type *[enter data]* for Correction Course

Mix Type *[enter data]* for Patching Work

[Insert the required design mix type 1,2,3,4 or 5 for the particular work.]

Design Traffic Category; *[enter data]*

[Nominate Heavy or Medium or Light in accordance with the TRAFFIC CATEGORIES clause. Seek advice from the Pavement Engineer if the grade is steep.]

**SSRW Clause 9.10.2 Mechanical Spreading**

Spreaders not specified in the Standard Specification but which are permitted to be used are;

*[enter data]*

[Where limited quantities of asphalt are required, or the area to be paved is restricted or of limited width, such as footpaths or parking areas, other spreaders may be specified.

Use only for large projects. Trial areas, where specified, should be included as a separate schedule item.]

**SSRW Clause 9.13 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 10 SLURRY SURFACING**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 10.3 Commencement of Work**

Length of notice before commencement of work is adjusted to *[enter data]* days.

[Delete if notice remains at 7 days.]

**SSRW Clause 10.14 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 11 MISCELLANEOUS CONCRETE WORKS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 11.4.1 Ready Mix Concrete**

Production Assessment; *[enter data]*

[Enter “Required” or “Not Required” . Add required concrete properties if they differ from those given in the Std Spec book.

Use Project Assessment for special-class concrete or where more significant structures are involved or where job-mixed concrete is used.]

|  |  |
| --- | --- |
| **Table – Concrete properties** | |
| **Property** | **Required measure** |
| Compressive strength | *[enter data]* |
| Aggregate size, generally | *[enter data]* |
| Aggregate size, machine extruded kerbs and gutters | *[enter data]* |
| Slump, generally | *[enter data]* |
| Slump, machine extruded kerbs and gutters | *[enter data]* |

[Delete table if required properties are unchanged.]

**SSRW Clause 11.4.2 Job-mixed Concrete**

Project Assessment; *[enter data]*

[Enter “Required” or “Not Required”.]

**SSRW Clause 11.6.7 Backfilling**

Material to be used is; *[enter data]* fill.

[Enter “select” or “general” or “special” or other selected fill type.]

**SSRW Clause 11.11 OTHER REQUIREMENTS**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 12 DRAINAGE WORKS**

**SSRW Clause 12.13 OTHER REQUIREMENTS**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 13 PROTECTION WORKS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 13.4 Rock Properties**

Use local rock unless specified differently here.

[Consider the availability of suitable local rock and any risks associated with the use of it.]

**SSRW Clause 13.5 Stone Pitching**

**SSRW Clause 13.5.1 Stone Pitching**

Depth of stone pitching is to be *[enter data]*mm.

[Delete this clause if the information is on the drawings]

**SSRW Clause 13.6 Dumped Rock Protection**

Use large spalls or boulders which have a least dimension of *[enter data]*mm.

[Consider the availability of rock sizes and specify size.]

**SSRW Clause 13.7 Quarter Tonne Class Dumped Rock Protection**

Use large spalls or boulders which meet the requirements of the following table.

|  |  |
| --- | --- |
| **Table – Rock - Size and grading** | |
| **Rock Size (weight)** | **Minimum % Larger Than Specified Size** |
| *[enter data]* kg | 90 |
| *[enter data]* kg | 50 |
| *[enter data]* kg | 0 |

[Consider the availability of rock sizes and specify size if default values are not available.]

**SSRW Clause 13.8 Rubble**

Dimensional tolerances are;

Maximum size of rubble to be *[enter data]* mm.

At least 30% by mass to have a nominal size of *[enter data]* mm or greater.

No more than *[enter data]*% by mass to pass the *[enter data]* mm sieve.

The average plane of the exposed face to be within *[enter data]* mm of that specified.

The exposed face to be within *[enter data]*mm of the average plane.

[Delete this clause if the information is on the drawings or if the information in the Std Spec is what is required.]

**SSRW Clause 13.9.2 Steel Wire Mesh for Gabions**

PVC coating: *[enter data]*

[Enter “Required” or “Not Required” . PVC coating can be deleted where abrasion of wire is not likely to be a problem. Additionally PVC coating may be deleted after due consideration of the likely long term deleterious effects on the wire of ground water, soil salinity, natural weather exposure and water immersion.]

Dimensions of gabions are to be: *[enter data]*

[State required dimensions, or state “As shown on drawings” if that is the case..]

**SSRW Clause 13.10.2 Steel Wire Mesh for Reno Mattresses**

PVC coating: *[enter data]*

[Enter “Required” or “Not Required”. PVC coating can be deleted where abrasion of wire is not likely to be a problem. Additionally PVC coating may be deleted after due consideration of the likely long term deleterious effects on the wire of ground water, soil salinity, natural weather exposure and water immersion.]

**SSRW Clause 13.12 Embankment Protection – Concrete**

Reinforcement *[enter data]*

[Enter “Required” or “Not Required”]

Margins *[enter data]*

[Enter “Included” or “Not Included”]

Adjacent protection work *[enter data]*

[Enter “Included” or “Not Included”]

**SSRW Clause 13.13 Margins**

Adjacent pavement *[enter data]* sealed.

[Enter “is” or “is not”]

**SSRW Clause 13.14 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 14.5 Fencing**

**SSRW Clause 14.5.2 Existing Fences**

Install a post at the intersection of new fence with existing fence and fix the wiring of both fences to that post.

Complete the necessary sections of new fencing before removing or opening a boundary or internal fence.

[Indicate which of the 2 preceding options is applicable.]

**SSRW Clause 14.5.6 Temporary Site Safety Fence**

[Indicate any special requirements for temporary site safety fences here..]

**SSRW Clause 14.6 Flexible Guide Posts**

**SSRW Clause 14.6.5.6 Delineators**

**Discrete device type retroreflectors**

The special hazards to be indicated by discrete device type retroreflectors are: *[enter data]*

[Indicate details here, or state that the hazards are on drawings.]

**Installation of Delineators**

Discrete device type retroreflectors installation requirements; *[enter data]*

[Indicate details here, or state that the installation details are on drawings.]

**SSRW Clause 14.7 Road Signs**

**SSRW Clause 14.7.3 Materials**

**AMENDMENT**

Replace the existing **Table – Roadside Signs – Mounting Selection** with the table below.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table – Roadside Signs – Mounting Selection** | | | | | | | | |
| **Sign Size** | | **Number of post** | **Sign Attachment Bracket (Or M8 Bolts) per Post** | **Min. Galvanised Post size** | | **Min. Bored Pier footing size** | |
| **Width (mm)** | **Depth (mm)** | **OD**  **(mm)** | **Thickness (mm)** | **Diameter (mm)** | **Depth (mm)** |
| 300 | 300 | 1 | 2 | 33.7 | 3.2 | 300 | 600 |
| 300 | 450 | 1 | 2 | 33.7 | 4.0 | 300 | 700 |
| 450 | 450 | 1 | 2 | 42.4 | 4.0 | 300 | 800 |
| 450 | 300 | 1 | 2 | 42.4 | 3.2 | 300 | 700 |
| 450 | 600 | 1 | 2 | 42.4 | 4.9 | 300 | 900 |
| 450 | 750 | 1 | 2 | 48.3 | 5.4 | 300 | 900 |
| 450 | 900 | 1 | 2 | 48.3 | 5.4 | 300 | 900 |
| 600 | 450 | 1 | 2 | 48.3 | 4.0 | 300 | 900 |
| 600 | 600 | 1 | 2 | 48.3 | 5.4 | 300 | 900 |
| 600 | 750 | 1 | 2 | 60.3 | 3.6 | 300 | 1000 |
| 600 | 900 | 1 | 3 | 60.3 | 4.5 | 300 | 1000 |
| 600 | 1050 | 1 | 3 | 60.3 | 5.4 | 450 | 900 |
| 750 | 450 | 1 | 2 | 48.3 | 5.4 | 300 | 900 |
| 750 | 600 | 1 | 2 | 60.3 | 4.5 | 300 | 1000 |
| 750 | 750 | 1 | 2 | 60.3 | 4.5 | 450 | 900 |
| 750 | 900 | 1 | 2 | 60.3 | 5.4 | 300 | 1100 |
| 750 | 1200 | 1 | 3 | 76.1 | 4.5 | 450 | 1000 |
| 900 | 300 | 1 | 2 | 48.3 | 5.4 | 300 | 900 |
| 900 | 600 | 1 | 2 | 60.3 | 5.4 | 450 | 900 |
| 900 | 900 | 1 | 3 | 76.1 | 4.5 | 450 | 1000 |
| 900 | 1200 | 1 | 4 | 76.1 | 5.9 | 450 | 1100 |
| 900 | 1350 | 1 | 4 | 76.1 | 5.9 | 450 | 1100 |
| 1050 | 600 | 1 | 2 | 76.1 | 3.6 | 300 | 1100 |
| 1050 | 900 | 1 | 3 | 76.1 | 4.5 | 450 | 1100 |
| 1200 | 600 | 2 | 3 | 48.3 | 5.4 | 300 | 900 |
| 1200 | 900 | 2 | 5 | 60.3 | 4.5 | 300 | 1000 |
| 1500 | 800 | 2 | 4 | 60.3 | 5.4 | 300 | 1100 |
| 1800 | 600 | 2 | 3 | 60.3 | 5.4 | 300 | 1100 |
| 1800 | 1200 | 2 | 6 | 76.1 | 5.9 | 450 | 1100 |
| 2400 | 1200 | 2 | 6 | 88.9 | 5.0 | 600 | 1000 |
| 2400 | 1800 | 2 | 9 | 101.6 | 5.0 | 600 | 1200 |
| 3000 | 600 | 2 | 3 | 76.1 | 5.9 | 600 | 1000 |
| 3000 | 1200 | 2 | 6 | 101.6 | 5.0 | 600 | 1200 |
| 3000 | 1500 | 2 | 8 | 114.3 | 4.5 | 600 | 1300 |
| 3000 | 1800 | 2 | 9 | 114.3 | 4.5 | 600 | 1300 |
| 3700 | 600 | 2 | 3 | 88.9 | 5.0 | 600 | 1000 |
| 3700 | 1200 | 3 | 6 | 101.6 | 4.0 | 600 | 1000 |
| 3700 | 1800 | 3 | 9 | 101.6 | 5.0 | 600 | 1200 |
| 3700 | 2400 | 4 | 12 | 101.6 | 4.0 | 450 | 1300 |
| 4300 | 600 | 2 | 3 | 101.6 | 5.0 | 600 | 1200 |
| 4300 | 1200 | 3 | 6 | 101.6 | 5.0 | 600 | 1200 |
| 4300 | 1800 | 3 | 9 | 114.3 | 4.5 | 600 | 1300 |
| 4900 | 600 | 3 | 3 | 76.1 | 5.9 | 600 | 1100 |
| 4900 | 1200 | 3 | 6 | 114.3 | 4.5 | 600 | 1300 |
| 4900 | 1800 | 3 | 9 | 114.3 | 5.4 | 600 | 1300 |
| 5500 | 600 | 3 | 3 | 88.9 | 5.0 | 600 | 1100 |
| 5500 | 1200 | 4.0 | 6 | 101.6 | 5 | 600 | 1200 |
| 5500 | 1800 | 3.0 | 9 | 139.7 | 5 | 600 | 1400 |
| 6100 | 600 | 3.0 | 4 | 101.6 | 4 | 600 | 1200 |
| 6100 | 1200 | 3.0 | 6 | 114.3 | 5.4 | 600 | 1400 |
| 6100 | 1800 | 4.0 | 9 | 114.3 | 5.4 | 600 | 1300 |
| **Notes:**   1. Sign posts and footings designs are based on allowable wind loads, not traffic impact forces. If traffic impact forces are to be considered in the design the signs affected require specific individual design. 2. All posts must be Grade 250min. 3. All posts must be capped for corrosion protection. 4. All posts must be **HOT DIP GALVANISED**. 5. Posts with outside diameter (OD) greater than 48.3mm must be fully cast in (with 100mm clearance from the base) and located centrally to footing. 6. Top of concrete footing must be domed around post to eliminate water pooling. 7. Dimensions are **NOT APPLICABLE** for sign structures with overall heights **exceeding 3m above ground**. These require specific individual design. 8. Dimensions are **NOT APPLICABLE** for sites having a soil bearing capacity **less than 100kpa.** These require specific individual design. 9. Posts for signs highlighted above must be installed with **slip base** as per NTG standard drawing CS3508. | | | | | | | | |

**ADDITIONAL SIGN SIZES**

Road signs mounting pole sizes other than the sizes shown in the table **Roadside Signs - Mounting Selection** are:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Table - Roadside Signs – Non Standard Mounting Poles Selection | | | | | | |
| **Location** | Sign size W x D (mm) | No. and NB Gal. Pipe Posts | Brackets or M8 bolts per post | Bracing req. (Yes/No) | Footing | |
| Depth (mm) | Dia. (mm) |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

[Delete this clause and the table if no non-standard pole sizes are required.]

**SSRW Clause 14.7.6 Installation**

**AMENDMENT**

**REPLACE THE EXISTING CLAUSE WITH THE FOLLOWING**

Conform to the ***Table Roadside Signs - Mounting Selection*** in **Materials** sub-clause in **Road Signs** clause in this work section.

Install posts vertically.

For signs with post sizes less than or equal to 48.3mm, provide and install a galvanised steel sleeve when installing sign posts in concreted or paved medians.

Sleeves, when specified, to be 50 mm longer than the specified ground anchor (footing) depth and extend 50 mm above the finished surface level.

Attach the post to the sleeve with a galvanized M10 bolt, 25 mm from the top of the sleeve. Encase the post, or sleeve when used, in a footing of 25 MPa concrete.

Orientation of sign face: Vertical, and turned 3 degrees to 5 degrees horizontally from oncoming traffic on straight sections. On curves, at right angles to centre line of road.

Exception: Parking signs to be oriented 5 degrees from parallel to the kerb to face oncoming traffic.

**SSRW Clause 14.7.7 Reinstatement and Relocation of Existing Signs**

**AMENDMENT**

**REPLACE THE EXISTING CLAUSE WITH THE FOLLOWING**

Dismantle existing post and signs carefully.

Store in a manner to prevent damage.

Backfill the hole left by the post and its footing and compact the fill to the same density as the surrounding area.

Erect signs in new locations as shown on the drawings.

GENERAL REQUIREMENTS

* Adopt the post requirements for the nearest sign size in the list for intermediate sizes.
* Refer to ***Table Roadside Signs - Mounting Selection*** for post sizes and footing requirements.

**SSRW Clause 14.12 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 15 PAVEMENT MARKING**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 15.18 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 16 LANDSCAPE**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 16.1 Landscape Defects Liability Period**

The defects liability period for the Landscaping portion of the works is: *[enter data].*

[Select one of the following 3 options; (a)13 weeks from practical completion of the landscaping works OR (b) The same as for the entirety of the works but not less than 13 weeks from practical completion of the landscaping works OR (c) To dd/mm/yyyy.]

**SSRW Clause 16.6 Grassing**

**SSRW Clause 16.6.1 Ground Preparation**

Fertilizer application rate: *[enter data]* kg/hectare.

[Specify the fertilizer application rate.]

**SSRW Clause 16.12 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 17 DUCTING AND CONDUITS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 17.3 Supply and Installation**

There are no kerbs. Terminate duct crossings *[enter data]* .

[Enter information on terminations of duct crossings, or refer to drawings if information is on drawings. Delete if there are kerbs.]

**SSRW Clause 17.6 Electrical Ducting**

Special requirements are *[enter data]* .

[Enter information on requirements not included in Standard Specification. Delete if there are none..]

**SSRW Clause 17.9 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 18 TRAFFIC CONTROL SIGNALS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 18.11 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 19 TRAFFIC COUNTING STATIONS**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 19.11 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 20 STREET LIGHTING**

[Add changes to the existing clauses in this section here, in correct number order.]

**SSRW Clause 20.4 Materials**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Clause 20.10 Existing Street Lighting**

**SSRW Clause 20.10.1 Disconnection and Removal**

Deliver the salvaged materials to *[enter data]* .

[Provide address / location of shed / yard for delivery of salvaged items.]

**SSRW Clause 20.13 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 21 DIRECTIONAL BORING**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Clause 21.5 Testing of Services**

Additional tests required are: *[enter data]* .

[Indicate if no additional tests are required. Add any additional requirements or any alteration to the reference text]

**SSRW Clause 21.8 Other Requirements**

[Add any additional requirements or any alteration to the reference text]

**SSRW Section 22 PROTECTIVE COATINGS**

**SSRW Clause 22.3 Protective coatings**

**Site testing of protective coatings**

To AS 3894.10 and AS 3894.11 and AS 3894.12.

Required or not required: *[enter data].*

**SSRW Clause 22.3.3** **Inorganic zinc silicate**

Required or not required: *[enter data].*

[Enter details of items to be coated, locations of those items, and coatings to be applied.]

**SSRW Clause** **22.4 Tables - Protective coatings specifications - systems and approved products**

Requirements are; *[enter data].*

[Enter details of project region classification (arid, inland, coastal), and specifications of coatings to be applied, and components to be coated.]

**SSRW Clause 22.20 Other Requirements**

[Add any additional requirements or any alteration to the reference text]

**SSRW Section 23 MEASUREMENT AND PAYMENT**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Clause 23.4 Earthworks**

**SSRW Clause 23.4.6 Select Fill**

Refer to **SSRW Clause 4.6.3** in this worksection.

or

Provide select fill conforming to *[enter data]*

[Delete one option.]

**SSRW Clause 23.6 Pavements and Shoulders**

**SSRW Clause 23.6.2 Reconstruction and Rehabilitation of Existing Pavements**

Refer to **SSRW Clause 6.5.2** and to **SSRW Clause 6.5.3** in this worksection.

[Indicate if measured at stockpile or loaded vehicle.]

**SSRW Clause 23.8 Spray Sealing**

**SSRW Clause 23.8.3 Prime Coat, Enrichment Coat, Emulsion Coat, Primer Seal, and Seal Coats**

Refer to **SSRW Section 8** in this worksection.

**SSRW Clause 23.8.9 Sealing Aggregate**

Measured at *[enter data]*

[Indicate if measured at stockpile or loaded vehicle.]

**SSRW Clause 23.11 Miscellaneous Concrete**

Additional items: *[enter data]*

[Indicate additional items not listed in this section of MEASUREMENT AND PAYMENT.]

**SSRW Clause 23.14 Road Furniture and Traffic Control Devices**

**SSRW Clause 23.14.1 Fencing**

Types of fences *[enter data]*

[Indicate types of fences.]

**SSRW Clause 23.14.3 Road Signs – Supply and Install**

Types of signs *[enter data]*

[Indicate types of signs.]

**SSRW Clause 23.14.6 Cattle Grids**

Sizes of cattle grids *[enter data]*

[Indicate sizes of cattle grids.]

**SSRW Clause 23.22 Protective Coatings**

Systems required are: *[enter data]*

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 24 REFERENCED AUSTRALIAN STANDARDS**

**SSRW Clause 24.1 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 25 OTHER REFERENCED AUTHORITIES AND DOCUMENTS**

**SSRW Clause 25.1 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 26 ACTS, REGULATIONS, CODES, AND AUTHORITIES**

**SSRW Clause 26.4 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 27 CIVIL STANDARD DRAWINGS FOR ROADWORKS**

**SSRW Clause 27.1 Other Requirements**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 28 NT CLIMATE ZONES TABLE**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 29 HOLD POINTS AND WITNESS POINTS SCHEDULES**

[Add any additional requirements or any alteration to the reference text.]

**SSRW Section 30 UPDATES OVERVIEW**

[Add any additional requirements or any alteration to the reference text.]