

Issue 1 January 2016

# Installation and Maintenance Manual for Steel Step Corridor and Steel Step Barrier Gate

The Steel Step Corridor or Steel Step Barrier system was developed by SAFEROAD in Holland and has been used in the UK for many years. It is a high containment safety barrier compatible with Concrete Step Barrier (CSB) and can be used where a light weight solution is required, for example over a structure or to provide a maintenance or emergency access point within the length of a CSB. The Steel Step Barrier works independently of the CSB, but provides a smooth continuation of the H2 W2 containment. It can be connected to CSB without the need for complex transitions as it is the same profile containment level and working width. It can also be used independently as a standalone VRS.

The SSB is marketed in the UK by SAFEROAD UK Ltd as part of the Mega Rail family of products.



## Contents

- 1 Safety
- 2 Tools
- 3 Components
- 4 Installation
- 5 Maintenance
- 6 Operating the SSB gate
- 7 Company contact details

## 1. Safety

- 1.1 A comprehensive site specific risk assessment must be produced for all locations where SSB is to be installed.
- 1.2 All lifting operations should be assessed by an appropriately qualified person and a lifting plan produced bespoke to the equipment being used.
- 1.3 All personnel to be trained in accordance with the tasks they are performing.

## 2. Tools

- 24mm impact socket
- Socket bar and impact wrench
- Torque wrench
- 6mm allen key
- 24mm spanners
- Podgers
- Chalk line
- Tape measure
- Large crow bar
- Crane or side loading fork lift
- Drilling equipment suitable for concrete
- Drill bits for M24 fixings use 40mm diameter.

### 3. Components

Note: special length closing sections can be manufactured to suit a bespoke length.



Fixed Hinge Section



Hinge Pin



Wheel Fork



One Wheeled Barrier Section with Hinge Joint



Wheel Unit



Two Wheeled Barrier Section with Hinge Joint



Wheel Units



Transition to Concrete



Female Socket



Bolt for Female Socket



Chemical Anchor Capsule



Ground Fixing Point



Upper Coupling Plate



Middle Coupling Plate



Lower Coupling Plate



M16 Nut, Bolt & Washer



Standard 5.450m Unit



Lower Anchor Plate  
-Type 1



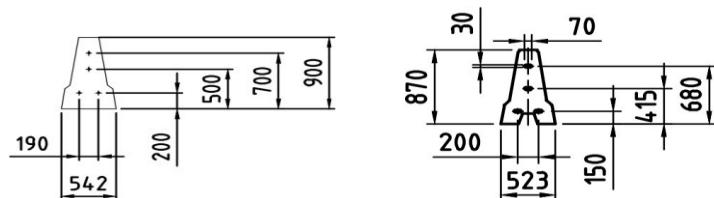
Upper Anchor Plate – Type 1

#### 4. Installation

##### Setting out:

**Ensure** all units are orientated the same way to allow the correct assembly.

When attaching to CSB if a cradle anchorage is present attach the connection bracket directly to the CSB. If no cradle has been installed then the connection bracket can be fixed using resin anchors. To mark the hole positions place the connection bracket against the end of the CSB at the correct height. It is recommended that the center line of the CSB is marked to assist with this. Drill to the correct diameter. Install resin anchors in accordance with the manufacturers instructions.



For subsequent units mark the center line of the SSB, mark 2 more lines 150mm either side of the center line at each ground fixing point. Put down another line 270mm from the center line which can be used to ensure the straight alignment of the SSB during assembly. Now position units and mark out drilling positions for each ground plate.

Move units, drill holes and fix anchors. Anchors should be allowed to cure and then tested to 40kN movement not to exceed 1mm.

Replace units and assemble, tighten all fasteners.

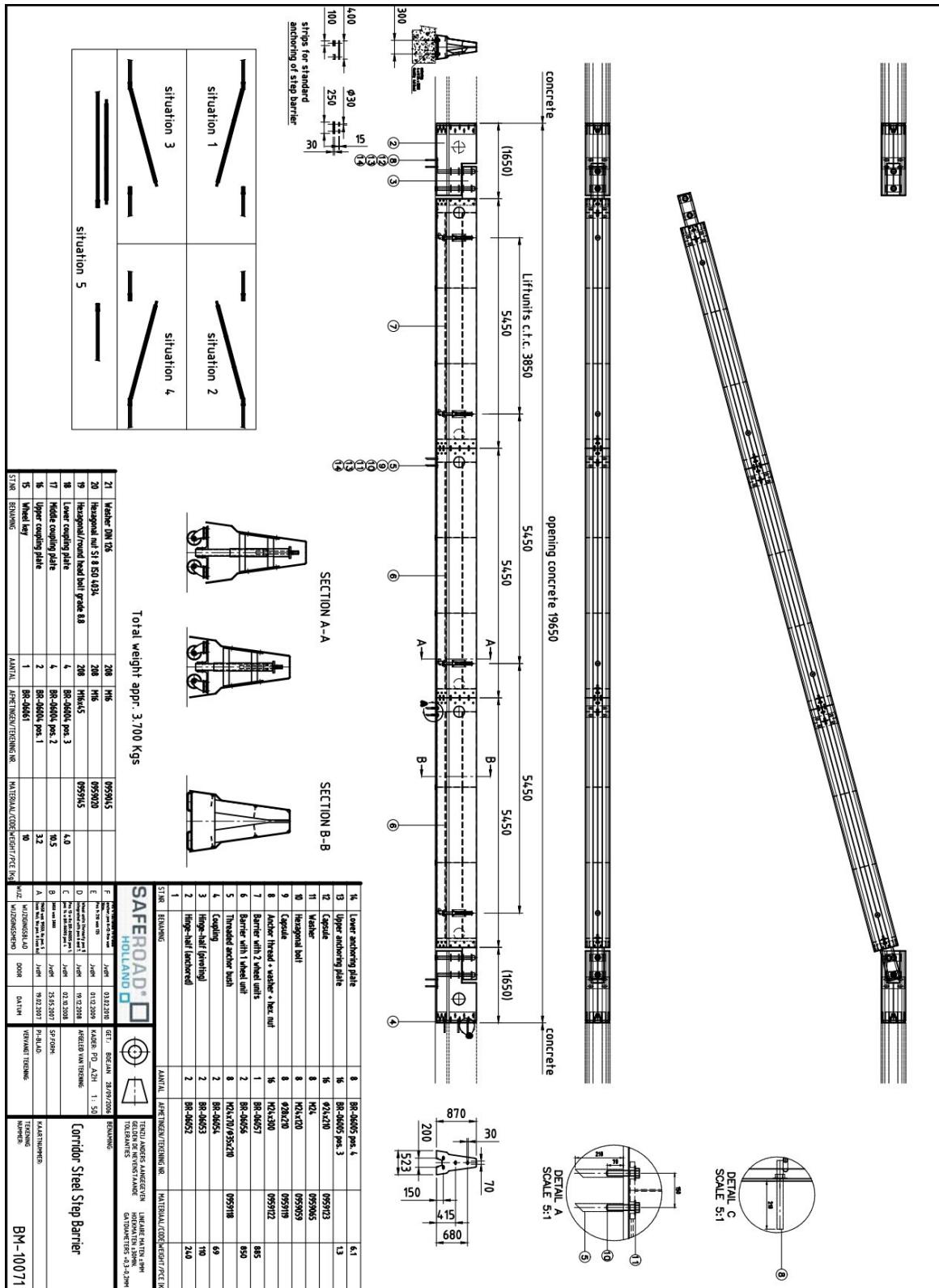
M16 70 – 140 Nm

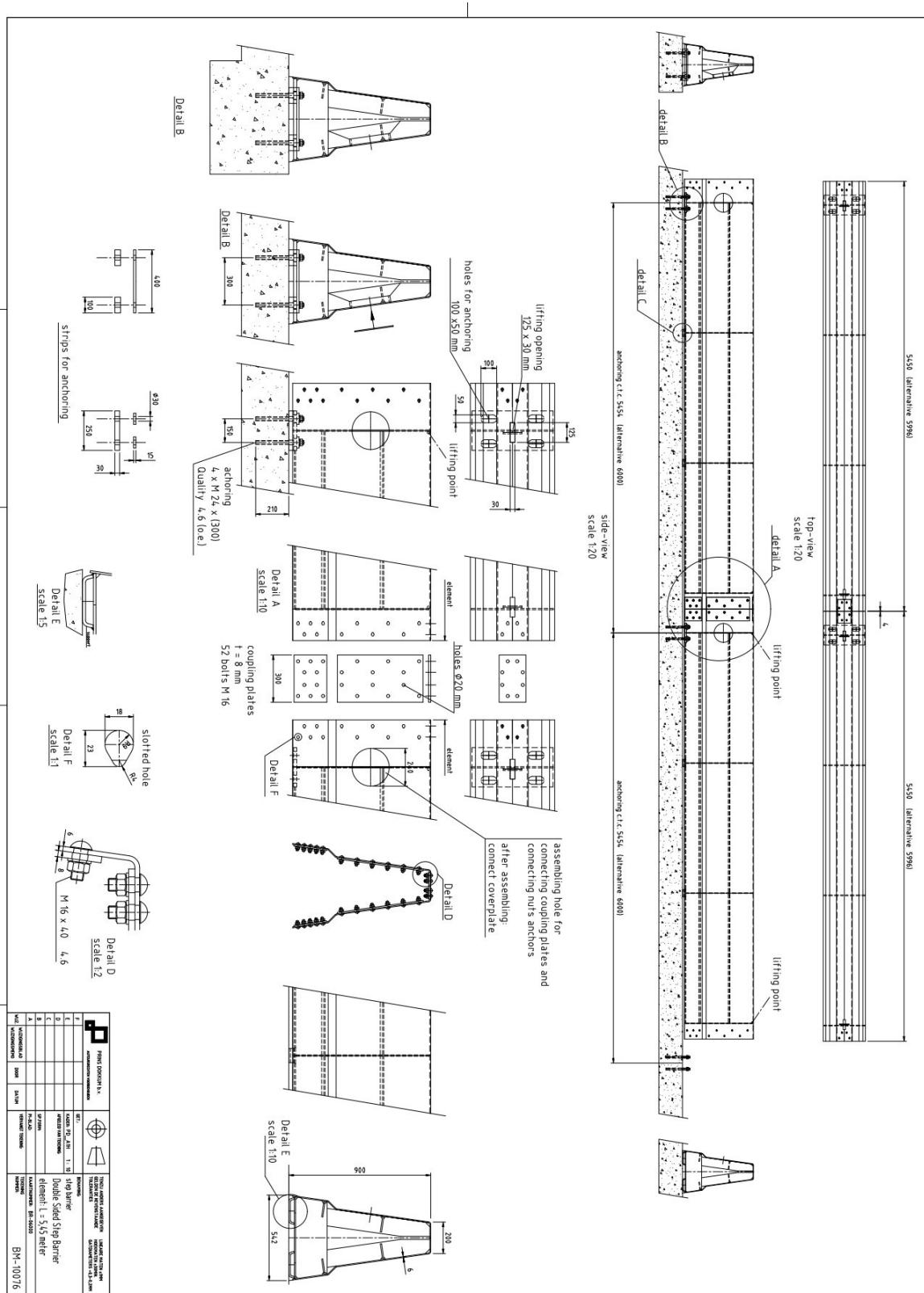
M24 150 – 170Nm

#### 5 Maintenance

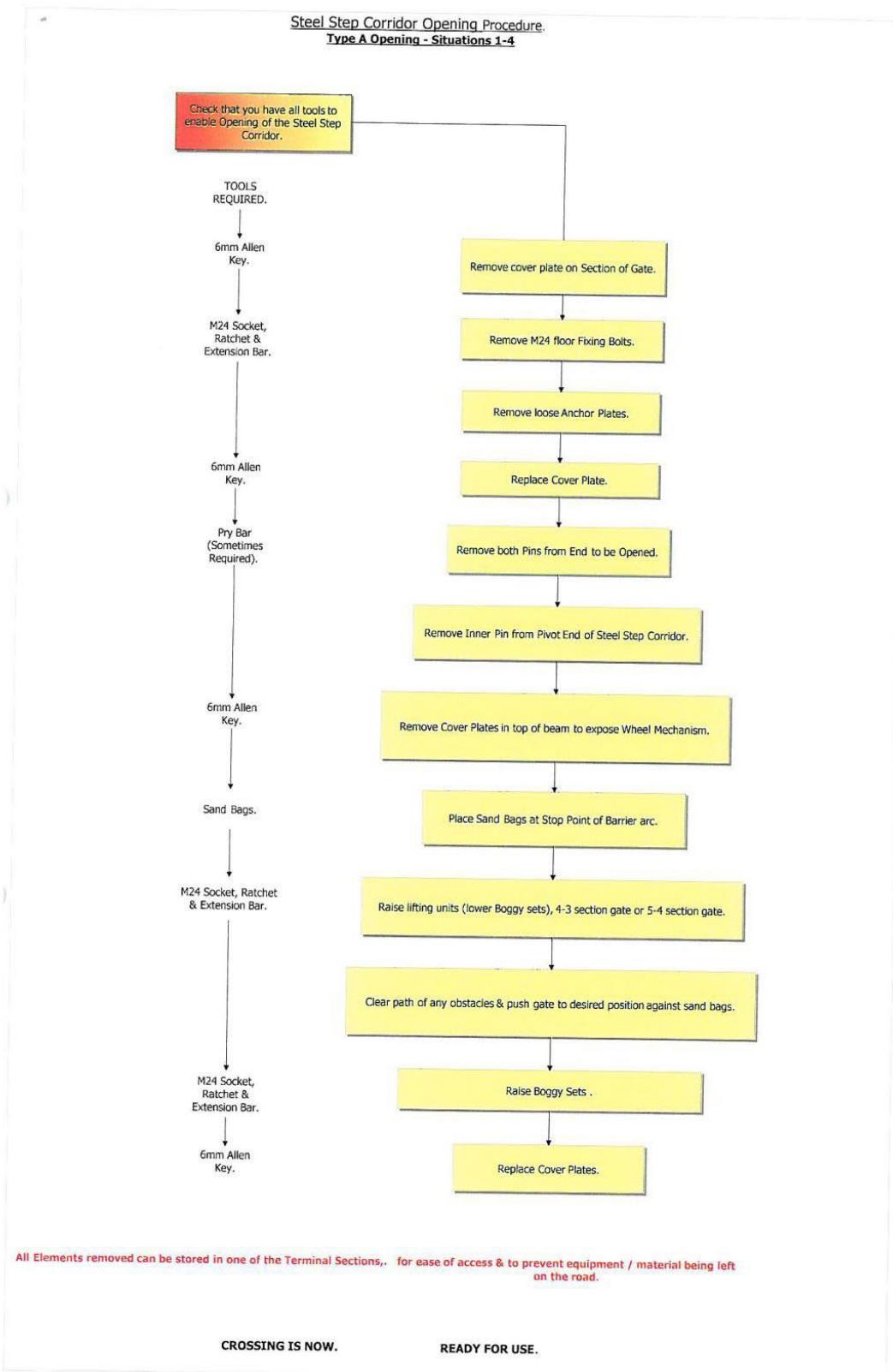
SSB will be maintenance free for its service life.

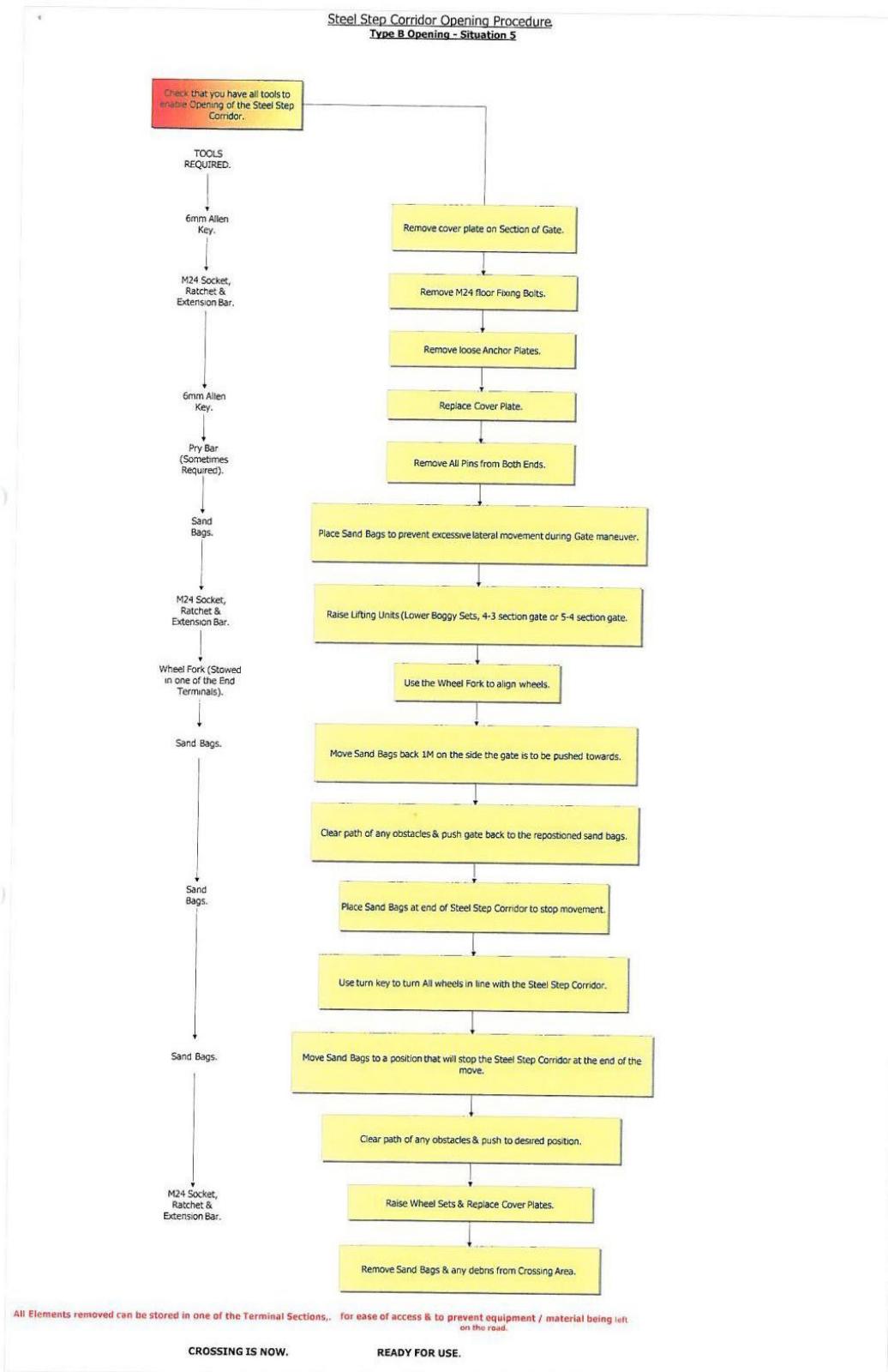
Moving parts should be lubricated annually and the installation checked for damage.

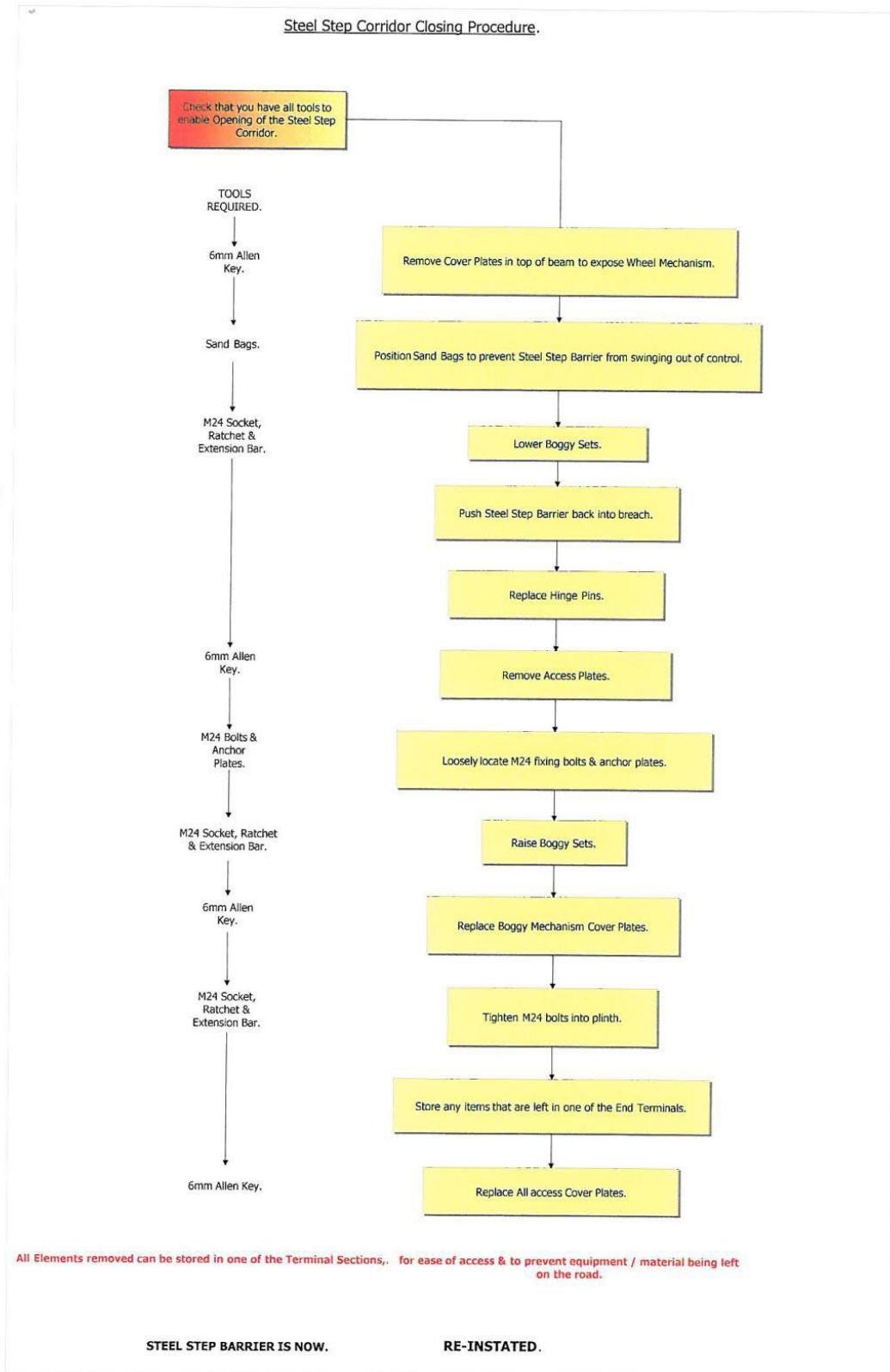




## 6 Operating the SSB Gate







## 7 Company contact details:-

SAFEROAD UK Ltd  
Concord House  
Bessemer Way  
Scunthorpe  
North Lincolnshire  
DN15 8XE  
Tel: 01724 289119

For Material Supply Information

Email – [sales@saferoad.co.uk](mailto:sales@saferoad.co.uk)

For Technical Information

Email – [john.cudlipp@saferoad.co.uk](mailto:john.cudlipp@saferoad.co.uk)

For Training Requirements

Email – [training@saferoad.co.uk](mailto:training@saferoad.co.uk)