

SM012 State Highway Control Manual

Part 12 - Consolidated Motorways Sections

Index

Motorways General Requirements	Page 2
Iwi Consultation for Order in Council	Page 3
Motorway Design Details	Page 4
Services in Motorways	Pages 5 and 6
Fencing on Motorways	Page 7
Agreement as to Work on Motorways	Pages 8 to 15
Lighting	Page 16
Motorway Service Centres	Pages 17 and 18
Motorway Service Centre Guidelines	Pages 19 to 22

Motorways General Requirements

Control	All motorways are under the control of the Board unless it has delegated its powers to another authority under the GRP Act s62.
Ownership	All motorways that are State highways are vested in the Crown.
Authorisation and declaration	The status of all motorways must be authorised under the GRP Act s71(1) and an Order-In-Council must be made and gazetted.
Iwi consultation	<p>All requests for an Order-In-Council declaring road or land to be motorway must demonstrate that all iwi or hapu with interest in the land have been consulted in compliance with s73 of the GRP Act.</p> <p>The requirements are set out on page 3.</p>
Motorway opening	<p>A motorway must be on land acquired and designated for that purpose. However, if a carriageway is constructed on that land prior to a motorway declaration, it may be opened to traffic as a road under the GRP Act s79(4). Approval to open the motorway is delegated to the System Manager (in consultation with the Senior Traffic and Safety Engineer).</p>
Availability for traffic	No motorway or portion of a motorway shall be opened for public traffic until it has been inspected by the System Manager or his/her appointee and found to be in good and efficient repair and may safely and conveniently be used for public traffic (GRP Act s79).
Services and access	The Board has absolute power to control new or existing services or accesses affected by any motorway, (GRP Act s76, 77, 78, 82, 83 and 84). NZTA policy on services and access is detailed on pages 5 and 6 below.
Cost of motorways	The full cost of constructing and maintaining a motorway shall be a State highway charge unless agreed otherwise (GRP Act s81).

Iwi Consultation to be Demonstrated When Seeking an Order in Council to Declare Motorway

In this Appendix

This appendix gives the iwi consultation requirements pursuant to s71(3) of the GRP Act for road or land to be declared motorway.

Iwi Consultation to be Demonstrated when Seeking an Order-in-Council to Declare Motorway

New Zealand Transport Agency Submission

A copy of the submission approved by the New Zealand Transport Agency Board must accompany all requests for an Order-in-Council. The submission needs to include the following information:

- Identify all iwi and hapu with interests that may be affected by the declaration.
- State whether or not the identified iwi and hapu have been consulted.
- If any iwi or hapu has not been consulted, explain why.
- State whether any iwi or hapu has any objections to the declaration.
- If an iwi or hapu has objections, explain what they are.
- If objections have been made and not resolved, explain why the declaration should proceed.

Documentation

The request must also include a copy of a statement from a representative of each iwi and hapu confirming whether or not there are any objections to the motorway declaration.

The statement must clearly identify the land area in which the iwi or hapu has interests.

Motorways Design Details

Introduction

This section points to guidelines to be used for new or reconstructed highways. These guidelines should not be applied as rigid standards and variations may be approved by the National Manager Programme and Standards, as appropriate, to take account of local engineering and economic considerations. This approval shall be adequately documented.

Motorway design

Motorways shall be designed for a design speed of 110 km/h.

Any exception to this policy must have the approval of the National Manager System Design.

Ramps on or off a motorway may have lower design speed values provided they are safe and appropriate speed values are posted.

Services in Motorways

Introduction

This section gives additional requirements relating to services on existing and proposed motorways.

Restrictions for services

The GRP Act s78 provides that no Utility Operator or TLA (including the Crown) can locate services on, over or under a motorway without the prior formal consent of the NZTA.

National Priorities for Access to Motorways

As there is often long-term restricted space in a motorway corridor the NZTA gives preference to uses with a high national value. National value would be assessed based on:

- the impact of the lack of the utility to the entire surrounding community,
- the impact of failures on public safety,
- main rather than local supply,
- requirement for transverse rather than longitudinal placement,
- freedom from other connections, and
- reduction in need for access for maintenance.

It is preferred to provide for installations where loss of direct customer service is not an issue as there will be circumstances when the NZTA will be unable to approve urgent access for maintenance on motorway sections.

Guidelines for services

The following guidelines shall be applied:

1. Wherever practicable, services are to be located so as to avoid using or crossing motorways.
 2. Services are to cross motorways as far as practicable at 90⁰ to the motorway centreline. Longitudinal placement is not permitted except in exceptional circumstances.
 3. The capacity of all services should be sized to cater for the maximum envisaged long term development to the area to avoid duplications or future replacements.
 4. With the exception of overhead wires or cables, all services shall cross motorways in ducts or galleries.
 5. Multiple use of crossing ducts should be encouraged (but see below).
 6. Maximum use shall be made of existing ducts or galleries within bridges and service culverts.
 7. NZTA shall process a single agreement for the relocation of multiple services of the same type belonging to the same Utility Operator within the limits of a capital works project.
-

Dispensations for proposed motorways

Services with a short life span in relation to the likely commencement date of motorway construction may be permitted with reduced restrictions.

In all other cases service ducts or galleries should be located so as to minimise

potential conflict with future motorway construction.

Access for maintenance

In all cases for both existing and proposed motorways, access to services for maintenance purposes is to be from areas outside the motorway reserve.

Notice of consent

The form of consent shall include all conditions required for roads plus the following additional clause:

Access to the installation for maintenance purposes is to be from areas outside the motorway reserve. Access is not permitted from the operating motorway carriageway.

Fencing on Motorways

Fences on Motorway

The NZTA requires the owner or occupier of any land not separated from an existing live motorway carriageway by a sufficient fence to enclose the land with fencing appropriate for the land use and to the satisfaction of the System Manager.

Exceptions to this requirement are:

- where a rural area adjacent to an existing motorway is rezoned as urban and existing open-strand fencing needs to be replaced with urban standard fencing appropriate for the land use (it should be a condition placed on any land development project), or
- where NZTA had a prior Resource Consent requirement to provide a noise fence for any motorway construction work and the noise fence needs to be maintained in terms of such consent.

The NZTA shall ensure, by arrangement with authorities responsible for adjacent areas, that continuous fencing to an appropriate standard will prevent public or animal access to existing motorway carriageways or by providing required fencing where the NZTA has an obligation to do so and where the absence of fencing would place the public at risk.

Agreement as to Work on Motorway

Parties:

1. **NEW ZEALAND TRANSPORT AGENCY** (“NZTA”), established as a body corporate under and by virtue of the Land Transport Amendment Act 2008, is responsible for the State Highway System.
2., established as a, is a (“The Owner”).

Background:

- A. The NZTA has the sole powers of control for all purposes including construction and maintenance of all State highways pursuant to the provisions of the Government Roding Powers Act 1989.
- B. The Owner wishes to carry out certain works described in Schedule One and thereafter have the right to maintain their works situated on the State highway.
- C. The consent of the NZTA is required for the works and the NZTA agrees to provide such consent on the conditions set out below.

Terms of Agreement:

1. The NZTA hereby gives consent for the Owner to install and/or maintain the works specified at Items 1 and 2 of Schedule One hereto subject to the following terms and the conditions specified in Schedules Two and Three hereto.
2. All of the civil engineering work shall meet with the approval of the Manager System Management. The works shall be laid more or less in the location shown on the attached plans referred to at Item 4 of Schedule One hereto. The exact location and level of all installations are to be made known to the System Manager’s authorised representative and shall be agreed to before work commences.
3. In consideration of the NZTA agreeing to the works specified at Item 3 in Schedule One, the Owner hereby agrees to indemnify the NZTA against all costs, actions, demands, suits, damages and proceedings of any kind for or in respect of any loss, damage or injury that may directly result to or be suffered by any third party or that may directly result to or be incurred by the NZTA by reason of the exercise of the rights conferred under this agreement in relation to the work, or for any costs resulting from the removal of any abandoned components or equipment that belong to the Owner.
4. At the discretion of the System Manager , this agreement may or may not include a requirement for the Owner to provide a Contract Bond in favour of the NZTA or for the contractor to provide a Contract Bond in favour of the Owner, as a performance guarantee.
5. In the event of works involving attachment of a utility service to a NZTA bridge, the Owner shall pay the NZTA a bridge charge for the use of the Bridge, prior to commencing any work on the bridge.
6. The Owner shall pay the reasonable costs of the NZTA and its consultants in connection with the processing of this notice and for the monitoring and auditing of the works.
7. Where the works affect an existing installation that belongs to the Owner, in the event of ambiguity or contradiction between the attached conditions and any prior conditions or specifications, the attached conditions shall take precedence.

8. The Owner understands that any contravention of the agreement, which includes the conditions specified in Schedules Two and Three, may result in the NZTA refusing further access to the State highway.
9. The party specified at Item 5 in Schedule One shall supervise the physical works and the party specified at Item 6 in Schedule One shall perform the works.
10. A full copy of this Agreement shall be kept on site at all times during construction.
11. The Owner and/or their contractors, if when working on the State highway are found not to be complying with the relevant specification and/or does not have permission to be there, are liable to be instructed to leave the site by the System Manager or the System Manager's authorised representative.
12. The works are to be available at all times for inspection by any person authorised by the System Manager. Compliance with the conditions specified herein shall be monitored during construction and audited upon completion by the party specified at Item 7 in Schedule One.
13. The NZTA reserves the right to require the Owner to carry out repairs to the reinstated surface of the road, should these become necessary in the NZTA's opinion, within twelve months of the NZTA's acceptance of the "Advice of Completion of Work" form. These works shall be undertaken within five working days of notification or as directed by the System Manager.
14. Where the Owner fails to comply with any requirement under these conditions the NZTA may arrange for the necessary work to be done and may recover any costs incurred.
15. After satisfactory completion of the works, the Owner shall give prior notification on each separate occasion to the NZTA of any subsequent service maintenance work that may be required and if the works are located in or under a carriageway or road shoulder the NZTA shall re-assess the implications and impose any new or altered conditions deemed necessary to protect the integrity of the State highway.
16. No vested right shall be hereby created and this consent shall not be transferable.
17. Where the NZTA considers that the Owner has breached any condition of this agreement, it shall provide written notice to the Owner specifying the breach and requiring it to be remedied where capable of being remedied. Where the Owner fails to remedy a material breach within ten (10) working days of receipt of such notice or where such material breach is incapable of being remedied, the NZTA may withdraw this consent by giving notice to the Owner who shall remove the works and leave the motorway reserve in good order and condition to the reasonable satisfaction of the System Manager.
18. The Owner shall not be entitled to any compensation on the withdrawal or termination of this agreement.
19. If the whole of or any part of the works are required to be temporarily or permanently relocated or protected due to the construction of any NZTA works during a two (2) year period as from the date of execution of this licence, then it shall be done by the Owner at no cost to the NZTA.
20. Nothing in this licence shall be construed to derogate from the rights of the NZTA to enter upon the areas occupied by the utility services for the purpose of installing, maintaining, repairing or removing any new or existing road or bridge assets over or under the improvements or for any other lawful purpose. The NZTA shall not otherwise interfere with the rights hereby conferred on the Owner.
21. When any notice is to be given it shall be sufficient in cases where the notice is to be given by the NZTA that the notice be signed by some person acting under the System Manager's express or implied authority and sent by post or telegram addressed to the Owner at the Owner's then or last known address.

22. In the absence of written acceptance from the NZTA for an extension, this agreement shall become invalid if the works do not commence within six months of the date signed to hereunder.

Date:

Signed for and on behalf of the

NEW ZEALAND TRANSPORT AGENCY

(.....)

System Manager

Acting pursuant to delegated authority

in the presence of

Signature: _____

Occupation: _____

Name: _____

Signed for and behalf of

THE OWNER

Name: _____

in the presence of

Signature: _____

Occupation: _____

Name: _____

Schedule 1

Item 1: THE WORKS:

Item 2: LOCATION:

STATE HIGHWAY:

ROUTE POSITION:

Item 3: THE WORK:

Installation and Maintenance or Maintenance (delete whichever is not applicable) of the works specified at Items 1 and 2 above.

Item 4: PLANS:

LOCALITY PLAN:

Attached.

SITE PLAN:

Drawing No. *****,

Attached.

Item 5: OWNER'S REPRESENTATIVE

Item 6: CONSTRUCTION CONTRACTOR:

Item 7: NZTA NETWORK OPERATIONS CONTRACTOR

General Conditions

23. All traffic control on state highways shall conform with the requirements in the latest version of the “*Code of Practice for Temporary Traffic Management*” published by the NZTA for all work falling within the State highway road reserve and this shall include activities falling outside the road reserve where such activities affect the normal operating conditions of the State highway. The Owner shall produce an approved Traffic Management Plan (TMP) in accordance with Section A6 of the above-mentioned Code of Practice prior to the works commencing.
24. The Owner shall ensure that the work is carried out under the control of a warranted Site Traffic Management Supervisor (STMS) - Practising, and there shall be sufficient other people on duty specifically to control the flow of traffic through the site in accordance with the Traffic Management Plan while having resources within the State highway road reserve.
25. The NZTA’s Traffic Management Co-ordinator shall be given two clear working days notice prior to commencing any work on the State highway. This notice, setting out the timeframes for the work to be undertaken, shall be given by facsimile to the NZTA Network Operations Contractor together with a copy of the approved TMP and confirmation must be received that the programme does not conflict with other work and permission to proceed is granted, prior to commencement of any works.
26. The works shall be carried out in a way that minimises disruption to the flow of traffic. In compliance with the Code of Practice, the works affecting traffic flows shall be undertaken outside of peak traffic flow periods as indicated by flow estimations. If the proposed programme provided does not meet this requirement, a revised programme must be submitted. If the works change in any way from those proposed in the notification, the NZTA shall be informed prior to commencement of the changed works, and be provided with a revised proposed programme.
27. All works shall be completed in one continuous operation. Works shall not to be suspended for any period of time greater than 24 hours without NZTA permission.
28. The NZTA have in place a standard restriction for any company working on or near State highways, during, and one day either side of, a public holiday, or public holiday weekend.
29. Instructions concerning the use of traffic control measures from an officer of the police traffic safety branch, or any person authorised by the System Manager, shall be complied with in addition to those stated in the Special Conditions.
30. Lane closures on the motorway carriageways shall not be permitted without the express permission of the System Manager.
31. Access to the site of works shall not be permitted from the operating carriageway of the motorway without the express permission of the System Manager.
32. The Owner and/or their contractor shall prevent visual distraction to motorway traffic. A sight screen shall be erected at exposed work sites where safety barriers are not required in terms of the “*Code of Practice for Temporary Traffic Management*” or if the work zone safety barriers or existing guardrails do not provide sufficient visual screening. Sight screening in absences of safety barriers shall not fully block the view from the work area of any errant motorway vehicle to which workers may be vulnerable.
33. The Owner shall obtain at the Owner’s cost all necessary approvals, consents and permits from all statutory, public or other authorities prior to commencing any work on the State highway and shall comply with all Regional and District Plans and applicable statutes, bylaws, regulations, approvals, permits and consents.
34. The Owner and/or their contractor shall not hold the NZTA liable for any of the costs incurred if the Applicant receives an Environmental Infringement Notice. The Owner and/or their contractor shall

ensure that their works comply with all relevant aspects of the Resource Management Act (1991) and subsequent amendments.

35. A plan shall be produced for managing environmental effects such as construction noise, the discharge of contaminants, sediment or litter and this plan shall be made available upon request.
 - Special measures shall be employed to avoid or mitigate construction noise that may cause disruption to residents in the vicinity.
 - The Owner and/or their contractor shall take extra precautions during grouting operations to avoid contaminating waterways and stormwater drainage with grouting compound.
36. The Owner and/or their contractor shall be responsible for locating and protecting all underground services the location and/or depth of some of which may not be known and notwithstanding this fact it is the consent holder's responsibility at their own cost to repair any damage they may cause to any of these services.
37. All surplus excavated material shall be removed from the site and all surfaces disturbed by any of the work shall be restored to their original condition or better.
38. The Owner and/or their contractor shall be responsible for protecting and maintaining all NZTA signs and road furniture including edge delineator posts during the period of work and shall replace any items that become damaged or lost.
39. Where traffic safety facilities (signs, marker posts etc.) are removed in the course of the work these shall be re-erected to the proper standard prior to the removal of the temporary traffic controls required by these conditions.
40. The Owner shall keep an "As Built" set of drawings in their records showing the location of all of the utility service components of that they have installed. This record shall be available for inspection by the NZTA or their representative as and when the need arises.
41. All work undertaken by The Owner and/or their contractor working under this approval must comply with the requirements under the "Health and Safety at Work Act 2016" and the "Health and Safety at Work Regulations 2016".
42. On completion of the works, the Owner and/or their contractors shall complete an "Advice of Completion of Work" form. For the purposes of the NZTA's right to require the Owner to carry out repair work, the twelve month maintenance period shall commence as from the date that the works completion form is completed accurately and submitted to the NZTA and the NZTA has accepted that the work is complete.
43. All work undertaken by The Owner and/or their contractor working under this approval must comply with the Department of Labour Construction Act 1959 and Construction Regulations 1961, as amended and any applicable industry codes of practice.

Special Conditions

See Template Local and Special Conditions for utility work on highways in the State Highway Control Manual, Section 2.9, Schedule 1.

Lighting

Motorway lighting

Capital and annual costs are a State highway responsibility. Other sections of State highway which are fully access controlled may also qualify, with the GMTS's approval.

Motorway Service Centres

Background

The National Stopping Place Strategy recognises that the NZTA has a responsibility to ensure the provision of convenient facilities and services that cater for the needs and expectations of road users. These facilities can also contribute to safety objectives by providing road users with the opportunity to break their journey, reduce fatigue and service vehicles.

On most State highways, demand for essential services is usually met by private sector interests (through the provision of service stations and other roadside businesses) and the NZTA (through the provision of rest areas, viewing points and the like). However, on motorways and expressways, where access is restricted and road users are generally unable to stop, the availability of such services is often limited.

Definition

Motorway Service Centres (MSC) are defined as developments located adjacent to a motorway or expressway, for the sole purpose of providing essential services for the safety, comfort and convenience of motorway and expressway users.

Policy Objective

To encourage the nationally consistent development of MSC, in a manner that improves the contribution of motorways and expressways to an integrated, safe, responsive and sustainable land transport system.

Key principles

Policy Statement

The NZTA will support the private development of MSC where the development is consistent with the NZTA's strategic objectives for MSC, does not compromise the NZTA's statutory objectives or functions, and is established and operated at minimal cost to the NZTA.

The NZTA will work with key stakeholders (including industry representatives, private developers and local government) to ensure MSC developments are undertaken in accordance with the following principles:

Safety and efficiency

MSC are to be located, designed and operated to ensure the safe and efficient movement of vehicles (on and off-site) pedestrians (on-site).

Communities & environmental effects

MSC are to be located, designed and operated to avoid, to the extent reasonable in the circumstances, adverse effects on communities and the environment. MSC should reflect good urban design principles and be well integrated into the surrounding environs.

Availability of essential services

MSC are to be established only where there is a lack of essential services in an area to meet the safety, comfort and convenience requirements of motorway and expressway users. MSC should not be established in areas where there are sufficient stopping opportunities and adequate service availability en route to meet the needs of motorway and expressway users.

Fatigue mitigation

MSC are to be located, designed and operated to encourage motorway and expressway users to break their journey and make use of the available facilities.

Traffic generation

MSC are to be provided for the benefit of motorway and expressway users and must not of themselves generate additional traffic. MSC are not intended to encourage, extend or intensify development along a transport route.

Statutory and local authority requirements

The construction, operation and maintenance of MSC must comply with all statutory and local authority requirements, including District and Regional Plan provisions.

Public engagement

The NZTA encourages early engagement with affected communities, stakeholders and local authorities to assist in the early resolution of potential issues associated with the development of MSC.

Compliance with other NZTA policies

In giving effect to these principles, all MSC are to be located, designed, constructed and operated in accordance with NZTA's statutory objectives and relevant policies, standards and guidelines. This includes the NZTA's Guidelines on MSC, Environmental Policy Manual, Urban Design Policy and Urban Design Professional Services Guide.

Case by case approach

Detailed design, access and operating requirements for each site will be determined on a case-by-case basis. In addition, developers will be required to prepare and implement comprehensive asset management plans, in accordance with agreed levels of service and forward maintenance requirements.

Tendering process

Where MSC are to be developed on NZTA administered land, development rights will be allocated through a competitive tendering process, consistent with NZTA's Policy and Guidelines on MSC.

Motorway Service Centre Guidelines

These guidelines set out the key issues to be considered in the development of Motorway Service Centres (MSC). The NZTA is unlikely to support proposals that are not consistent with the following requirements.

1. On site services, facilities & land area

The services and facilities are to be provided solely for the comfort, convenience and safety of road users and should not in themselves generate additional traffic movements.

Core facilities

Core facilities to be provided should include:

- Vehicle services, including emergency repairs and fuel (together with alternative energy sources, as required).
- Public amenities, including toilets, washbasins, telephones.
- Food and refreshments. Drive-through facilities will be prohibited as they do not encourage drivers to rest.
- Provision of adequate emergency spill/fire equipment.
- Rubbish collection/disposal facilities.

Additional facilities

Additional facilities may be required on a case-by-case basis, including tourist information, toll collection facilities, showers and children's play areas. Resource consents sought for MSC are to be sufficiently flexible to enable the development of all appropriate on-site services and facilities.

Operating hours

As a general rule, facilities are to be provided 24 hours, 7 days per week, 365 days per annum and to a standard sufficient to meet road users' needs and encourage drivers to break their journeys.

Design

The design, layout and treatment of onsite facilities and services should be family-friendly, and consistent with good urban design principles and practices. MSC should:

- fit in sensitively with the surrounding built, natural and community environments; and
- make a positive contribution to the quality of public space.

Land area

The recommended land area for MSC development will be determined on a case-by-case basis. As a *general* guide, it is anticipated that approximately 2.5-3.5 hectares will be required.

2. Location & spacing

General factors

Factors to be considered in determining the appropriate location and spacing of MSC include:

- Traffic volumes, types and predominant trip length;
- Safety/fatigue mitigation needs;
- Proximity to existing highway stopping opportunities and other NZTA approved MSC;
- Long term plans for motorway/expressway development;

- Potential co-location benefits i.e. development in pairs on either side of

Travel time As a *general* guide, MSC are to be spaced approximately 1 hours travel time apart (unless co-located).

3. Site access and visibility

NZTA standards The design and location of MSC access and exit ramps are to comply with NZTA standards, including relevant geometric design standards. Appropriate provision should be made for heavy and large vehicle movements.

Direct access Direct access sites are preferred over sites with access to an interchange as they are more effective in encouraging drivers to use the facility and provide safer traffic movements on and off the site.

Sight distances Sight distances to accesses, design vehicle turning paths and interference to through traffic by decelerating and accelerating vehicles shall be considered on a case-by-case basis.

Access ramps Access ramps are to be designed to provide for future motorway and expressway carriageway widening. If there is any indication the carriageway may be scheduled for future widening, ramps should be designed so that deceleration and acceleration standards are retained when the carriageway is widened.

Site visibility Sites are to be highly visible to approaching traffic and well lit to encourage the driver to stop. Sites should be significantly less visible to vehicles that have already passed the access point (refer landscaping requirements).

Site specific agreements Further details on access arrangements and licence fees will be contained in site-specific access/licence agreements.

4. Connections to local roads

No local road access Motorway and expressway users should not be able to access the local road network from the MSC. In some circumstances it may be appropriate to provide local road access for staff and service delivery vehicles only.

5. Emergency Services Access

Emergency services The site design should enable efficient and effective emergency service access to the site. Liaison with emergency service agencies will be undertaken on a case-by-case basis to determine appropriate access provisions.

6. Pedestrian access

Pedestrian access Appropriate safety measures are to be incorporated within the median and at the MSC boundary to prevent pedestrian access to the MSC (including preventing pedestrians from crossing the motorway or expressway)

7. Lighting

NZTA standards All lighting (both approach and on-site) is to comply with relevant NZTA standards and should not adversely affect neighbouring properties (existing or proposed).

Safety and personal On-site lighting should be provided to promote safety and personal security

security objectives.

8. Parking & internal circulation

NZTA standards All parking is to comply with appropriate standards, including disability provisions and stormwater requirements. Parking areas are to be sealed and well-defined for safety and efficiency.

Numbers and layout The number and layout of parking spaces will be determined on a case-by- case basis, with regard to traffic volumes and types.

Size Parking spaces are to be of a sufficient size to enable easy access and manoeuvrability for users e.g. to check load stability.

Vehicle classes Dedicated parking areas are to be established for different vehicle classes e.g. private vehicles, heavy vehicles, buses, and motorhomes/caravans.

Safety Parking areas are to be designed to provide a smooth transition from vehicle to pedestrian areas, with minimum conflict between pedestrians and vehicles. Ease and directness of circulation between parking and onsite facilities should determine the location of pedestrian walkways.

9. Signage

NZTA standards Advanced and on-site signage is to comply with relevant NZTA standards.

Advance signage Advance signposting is to be provided to give drivers adequate advance notice of a MSC, to encourage use of the centre and to ensure safety standards are met. Care should be taken to ensure the landscape planting does not encroach on signage sight lines.

10. Landscaping

NZTA Guidelines Landscaping is to be designed and maintained in accordance with NZTA’s “Guidelines for Highway Landscaping”. The purpose of landscaping in MSC should include:

- Minimising driver distraction for vehicles that have already passed the access point;
- Creating a pleasant setting and visual interest for MSC users; and
- Integrating the site into the natural surrounds.

Setback On site landscaping is to be set back sufficient distance from the road boundary to avoid shoulder closure when maintaining landscaping.

11. Stormwater

NZTA standards Permanent stormwater quality treatment and improvement devices are to be designed and operated in accordance with the objectives of NZTA’s Environmental Plan. This should include adequate spill containment capacity.

12. Noise

NZTA standards Noise mitigation measures are to comply with relevant NZTA standards. Mitigation measures are to be included in detailed site design to reduce adverse noise effects from the use of MSC in relation to any neighbouring properties

(existing or proposed).

Reverse sensitivity

Consideration should also be given to mitigating adverse noise effects from the motorway/expressway for MSC users.