



---

# **SYDNEY TRAMWAY MUSEUM**

## **TRACK INSPECTION PROCEDURE**

~~JANUARY 2007~~ MAY 2008



# SYDNEY TRAMWAY MUSEUM

## **1. Purpose**

To explain the tramway track inspection procedures at STM and the forms to be completed.

## **2. Scope**

This procedure applies to all tramway tracks operated by the Sydney Tramway Museum.

## **3. Responsibilities**

The Infrastructure and Traffic staff at STM must follow the processes in this procedure.

## **4. References**

STM6024 – Tramway Track Standard.

STM6027 –Track Inspection Report.

[STM6033 – Incident Report](#)

STM6085 –Track Maintenance Log.

STM6106 – Structure Inspection Report.

## **5. Definitions**

STM Sydney Tramway Museum: the trading name of South Pacific Electric Railway Co-Operative Society Limited for tram activities, therefore references to STM.

SPER South Pacific Electric Railway Co-Operative Society Limited

# SYDNEY TRAMWAY MUSEUM

## 6. Process

### 6.1 Check Sheets and Schedules

Check sheets and schedules shall be prepared in accordance with the detail shown on the diagrammatic layout (see Tramway Track Standard – *STM6024*), or with provision for the manual insertion of this detail in each sheet. Copies of these sheets shall be provided to the Infrastructure Manager on each day that inspections are to take place.

The sheets shall be filled in as the inspection work progresses and at the end of each day shall be inserted in a “Current” file. When all repair work noted on any sheet as being outstanding has been carried out the sheet shall be suitably endorsed and transferred to an “archive” file where it will remain to form a history of the examination and maintenance of the tramway track.

### 6.2 Maintenance Standards

Track shall be maintained to gauge and an even line within the limits outlined in the Tramway Track Standard (*STM6024*). When examination reveals that any of these limits has been exceeded, speed restrictions must be posted where trams can safely proceed over such track at reduced speed, otherwise services must be suspended until essential repairs have been carried out.

### 6.3 Replacing Damaged and Worn Rails

Rails or sections of rail which exhibit major defect shall be scheduled for replacement as soon as possible. The damaged rail shall be marked with severing locations and replacement rails shall be cut to length and mechanically bent, if required, and brought to the site before the running rails are severed.

Where the replacement rails are to be “thermit” weld bonded to the existing rails, they shall be prepared by, or in consultation with, an approved welding company.

Rails being prepared as replacements and defective running rails are to be mechanically sawn and drilled. ~~GAS CUTTING AND DRILLING OF RUNNING RAILS WILL NOT BE PERMITTED IT IS NOT PERMITTED TO USE GAS FOR CUTTING, OR BLOWING HOLES, IN RUNNING RAILS.~~

### 6.4 Track Inspection schedule – Generally

The tramway track shall be visually examined at intervals from the tram driver’s view point and tram drivers are to report after each trip to the Officer-in-Charge any apparent defect in the track or any line-side structure to allow any such defect to be examined as soon as possible. Any such defects should be recorded on the Incident report (*STM6033*).

The tramway track infrastructure, including culverts, embankments, cuttings and line-side structures, shall be visually examined every six months for obvious defects and examined annually when the rail fastenings are to be checked and adjusted, the rails to be re-adjusted to the correct alignment and gauge and drains and culverts cleared of debris.

Undergrowth along the right-of-way is to be removed where it could constitute a vision or bush fire hazard.

### 6.5 Sleeper Maintenance and Replacement

When individual sleepers are to be replaced, the ballast shall be removed between the damaged sleeper and the one adjacent. The damaged sleeper is then to be freed from the rails and slid sideways into the cleared space without disturbing the alignment of the rails. The new sleeper is to be inserted in the reverse manner, levered up to the foot of the rail and the spikes inserted. Ballast shall then be packed under the sleeper below the rail and the ballast dressed to the sleeper top.

Where groups of sleepers are to be removed, the track gang shall endeavour to remove and replace the sleepers alternately to avoid disturbing the alignment of the rails.

# SYDNEY TRAMWAY MUSEUM

## **6.6 Recording Any Maintenance and Replacement**

All maintenance performed on the STM track network must be recorded in the Track Maintenance Log (*STM6085*).

The details of the form are:

- a) *Date* – the date that the maintenance/replacement was performed;
- b) *Sheet* – the sheet number and if more than 1 sheet the number of sheets;
- c) *Supervisor* – the name of the person supervising the work;
- d) *Membership No.* – the member number if the supervisor was a Museum member;
- e) *Length* – the approximate length of track maintained;
- f) *Pole numbers* – the first and last pole numbers covering the maintenance work;
- g) *Rail* – the size of the rail replaced;
- h) *Fix'g* – any fixtures maintained or replaced (eg point work, etc); and
- i) *Comments* – a brief description of the work performed including the number of sleepers replaced.

## **6.7 Inspection Reports**

- a) All track inspections performed on the STM network must be recorded in the Track Inspection Report (*STM6027*).

The details of the form are:

- a) *Date* – the date that the inspection was performed;
- b) *Sheet* – the sheet number and if more than 1 sheet the number of sheets;
- c) *Inspector* – the name of the person inspecting the trackwork;
- d) *Membership No.* – the member number if the inspector was a Museum member;
- e) *Length* – the approximate length of track inspected;
- f) *Pole numbers* – the first and last pole numbers covering the inspection work;
- g) *Rail* – the size of the rail inspected;
- h) *Fix'g* – any fixtures inspected (eg point work, etc ???); and
- i) *Comments* – a brief description of the inspections performed including the number of sleepers which may need to be replaced.

- b) All Structure inspections performed on the STM network must be recorded in the Structure Inspection Report (*STM6106*).

The details of the form are:

- a) *Date* – the date that the inspection was performed;
- b) *Sheet* – the sheet number and if more than 1 sheet the number of sheets;
- c) *Inspector* – the name of the person inspecting the structures;
- d) *Membership No.* – the member number if the inspector was a Museum member;
- e) *Structure/Identification* – the identification number, etc of the structure; and
- f) *Comments* – a brief description of the inspections performed including any repairs that may need to be required.

ooo000ooo