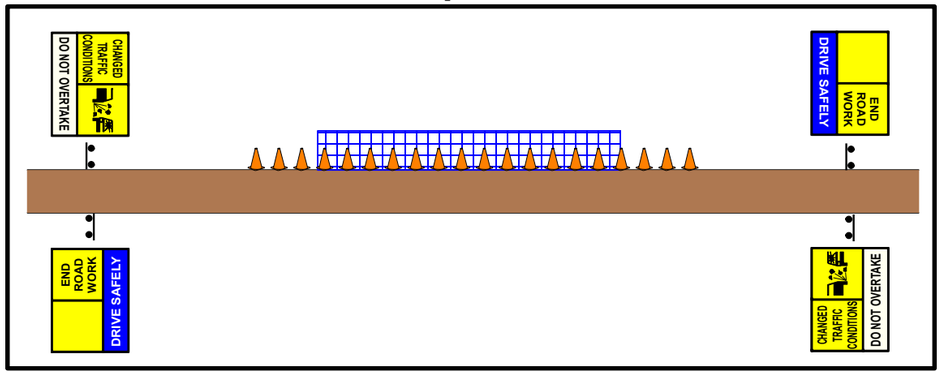
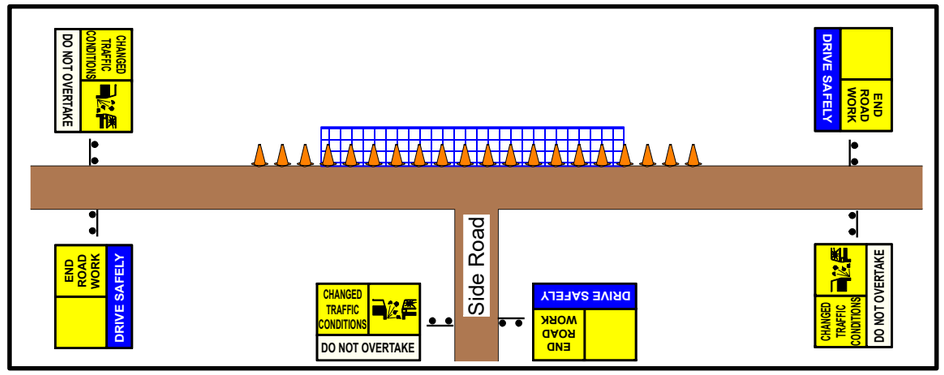
Unsealed Treatment Works - Signage Expectations

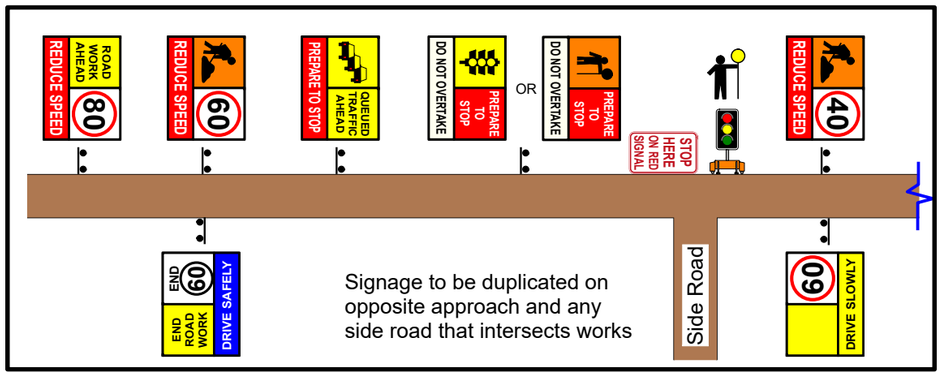
Stockpile Area



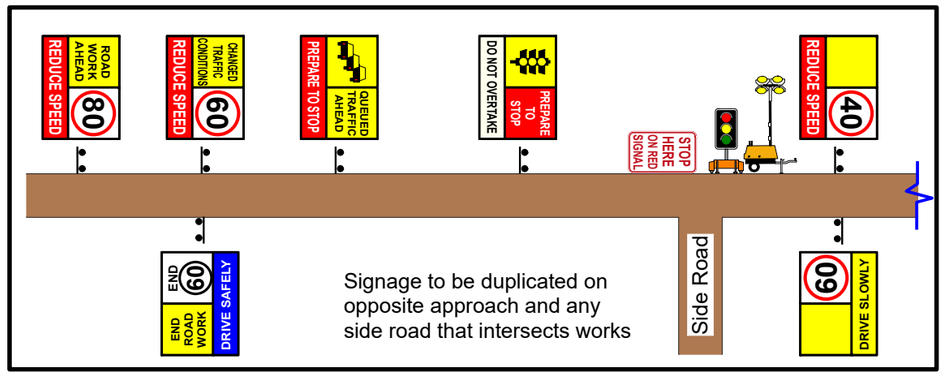
Stockpile Area - With Intersection



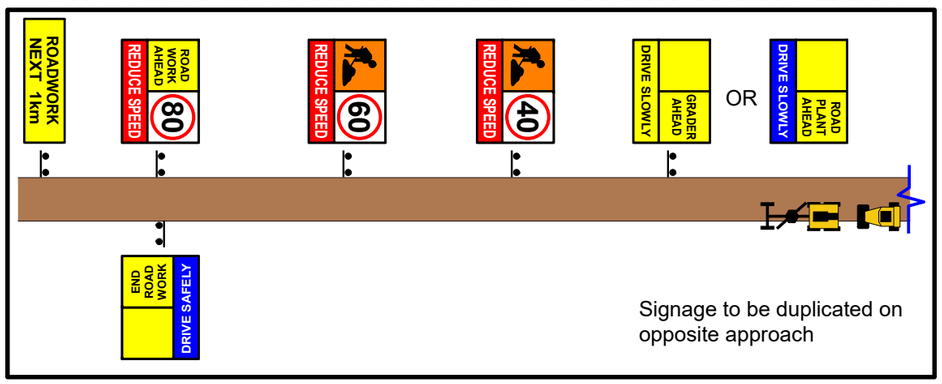
Unsealed Treatment Works - Within Traffic Lane - with TC



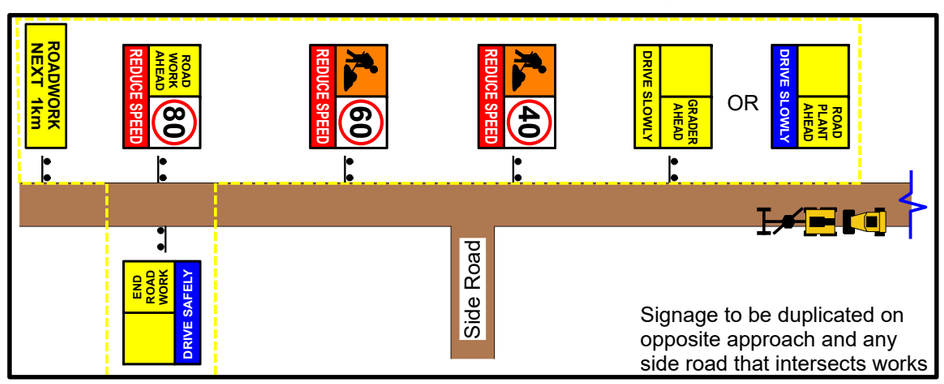
Unsealed Treatment Works - Within Traffic Lane - Aftercare



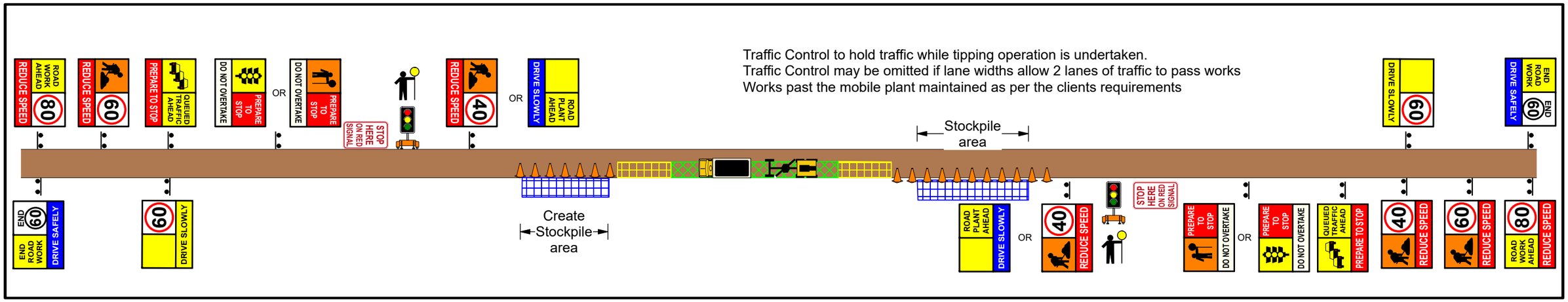
Unsealed Treatment Works - Within Traffic Lane



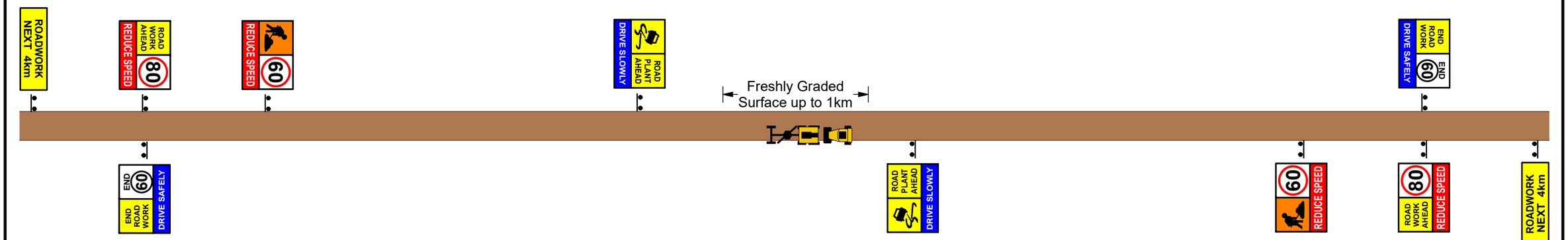
Unsealed Treatment Works - Within Traffic Lane with Intersection



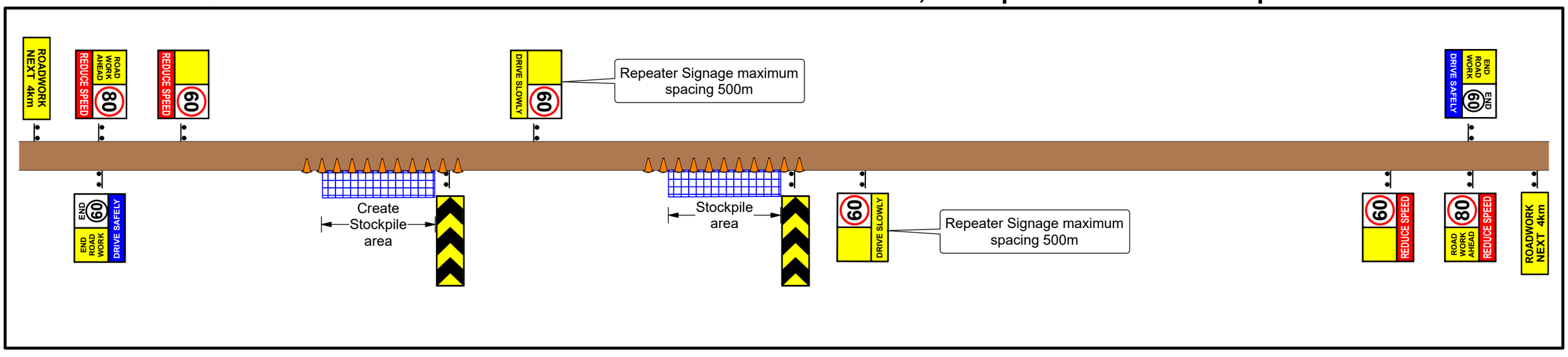
Formation Grading (including gravel resheeting) - Incorporating material (refer to treatments attached) - Within Traffic Lane



Formation Grading (Not incorporating material) - Within Traffic Lane - Work Area, Stockpile and Create Stockpile



Unsealed Treatment Works - Within Traffic Lane - Work Area, Stockpile and Create Stockpile - Aftercare



Notes to Traffic Guidance Scheme:

1. A site prestart meeting is to be undertaken prior to the start of works to ensure all workers understand the work activities and details of this TGS.
2. Copies of current licenses and relevant permits (i.e. TMR) must be kept on site and sighted by the Site Supervisor.
3. All conflicting devices indicated in TGS shall be covered and recorded in site drive through
4. Signs and devices shall be set out by a Traffic Management Implementation (TMI) officer or a person who has successfully completed Working in Proximity to Traffic Awareness Part 1 & 2 under the supervision of a Traffic Management Implementation (TMI) qualified officer.
5. Tolerances for signage and tapers/delineation: +25% or 10%, unless a distance, length or spacing is already given in the text or a figure as a maximum or a minimum (See AGTTM Pt 6 Sect 6.8)
6. Signs and devices are to be set out in the following sequence

i. Advanced warning and regulatory signage Non-Affected Side (Road Work Ahead and Workers Symbolic)
ii. Advanced warning and regulatory signage Affected Side (Road Work Ahead and Workers Symbolic)
iii. Intermediate advanced warning and regulatory signage and devices in advance of the taper or start of the work area.
iv. Delineating devices to form tapers using Bollards/Traffic Cones at spacings Tapers 4.0m max
v. Delineation of the work area with Bollards/Traffic Cones spacings as directed on TGS
vi All other required warning and regulatory signs including Termination signage and end of temporary speed zone signs
vii At Completion of works all signs and devices are to be removed in the reverse order to setup

7. Signage is to be placed 1 metre clear of the travelled path signage not to obstruct traffic or pedestrians or cyclists bike lanes. See Figure 1 and 2
8. Signage should face toward the approaching traffic at approximately right angles to the line of site of drivers.
9. When working within an intersection Stop and/or Give Way signs to be covered.
10. Traffic Controllers shall wear high visibility clothing as specified in the Traffic Controller Accreditation Scheme Approved Procedure (TCASAP) and SWMS.
11. Traffic Controllers are to be placed and have a safe and clear escape route that provides a minimum of 90m with a clear line of sight to oncoming traffic
12. Traffic Controllers shall be relieved of their duties after not more than 2 hours for a period of rest or other duties of at least 15 minutes.
13. Pedestrians will not be impeded during works as there are no footpaths
14. As there are no designated cycle ways, cyclists are to be treated in the same respect as vehicles.
15. Workmen and traffic controller/ signage shall be removed or covered (with opaque material) when there are no workers/ traffic controllers present.
16. Portable two-way radios in good working order shall be used for communication between Traffic Controllers and work crew.
17. NIGHT WORKS: Traffic Controllers carrying out any works at night, shall use night wands.
18. NIGHT WORKS: Lighting is required for the traffic control station and where workers or machinery are working close to traffic lanes, it is recommended that the entire work area be illuminated
19. Plant, vehicles and other items are not to be stored or erected in positions where they may create a hazard, obscure signs or block line of sight for approaching drivers or be positioned within safety buffer or termination zone.
20. All plant and vehicles operating on the roadway shall be equipped with vehicle mounted warning devices and activated when working on or adjacent to the road
21. All Emergency vehicles will have priority at all times when it is safe for the emergency vehicle to pass through/ around the job site, Site Supervisor/ Traffic Controller shall notify the site team to temporarily stop work or whatever action is practicable to allow emergency vehicle passage through the work zone.
22. TMI qualified officer shall conduct signage and work site checks at regular intervals this is to be documented along with the erection and dismantling of signage at the beginning and end of shift using relevant documents or other methods for recording, (approved tablet).

23. Road condition signs shall be placed at various locations if the freshly-grade surface has loose material that may be a hazard. One or more of the following may be required, depending on the nature and degree of hazard:

A. Slippery (symbolic) (T3-3).

B. Loose Stones (symbolic) (T3-9).

C. LOOSE SURFACE (T3-14).

24. A site specific risk assessment will be required prior to implementation to select a TGS to assessed as site suitable.
25. Works are to be conducted under the QRA Treatment Guide at the time of tender

Unsealed road treatments

All grading and resheet treatments include the following work operations:

- site establishment and disestablishment of all plant, labour and materials
- establishment and disestablishment of traffic control
- determination of the work area
- the removal and re-instatement of roadside furniture (e.g. guide posts, signs etc.) as required
- clean up of the site and disposal of any waste/removed material in accordance with applicable State Government legislation or Local Government By-laws

Reference	Treatment	Unit
USP_LFG	Light formation grading	m
USP_MFG	Medium formation grading	m
USP_HFG	Heavy formation grading	m
USP_HFG50	Heavy formation grading incorporating 50mm of imported material	m^3
USP_HFG75	Heavy formation grading incorporating 75mm of imported material	m^3
USP_GR	Gravel resheeting (excludes supply of material)	m^3
USP_GR100	Gravel resheeting 100mm	m^3
USP_GR150	Gravel resheeting 150mm	m^3
USP_GMS	Gravel/material supply	m^3
USP_RSTD	Reshape table drain (1 side)	m

Refer to the following pages for details of treatment types

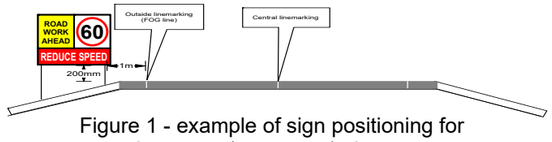


Figure 1 - example of sign positioning for short term (temporary) signage

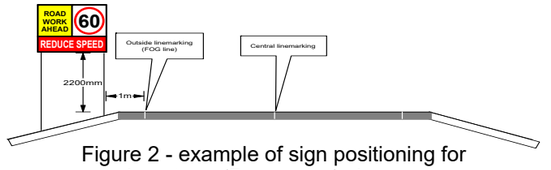


Figure 2 - example of sign positioning for long term (Permanent) signage

Light formation grading

For gravel roads damaged as a result of an activated event, a **Light formation grading** is often undertaken during the emergency works period to restore rideability prior to restoration works. Where the road is formed only (not gravelled), and loss of shape and material is minor only, a **Light formation grading** may be appropriate for restoration works to restore shape.

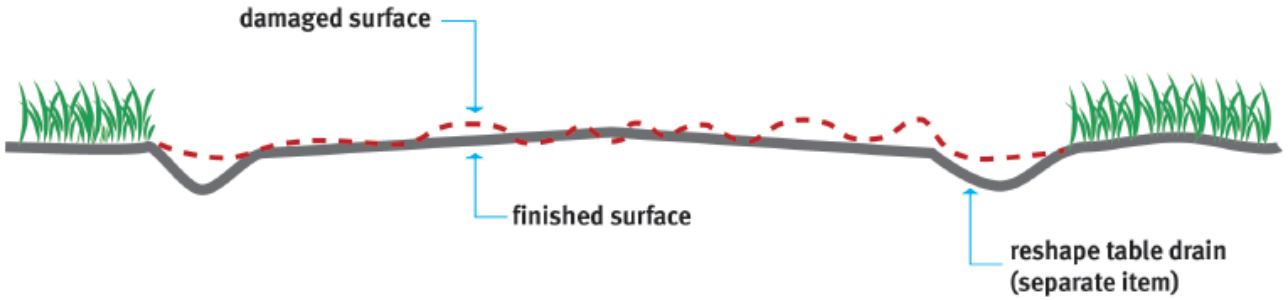


Figure 4 – Light formation grading

Treatment:	**USP_LFG**
Unit of measurement:	m
Summary:	Light trimming by grader of unsealed road surface to restore rideability
Description:	Light trimming by grader of the existing roadway to fill holes and other depressions
Exclusions:	Scarifying, compaction, import of water or material, table drain works (separate item)
Indicative plant:	Grader

Medium formation grading

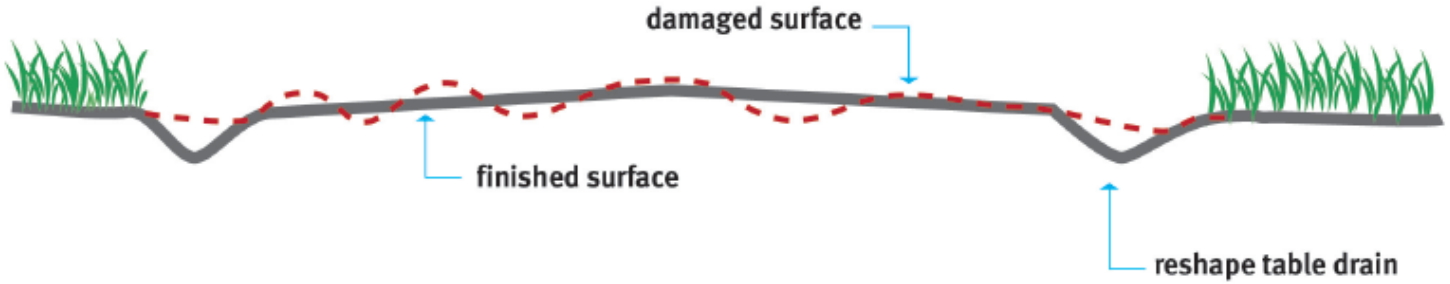


Figure 5 – Medium formation grading

Treatment:	**USP_MFG**
Unit of measurement:	m
Summary:	Grading of unsealed roadway to reinstate the pre-disaster profile.
Description:	Grading to restore the road surface to pre-disaster profile and condition. Includes roughening of top 50mm of roadway (by grader), clearing and grubbing to remove light vegetation and grass, recovery of suitable material from table drains (by grader), incorporation of water and compaction.
Exclusions:	No import of material
Indicative plant:	Grader, water truck, rollers

Heavy formation grading

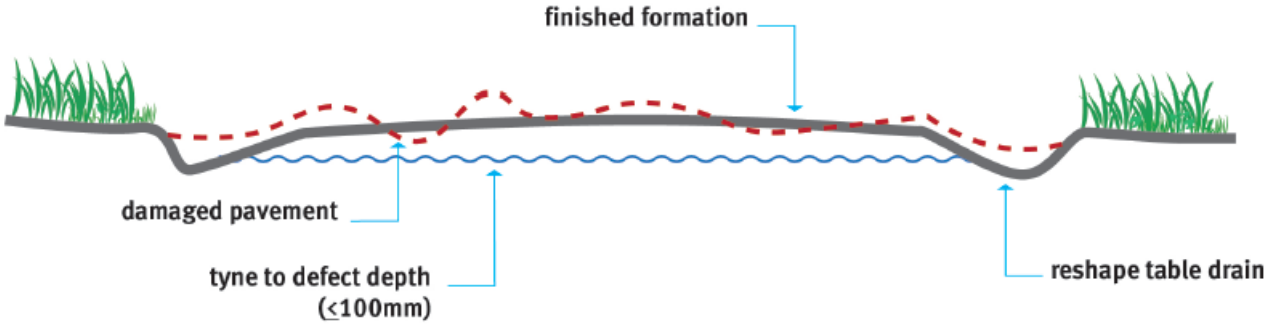


Figure 6 – Heavy formation grading

Treatment:	USP_HFG	Heavy formation grading
	USP_HFG50	Heavy formation grading incorporating 50mm of imported material
	USP_HFG75	Heavy formation grading incorporating 75mm of imported material
Unit of measurement:	m	
Summary:	Reinstatement of formation and profile.	
Description:	Clearing and grubbing and recovery of suitable material from table drains (by grader), tyne ≤100mm depth (150mm if supported by depth of rutting), incorporation of additional gravel/material (excludes USP_HFG), trimming, and compaction.	
Exclusions:	**USP_HFG** (only) – No gravel/material supply	
Indicative plant:	Grader, water truck, roller, front end loader and job truck (for disposal of unsuitable)	

Gravel resheeting

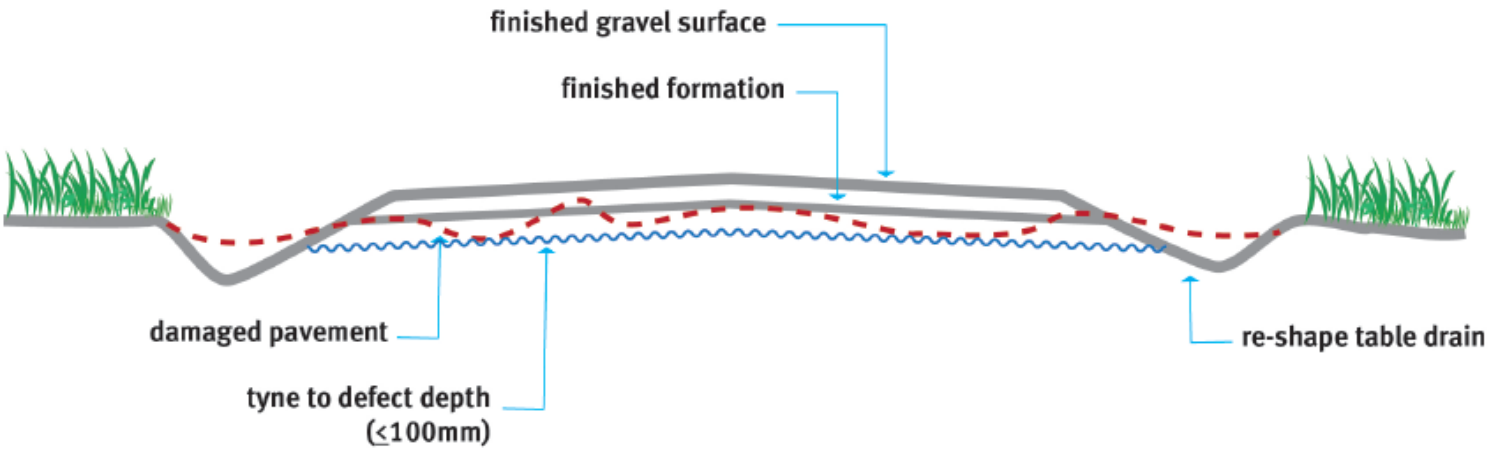


Figure 7 – Gravel resheeting

Treatment:	USP_GR	Gravel resheeting (excludes supply of material)
	USP_GR100	Gravel resheeting 100mm
	USP_GR150	Gravel resheeting 150mm

Unit of measurement: m^3

Summary: The addition of imported gravel/material to the roadway to reinstate the running surface and correct profile.

Description: Preparation of the formation through **Heavy formation grading**.
Supply and spreading of imported gravel/material.
Imported material should be consistent with that in-place pre-disaster or that which the asset owner currently uses for maintenance in the area.