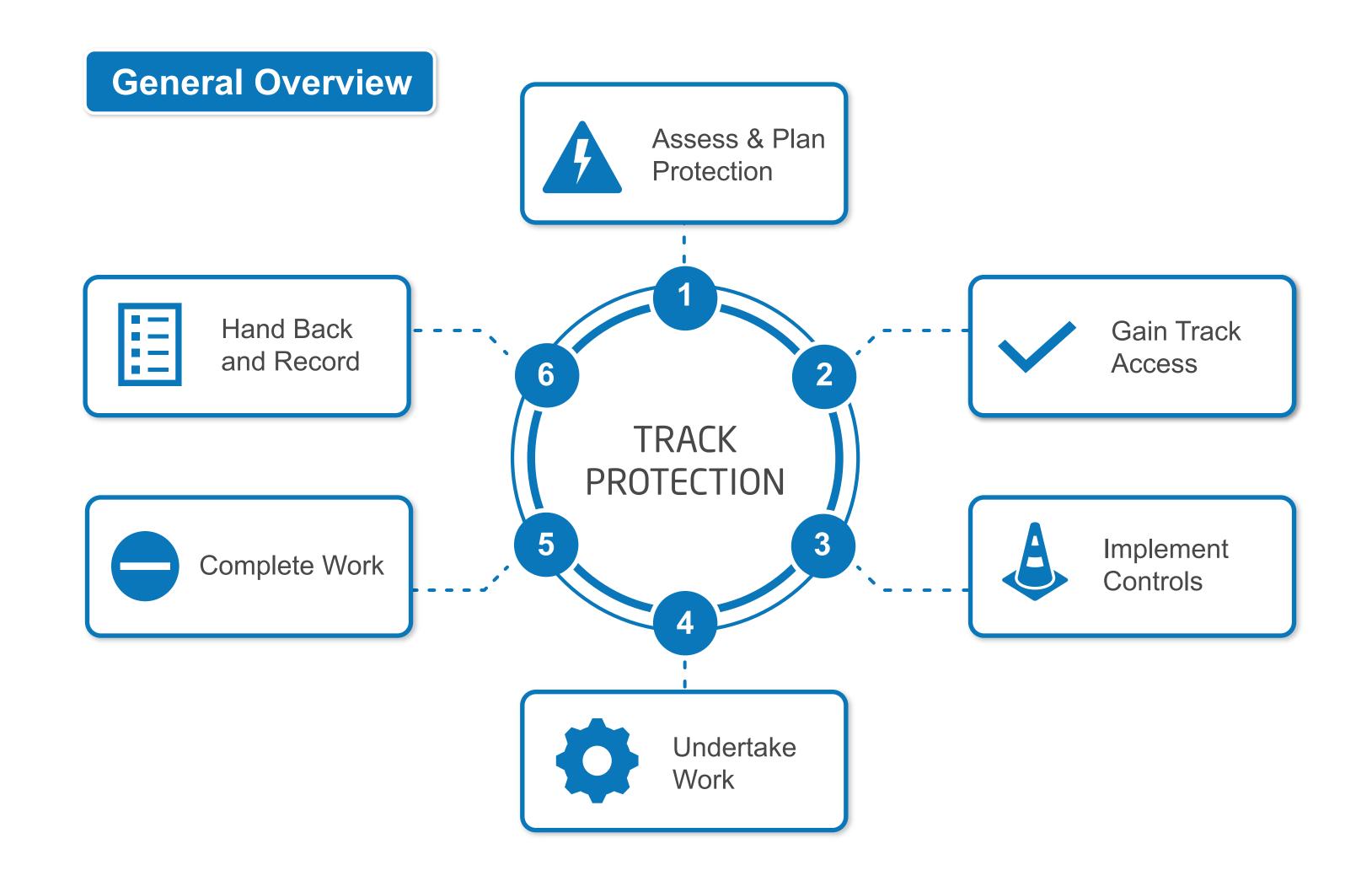
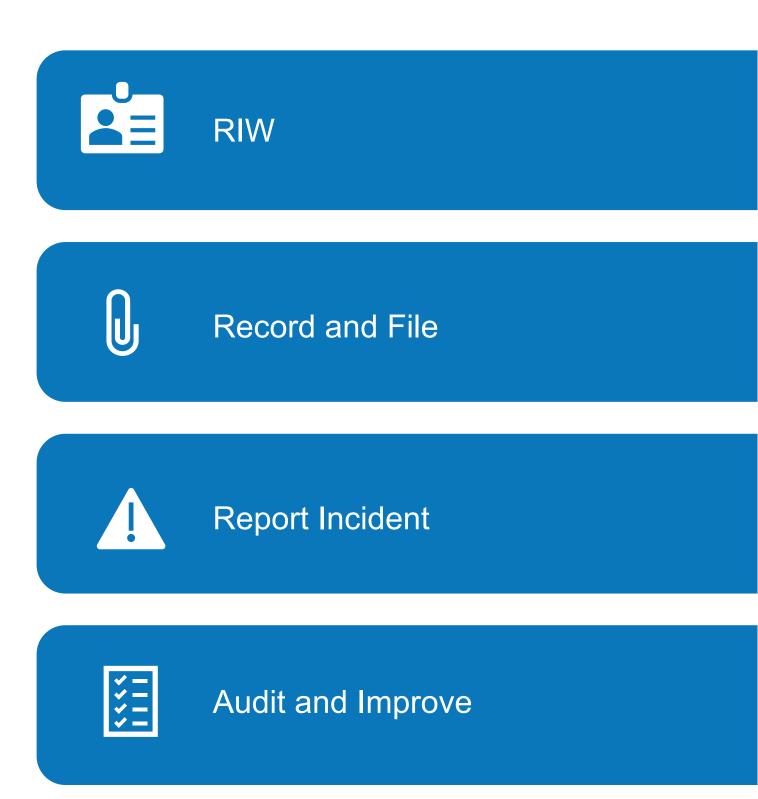
# Track Protection Guidebook





### SUPPORT PROCESSES



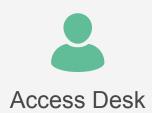












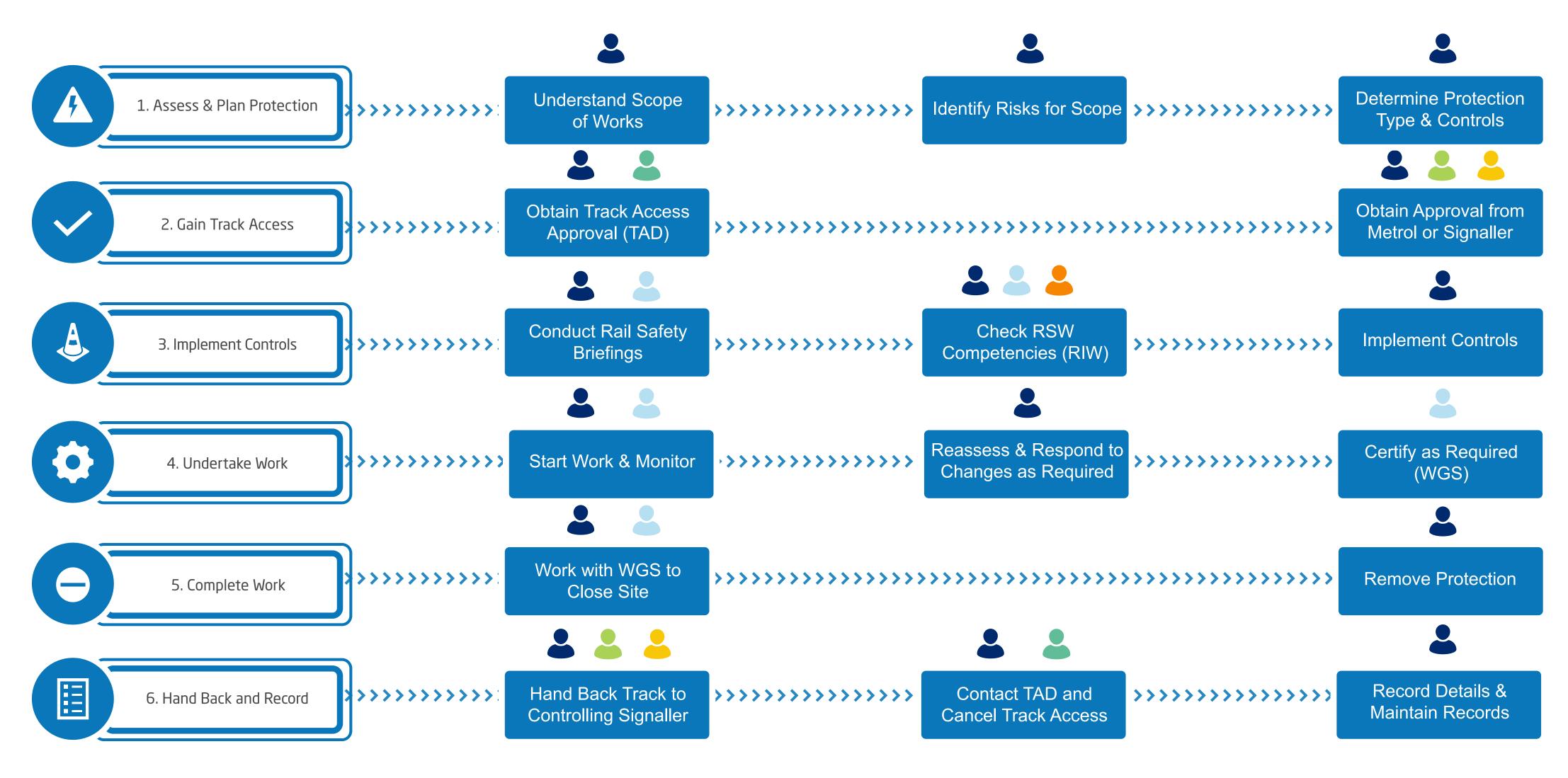










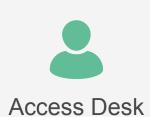










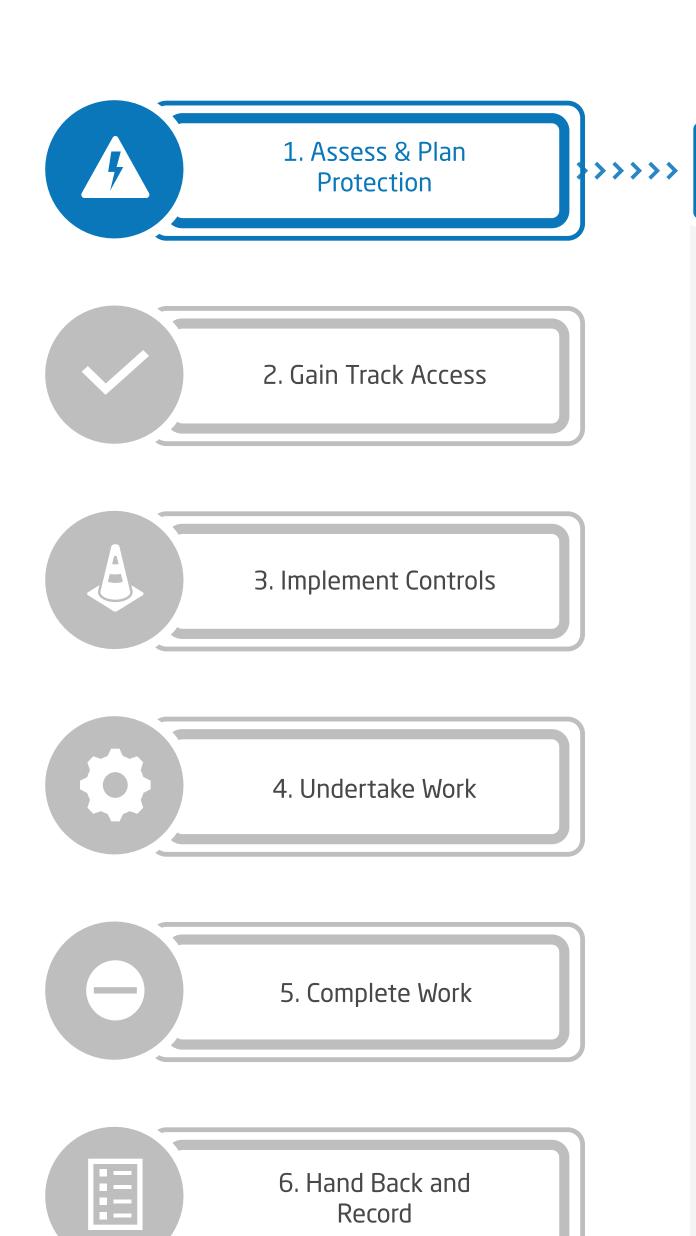














Determine Protection
Type & Controls

In order to understand the work required, the conditions, and risks, relevant information must be obtained from the multiple sources which may include planners, the hire desk, the Work Group Supervisor, and operations and infrastructure personnel.



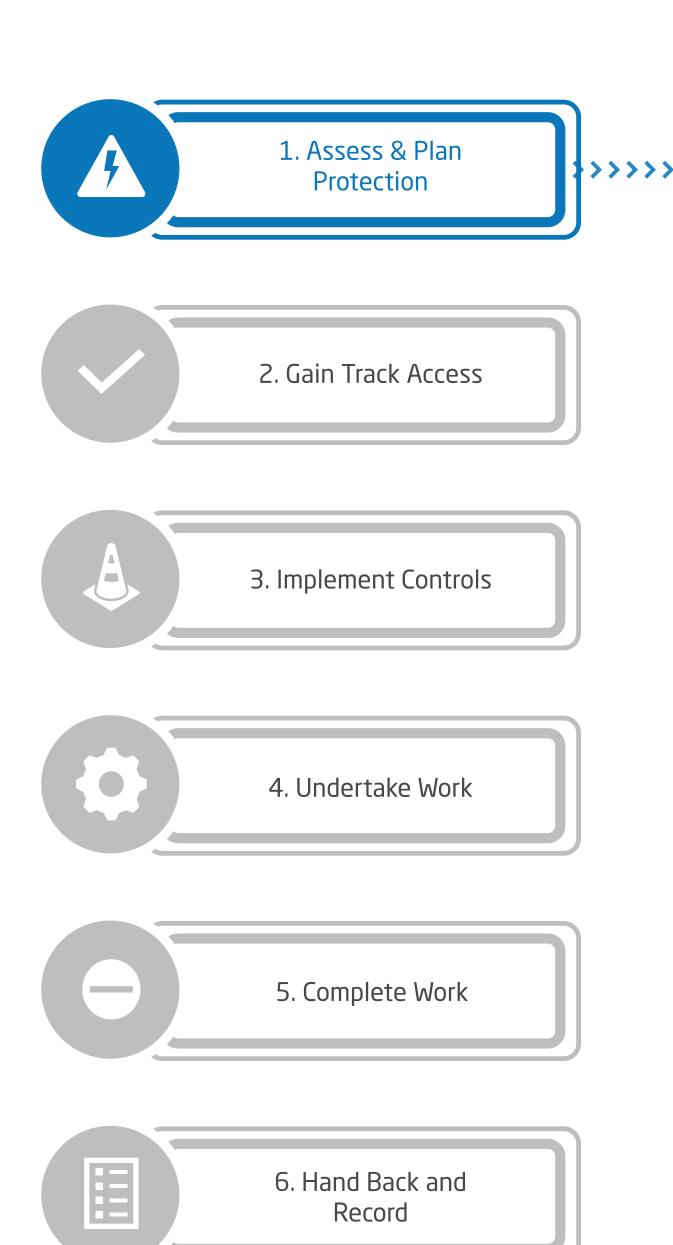
Assess the track environment, access and egress, and the character of the approach to the intended worksite infrastructure personnel.





Determine Protection

Type & Controls



A Rail Safety Worksite Hazard Assessment (RSWHA) must be conducted prior to any work commencing in the rail corridor, to determine the appropriate protection requirements for the worksite and to ensure worksite protection personnel are not exposed to hazards.



Assess the track environment, access and egress, and the character of the approach to the intended worksite.



RSWHA Form L4-OPS-FOR-014 and



RSWHA Briefing Note L4-OPS-GDL-002



If form L4-OPS-FOR-014 was pre-completed, confirm acceptance of the method of protection based on own assessment, or revise the RSWHA and the method of protection selected accordingly.





>>>>>

**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Minor task**



<u>L1-SQE-PRO-054</u>

Is a light maintenance task that can be ceased immediately on the approach of rail traffic to enable the staff to reach a Position of Safety (POS) prior to rail traffic reaching the work site. The task may only be performed through the use of light powered/non-powered hand tools that can be removed easily and immediately from the track by one person without mechanical assistance.

#### Select Method of Protection for *Minor* Task:

#### **Absolute Signal Blocking**

Used to undertake limited activities on track using controlled absolute signals set to stop and blocking facilities applied.

#### **Enhanced Lookout Protection**

Uses the signalling system to reduce the speed of approaching rail traffic to achieve the required minimum sighting distance.

#### **Lookout Protection**

Utilises the provision of a Lookout(s) to advise of the approach of rail traffic to a worksite.

#### **Major task**



<u>L1-SQE-PRO-054</u>

Is a task involving the use of equipment which could not be completed under the definition of 'Minor Task.'

#### Select Method of Protection for *Major* Task:

#### **Absolute occupation**

Closes a defined portion of track for a specified period.

#### **Booking out of track**

Closes a defined portion of running line during an emergency, or for maintenance activities within a siding.

#### **Securing points for protection**

Creates a POS within the Danger Zone by securing the points to route rail traffic away.

#### **Using a Train for Protection**

A method of protection which allows for a stationary train to be used in order to create a POS.

#### **Track Force Protection**

Utilises hand signallers to protect an obstruction on track.







**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Absolute Signal Blocking**

This method of protection enables working in the Danger Zone using Absolute Signal Blocking (ASB) to exclude rail traffic from a portion of track. It applies to Controlled Absolute fixed signals situated on the Metro Trains lease and operated by Metro signalling complexes.

ASB may be used only: (1) for walking/visual inspections; (2) for the securing of points associated with the protection of an Absolute Occupation or Booked Out Track; (3) for work using light powered and non-powered hand tools which can be easily and immediately removed from the track by one person without mechanical assistance; and (4) to allow road vehicles to directly cross the track.



Determine the type of work being undertaken and assess the potential impact on services on the network.



Form L4-OPS-FOR-014



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).





L1-SQE-PRO-054 s.3 Briefing Note L4-OPS-GDL-002



Plan and determine appropriate level of protection.



L1-SQE-PRO-054



Identify and verify the location of the proposed work with the Signaller.



L1-SQE-PRO-067 s.6&14



Choose protection for defined ASB limits



L1-SQE-PRO-067 s.10



Request ASB.



L1-SQE-PRO-067 s.7



Implement the protection and controls.



L1-SQE-PRO-067



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.



L1-SQE-PRO-067 s.7



Finish work under ASB.



L1-SQE-PRO-067 s.13







**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Lookout Protection**

If a safety assessment indicates it is safe, some work may be done in the Danger Zone without a work on track authority. If Absolute Signal Blocking (ASB) is not available, Lookout Protection can be used for the protection of minor tasks where the required sighting distances can be achieved. The key risk is that rail traffic cannot be controlled.



Determine the type of work being undertaken and assess the potential impact on services on the network.



<u>L1-SQE-PRO-054 s.3</u>



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Plan and determine appropriate level of protection.



L1-SQE-PRO-054



Determine if sighting distances can be achieved.



<u>L1-SQE-PRO-054 s.17</u>



Determine the number/locations of Lookouts and/or ATWS and other warning equipment needed to protect the work.



Implement Lookout Protection.



<u>L0-SQE-PRO-037 s.5</u>



Monitor changes in the work and conditions to ensure that minimum warning times and communication with the Lookouts can be maintained.



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.









**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Enhanced Lookout Protection**

Enhanced Lookout Protection is to be used for the protection of minor tasks where conventional Lookout protection would otherwise be the most appropriate method, but the required sighting distances cannot be achieved. Enhanced Lookout Protection is primarily designed to reduce the speed of approaching rail traffic through the use of absolute or automatic signals held at the 'Stop' position in order to achieve required sighting distances for Lookout Protection.



Determine the type of work being undertaken and assess the potential impact on services on the network.



<u>L1-SQE-PRO-054 s.3</u>



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Implement Enhanced Lookout Protection.



<u>L0-SQE-PRO-039 s.12</u>



Determine Enhanced Lookout method.



<u>L0-SQE-PRO-039 s.11</u>







**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Absolute occupation**

An Absolute Occupation closes a defined portion of track for a specified period in order to carry out inspections, repairs, maintenance, upgrade work, improvements, additions or any other works which could interfere with the services on the network.



Determine the type of work being undertaken and assess the potential impact on services on the network.



L1-SQE-PRO-054 s.3



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Plan and determine appropriate level of protection.



L1-SQE-PRO-054



Use an approved method of protection.



L1-SQE-PRO-067 s.6&14



1994 Book of Rules, s.15



Determine the required distance of the safety overlap in agreement with the Operations Delivery Support.



Implement the protection and controls.



L0-OPS-PRO-017



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.



**L1-SQE-PRO-067 s.7** 



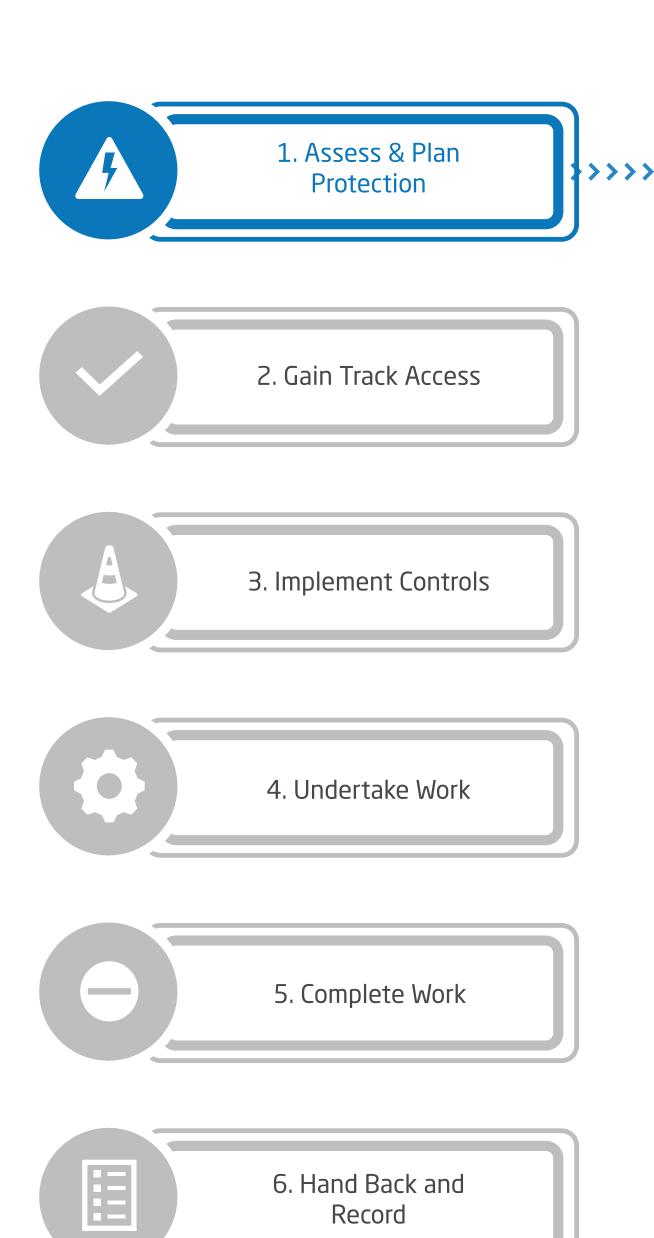
Coordinate with the Work Group Supervisor in closing the work site.

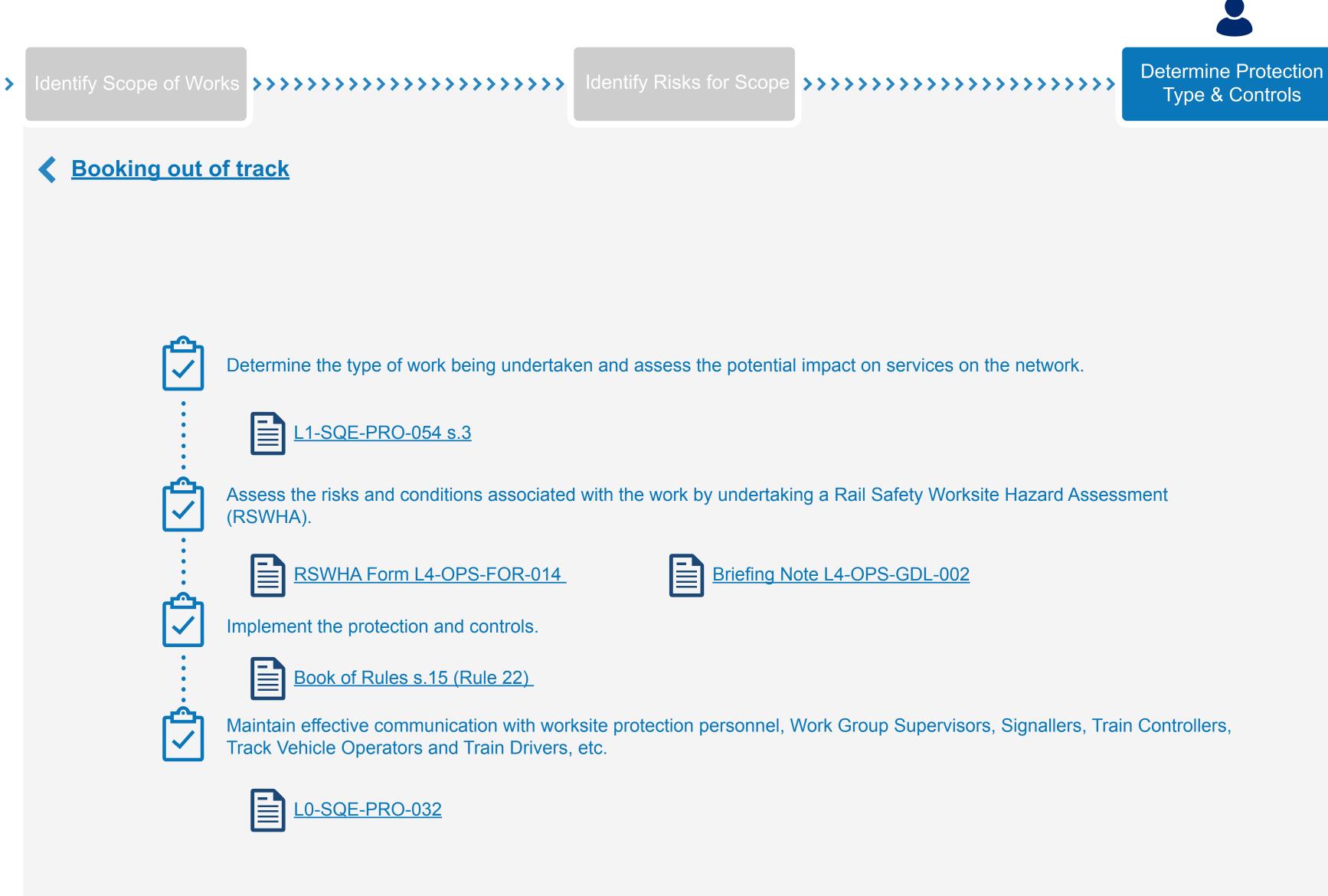


L1-SQE-PRO-054 s.13















>>>>>

**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Protection



4. Undertake Work



5. Complete Work



6. Hand Back and Record

#### **Securing points for protection**

This method is designed to route rail traffic to ensure a position of safety is created for a work group working in the danger zone and can be applied in conjunction with other forms of protection.

Approved methods of securing points include:

- 1. Application of a lockable point clip or lock bar secured by a unique padlock.
- 2. Points physically inhibited in operations by a Signal Maintenance Technician (SMT).



Determine if Securing the Points is the most appropriate method of protection



L1-SQE-PRO-040 s.5



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Implement Securing Points for protection.



L1-SQE-PRO-040 s.5



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.











**Determine Protection** Type & Controls



2. Gain Track Access



3. Implement Controls



4. Undertake Work



5. Complete Work



6. Hand Back and Record

**Using a Train for Protection** 



Determine if Using a Train for Protection is suitable and check that the train can provide protection and a Position of Safety (POS) at the intended worksite.



L1-SQE-PRO-038 s.8



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Implement Using a Train for Protection.



L1-SQE-PRO-038 s.8



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.



L0-SQE-PRO-032



Complete works and advise the Driver, the Network Controller, and Track Access Desk that the worksite is clear and that the train can be returned to operational use.



L1-SQE-PRO-038 s.8









**Determine Protection** Type & Controls



3. Implement Controls





6. Hand Back and Record

#### **Track Force Protection**



Determine the type of work being undertaken and assess the potential impact on services on the network.



<u>L1-SQE-PRO-054 s.3</u>



Assess the risks and conditions associated with the work by undertaking a Rail Safety Worksite Hazard Assessment (RSWHA).



RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002



Plan Track Force Protection depending on the following areas:

- Country regions

  Book of Rules s.15 Rule 3
- Suburban area
  Book of Rules s.15 Rule 4
- c) Inner suburban area
  Book of Rules s.15 Rule 6
- d) Implement the protection and controls.
  Book of Rules s.15 (Rules 3,4,6)



Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.

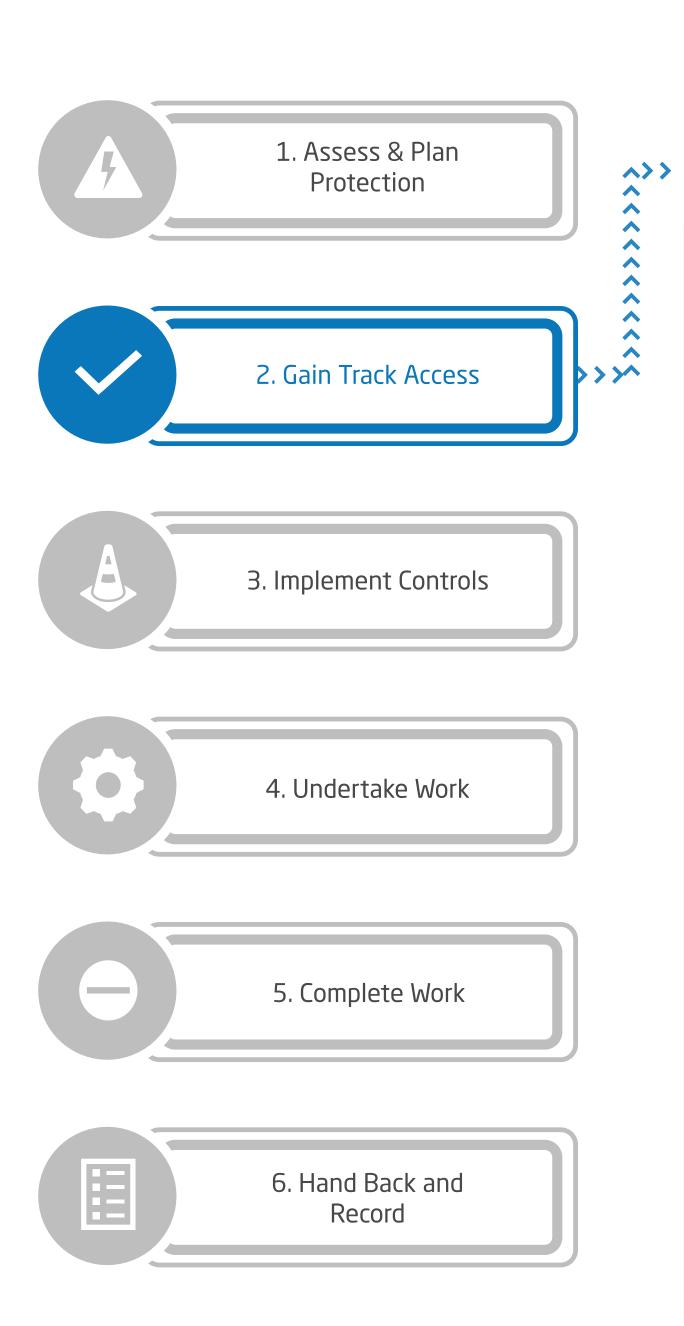






Obtain Approval from

Metrol or Signaller





Prior to commencing work, the TFPC must obtain authority from the MTM Track Access Desk (TAD).



Determine the required access based on the location of the task.



L1-SQE-PRO-054 s.11



Contact TAD on 9619 5647 to request authority to access the Rail Corridor or Danger Zone.



L1-SQE-PRO-054



L1-INF-PRO-021 s.7&8

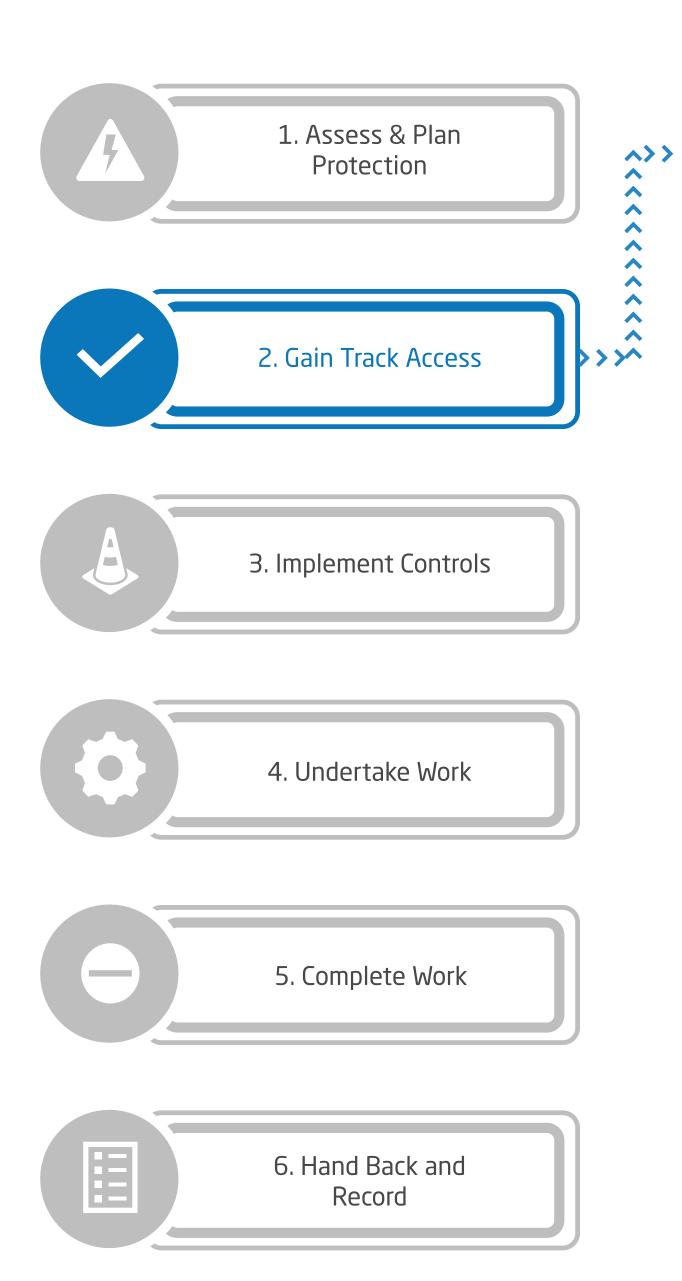


Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.









Obtain Track Access
Approval (TAD)

Obtain Approval from Metrol or Signaller

The TFPC must contact the Controlling Signaller to:

- Discuss the work and protection plan;
- · Identify and seek up-to-date train running information from the relevant Train Controller or Signaller for the area; and
- Communicate the information to all worksite protection personnel.

Provide the Controlling Signaller with a description of activities to be performed and protection plan.

<u>L1-SQE-PRO-054</u>

Communicated to TAD any amendments made to method of protection.

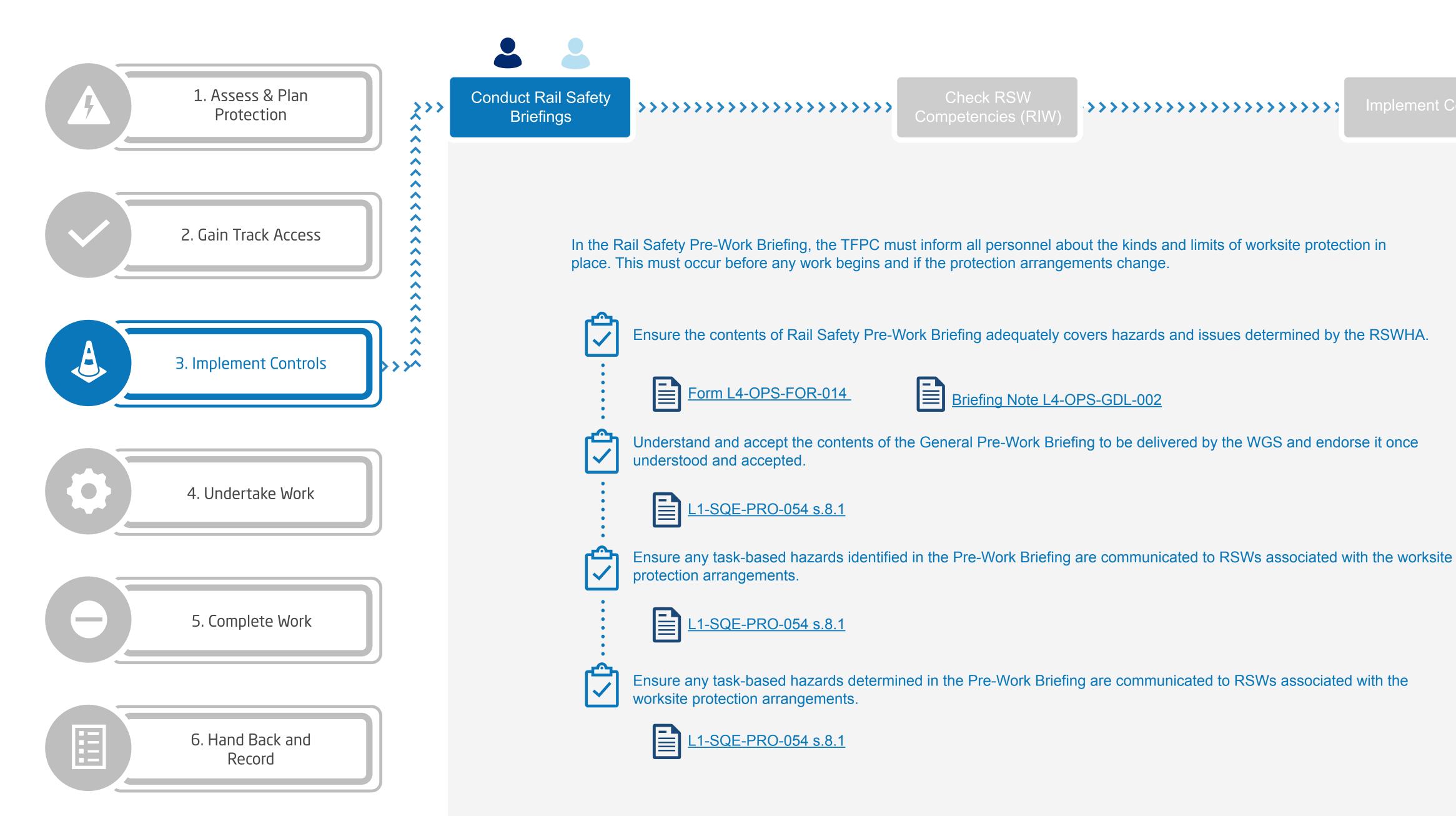
L1-SQE-PRO-054

Maintain effective communication with worksite protection personnel, Work Group Supervisors, Signallers, Train Controllers, Track Vehicle Operators and Train Drivers, etc.





Implement Controls



## //// METRO











Implement Controls



Check RIW / MTM competencies for the work site personnel.



L1-SQE-PRO-054 s.8.2



Assist the WGS check for competencies for RSWs and operators of track machines/vehicles as required.



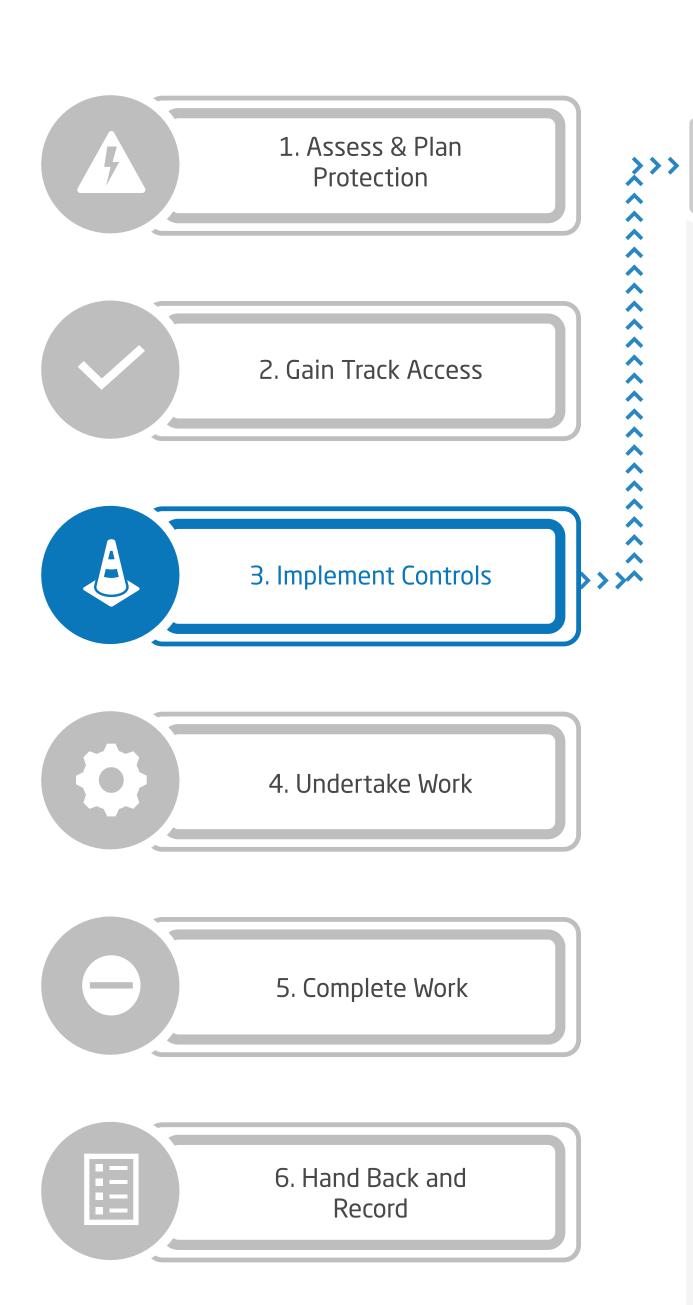
RSWHA Form L4-OPS-FOR-014



Briefing Note L4-OPS-GDL-002







Conduct Rail Safety Briefings 

Check RSW Competencies (RIW)

->>>>>>>>>>

Implement Controls



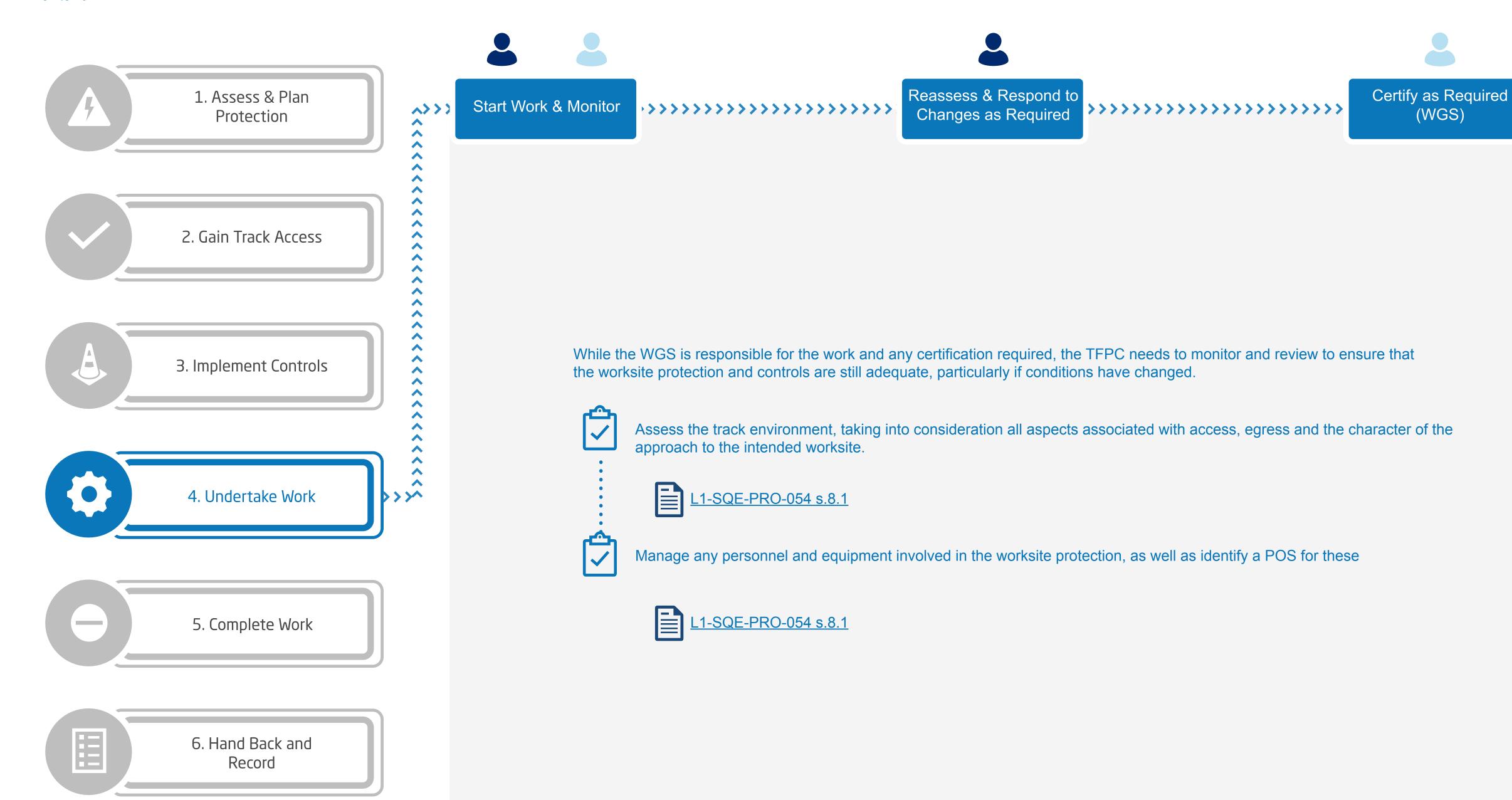
Implement protection as per the selected protection method.



## METRO



(WGS)



## **METRO**



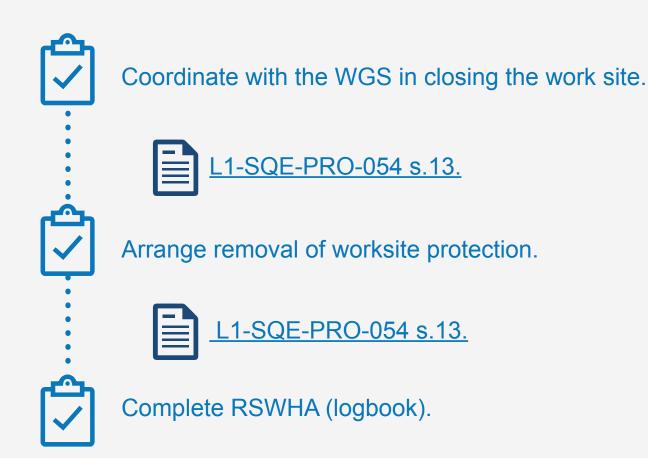




Remove Protection

The WGS is largely responsible for completing the work, closing the work site, and leaving the Danger Zone, and informing the TFPC accordingly.

The TFPC is responsible for the removal of worksite protection, including removal of any worksite protection equipment from the track, once the worksite has been closed.



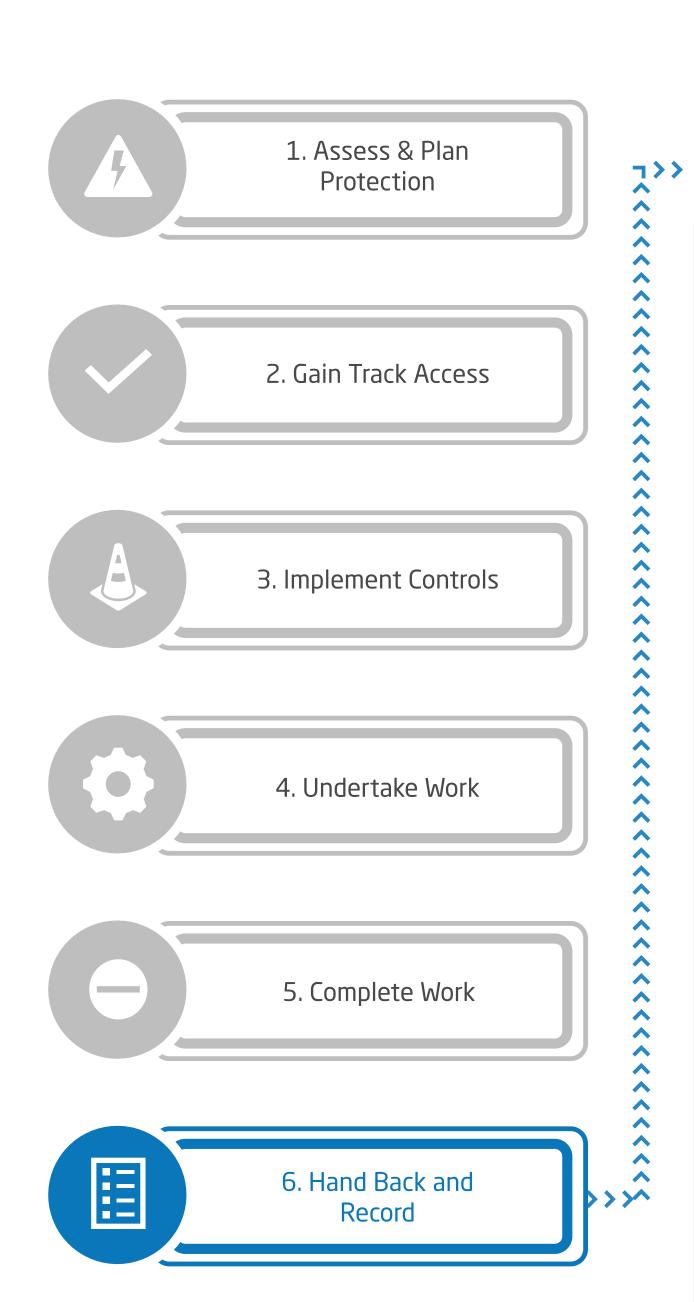
Once the worksite protection has been removed, no one is permitted to re-enter the Danger Zone unless an appropriate method of protection is applied, subject to a RSWHA.













Maintain Records



Contact controlling signaller and confirm that the area is clear.

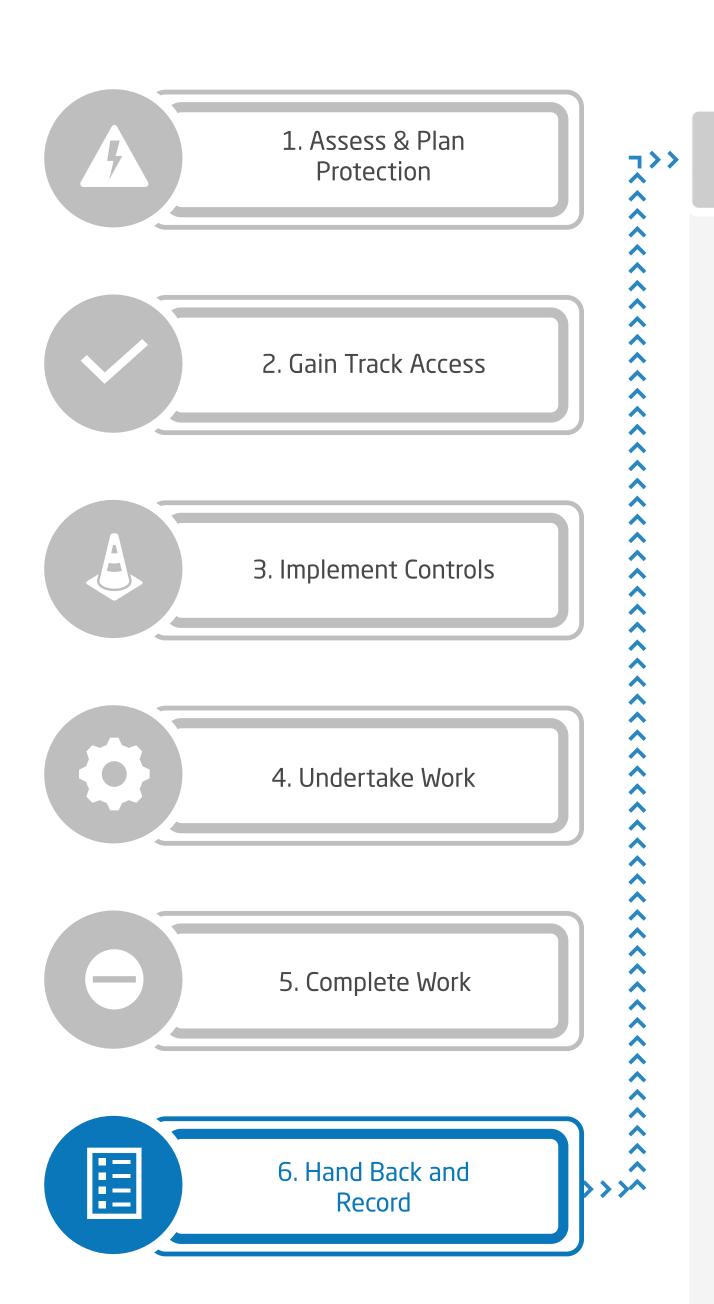


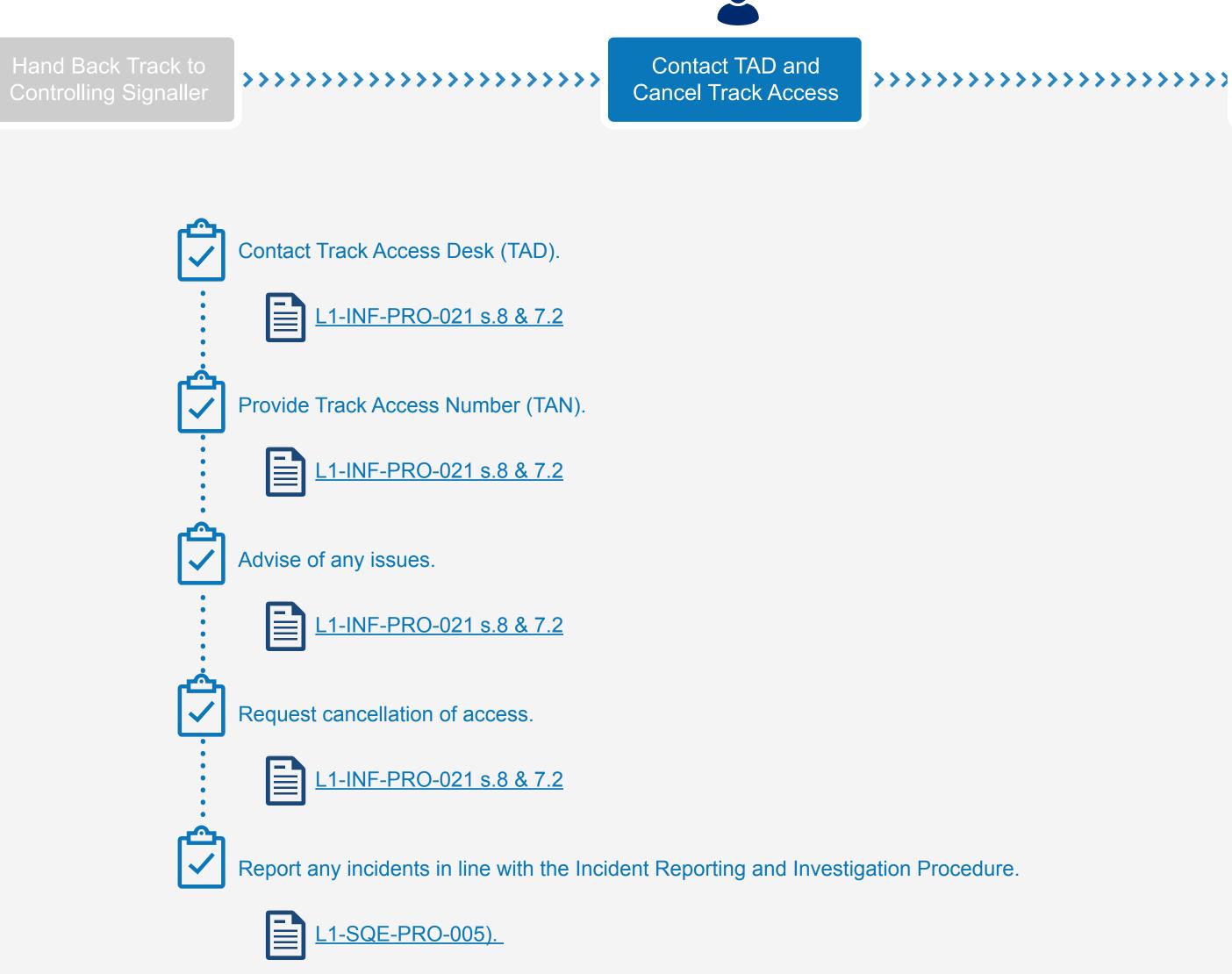
Book of Rules s.15

## METRO



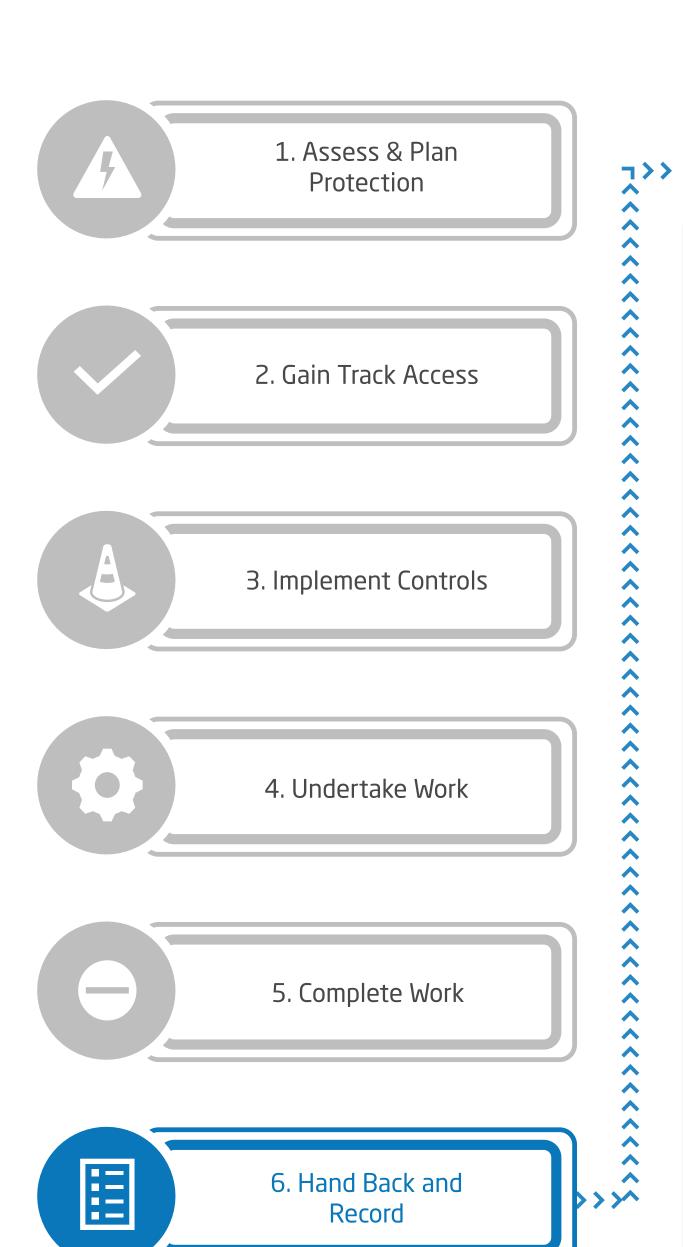
Maintain Records











Hand Back Track to Controlling Signaller 

Record Details & **>>>>>>>>>>** Maintain Records



Worksite protection records and RSWHA to be held on file.



<u>L1-SQE-PRO-054 s.16</u>



Book of Rules s.31