

# **SPECIFICATION 602**

# **GUIDE POSTS**

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REVISION REGISTER							
Clause Number	Description of Revision	Authorised By	Issue Date				
Annexure 602B	Approved Guide Post List updated	A/SRE	09/09/2024				
602.11	Figure 1 updated	RE	27/10/2021				
Guidance Notes	900 installation height removed						
Contract Specific Requirements	Clause 602.91 amended						
602.35.1	Figure 3 updated	RE	02/05/2017				
Guidance Notes	Figure 4 Warranty Form added						
Whole document	Reformatted	SCO	18/04/2017				
Annexure 602B	List of Approved Guide Posts amended	RE	11/02/2016				
602.02	Amendment of the AS 2311 title and addition of AS 3730.6	RE	19/03/2015				
602.13.6	Requirements for Vehicle impact test modified						
602.13.12	Requirements of Clause amended						
602.13.13	Dimensions in Figure 2 changed						
602.28.2	Clause modified. In accordance with AS 1742.2						
602.31.2	Clause added						
602.35.5	Figure 3. Dual carriageway white delineator replaced with yellow delineator						
Annexure 602B	List of Approved Guide Posts amended						
Annexure 602C	Annexure 602C added						
Annexure 602B	Delinex-Pro Guidepost added to Approved Guide Post List	RE	18/11/2010				
Annexure 602B	Delinex Guidepost added to Approved Guide Post List	A/SRE	01/09/2010				
Annexure 602B	Park Flexible Steel Guide Post added to Approved Guide Post List	RE	25/06/2008				

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## **SPECIFICATION 602 GUIDE POSTS**

### **GENERAL**

#### 602.01 **SCOPE**

1. The work under this specification consists of the supply, installation and maintenance of Guide Posts and Delineators.

#### 602.02 **REFERENCES**

1. Australian Standards, MAIN ROADS Western Australia Standards and MAIN ROADS Western Australia Test Methods are referred to in abbreviated form (e.g. AS 1234, MRS 67-08-43 or WA 123). For convenience, the full titles are given below:

### **Australian Standards**

AS 1580	Paints and related materials – Methods of test
AS 1742.2	Manual of uniform traffic control devices – Traffic control devices for general use
AS 1906.1	Retroreflective materials and devices for road traffic control purposes – Retroreflective sheeting
AS 1906.2	Retroreflective materials and devices for road traffic control purposes – Retroreflective devices (non-pavement application)
AS 2082	Timber – Hardwood – Visually stress-graded for structural purposes
AS 2858	Timber – Softwood – Visually stress-graded for structural purposes
AS 3730.6	Guide to the properties of paints for buildings – Solvent-borne – Interior/exterior – Full gloss enamel
AS 3730.13	Guide to the properties of paints for buildings – Primer – Wood – Solvent-borne – Interior/exterior
AS 3730.14	Guide to the Properties of Paints for Buildings – Undercoat – Solvent-borne – Interior/exterior
AS/NZS 2311	Guide to the Painting of Buildings
SAA TR1 Part 6	Specification for Full Gloss Paint, Solvent, Borne, Exterior

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### 602.03 DEFINITIONS

**Flexible** A guide post which deflects when impacted by a vehicle and

guide post then returns to a vertical position, without maintenance

Flexible

intervention.

**Rigid guide** A guide post which either fractures or remains intact and straight, but not vertical, when Impacted by a vehicle.

Rigid

602.04 - 602.05 NOT USED

### PRODUCTS AND MATERIALS

### **602.06 GENERAL**

 The Contractor shall supply new guide posts, delineators and fixings in accordance with this section of the specification. An approved list of guidepost manufacturers for use in Western Australia is supplied in Annexure 602B.

### 602.07 GUIDE POST COLOUR

1. All faces of the guide post shall be white in colour for at least a length of 600 mm from the top of the guide post.

### 602.08 GUIDE POST SURFACE FINISH

 The guide post shall be free of sharp edges, burrs, discolouration or other defects, which may affect its appearance and/or serviceability. The portion of the guide post that is white in colour shall have a surface finish that permits repeated easy cleaning.

### 602.09 GUIDE POST DIMENSION AND SHAPE

- 1. The cross sections of the guide post are to be such that it permits the guide post to meet the requirements of this specification.
- 2. The following dimensional requirements, as shown in Figure 1, must be satisfied:

(a) Width – guide post shall have a projected width of 100 mm  $\pm$  5 mm.

Width

(b) Length – guide posts shall be manufactured to a length that permits insitu above ground height and below ground depth in accordance with Figure 1. Length

(c) Shape – the shape of the guide post shall be such that approved delineators can be permanently and securely attached to the guide post. Shape

(d) Tops – the tops of timber guide posts shall be cut to an angle to promote water run off in accordance with Figure 1. The tops of other types of guide posts may be cut square to the sides or may be angled. The shape of the bottom face of the guide post can be made to suit the method of installation. Tops

### 602.10 GUIDE POST WARRANTY

1. The period of the warranty for guide posts shall be a minimum of 5 years. During the period of the warranty, the Supplier shall, without delay and at no cost to the Principal, correct all defects and omissions covered by the warranty by way of repair, replacement or modification or other means. The Warranty must be in writing naming Main Roads Western Australia (Principal) as the product owner. When a product fails this specification under the warranty period the supplier is required to replace the product at no cost to the Main Roads Western Australia.

Warranty

Refer to Main Roads Special Conditions of Contract "Warranties from Third Parties".

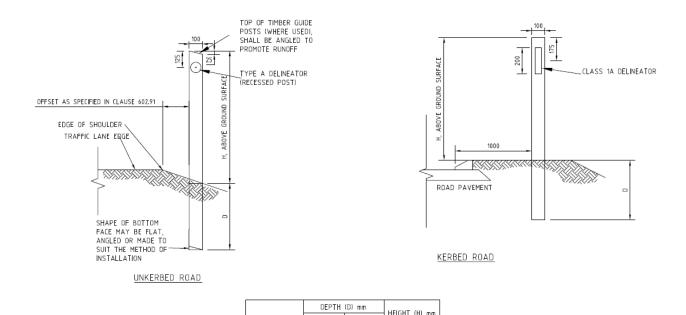
### 602.11 GUIDE POST MARKINGS

 To enable traceability of the guide post, each post shall have legible markings, for the duration of the warranty period, containing the following information: Traceability Marking

- (a) Name of the supplier
- (b) Date of manufacture
- (c) Batch number
- (d) End of warranty date
- (e) Model identification number / name
- 2. The markings shall be placed on at least one side of the guide post and shall be between 900 mm and 1000 mm from the top of the guide post. The lettering size shall be between 5 mm and 10 mm high.
- 3. A horizontal depth indicator shall be marked across the rear face of the guide post 1000 mm from the top. The indicator shall remain clear for the full life expectancy of the guide post.

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FLEXIBLE POST 450 (±20) 350 (±20) 1000 (+30, -0)

FIGURE 1: GUIDE POST AND DELINEATOR

DRIVEN

300 (+20)

1000 (+30 -0)

BURIED

300 (+20)

**RIGID GUIDE POSTS** 

## 602.12.01 GENERAL

602.12

1. Rigid guide posts shall not shatter into multiple parts on impact. After being struck, guide posts shall not project a dangerous impaling section.

RIGID POST

2. Rigid guide posts shall have a minimum bending strength of 0.3kNm and a maximum bending strength of 3.0kNm at yield.

### 602.12.02 TIMBER

- 1. Timber guide posts shall be manufactured from 100 mm x 50 mm Structural Grade 1 Timber being either Jarrah or treated Pine conforming to AS 2082 and AS 2858 respectively.
- Timber Guide Posts
- 2. Both 100mm faces shall be lightly dressed to remove all saw marks over 80% of the face area. Thicknessing is not required on any dimension.
- 3. Timber may be unseasoned. The guide post shall be free from compression failures and other fractures, termite galleries, end splits and bark.
- 4. The entire exposed (above ground) surface area of the guide post shall be coated in paint either by brushing, spraying or immersion in accordance with the paint manufacturer's published requirements.

Painting Timber Guide Posts

The exposed surface area shall be painted as follows:

- (a) One coat of Primer to AS 3730.13
- (b) One coat of white Undercoat to AS 3730.14

- (c) One coat of white Gloss to SAA TRI Part 6 and AS 2311
- 5. Paint for rigid guide posts shall conform to the requirements of AS 1580. The perimeter of the guide post shall be finished in a durable gloss or semi gloss opaque white colour.
- 6. The surfaces of the guide post to be painted shall be dry and free from all foreign matter including saw-dust, sand, dust, dirt, or other material or substance that could prevent the paint adhering.

### 602.12.03 STEEL GUIDE POSTS

1. All faces of steel guide posts shall conform to a smooth gloss white powder coat finish to a minimum coat thickness of 0.100 mm.

Rigid Steel Guide Posts

- 2. Steel guide posts shall be free of rust or other defects for the duration of the warranty period.
- 3. Steel guide posts shall not have blunt edges exposed to passing motorists.

### 602.13 FLEXIBLE GUIDE POSTS

1. Flexible guide posts shall be manufactured from material that does not shatter into multiple parts on impact. After being struck, guide posts shall not project a dangerous impaling section.

Materials

- Details of the materials used in the manufacture of the guide post shall be supplied. These may include but are not limited to plastic and rubber. Details of the material properties including information relating to the use of recycled materials shall also be provided.
- 3. The material shall not vary beyond commercially accepted limits from the composition stated by the manufacturer at the time of offering.
- 4. The guide post shall be made to a design and from material, which provide the properties of strength, flexibility, impact resistance and durability required. The guide post shall be capable of retaining 85% of its colour, appearance and physical properties for at least 5 years when exposed to weather conditions existing in Western Australia. The material shall be resistant to mould growth and shall not be affected by hydrocarbon solvents (such as mineral turpentine, kerosene or diesel) which may be used for cleaning purposes. The material shall be resistant to termites and resistant to combustion if subjected to fire of intensity typical of roadside bush and grass fires. Any metal component shall be free of rust or other defects for at least 5 years of the operational life of the guidepost.
- 5. The guide post shall be installed in the ground such that it resists overturning or displacement by wind forces and does not work out of the ground due to oscillations.

Guide Post Anchorage

6. All testing specified in this Clause shall be undertaken by a NATA accredited laboratory. The vehicle impact test (602.13.12) can be undertaken by a non NATA accredited laboratory. A single submission of all the test results listed within this Clause shall be provided. These

Test Results

results shall be less than 3 years old, unless approved otherwise by the Principal, and shall be for the exact type of guide post offered.

7. If a warranty is not available for the guidepost then a sample of the guide post shall be subject to artificial weathering for a period of 1000 hours in either:

Weathering Resistance

- (a) Atlas Twin Sunshine Carbon Arc Weatherometer, or
- (b) Xeon Arc Weatherometer at 0.55 watts/m2 irradiance level with Boro/Boro filters.

During the weathering of the sample it shall be subject to:

- (c) Light and dark alternating cycles 20% of the testing time.
- (d) Temperature during light cycles shall be a minimum of 32° degrees.
- (e) Humidity temperatures shall be cyclic and be 20% of the testing time.
- 8. After exposure the surface shall be free from crazing or blistering. The degree of chalking and colour change shall not fall below a rating of 5 and the loss of gloss shall not exceed 20 gloss units (egg shell gloss) when evaluated in accordance with AS 1580 Methods 481.1 and 602.2 (Specular Gloss).
- 9. The guide post shall demonstrate shape retention under the specified thermal tests within this Clause. For each shape retention test the guide post shall be held in a clamp. The jaws of the clamp shall be shaped to match the profile of the guide post.

Shape Retention

10. The guide post shall be conditioned at  $60^{\circ}\text{C} \pm 2^{\circ}\text{C}$  for 2 hours in an oven prior to being clamped. The conditioned guide post shall be capable of straightening itself to within  $5^{\circ}$  of vertical within 30 seconds of being bent  $90^{\circ}$  at the midpoint. This test is to be performed four times for both directions and each test shall be completed within 2 minutes of removal from oven.

Heat Resistance

11. The guide post shall be conditioned at  $0^{\circ}C \pm 2^{\circ}C$  (ice bath) for 2 hours prior to being clamped. The following tests shall then be performed:

**Cold Resistance** 

- (a) The conditioned post shall be capable of straightening itself to within 5° of vertical within 60 seconds of being bent 90° at the midpoint. This test is to be performed four times for both directions. The post shall be reconditioned for 60 seconds between bend tests.
- (b) The conditioned post shall show no signs of fracturing, cracking or splitting when a steel ball weighing 1 kilogram is dropped a distance of 1500mm through a vertical frictionless guide to impact the surface of the post. The surface of the post being struck by the ball shall be in a horizontal position, with the post supported and clamped in position at both ends. The length between supports shall be 1000 mm. This impact test shall be carried out five times and concentrated near the middle of the post. The post shall be reconditioned for 60 seconds between impact tests.

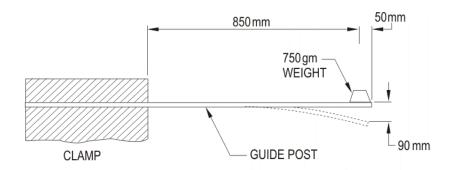
Impact Testing

12. The guide post shall be capable of self erecting and remaining serviceable after being subjected to a series of direct impacts by a typical passenger vehicle at temperatures between 15°C and 30°C. A minimum sample of three guide posts shall be tested. The testing of the guide posts shall be conducted in a single run. The guide posts to be tested shall be installed in accordance with the recommendations of the manufacturer and shall be furnished complete with delineators. The guide posts shall be capable of withstanding a series of 10 bumper bar impacts at a speed of 60 km/h followed by 5 bumper bar impacts at a speed of 100 km/h directed at 90 degrees to the front face of the guide post. The impacting vehicle shall suffer little or no damage during the impact tests. The guide post shall return to within 5 degrees of vertical within half hour of impact. Test results which show the guide posts are capable of withstanding the above vehicle impacts are to be provided. This shall include video footage evidence. The video footage shall be uninterrupted and show the guide posts returning to within 5 degrees of vertical within half hour of impact. Ending the video footage before the guide posts return to vertical is not acceptable. The video footage requires a time and date stamp.

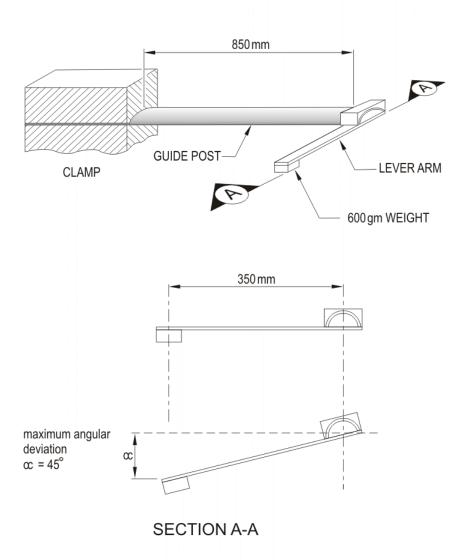
Vehicle Impact

13. The design and composition of flexible guide posts shall be such that they conform to the requirements of Test A and Test B of the Guide Post Rigidity Tests drawing as shown in Figure 2. The rigidity tests are to be performed at a temperature of 28°C.

Rigidity



**TEST A - BENDING TEST** 



**TEST B - TORSIONAL TEST** 

FIGURE 2: GUIDE POST RIGIDITY TESTS

### 602.14 DELINEATORS

- 1. Delineators supplied for attachment to guide posts shall meet the following requirements:
  - (a) Corner cubed delineator (Type A)

Type A Delineators

Comply with AS 1906.2

Red and white delineators shall be nominally 80 mm in diameter

(b) Retroreflective sheeting delineator (Class 1A)

Class 1A Delineators

Comply with requirements of Class 1A material, as defined in AS 1906.1

Red and white delineators shall be 200 mm  $\times$  50 mm for height and width respectively

### 602.15 FIXINGS FOR DELINEATORS

- The following fixings shall be provided for installing delineators to guide posts.
  - (a) Screws or nails shall be supplied to affix Class 1A delineators to guide posts. Self-adhesive delineators may be used on guide posts that have a surface finish that permits adequate bonding of the delineator to the guide post.
  - (b) Vandal proof screws shall be supplied to affix Type A delineators to RIGID guide posts.

### 602.16 - 602.25 NOT USED

### **INSTALLATION**

### 602.26 REMOVAL OF EXISTING GUIDE POSTS

1. Any existing guide posts that need to be removed prior to or during works are to be removed by the Contractor. The guide posts shall be disposed of by the Contractor and a new guide post shall be installed. If the guide posts are suitable for reuse or refurbishment the Contractor may either reuse or refurbish the guide posts in accordance with this specification.

Existing Posts Removed

2. Redundant treated pine guide posts shall be removed to a hazardous materials disposal area.

Hazardous Materials

### **602.27 TIMING**

 Guide posts shall be installed on new works after completion of bituminous surfacing and final trimming of batters or as soon as practicable.

#### 602.28 **LOCATION OF GUIDE POSTS**

- 1. New guide posts with appropriate delineators shall be located in accordance with the Guide Post Schedule at Annexure 602A.
- 2. Guide posts shall be installed in conjunction with road safety barriers in accordance with AS 1742.2, clause 4.2.5.4(b).

Road Safety **Barriers** 

#### 602.29 **POSITIONING**

1. On unkerbed roads guide posts shall be positioned so that the inside face of the posts line up with the outside edge of the road shoulder (refer to Figure 1).

Position from Shoulder

2. On kerbed roads the setback from the kerb face to the roadside face of guide posts shall be 1 m (refer to Figure 1).

Position from Kerb

#### 602.30 **BURIED GUIDE POSTS**

- 1. Guide post holes shall be drilled or dug with vertical sides and having depth as per Figure 1. The material excavated shall be used for backfilling around the guide post.
- 2. Once the guide post has been put in place, the hole shall be backfilled and compacted, with the guide post vertical when measured with a spirit level, such that the top of the guide post is within  $\pm 10$  mm of the guide post at ground. The density of the compacted backfill shall be not less than that of the material in the adjacent shoulder.

Backfill and Compaction

3. Surplus material shall be disposed of by the Contractor.

#### 602.31 **DRIVEN GUIDE POSTS**

1. Driven guide posts shall be installed in accordance with the manufacturer's published requirements to a depth as per Figure 1. Installed Depth

2. Manual guide post rammers shall not be used for driven guide post installations.

#### 602.32 **GUIDE POST SLOTS**

1. Guide posts installed in floodways shall be installed in guide posts slots. If the slot is to be located in the concrete floodway edge wall, care shall be taken when installing the slot so as not to damage the edge wall. A wedge shall be used to secure the guide post in the slot.

**Floodways** 

#### 602.33 **INSTALLATION HEIGHT**

1. On unkerbed roads guide posts shall be installed so that the top of the guide post is 1000 mm above the level of the adjacent outside edge of the road shoulder, with a tolerance of +30 mm or -0 mm, as shown in Figure 1.

Unkerbed Roads

2. On kerbed roads guide posts shall be installed so that the top of the guide post is 1000 mm above the adjacent seal edge level, with a tolerance of +30 mm or -0 mm, as shown in Figure 1.

Kerbed Roads

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#### 602.34 **ORIENTATION**

- 1. All guide posts shall be installed with the 100 mm face at right angles to the carriageway such that the face is directed at the approaching vehicles.
- 2. Guide posts with a curved cross section shall be installed with the convex face (front) towards approaching traffic in the lane nearest the guide post.

**Curved Cross** Sections

3. Guide posts with angled tops shall be installed such that the highest point at the top of the guide post is nearest to the carriageway as shown in Figure 1.

**Angled Tops** 

#### 602.35 **DELINEATORS**

- 1. Delineators shall be fitted to guide posts as follows (Refer also to Figure 3):
  - (a) when viewed in the direction of travel along the carriageway, RED delineators shall be on the left side and WHITE delineators shall be on the right side of the carriageway.

Delineator Colour

(b) On undivided roads, delineators shall be provided on both sides of each guide post.

**Undivided** Roads

(c) On divided roads where guide posts are used, delineators shall be provided only on the side of the guide post seen by a driver on that carriageway.

**Divided Roads** 

2. Rigid guide posts shall be fitted with delineators meeting either Type A or Class 1A requirements. Where guide posts are installed on both sides of the carriageway the same delineator type shall be used.

Delineator Type - Rigid Posts

3. Flexible guide posts shall be fitted with delineators meeting Class 1A requirements. Type A delineators shall not be fitted to flexible guide posts.

**Delineator Type** - Flexible Posts

4. Delineators shall not be fitted to road safety barriers. Delineation of road safety barriers shall be by way of guide posts in accordance with Clause 602.28.

Road Safety **Barriers** 

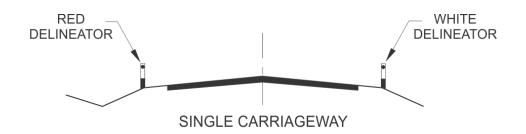
- 5. Mounting Location:
  - (a) If corner cubed delineators (Type A) are to be attached to the guide post, a flat area at least 90mm in diameter shall be provided in the centre of both 100mm faces of the guide post. For timber posts this flat area shall be recessed to the depth of the delineator. The centre of these flat areas shall be 125 mm from the top of the guide post as per Figure 1.

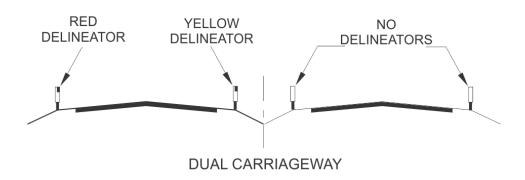
Delineator Mountina Location

(b) If retro-reflective sheeting (Class 1A) delineators are to be fitted to the guide post, an essentially flat area 200 mm long by 50 mm wide shall be provided in the centre of both 100mm faces of the guide post. The centre of the flat areas shall be 175 mm from the top of the guide post as per Figure 1. If the surface of the guide post has a curvature the radius of the curvature is to be no less than 300 mm.

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KERBED ROAD SITUATION TO BE THE SAME AS UNKERBED (SHOWN)

FIGURE 3: DELINEATOR LOCATIONS

### 602.36 INSTALLATION TOLERANCES

1. The following tolerances shall apply to the installation and maintenance of guide posts:

Post Height (above ground level)	-0, +30 mm
Offset (from outside of shoulder mark)	± 50 mm
Longitudinal Position (from chainage mark)	± 200 mm
Deviation from vertical (measured at top of post)	<= 10 mm
Painted Length of Guide Post	± 20 mm
Delineator position	± 5 mm

602.37 - 602.40 NOT USED

### **MAINTENANCE**

#### 602.41 REFURBISHMENT OF GUIDE POSTS

1. Refurbishment of guide posts with faded or peeling paint shall be carried out in accordance with this specification.

**Painting** 

#### 602.42 **REALIGNING GUIDE POSTS**

1. Guide posts not vertical shall be realigned to the vertical. The material around the base of the post shall be compacted so that the density of the material retaining the guide post is not less than that of the material in the adjacent shoulder.

#### 602.43 REPLACING MISSING OR DAMAGED GUIDE POSTS

- 1. Missing or damaged guide posts shall be replaced at their previous location in accordance with this specification.
- 2. Damaged guide posts shall be removed and disposed of by the Contractor. Treated pine guide posts shall be disposed of in accordance with Clause 602.26.

#### 602.44 TEMPORARY REMOVAL OF GUIDE POSTS

1. Where guide posts are temporarily removed to facilitate roadworks they shall be reinstated in their previous locations in accordance with this specification.

#### 602.45 **DELINEATOR REPLACEMENT**

- 1. Damaged or non-reflecting delineators shall be removed and disposed of by the Contractor.
- 2. Damaged or missing delineators shall be replaced with delineators of the same type and colour as used by adjacent guide posts for consistency.
- 3. Guide posts shall not be left without delineators overnight.

#### 602.46 **WASHING DELINEATORS IN-SITU**

1. Existing delineators that still have adequate retro reflectivity shall be washed clean so that they are free of all road grime, dust and dirt.

602.47 - 602.80 **NOT USED** 

### AS BUILT AND HANDOVER REQUIREMENTS

602.81 - 602.90**NOT USED** 

### CONTRACT SPECIFIC REQUIREMENTS

602.91 - 602.99**NOT USED** 

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### **ANNEXURE 602A**

### **GUIDE POST SCHEDULE**

Chainage	Left	Right	Notes

(Complete above Schedule as required, or mark as "NOT USED" if guide post locations are listed on the Drawings, and delete this note.)

## **ANNEXURE 602B**

### **APPROVED GUIDE POST LIST**

RIGID PRODUCT	TYPE OF GUIDEPOST	MANUFACTURER	DATE APPROVED	
Treated Pine Guideposts	Timber	Timber Treaters WA	23 May 2001	
Dura-Post Steel Guide Post	Steel	Dura-Post (Aust) Pty Ltd	2003	
Delnorth Rolled Edge Guide Post	Steel	Delnorth International Roadside Products	5 December 2012	
Delnorth Straight Edge Guide Post	Steel	Delnorth International Roadside Products	5 December 2012	
SPARX Guide Post	Unplasticized Polyvinyl Chloride (uPVC)	All Round Safety	12 June 2014	
FLEXIBLE PRODUCT	TYPE OF GUIDEPOST	MANUFACTURER	DATE APPROVED	
RoadKing Guideposts (previously Superflex guideposts)	PVC	Australian Safety Products	31 May 2000	
Dig In Rubber guideposts	Rubber	Saferoads (formerly Rubbertough)	11 July 2002	
Supa Drive rubber guideposts	Rubber	Saferoads (formerly Rubbertough)	11 July 2002	
Flexi 360 Guide Post (FGP1137, FGP1179, FGP1087, FGP1210)	Plastic	Dura-Post (Aust) Pty Ltd	17 October 2002	
Delnorth Steel-Flex Guideposts	Steel	Delnorth International Roadside Products	5 December 2012	
Omni-Flex Guide Post	High Density Polyethylene (HDPE)	RPS Traffic (formerly Traffic Systems West)	17 October 2014	
Flexloc Guide Post	Plastic with Urethane Hinge	Safe Roads	22 October 2014	
Spring Return Guide Post (GP170201)	Plastic	JMB Manufacturing	6 May 2015	
Duraflex Guide Post (FPV6100, FPV6510)	PVC	Dura-Post (Aust) Pty Ltd	21 May 2015	
Park Reboundable Plastic Guide Post	Plastic	Park Roadside Guide Posts	12 January 2016	

### **ANNEXURE 602C**

### CHECKLIST FOR FLEXIBLE GUIDE POST APPROVAL SUBMISSION

A single submission meeting all the requirements of this specification shall be submitted for approval of a Guide Post product.

The checklist below details the requirements for flexible guide posts. A submission that does not address all the requirements will not be assessed by Main Roads Western Australia.

Details of materials used in the manufacture of the guide post shall be supplied (602.13.2)
Weathering Resistance (602.13.7)  Only required when a Warranty (602.10) is not available.
Heat Resistance (602.13.10)
Cold Resistance (602.13.11a)
Impact Testing (602.13.11b)
Vehicle Impact (602.13.12)
Rigidity (602.13.13)

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## **GUIDANCE NOTES**

### FOR REFERENCE ONLY - DELETE GUIDANCE NOTES FROM FINAL DOCUMENT

- All edits to this specification are to be made using track changes, to clearly show added/ deleted text.
- 2. If **all** information relating to a clause is deleted, the clause number should be retained and the words "**NOT USED**" should be inserted.
- 3. The proposed document with tracked changes must be submitted to the Project Manager for review, prior to finalising the document.
- 4. Once the Project Manager's review is complete, accept all changes in the document, turn off track changes and refresh the Table of Contents.
- 5. The Custodian of this specification is Road Engineer.

### 1. WARRANTY

1.1 Warranty (602.10) for guide post approval submission shall be in the format as shown in Figure 4.

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## Supplier's Letter Head Supplier's Name Supplier's ABN Supplier's Contact Detail

### WARRANTY

To: Main Roads Western Australia

Date: Day/Month/Year
Period of Warranty: Minimum of 5 Years

Guide Post Product Name: Guide Post Product Name

Guide Post Product Number: Guide Post Product Number

Product Owner: Main Roads Western Australia (Principal)

**Supplier/Manufacturer** guarantees that all **Guide Post Product Name** Guide Posts delivered:

- meet Main Roads Western Australia (Main Roads WA) Specification 602;
- shall be free from defects in material and workmanship;
- and when installed in accordance with Main Roads WA Specification 602 and Supplier/Manufacturer technical literature will meet the performance requirements specified in Main Roads WA Specification 602.

During the period of the warranty, the **Supplier/Manufacturer** shall, without delay and at no cost to the Principal correct all defects and omissions covered by the warranty by way of repair, replacement, modification or other means.

This guarantee may be invalidated by Supplier/Manufacturer where:

 Guide Post Product Name is not installed in accordance with Main Roads WA Specification 602 and Supplier/Manufacturer technical literature provided Main Roads WA is kept-informed in writing by Supplier/Manufacturer of any changes to the technical literature.

Authorised by:	Name
	Title

FIGURE 4: WARRANTY FORM

## CONTRACT SPECIFIC REQUIREMENTS

The following clauses are to be placed under the CONTRACT SPECIFIC REQUIREMENTS, as required. After inserting the clause, change the clause number and heading to style "H2 SP" so it appears in the Table of Contents.

### 602.91 INSTALLATION WITH OFFSET FROM EDGE OF SHOULDER

 On unkerbed roads guide posts shall be installed at 0 mm / 100 mm / 150 mm / 200 mm offset from the edge of shoulder, as indicated in Figure 1.

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# AMENDMENT CHECKLIST

Specifi	cation No.	602	Title:	GUID	E PO	OSTS				Revision No	):
Project	t Manager:					Sign	nature: _			Date	):
Checked by: Signature: Date							):				
Contra	ct No:			_	Co	ontract I	Name: _				
ITEM	DESCRIP	TION									SIGN OFF
Note:	All changes	s/amei	ndment	s must	t be s	shown ii	n tracke	d chan	ges until	approved.	
2.	Project Ma		r has re	viewe	d the	Specifi	ication a	nd ider	ntified ac	dditions and	
3.	Standard Contracts						<b>K</b> appro	val fror	m Mana	ger	
4.	Any unliste Manager?						and app	oroved	by the F	Project	
5.	Deleted cl	auses	shown	as " <b>N</b>	ΟΤ ι	JSED".					
6.	Ensure ap							•		e included in rified).	
7.	AS-BUILT	「 AND	HAND	OVER	requ	uiremen	its addre	essed.			
8.		CONTRACT SPECIFIC REQUIREMENTS addressed? Contract specific materials, products, clauses added? (refer Specification Guidance Notes).									
9.	ANNEXU	RES c	omplete	ed (ref	er Sp	ecificat	tion Guid	dance N	Notes).		
10.	Estimates	Mana	ger has	appro	oved	change	es to SM	М.			
11.	Project Ma design.	anage	r certifie	es com	plete	ed Spec	cification	reflect	s intent	of the	
12.	Independe Manager.	ent vei	ification	n of co	mple	ted Spe	ecificatio	n arrar	nged by	Project	
13.	Project Ma	anage	r's revie	ew con	nplet	ed.					
14.	SPECIFIC	OITA	N GUID	ANCE	E NO	TES de	leted.				
15.	TABLE O	F CO	ITENT:	<b>S</b> upda	ated.						
16.	FOOTER	update	ed with	Docun	nent	No., Co	ontract N	lo. and	Contrac	t Name.	
17.	Supporting	g infor	mation	prepar	red a	nd subi	mitted to	Projec	ct Manag	ger.	
Additio	onal informa	ition o	· furthe	r actior	n:						
Signed:	:							Project	t Manage	er) Date:	