Prompt list

Temporary Traffic Management Compliance Audit / Inspection

Introduction

This document is a sample prompt list (previously termed checklist) for Temporary Traffic Management for Works on Roads. It is based on the Austroads Road Safety Audit prompt list and it incorporates specific requirements in Western Australia. This prompt list should be read in conjunction with Australian Standards AS 1742.3, Austroads Guide to Temporary Traffic Management and the Main Roads’ Traffic Management for Works on Roads Code of Practice.

This prompt list should be treated as a guide only. It does not provide an exhaustive list of questions to identify all possible instances of non-compliance that may be detected at a worksite in respect to a given Traffic Management Plan. Some contracts will require auditing in accordance with specification 202, some of which is not covered by this prompt list (this prompt list may be modified as required).

Advice when Undertaking the Compliance Audit / Inspection

When conducting a traffic management Compliance audit or inspection approval from Project Manager should be obtained prior to arriving at the worksite.

An “Entry Meeting” should be convened with the relevant personnel (e.g. Project Manager, Traffic Manager, etc.) to obtain all relevant documentation including project details and staging. Following the “on-site” inspection where the Traffic Management Plan has been implemented, person conducting the audit/inspection should meet with the relevant works personnel (e.g. Project Manager) at an “Exit Meeting” to convey the Findings and Recommendations from the audit/inspection.

As soon as practicable, a Corrective Action Report identifying the Audit/Inspection Findings and Recommendations is to be conveyed to representatives of the Project team. Areas where “Improvements” could be made should also be identified in the Corrective Action Report.

During the site inspection, Audit/Inspection Team personnel should wear appropriate high visibility vests, safety foot apparel and helmets (where required), and comply with any other safety requirements that are applicable to the worksite being audited/inspected.

Prompt list

| **Issue**  | **Yes/No/ NA** | **Comment** |
| --- | --- | --- |
| 1. **Approvals**
 |  |  |
| **1.1 Access to worksite** |  |  |
| Have all the necessary approvals been obtained for access to the worksite? |  |  |
| Where applicable, is the TM company a Main Roads registered company? |  |  |
| **1.2 Traffic Management Plan (TMP)** |  |  |
| Is the TMP for the roadworks approved by an Authorised Body? If not, has MRWA approval been obtained (as per the Delegation of Authority)? |  |  |
| Has a ‘Suitability Audit’ been carried out for the TMP? If so are there any major changes since it was carried out. |  |  |
| Does the TMP involve “complex traffic arrangements” as defined in the Code of Practice? If so, has the Traffic Management Plan been endorsed by a RTM? |  |  |
| Is the TTM on a Main Roads road involving ‘complex traffic arrangements’ and if so, is person with either Worksite Traffic Management or Advanced Worksite Traffic Management accreditation on-site at all times when road workers are present. |  |  |
| Does the TMP involve any variations to the code of practice or standards? If so, has the variation been approved by the road authority through a variation of standards application with appropriate risk management undertaken by a RTM? |  |  |
| Check that the conditions for which the Traffic Management Plan was approved still apply. |  |  |
| Check for conditions of approval relating to working hours, number of traffic lanes, lane widths, signs & site instructions |  |  |
| Check to ensure that the signs and devices are representative of the approved TGS.  |  |  |
| Have the TGS been assigned a unique reference number and dated by an AWTM accredited person? |  |  |
| Have the police, emergency services and other effected stakeholders (road authority, schools etc) been consulted and informed of the works? |  |  |
| Does the TMP detail traffic management and project personnel and responsibilities? Is there an after-hours contact? |  |  |
| **1.3 Railway Crossing** |  |  |
| Is the worksite in the vicinity of a Railway Crossing? If so, have the necessary approvals been obtained from the Railway Authority? |  |  |
| Does the TMP comply with the conditions of approval imposed?  |  |  |
| **1.4 Traffic Signals** |  |  |
| Is the worksite in the vicinity of Traffic Signals? If so, have the necessary approvals been obtained from MRWA? |  |  |
| Has RNOC been advised of the scope and extent of the roadworks (noting required timeframes)? |  |  |
| Has the safety of all road users at the signals been adequately catered for e.g. pedestrian crossing. |  |  |
| **1.5 Active Worksites** |  |  |
| Is there more than one active worksite? If so are they part of the same project? Ensure they are not conflicting. |  |  |
| Are there approved Traffic Guidance Schemes (TGS) for each of the active worksites? |  |  |
| 1. **General items**
 |  |  |
| **2.1 Alignment**  |  |  |
| Are the roadworks located safely with respect to horizontal and vertical alignment? If not, does works signing, offset and/or protection cater for this?  |  |  |
| Are the transitions from the existing road to the roadworks safe and clearly laid out?  |  |  |
| **2.2 Turning radii and tapers**  |  |  |
| Are turning radii constructed in accordance with guidelines?  |  |  |
| Have the swept paths of all vehicles been catered for? |  |  |
| Are tapers constructed in accordance with guidelines? |  |  |
| Are the tapers delineated where necessary?  |  |  |
| Is the width of lanes satisfactory for the traffic passing works area? |  |  |
| Is the alignment of kerb, traffic islands and medians away from traffic lanes satisfactory?  |  |  |
| **2.3 Traffic lane safety and visibility**  |  |  |
| Is the work area clearly defined?  |  |  |
| Are the travel paths for both directions of traffic clearly defined?  |  |  |
| Is the work area appropriately separated from passing traffic?Check the transition at the interface of the modified alignment. |  |  |
| Is there the need to separate the opposing traffic flows? (eg barriers, delineation devices etc)If so, what is in place to allow for this? |  |  |
| Do the temporary works involve shoulder or traffic lane closures? If so:Are the taper lengths in accordance with the approved distances specified standards and guidelines?Are traffic cones, bollards upright, secure, correctly spaced and neatly aligned?Do the “lane status” signs depict the representative number of traffic lanes available at the sign?Are temporary hazard markers (T5-4 and T5-5) aligned and spaced to comply with the requirements of AS 1742.3?Are the illuminated flashing arrow signs located in accordance with the requirements of AS 1742.3? |  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| Are centre lines/lane lines/edge lines clear and unambiguous? |  |  |
| Are sight and stopping distances adequate at works and at intersections and driveways?  |  |  |
| Has provision been made to accommodate the passage of over-dimensioned vehicles? If not, has the appropriate detour been provided? |  |  |
| **2.4 Contra Flow** |  |  |
| If there is a contra flow situation have road users been warned with adequate delineation and signage in accordance with standards and guidelines?Are pedestrians adequately catered for in accordance with standards and guidelines?Taper? |  |  |
|  |  |
| **2.5 Side Tracks** |  |  |
| Is there a constructed side track. If so, does it meet the vehicle needs for length, horizontal alignment, geometry and width? |  |  |
| Is the forward alignment of the sidetrack well delineated?  |  |  |
| Are temporary hazard markers and roadworks delineators installed? |  |  |
| Is the sidetrack sealed? If not, are provisions made for the maintenance of the surface condition? |  |  |
| **2.6 Unsealed Roads** |  |  |
| Is the travel path well delineated with the correct coloured delineators in accordance with standards and guidelines? |  |  |
| Are the gradients of the pavement such (4%-6%) that surface water is dispersed? |  |  |
| Is there a maintenance regime for the pavement surface? Has this been carried out? |  |  |
| Are speed limit signs erected? If so, is the pavement surface maintained such that the posted speed limit is safe? |  |  |
| **2.7 Night-time safety**  |  |  |
| Is appropriate street lighting or other delineation provided at the roadworks to ensure that the site is safe at night? (Night-time inspection essential.)  |  |  |
| If temporary lighting is used, have issues such as glare or transition in illumination been addressed?  |  |  |
| Are all fixed objects adjacent to and close to the travel path treated to ensure visibility at night? |  |  |
| Is the works area safe for pedestrians and cyclists at night? |  |  |
| **2.8 Maintenance**  |  |  |
| Can the road be maintained safely during construction (consider workers and the public)?  |  |  |
| Is the road surface likely to be free of gravel, mud or other debris? |  |  |
| **2.9 Access to property**  |  |  |
| Do the roadworks safely accommodate vehicular access to property? If not, has alternate access been provided? |  |  |
| **2.10 Clear Zones** |  |  |
| Are non-frangible objects located within the clear zone? Can these be removed, re-located or protected? |  |  |
| Are non-recoverable batter slopes or excavations located within the clear zone? |  |  |
| Does the delineation offset and safety space provided comply with standards and guidelines? |  |  |
| **2.11 Work Site** |  |  |
| Are the clearances from the worksite consistent with the requirements of AS 1742.3? If not, is the appropriate delineation provided or are Road Safety Barriers (RSB) installed? |  |  |
| **2.12 Safety barriers** |  |  |
| Are safety barriers used where required to separate works areas from public areas? If so, have they been endorsed by a RTM? |  |  |
| Are safety barriers used where required to protect traffic from other hazards?  |  |  |
| Are the barriers of an approved type for the purpose and located and assembled correctly? |  |  |
| Is there adequate clearance from the edge of traffic lane and road safety barrier system? |  |  |
| Are safety barriers erected in a manner that:* does not make them a hazard to traffic?
* does not obstruct visibility?
 |  |  |
| Is the work area appropriately separated from the deflection zone of the safety barrier? |  |  |
| Is the road safety barrier system adequate (eg length of need, barrier type, offset to traffic, offset to work area, end treatment)? |  |  |
| Are the Road Safety Barriers installed compliant with the manufacturer’s requirements relating to minimum length, dynamic deflection clearance and end treatment? |  |  |
| **2.13 Truck Mounted Attenuators (TMAs) and shadow vehicles** |  |  |
| Are TMAs and shadow vehicles being used to protect workers where required? If so are they being operated in accordance with standards and guidelines? |  |  |
| Are the shadow vehicles located in a safe position with adequate sight distance for approaching vehicles? Are workers located a safe distance from the vehicles? |  |  |
| Are drivers entering/exiting vehicles in a safe manner? |  |  |
| Are arrow boards displayed correctly to warn road users? |  |  |
| **2.14 Inspections**  |  |  |
| Has the site been inspected day and night? |  |  |
| 1. **Traffic management**
 |  |  |
| **3.1 Traffic controls**  |  |  |
| Are the Traffic Control Devices set out in accordance with the Traffic Guidance Scheme (TGS)? |  |  |
| Does each TGS include a sign legend, sequence and spacing? |  |  |
| Does each TGS include lateral placement of devices? Are signs a minimum of 200 mm off the ground? |  |  |
| Does each TGS state the stage of works and proximity of traffic to workers? |  |  |
| Are the signs erected in accordance with standards and guidelines? |  |  |
| Are all signs and devices placed such that they are clearly visible to approaching drivers and other road users both day and night? |  |  |
| Do the traffic control devices have the requirements for retro-reflectivity (night time inspection)? |  |  |
| Are the signs erected using round not square upright mounting pegs? Are they on supports that are straight and stable? |  |  |
| Are all signs and devices placed such that they do not adversely impact access to properties and other road users (pedestrians, cyclists and the disabled)? |  |  |
| Are signs erected on side roads in accordance with standards and guidelines? |  |  |
| Have the needs of cars, trucks, pedestrians, bicyclists, motorcyclists and bus users been considered?  |  |  |
| Is sight distance to traffic controllers adequate? Are queue lengths being monitored in line with AS 1742.3? (Check queue lengths do not extend past the prepare to stop signs as per AS 1742.3) |  |  |
| Have parking, clearways and rest areas been considered?  |  |  |
| **3.2 Speed management**  |  |  |
| Are temporary speed limit signs required for these works? If so, are they correctly applied?  |  |  |
| Are speed limit signs required to be maintained all day and at night?  |  |  |
| Are motorists informed of the need to slow down through the roadworks site?  |  |  |
| Are the speed limits established on site consistent with the modified road environment?  |  |  |
| If not, should this be changed or should the “safety space” to the worksite be increased? |  |  |
| Are road users complying with the temporary speed limits?  |  |  |
| If not can something be done on site to encourage speed compliance? |  |  |
| If required, have speed feedback signs been installed and used correctly? |  |  |
| Are buffer zones established?  |  |  |
| Are the zone lengths consistent with standards and guidelines? |  |  |
| Are repeater speed limit signs erected in accordance with AS 1742.3? |  |  |
| **3.3 Work site access**  |  |  |
| Are site entrances and exits safely located with adequate sight distance?  |  |  |
| Are traffic merges/exits/entries/turns properly delineated and controlled?  |  |  |
| Are adequate merge lengths provided?  |  |  |
| Are appropriate traffic controls in place where works traffic and public traffic interact?  |  |  |
| Do work method statements detail the procedure of worksite vehicles when interacting with public traffic? |  |  |
| Are there parking bays or rest areas close to the worksite? If so, have they been adequately closed off?  |  |  |
| **3.4 Traffic Flow** |  |  |
| Has traffic flow been maintained as much as possible in line with the Code? Have the effects of network congestion been examined and justified in accordance with the Main Roads Code of Practice?  |  |  |
| 1. **Signs and pavement markings**
 |  |  |
| **4.1 Signs**  |  |  |
| Are all necessary regulatory, warning and direction signs in place as per approved TGSs?  |  |  |
| Are they correctly placed, clean and conspicuous?  |  |  |
| Do they meet the required reflectivity? |  |  |
| Are appropriate procedures in place to check and clean signage? |  |  |
| Do they conform with AS 1742.3, MRWA code of practice and other guidelines in regards to reflectivity, sizes etc? |  |  |
| Are traffic signs correctly located, with adequate lateral and vertical clearance? |  |  |
| Have signs been securely mounted and where required post mounted? |  |  |
| Are signs placed to not restrict sight distance, particularly for turning vehicles? |  |  |
| If chevron alignment markers are installed, have the correct types been used? |  |  |
| Are redundant permanent signs (eg speed limit) covered up? |  |  |
| Have unnecessary signs been removed when works are not in progress? (for example, at night)  |  |  |
| **4.2 Variable Message Signs (VMS)** |  |  |
| Are the VMS signs used compliant with the requirements of AS 1742.3? |  |  |
| Are these (VMS) signs located in the transition zone? Are VMS signs located where they will not distract road users trying to pass the work area? |  |  |
| Are the numbers of words per screen as per AS1742.3? |  |  |
| Is the number of screens as per AS1742.3? |  |  |
| Are the minimum letter heights in accordance with AS1742.3?Have Advanced warning signs been replaced with VMS? |  |  |
| **4.3 Day/night sign requirements**  |  |  |
| Are the correct signs used for each situation including at night where required, and is each sign necessary?  |  |  |
| Where signs and devices have been removed after hours is appropriate delineation provided (particularly at night)? |  |  |
| **4.4 Delineation and reflective markers**  |  |  |
| Are traffic lanes clearly delineated?  |  |  |
| Have temporary reflective markers been installed? Are these well maintained? |  |  |
| Where coloured reflective markers are used, have they been installed correctly?  |  |  |
| **4.5 Pavement marking**  |  |  |
| Are all necessary pavement markings installed in accordance with guidelines?  |  |  |
| Are vehicle paths through the works area clear to motorists?  |  |  |
| Are movement paths through intersections delineated where required? |  |  |
| Are works areas clearly defined and clear of through traffic when traffic controllers are not used?  |  |  |
| Have any issues of site difficulties for motorcyclists (day or night) been addressed?  |  |  |
| **4.6 Detours**  |  |  |
| Do temporary detours allow heavy vehicles and buses to safely manoeuvre in their designated lane?  |  |  |
| 1. **Traffic Control**
 |  |  |
| **5.1 General** |  |  |
| If using single lane shuttle flow, is the length in accordance with the approved TMP? |  |  |
| Are signs warning of the traffic control adequate? |  |  |
| Are queue lengths reasonable and being monitored in line with the Code of Practice? Are ‘Prepare to Stop’ signs adequate for queue lengths? |  |  |
| Has the need for additional warning signs been considered? |  |  |
| Will the ends of vehicle queues be visible to motorists so that they may stop safely? Are queue lengths being monitored in line with the Code? |  |  |
| Have pilot vehicles been used where required? Is the Pilot vehicle operating safely? |  |  |
| **5.2 Portable Traffic Control Devices (PTCD)** |  |  |
| Are PTCDs being used where required? If so, are traffic controllers positioned in a safe position from the roadway but still in view of motorists? |  |  |
| Are the PTCDs clearly visible to approaching motorists? |  |  |
| Are traffic controllers available in case of faults? |  |  |
| If using temporary traffic signals, are they vehicle-actuated or on fixed time control? Has the traffic signal operation been monitored to ensure safe and effective control without undue delays to traffic? |  |  |
| Are the PTCDs operating correctly? Is the number and location of PTCDs adequate? |  |  |
| **5.3 Traffic Controllers** |  |  |
| Are traffic controllers provided where required? (comment - where, when and how) |  |  |
| Do traffic controllers have an adequate escape path? |  |  |
| **5.4 Visibility**  |  |  |
| Have any visibility problems caused by the rising or setting sun been addressed?  |  |  |
| Do any site works or any construction equipment create visibility problems for traffic signals?  |  |  |
| **5.5 Traffic Signal display**  |  |  |
| Are signal displays shielded so they can be seen only by the motorists for whom they are intended?  |  |  |
| **5.6 Traffic movements**  |  |  |
| Are all movements, catered for by the Traffic Control?  |  |  |
| 1. **Pedestrians and cyclists**
 |  |  |
| **6.1 General**  |  |  |
| Have the effects of the works areas on pedestrians and cyclists been considered?  |  |  |
| Are appropriate travel paths and crossing points provided for pedestrians and cyclists?  |  |  |
| Are pedestrians and cyclists adequately warned of obstructions and temporary works hazards on their travel way?  |  |  |
| Are containment fences used to provide visible separation between the travelled way, the worksite and pedestrians? |  |  |
| Are facilities for pedestrians and cyclists in terms of width and pavement surface provided past the worksite? |  |  |
| **6.2 Elderly and disabled access**  |  |  |
| Are facilities for wheelchair users in terms of width, ramp gradients and pavement surface provided past the worksite? |  |  |
| **6.3 School Crossing** |  |  |
| Is the worksite in the vicinity of a School Crossing? If so, has the Police School Crossing Section been informed? |  |  |
| Has the crossing been appropriately relocated and provision made for alternate access to and from the crossing? |  |  |
| **6.4 Public Transport** |  |  |
| If required, are bus stops appropriately located with adequate clearance from the traffic lane for safety and visibility? |  |  |
| Have the Bus Operators been informed of the changes. |  |  |
| Can pedestrians safely gain access to the bus stops? |  |  |
| **6.5 Cyclists**  |  |  |
| Is the route available for bicycles continuous and free of squeeze points or gaps?  |  |  |
| **6.6 PSP Detours** |  |  |
| Are there PSP detours? If so, is the detour route reasonable for path users? Is the surface adequate and the detour route free of hazards?  |  |  |
| 1. **Road pavement**
 |  |  |
| * 1. **Pavement defects**
 |  |  |
| Is the pavement free of defects (for example, excessive roughness or rutting, potholes, loose material, etc.) that could result in safety problems such as loss of steering control for: * car drivers?
* cyclists?
* motorcyclists?
* Heavy vehicle drivers?
 |  |  |
| **7.2 Skid resistance**  |  |  |
| Is the pavement sealed? If so, does the pavement appear to have adequate skid resistance, especially on steep descents?  |  |  |
| **7.3 Ponding**  |  |  |
| Is the pavement free of areas where ponding or sheet flow of water may cause safety problems?  |  |  |
| 1. **Work Health and Safety**
 |  |  |
| **8.1 General** |  |  |
| Does the TMP detail the responsibilities of workers?Is this being adhered to? |  |  |
| Are site inductions being conducted to those entering the worksite? |  |  |
| Are workers wearing correct PPE when on site? Do they have adequate clearance to traffic and an escape path? |  |  |
| Are start-up meetings being conducted each day and are staff aware of their responsibilities during each stage of the works? |  |  |
| Are the risks of mobile plant and workers being managed? |  |  |
| Is there a completed SWMS/JSA onsite and are workers following all safety requirements? |  |  |
| **8.2 TTM Workers / Accreditations** |  |  |
| Is there at least one person accredited in Advanced Worksite Traffic Management or Worksite Traffic Management available on site to manage variations, contingencies and emergencies, and to take overall responsibility for traffic management. |  |  |
| Are staff implementing the plan appropriately accredited in Basic Worksite Traffic Management?Are signs being implemented safely in accordance to AS 1742.3? |  |  |
| Are the Traffic Controllers used on the worksite accredited, suitably attired and adhering to the traffic control handbook and other standards? |  |  |
| Are staff operating TMAs appropriately accredited? |  |  |
| 1. **TTM Implementation, Operation and Removal**
 |  |  |
| Has the traffic management been installed and removed safely, limiting crossing the road, use of spotters and shadow vehicles or TMAs? Do TM workers have adequate escape path? |  |  |
| Is the traffic management being appropriately monitored by TTM workers? |  |  |
| Has the traffic management been appropriately recorded in the Daily Diary? |  |  |
| 1. **Incident response**
 |  |  |
| Have contingencies for emergencies been detailed in the TMP in line with the Code of Practice? |  |  |
| Does the TMP contain a Traffic Incident Reporting Form? |  |  |
| Does the TMP have provisions addressing inclement weather? (eg storms, floods, heat, smoke, etc) |  |  |
| 1. **Record Keeping**
 |  |  |
| Are the daily routine tasks of inspecting and maintaining the traffic control devices on-site recorded? |  |  |
| Does the “Daily Diary” include the Traffic Guidance Scheme (TGS) number to identify the devices erected on-site for that day? |  |  |
| 1. **Any other matter**
 |  |  |
| Have all other matters which may have a bearing on safety been addressed?  |  |  |