

NATIONAL CODE OF PRACTICE

for

UTILITY OPERATORS' ACCESS to TRANSPORT CORRIDORS

Version II submitted to Minister for Infrastructure for approval

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working together

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Definitions

Terms defined in the Utilities Access Act will have those meanings when used in this Code. In addition, within the context of this Code, the following terms mean:

Amenity Areas

Areas that are essentially of a decorative nature, where streetscape and pavement are of high quality.

Applicant

The Utility Operator (or its agent) applying for access to the Transport Corridor.

Arterial Road – see **Minor Arterial Road** or **Major Arterial Road**.

Auckland Council Act

Means the Local Government (Auckland Council) Act 2009.

Berm

The strip of land between the property boundary and the edge of the Carriageway, whether that is defined by the edge of the seal or dish channel.

Business or Commercial Area

Any area of land where the dominant activity includes at least one of the following activities: retailing, offices, business and financial services, manufacturing, warehousing, factory shops and restaurants.

Carriageway

The portion of the Road or Motorway primarily for the use of travelling vehicles, including the sealed shoulders.

Central Business District

The central part of an urban area zoned as a business and commercial area in the district plan.

Collector Road

A Road that provides circulation in local areas and links to Arterial Roads. Collector Roads link land uses in all area types and provide access for all modes of transport, including public transport.

Commercial Area – see **Business Area**

Conflict Disclosure has the meaning given in Section 2.6.2.

Conflicted Person has the meaning given in Section 2.6.1.

Congested Corridors

Areas where little or no space is available in the lay position.

Contractor

Any contracted agent that undertakes Work in the Corridor on behalf of the Utility Operator or Corridor Manager.

Corridor – see **Transport Corridor**

Corridor Access Request or CAR

An application by a Utility Operator to carry out Works in the Transport Corridor.

Corridor Manager

The Manager of any Transport Corridor (see **Motorway Corridor Manager**, **Railway Corridor Manager** and **Road Corridor Manager**).

Deadlock

When the two Parties have not been able to resolve a Dispute within 20 Working Days of receipt of the Notice of Dispute.

Deed of Grant

Deed of Grant means a grant of rights to access railway land given pursuant to section 35 New Zealand Railways Corporation Act 1981.

Dispute

A disagreement between the Parties that cannot be resolved through collaboration and cooperation and which results in the issue of a Notice of Dispute from one or more Parties.

Electricity Act

Means the Electricity Act 1992.

Emergency Works

Works that require an immediate response to restore the integrity of the Utility Structure or secure the situation for the safety of the public and relates to:

- restoration of supply following an unplanned outage or interruption of supply;
- rectification of a dangerous situation including support requested by an emergency service; or
- unplanned events that have a significant impact on a Road, a Railway, a bridge, public health, public safety or the security of supply to a network.

Existing Structures

Street furniture and other Utility Structures in or adjacent to the Work Site that are required to be considered as part of the Works.

Footpath

Areas of Road reserve set aside for, or formed specifically for, pedestrian use.

Gas Act

Means the Gas Act 1992.

Government Road

A Government Road is a Road declared by the Minister of Transport by notice in the Gazette as a Government Road.

Government Roding Powers Act

Means the Government Roding Powers Act 1989.

Greenfields

Areas where new Roads are being constructed (generally areas of new subdivision, where alignment of Utility Structures is primarily based on NZS 4404: 2010, Land Development and Subdivision Infrastructure, or on Corridor Manager requirements.

KiwiRail

KiwiRail is the trading name of New Zealand Railways Corporation and its wholly owned subsidiaries.

Lay Position of Utility Structures

The position and alignment of Utility Structures within the Transport Corridor.

Lids

A separable fill piece for an opening; includes infill lids for Special Paving Areas and areas with high traffic volumes such as Arterial Roads and normal design lids used outside of the Special Paving Areas or Arterial Roads.

Local Conditions

Means Reasonable Conditions that are within the meaning set out in Section 4.5.3.1 of this Code.

LGA 1974

Means the Local Government Act 1974.

LGA 2002

Means the Local Government Act 2002.

Local Residential Road

Any Local Road in a residential area.

Local Road

Any Road in a non-residential area that does not meet the definition of Main Road.

Main Road

All Roads classified as Motorways, State highways, strategic, arterial, principal, collectors or Roads with high traffic flows as defined by the relevant Corridor Manager.

Major Arterial Road

A Road that provides interconnections between major sectors of a large area linked with external areas and distributes traffic from major intercity links.

Major Works

Means Utility Operator maintenance or construction Work in, on, along, over, across or under the Transport Corridor, which includes Works undertaken in any of the following situations:

- A trench extending more than 20m along the Road;
- A traffic lane needing to be closed on a Main Road;
- A Road closed for more than two minutes during peak traffic, or business hours in Central Business Districts;
- Work in a State highway;
- Work in a Railway Corridor;
- Work affecting metered parking or other restricted parking areas for more than two hours during normal business hours;
- Work affecting a Road Structure such as a bridge, tunnel, or retaining wall;
- Work needing to be done outside normal hours of work;
- Work restricting property access for more than ten minutes for business or one hour for residential;
- Diverting a footpath for more than eight hours;
- A financial contribution is sought from the Corridor Manager, such as towards the reinstatement of the Road surface.

Notwithstanding these specific criteria, where, due to the scope, location, time, or duration of the Works, the Road Corridor Manager and Utility Operator agree that the Works cause minimal inconvenience to users of the Road Corridor, the Works will be considered to be Minor Works.

Minister

The Minister of the Crown who, under the authority of any warrant or with the authority of the Prime Minister, is for the time being responsible for the Utilities Access Act, or his/her delegated deputy.

Minor Arterial Road

A Road that provides access between Collector Roads and Major Arterial Roads. Minor Arterial Roads have a dominant through-vehicular movement and carry the major public transport routes.

Minor Works

Utility Structure maintenance or construction work in, on, along, over, across or under the Road that has lower impacts than that for Major Works.

Motorway

A Motorway has the meaning given in section 2 of the Government Rooding Powers Act.

Motorway Corridor

For Motorways as defined above: this includes all land from legal boundary to legal boundary, the soil thereof and all improvements fixed to the land.

Motorway Corridor Manager

The NZTA or the Territorial Authority that has jurisdiction over the Motorway (as per the Government Rooding Powers Act). As at the date of this Code, the NZTA has not delegated any Motorways to be managed by a Territorial Authority.

New Zealand Transport Agency or NZTA

The Crown Agency established under section 93 of the Land Transport Management Act 2003 that operates and maintains the State highways, allocates funds for national land transport activities and regulates access to land transport networks.

New Zealand Utilities Advisory Group or NZUAG

A joint consultative group of Utility Operators, Territorial Authorities, NZTA, industry bodies and KiwiRail.

Notice of Dispute

Means the Notice of Dispute issued by a Party in accordance with Section 7.2, the form of which is set out in Schedule A14.

NZRCA

Means the New Zealand Railway Corporation Act 1981.

Party/Parties

One or more of Utility Operators, Corridor Managers, licensed access providers for Railway Land and Territorial Authorities.

Pedestals

The smaller junction units used by Utility Operators containing customer connections.

Permit to Enter

Written authority from KiwiRail to enable physical access to Railway Land (being the equivalent to the WAP for Roads).

Planned Works

Works that Utility Operators or Corridor Managers have scheduled in their annual or long-term capital Works programmes or have specifically identified as being required in the next ten years.

Preliminary Notice

Means the preliminary notice issued in respect of Works pursuant to Section 4.2, and **Preliminary Notification** has a corresponding meaning.

Project Works

Major Works in, on, along, over, across or under the Road or Motorway Corridor that exceeds or is expected to exceed 28 days from commencement to final reinstatement.

In relation to a Railway Corridor, any Work in the Railway Corridor running parallel to a railway line.

Public

Any person other than the Parties bound by this Code.

Quality Plan

The quality assurance document to be provided and implemented by a Contractor or Utility Operator.

Railway Corridor

Means the linear Transport Corridor formed by contiguous Railway Land, and includes street tramways.

Railway Corridor Manager

The licensed access provider who controls access to the Railway Land. This may be KiwiRail, or a heritage and tourist rail owner/manager, or the owner/manager of an industrial rail line and includes the Wellington Cable Car.

Railway Infrastructure

Railway Infrastructure as defined in the Railways Act 2005.

Railway Land

Any land upon which a railway line (as defined in section 4 of the Railways Act) is constructed, along with any adjacent land that is held or used in connection with operating a railway on that railway line.

Railways Act

Means the Railways Act 2005.

Reasonable Conditions

Refers to conditions permitted under section 24(2) of the Electricity Act, section 25(2) of the Gas Act, sections 135(2) and 142(2)(b) of the Telecommunications Act, section 65(2) of the Auckland Council Act and section 52(2) of the Government Roading Powers Act or other Reasonable Conditions that may be applied within the context of this Code.

Relevant Personnel has the meaning given in Section 2.6.3.

Resource Management Act

Means the Resource Management Act 1991.

Road

In the case of Telecommunications, the Telecommunications Act defines Road as:

- (a) a street and any other place to which the public have access, whether as of right or not; and
- (b) land that is vested in a Territorial Authority for the purpose of a road as shown on a deposited survey plan; and
- (c) all bridges, culverts, ferries, and fords that form part of any road, street, or any other place referred to in paragraph (a) or paragraph (b).

In respect of Utility Structures other than Telecommunications, Road has the same meaning as set out in:

- (d) section 315 of the LGA 1974, being a road under the jurisdiction of any territorial authority;
- (e) a public footpath or service lane; or
- (f) a State highway within the meaning of section 2(1) of the Government Roading Powers Act.

The term Road when used in this Code does not include:

- (g) a private road within the meaning of section 315 of the LGA 1974; or
- (h) a Motorway within the meaning of the Government Roading Powers Act; or
- (i) any level crossing, or any roadway laid out by order of the Maori Land Court under Part 16 of the Te Ture Whenua Maori Act 1993 or under any former Act, except where that order has been cancelled, or where the Roadway has been declared under section 320 of that Act to be a Road.

Road Corridor

Includes Roads as defined above and includes all land from boundary to boundary (including the Berm and Carriageway).

Road Corridor Manager

The Territorial Authority or other organisation that has jurisdiction over the Road (as defined in section 315(1) of the LGA 1974), including State highways and Government Roads.

Road Structure

Road Structures means all bridges, culverts, drains, ferries, fords, signs, signals, barriers, gates, walls, buildings or other structures forming or intended by the territorial authority or controlling agency to form part of the Road, State highway, Motorway, or land on which the Road is constructed.

Shoulder

The (sealed and unsealed) portion of the Road or Motorway formation beyond the traffic lanes that is contiguous and flush with the surface of the pavement.

Special Conditions

Special Conditions are Reasonable Conditions that are within the meaning set out in Section 4.5.3.3 of this Code.

Special Paving Areas

Areas of the Road Corridors that are essentially of a decorative or special purpose nature and have been constructed and maintained to a higher standard. Such areas are to be identified by each Corridor Manager.

State highway

State highway has the same meaning as in section 5 of the Land Transport Management Act 2003 except when used in this Code it excludes Motorways.

Telecommunication

As defined by section 5 of the Telecommunications Act.

Telecommunications Act

Means the Telecommunications Act 2001.

Territorial Authority

A Territorial Authority means a city council or district council named in Part 2 of Schedule 2 of the LGA 2002 including Auckland Transport.

Third Party Damage

In relation to an agreement between two Parties or parties, means either damage caused to an asset owned by one of the Parties by another independent party or damage caused by one of the Parties to an asset owned by an independent party.

Traffic

Pedestrians, cyclists and vehicles legally in a Transport Corridor.

Traffic Management Plan or TMP

An approved site-specific plan, which addresses the management of movement of vehicles, cyclists and pedestrians through or past the Work Site and the safety needs of both the public, the Contractors and (for Railway Corridors) persons who access the Railway Land. For Road Corridors, the TMP must be in accordance with the Code of Practice for Temporary Traffic Management.

Transport Corridor

Includes Road Corridors, Motorway Corridors and Railway Corridors as defined in this Code.

Trench

Any excavation within a Transport Corridor for the purpose of maintaining, locating, or installing Utility Structure.

Utilities Access Act

Means the Utilities Access Act 2010.

Utility Operator

- (a) in relation to electricity infrastructure, an electricity operator as defined in section 2(1) of the Electricity Act;
- (b) in relation to gas infrastructure, a gas operator as defined in section 2(1) of the Gas Act;
- (c) in relation to telecommunications infrastructure, a network operator as defined in section 5 of the Telecommunications Act;
- (d) in relation to water and wastewater infrastructure, a Territorial Authority as defined in section 5 of the LGA 2002 or any person acting on behalf of a Territorial Authority in relation to that infrastructure;
- (e) in relation to public letterboxes, a postal operator as defined in section 2(1) of the Postal Services Act 1998

Utility Structure

Any tower, pole, cabinet, post, pipes, cables, chambers, drains, street furniture assets, or other structure lawfully upon or in or over a Transport Corridor; and includes any equipment that must be removed with the Utility Structure if the Utility Structure is removed; but does not include:

- (a) any part of a bridge or culvert;
- (b) any fence, gate, or cattle stop erected in accordance with this Act or the LGA 1974;
- (c) anything provided for the assistance or control of traffic; and
- (d) any Utility Structure that was erected when the land was not a Road.

Warranty

A guarantee or promise given by one Party to another stating that a product or service is free from defects and that the warranting Party will, without charge, repair or replace defective Works within a given period.

Work or Works

Maintenance or construction work in, on, along, over, across or under the Transport Corridor or any other work in a Road Corridor that the Utility Operator can carry out as authorised under section 24(1) of the Electricity Act, section 25(1) of the Gas Act, section 65(1) of the Auckland Council Act and sections 135 and 142 of the Telecommunications Act. See also **Major Works, Minor Works, Project Works** or **Emergency Works**.

Work Site

Any one area of Work being carried out in, on, along, over, across or under the Transport Corridor pursuant to a WAP or Permit to Enter and as approved by the Corridor Manager.

Working Day

The definition of Working Day is set by the relevant legislation under which an application is being sought.

Works Access Permit or WAP

A written permission from the Corridor Manager to enable Works on a Road or Motorway Corridor to proceed.

Works Completion Notice

A written acknowledgement that the Work has been satisfactorily completed.

Abbreviations Used

AADT	Average Annual Daily Traffic
CAR	Corridor Access Request
CoPTTM	Code of Practice for Temporary Traffic Management
km/h	kilometres per hour
kPa	kilopascals
kV	kilovolts
m/s	metre/s
mm/s	millimetre/s
MOTSAM	Manual of Traffic Signs and Markings
MVA	Megavolt amperes
NZRCA	New Zealand Railways Corporation Act 1981
NZTA	New Zealand Transport Agency
NZUAG	New Zealand Utilities Advisory Group
TMP	Traffic Management Plan
TQS1	NZTA/Transit Quality Standard 1
TQS2	NZTA/Transit Quality Standard 2
WAP	Works Access Permit

1. Introduction

1.1 Scope

This Code sets out the processes and procedures for:

- a) Utility Operators to exercise their right of access to the Road Corridor¹ for the placement, maintenance, improvement and removal of Utility Structures;
- b) Corridor Managers to exercise their right to apply Reasonable Conditions on working in the Corridor; and
- c) Managers of Railway and Motorway Corridors to exercise their discretion to grant rights of access to Utility Operators².

Figure 1-1 illustrates the layout of the Code. Sections 5 and 6 apply only to Works in Roads and Motorways. The equivalent guidance for Works construction in Railway Corridors is set out in KiwiRail's Specifications for Working in Railway Corridors.

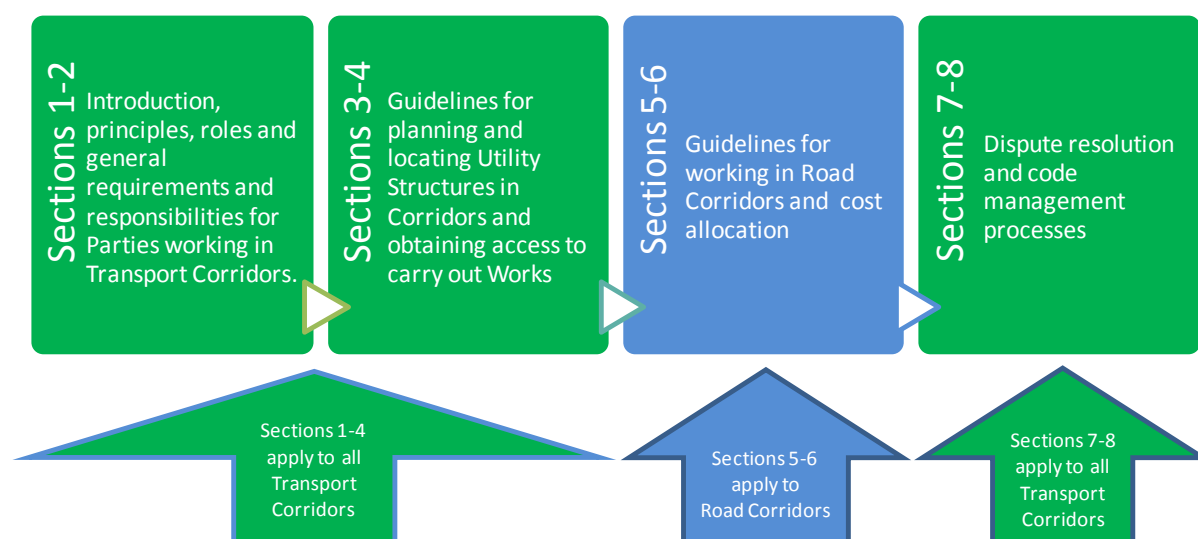


Figure 1-1: Application of Code to Corridor Types

1.2 Legal Framework

1.2.1 Legislative Scope of Code

In accordance with section 9 of the Utilities Access Act, the purpose of this Code is to enable access by Utility Operators to Transport Corridors to be managed in a way that:

- a) maximises the benefit to the public while ensuring that all Utility Operators are treated fairly;
- b) ensures that disruptions to Roads, Motorways, and railways caused by Work by Utility Operators are kept to a minimum, while maintaining safety; and
- c) provides a nationally consistent approach to managing access to Transport Corridors.

¹ The right of access applies only to Roads and excludes Motorways.

² Noting that in the instance of existing Works or at Railway Level Crossings there is an existing right of access in some cases, as set out in Section 1.2.2 below.

This Code provides mandatory requirements and supporting guidance to assist Utility Operators and Corridor Managers in exercising these rights and complying with legislation relating to Utility Operators' access to Transport Corridors. As illustrated in Figure 1-2, the Code processes are separate from, and do not over-ride, the obligation to comply with the requirements of the Resource Management Act or any other relevant legislation.

1.2.2 Legislation Governing Railway Access

KiwiRail's operations are governed by the NZRCA, the Railways Act and the State Owned Enterprises Act 1986. Other Railway Corridor Managers' activities are governed by the Railways Act and in some cases the Reserves Act 1977.

In respect of access:

1. KiwiRail grants access rights to place Utility Structures in Railway Land in accordance with section 35 of the NZRCA.
2. Section 35(4) NZRCA provides that KiwiRail's rights to grant access are subject to the Telecommunications Act, Electricity Act and Gas Act. Utility Operators covered by these Acts have rights as follows:
 - a) **Existing Works:** Under the Telecommunications Act and Electricity Act the owners of Existing Works (as defined in those Acts) have statutory rights to enter the Railway Land where these Existing Works are located. Under the Gas Act the owners of Existing Fittings (as defined in that Act) have equivalent statutory rights;
 - b) **Level Crossings:** Utility Operators governed by the Electricity Act and Gas Act have the right to seek court orders requiring access to be given at level crossings for the purposes of construction and maintenance of their facilities where there is no practical alternative route.
3. There are no statutory rights of access for cases other than those specified in Clause 2. Access rights are by agreement with KiwiRail; and
4. Section 75 of the Railways Act requires all Utility Operators (even where the above statutory or agreed rights apply) to obtain the Railway Corridor Manager's consent before entering the land. Therefore Utility Operators must follow the CAR process when seeking to gain access, regardless of whether the above statutory rights apply.

1.3 Code Limitations

Some installations of electricity lines carrying voltages greater than 110 kV and 100 MVA capacity, or gas lines with pressures greater than 2000 kPa, do not have direct legal right of access to the Road Corridor. Corridor Managers have indicated the intent to use the procedures outlined in this Code and the expectation that those Utility operators will also comply with the procedures outlined in the Code. In some situations, additional approval processes will still be required.

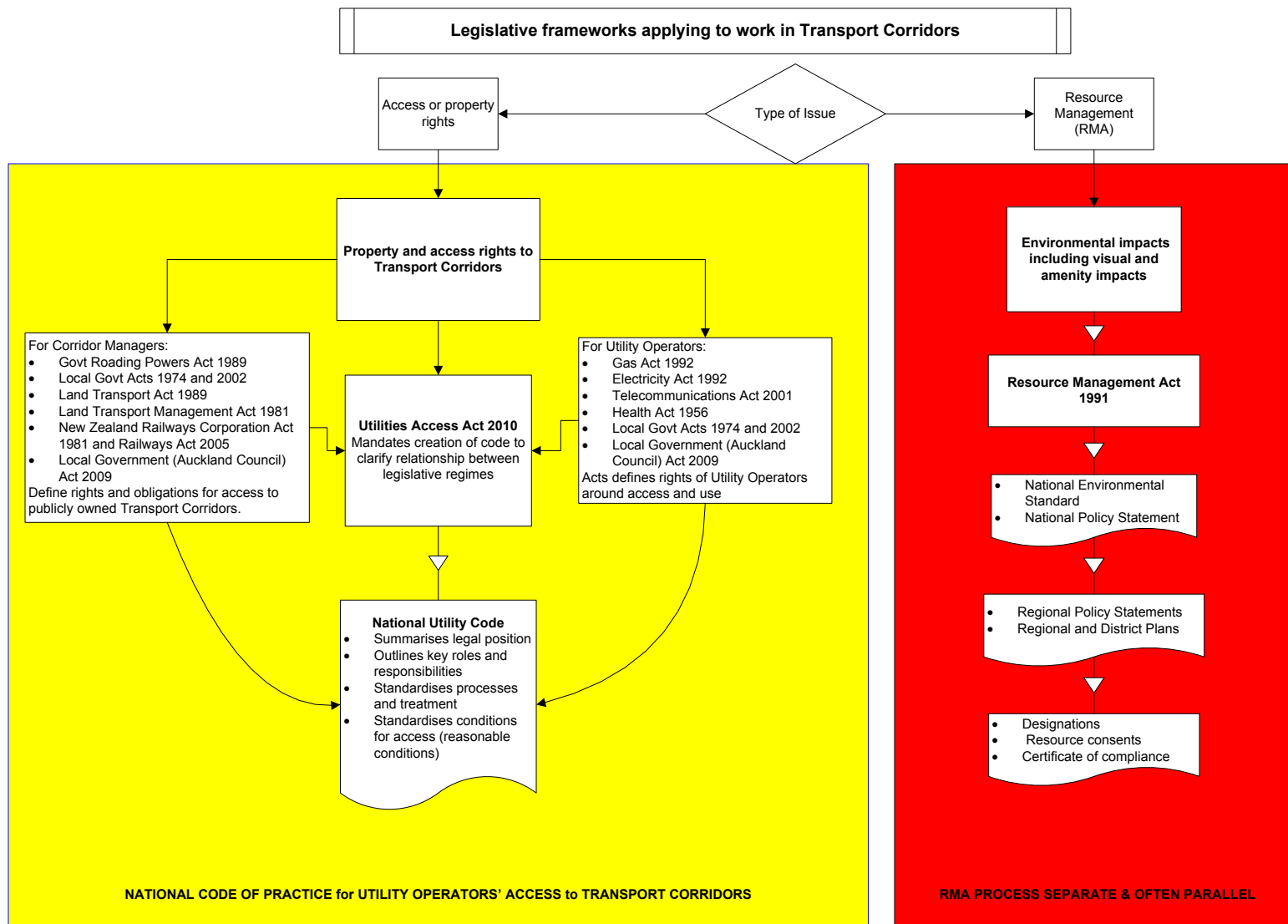


Figure 1-2: Legislative Scope of Coverage of this Code

1.4 General Principles

All Parties must apply this Code within the context of the following principles:

- Working Together:** Each Party will work together and cooperate to ensure that:
 - where Utility Operators have a right of access, that right is fairly balanced against the Corridor Manager's right to set Reasonable Conditions for Work;
 - the applications process is streamlined and delay is minimised; and
 - where Parties are unable to reach agreement, each Party involved participates in the Disputes resolution process in good faith.
- Consistency and Efficiency:** Consistent procedures will be applied that enable the Parties to plan and work cost-effectively while preventing avoidable damage to Transport Corridors and Utility Structures and reducing delays and Disputes.
- Technical Excellence:** The Parties will foster the adoption of best practice standards, technical excellence and a competent workforce.
- Quality:** The Parties will foster the adoption of quality assurance processes and ensure that Work is carried out in a competent and professional manner to ensure that quality outcomes are delivered.
- Equity and Fairness:** Each Party will deal with other Parties fairly, honestly, equally, without prejudice or bias, and with due regard for the known intentions of the other Parties.
- Respect for others:** All Parties will respect others' assets and property rights when carrying out Works in Transport Corridors. All Parties have a responsibility to preserve, promote and balance the diverse values and uses of Transport Corridors.
- Safety:** All Parties recognise that Transport Corridors are dangerous working environments and will work together to enhance Transport Corridor safety.

1.5 Rights of Access to Transport Corridors

Figure 1-3 illustrates the rights of access to the different Transport Corridors.

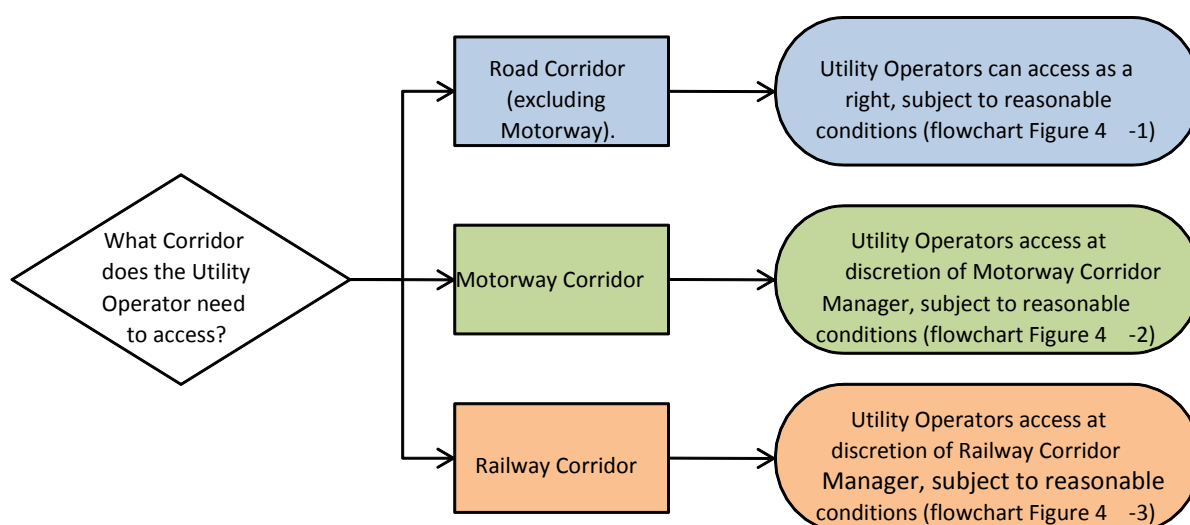


Figure 1-3: Rights of Access

2. General Requirements

The purpose of this Section is to outline matters common to all Utility Operator access to Transport Corridors.

2.1 Rules for Interpreting the Code

All Parties must interpret this Code as follows:

1. The following terms are used:
 - a) 'Must' indicates minimum and mandatory requirements for Corridor Managers and Utility Operators;
 - b) 'Must, where practicable' indicates that the requirement is mandatory unless the Party can demonstrate they are unable to reasonably apply it;
 - c) 'Must consider' indicates that the Party must be able to demonstrate that they have considered those requirements;
 - d) 'Should' is used to indicate best practice advice which Utility Operators and Corridor Managers must try to comply with in good faith; and
 - e) 'May' is used to indicate that the Party or Parties are able to carry out that requirement at their discretion.
2. Where the Code specifies that the Parties must agree on requirements, this agreement is to be made in writing.
3. Reference to a Section, Clause or Schedule is a reference to that Section, Clause or Schedule in this Code.
4. A reference to any Act or regulation includes all subsequent Acts and regulations, and includes relevant Acts or regulations in amendment of, or substitution for, the same.
5. A reference to any Standard or other document includes reference to that document as amended, supplemented or replaced from time to time.
6. A reference to any document includes any amendments to that document that are in force, and any document issued in substitution.
7. If this Code conflicts with any legislative provision, the legislative provision will prevail.
8. This Code replaces and supersedes any voluntary code of practice covering Utility Operators' access to and working in the Transport Corridors.
9. This Code is not retrospective. It will have legal force on the date stipulated when approved by the Minister under the Utilities Access Act. It does not apply to any application lodged or Work commenced by the Utility Operator before the commencement date. It does not require the relocation of Transport Corridor assets that exist at the commencement of this Code.
10. Where Parties agree terms and conditions between themselves that vary from this Code, they must still comply with all legislative requirements.
11. This Code does not indemnify any Party from any liability that they may incur when carrying out Works in accordance with this Code.
12. Unless otherwise specified, any period of time from a given time, an act or event as prescribed in this Code is determined as being exclusive of that day or the day of the act or event.

2.2 Role and Responsibilities

2.2.1 All Parties

All Parties must:

- a) undertake their specific responsibilities outlined in this Code;
- b) advise the known location of their own assets in the Transport Corridor to Parties planning Works;
- c) take all practicable steps to protect other Parties' assets when working in Transport Corridors; and
- d) act in good faith in all their endeavours even if they are in dispute, and resolve matters as quickly as possible.

The Parties should cooperate, collaborate and engage with each other constructively through open communication and maintain formal and informal communications with all other Parties. Where the Code requires the Parties to agree a solution or process, the Parties should exhaust all efforts to reach agreement by collaboration and cooperation. The Dispute resolution processes set out in Section 7 are seen as an avenue of last resort where all reasonable attempts to reach agreement have failed.

2.2.2 Road and Motorway Corridor Managers

1. The Road Corridor Manager, must:

- a) coordinate, where practicable, Works in the Road Corridor including providing advice on all Parties' Planned Works programmes and leading regional coordination meetings (Section 2.7);
- b) receive and process notifications of proposed Works in the Road Corridor (Section 4);
- c) set Reasonable Conditions for any Works in the Road Corridor which are consistent with this Code (Section 4.5); and
- d) ensure and enforce compliance with these Conditions and with this Code.

Where State highways pass through urban areas, the Corridor Manager role may be split between the NZTA and the Territorial Authority. In this instance, the point of contact is the NZTA and it is the responsibility of the NZTA to coordinate the response. Where a Road Corridor also contains a Rail Corridor for light rail, the point of contact is the Road Corridor Manager, and it is the responsibility of the Road Corridor Manager to coordinate the response.

2. The Motorway Corridor manager must:

- a) coordinate, where agreed and practicable, Works in the Motorway Corridor including providing advice on all Parties' Planned Works programmes;
- b) receive and process notifications of proposed Works in the Motorway Corridor (Section 4);
- c) set Reasonable Conditions for any Works in the Motorway Corridor which are consistent with this Code (Section 4.5); and
- d) ensure and enforce compliance with these Conditions and with this Code

3. Where a Road or Motorway Corridor Manager is also a Utility Operator:

- a) the Corridor Manager must, while performing any functions of the Corridor Manager, also comply with the roles and responsibilities of a Utility Operator as defined in legislation and this Code; and
- b) deal with any potential conflicts of interest arising from performing both functions, in accordance with Section 2.6.

2.2.3 Railway Corridor Manager

The Railway Corridor Manager must:

- a) receive and process requests for access across or along the Railway Corridor (Sections 4.3 and 4.9);
- b) set terms and conditions for any Work in the Railway Corridor that are consistent with this Code (Section 4.9);
- c) be responsible for ensuring and enforcing compliance with these conditions and with this Code; and
- d) participate as required in regional coordination and liaison meetings.

2.2.4 Utility Operator

The Utility Operator must:

- a) notify the Corridor Manager of any Planned Works in the Transport Corridor in accordance with this Code, in both a wider planning sense and in relation to specific Works (Sections 2.7.1 and 4);
- b) comply with this Code and with any Reasonable Conditions set by the Corridor Manager in relation to their Works; and
- c) participate as required in regional coordination and liaison meetings (Section 2.7).

2.2.5 Compliance by Suppliers and Agents

Each Party is responsible, in respect of this Code, for the competency, actions and omissions of its delegates, agents, consultants, Contractors and employees except to the extent that any Act provides otherwise. Each Party must ensure that its agents act in accordance with this Code.

2.3 Legislative and Regulatory Duties

When planning for or carrying out Work in the Transport Corridor, the Parties have a duty to:

- a) operate within the legislative framework, including the Acts listed in Figure 2-1, any amendment to these Acts and any applicable regulations, rules or bylaws under these Acts; and
- b) be aware of, and comply with where legally required to, any applicable codes of practice, rules, bylaws, and standards such as those issued by the Department of Labour, Ministry of Economic Development, NZTA, KiwiRail, Territorial Authorities, Standards New Zealand as well as any international standards that are known and accepted to be best practice within the New Zealand industry.

Clause b) does not override any specific obligation in this Code.

Consents or permission given under this Code by any Party do not replace any requirements for permits and consents for the Works required under other legislation (for example, the Resource Management Act).

2.4 Quality Management

2.4.1 Quality Plan

Utility Operators must ensure that, in respect of Works undertaken in the Transport Corridor, there is an appropriate Quality Plan in place which applies to the Works that is available on request by the Corridor Manager or other affected Utility Operators.

With regard to Project Works, the appropriate level of quality assurance to be applied should be at least equivalent to NZTA Quality Standard TQS1.

Utility Operators should have procedures and processes for ensuring the Works are carried out in accordance with the Code. These should generally include, but not be restricted to:

- a) obtaining the Works Access Permit (WAP) or Permit to Enter through the Corridor Access Request (CAR) process;
- b) ensuring that the standards of workmanship required by this Code are fulfilled;
- c) providing a Works Completion Notice to the Corridor Manager;
- d) detailing outstanding Works required to be completed;
- e) ensuring environmental and public risks such as noise and pollution are managed;
- f) producing and implementing a communication strategy for Major Works and Project Works;

Arbitration Act 1996 Building Act 2004 Commerce Act 1986 Electricity Act 1992 Gas Act 1992 Government Rooding Powers Act 1989 Health Act 1956 Health and Safety in Employment Act 1992 Historic Places Act 1993 Land Transport Act 1998 Land Transport Management Act 2003 Local Government Acts 1974 and 2002 Local Government (Auckland Transitional Provisions) Act 2010 Local Government (Auckland Council) Act 2009 Local Government Official Information and Meetings Act 1987 New Zealand Railways Corporation Act 1981 Official Information Act 1982 Postal Services Act 1998 Railways Act 2005 Reserves Act 1977 Resource Management Act 1991 State Owned Enterprises Act 1996 Te Ture Whenua Maori Act 1993 Telecommunications Act 2001 Utilities Access Act 2010

Figure 2-1: Legislation Relevant to Utility Operators' Access to Transport Corridors

- g) notifying affected residents and businesses of the proposed Work;
- h) reinstatement of all existing Corridor assets including markings , signs and any other Corridor furniture;
- i) minimising any damage to key features such as trees and landscape features;
- j) working around other Utility Structures;
- k) operating the Work Site safely;
- l) audit procedures on the Works and resulting records management;
- m) situations where a site-specific Quality Plan will be produced for more significant Works; and
- n) at all times when on Railway Land, complying with the instructions of the train controller and the person-in-charge of the Work Site, or any other person authorised by them.

The Corridor Manager may identify the level of quality assurance (appropriate to the size and complexity of the Works, and the scale of the Transport Corridor) in the conditions for the proposed Works.

2.4.2 Audit Process

The Utility Operator must:

- a) retain quality management records and make these available to the Corridor Manager or other affected Utility Operators on request; and
- b) make allowance for the Corridor Manager to undertake independent inspections/audits and carry out any independent conformance testing on the Work Site, to satisfy themselves as to the standard of completion of the Works.

Any audits by the Corridor Manager do not replace the Utility Operator requirements.

Where audits show that Work is consistently of the appropriate standard, the Corridor Manager may limit the extent of audits that are required.

To enable performance evaluation, there may be sharing of audit and quality information amongst Corridor Managers and Utility Operators within regions.

2.4.3 Use of Forms and Templates

Utility Operators and Corridor Managers must use the forms and templates in Schedule A and Schedule B for procedural matters under this Code, subject to the following:

- a) any variations to the forms in Schedule A are agreed between all affected Parties; and
- b) forms are substantively similar to those in Schedule A; and
- c) there are no variations made to the template for Reasonable Conditions (Schedule B).

2.5 Health and Safety

1. Each Party must at all times comply with health and safety legislation and regulation including the Health and Safety in Employment Act 1992, appropriate Department of Labour health and safety guidelines, and on Railway Land, the Railways Act.
2. For the Utility Operator, this must include, but is not limited to:
 - a) adhering to a site-specific health and safety management plan and procedures;
 - b) developing, obtaining approval for and implementing the site's Traffic Management Plan (TMP);
 - c) obtaining the plans for existing underground and overhead Utility Structures;

- d) marking out the existing Utility Structures on site;
 - e) ensuring existing underground and overhead Utility Structures are not damaged, and maintaining minimum Utility Structure clearances;
 - f) notifying Work Site accidents and property damaged by the Works;
 - g) establishing air space requirements prior to use of lifting and construction equipment;
 - h) excavating and trenching in accordance with the appropriate codes of practice and Section 5.5; and
 - i) complying with the aspects relating to licensed railway systems, as set out in the railway Permit to Enter and the approved site safety plan.
3. The Parties must ensure that any persons entering a Work Site when Work is underway must comply with relevant health and safety legislation, codes of practice and any safety requirements prescribed for those Works by the Corridor Manager.

2.6 Conflicts of Interest

2.6.1 Deemed Conflict of Interest

Where a Party is:

- a) a Corridor Manager and a Utility Operator; or
- b) a Utility Operator for more than one Utility Structure,

in relation to the same Works, then a conflict of interest is deemed to exist and the relevant Party is deemed to be a **Conflicted Person** for the purpose of Section 2.6.

2.6.2 Identification and Disclosure of Conflict of Interest

Where a conflict of interest is deemed to exist in accordance with Section 2.6.1, then prior to the commencement of the lodgement of the CAR, the Conflicted Person must disclose this conflict of interest in writing to all Parties interested in the Works (**Conflict Disclosure**). The Conflicted Person must also send a copy of this disclosure to the NZUAG for record keeping purposes.

The NZUAG will maintain a register of Conflict Disclosures which is available for inspection on request.

2.6.3 A Conflicted Person's obligations

Where a conflict of interest is deemed to exist under Section 2.6.1, the Conflicted Person must comply with the following obligations:

- Where the Conflicted Person is both a Corridor Manager and a Utility Operator in respect of the same Works, the Conflicted Person must:
 - inform its employees and agents that will be processing the CAR (**Relevant Personnel**) of the conflict of interest;
 - require the Relevant Personnel to follow the same process and apply the same criteria in relation to the CAR as the process followed in respect of CARs lodged by all other Utility Operator applicants;
 - ensure that all relevant employees and agents involved in the lodgement of the CAR are excluded from the process of assessing and approving the CAR; and
 - ensure that appropriate records of the processing of the CAR are kept so that the Conflicted Person can demonstrate that the requirements of this Section 2.6.3 have been

complied with (including where any dispute has arisen as contemplated in Section 2.6.4).

- Where the Conflicted Person is the operator of more than one Utility Structures in relation to the Works, the Conflicted Person must:
 - inform its employees and agents that will be involved in lodging the CAR of the conflict of interest;
 - submit every CAR application in accordance with the applicable legislation that applies to that particular Utility Structure; and
 - to the extent applicable, ensure that the CAR application identifies where Work is planned on different but co-located Utility Structures.

A Party which may become a Conflicted Person under Section 2.6.1 must implement and maintain a conflicts of interest policy in a manner consistent with this Section 2.6.2. This policy must be published internally and be brought to the attention of the employees and agents of the Conflicted Person who may potentially be required to comply with the policy.

2.6.4 Disputes Relating to Conflicts of Interest

Where an affected Party reasonably believes that a Conflicted Person has failed to comply with the Conflicted Person's obligations contained in Section 2.6.3, or that it has been unfairly disadvantaged in relation to Works due to a conflict of interest arising under Section 2.6.1, then that affected Party may initiate the Dispute resolution process contained in Section 7 of the Code.

2.6.5 Guidance on Managing Conflicts of Interest

The Office of the Auditor-General Parties has identified best practice for managing conflicts of interest in the publication *Managing conflicts of interest: Guidance for public entities*. The following summarises the content of this publication and is provided to help the Parties understand the expectations and duties on them to properly deal with the issues of conflicts of interest.

There are two aspects to dealing with particular situations where conflicts of interest arise that should be dealt with in the process:

- c) identifying and disclosing the conflict of interest (primarily the responsibility of the person/s concerned); and
- d) deciding what action (if any) is necessary to best avoid or mitigate any effects of the conflict of interest (primarily the responsibility of the Party concerned).

The primary obligation to determine the appropriate next steps (and to direct the affected person/s accordingly) lies with the Party.

Secondly, the Party should consider whether it has any relevant policy that contains a clear rule covering the situation.

Thirdly, if no relevant legal requirement or policy applies (or after any such rule has been complied with), then the Party should also consider whether anything more needs to be done.

In exercising discretionary judgement, the Party needs to assess carefully:

- a) the seriousness of the conflict of interest; and
- b) the range of possible mitigation options.

The possible mitigation options (in order approximating lowest to highest severity) may include:

- Taking no action;

- Enquiring as to whether all affected Parties will consent to the person's ongoing involvement;
- Seeking a formal exemption to allow ongoing participation;
- Imposing additional oversight or review over the person;
- Exclusion from any committees or working groups dealing with the issue;
- Re-assigning certain tasks or duties to another person;
- Agreement or direction not to do something;
- Withholding certain confidential information, or placing restrictions on access to information;
- Transferring the person (temporarily or permanently) to another position or project;
- Relinquishing the private interest; or
- Resignation or dismissal from one or other position or Party.

Any Party which believes that conflicts of interest in respect of this Code are not being appropriately dealt with may use the Disputes resolution process.

2.7 Coordination

2.7.1 Sharing Planned Works Programmes

1. The Corridor Manager must:
 - a) coordinate, where practicable, Works in its Transport Corridors; and
 - b) provide information on forward schedules of its Planned Works in the Transport Corridor to Utility Operators.
2. Utility Operators must:
 - a) undertake strategic forward planning to identify Planned Works requirements;
 - b) provide information on Planned Works programmes to Corridor Managers;
 - c) provide information on Planned Works programmes to other Utility Operators (subject to requirements to keep certain information confidential); and
 - d) provide available information on redundant Utility Structures or assets on request by Corridor Managers or other Utility Operators.

Changes to national policy, environmental, safety and community objectives can all require further developments within the Transport Corridor and coordination may be required to support this development. It is recognised that not all Work can be anticipated, however new installations and network upgrades generally can be, and Utility Operators should aim to make this information available to assist with Works coordination.

2.7.2 Participation in Liaison Meetings

1. The Corridor Manager must facilitate:
 - a) regular liaison meetings with all Parties to improve coordination and planning of activities in the Transport Corridor between all Parties;
 - b) strategic high level planning meetings with individual Utility Operators to discuss their annual plans and longer term planning and coordination; and
 - c) operational meetings on the nature and timing of future Works, and to facilitate the coordination of Works.

2. All Parties must disclose information at these meetings in a timely manner, to assist the coordination of Works. Where this information is provided as confidential information to the Corridor Manager, the requirements of Section 2.8.3 apply.

The primary objective of the liaison meetings is to share information and coordinate Work programmes to minimise disruption and damage during Works. The meetings may be held monthly or bi-monthly, but should be at least once a year. A person of appropriate authority should represent each Party at the meetings.

Liaison meetings are also an opportunity to discuss matters such as:

- Further simplification of processes for Works that do not require opening or breaking up a Road or that are on a low traffic volume road;
- Processes for dealing with emergency situations in Transport Corridors;
- Consideration of opportunities to use or remove redundant or abandoned assets, and or to install ducts for future use (refer Sections 3.5 and 3.6);
- Whether Local Conditions may be required and, if so, what these conditions should cover;
- Processes for working around trees;
- Raised awareness of Utility Operator issues and needs, such as inappropriate tree planting near Utility Structures;
- The development of corridor management policy, frameworks or procedures to ensure coordinated outcomes are achieved that address all Parties' needs;
- Consideration of issues relating to 'lifelines' co-location (for example, where having a number of highly critical assets in the same Transport Corridor creates a point of significant vulnerability); and
- Working together to enable development within the Transport Corridor, such as consideration of relocation of Utility Structures where appropriate and practicable.

Note that the Corridor Manager should liaise with all internal departments (such as safety, parks, reserves, trees) in relation to any other requirements that these departments may have with respect to working in the Transport Corridor.

2.8 Sharing Information

2.8.1 Maintaining and Providing Information on Utility Structures

1. Each Utility Operator must, in respect of existing Utility Structures:
 - a) hold records of the nature and location of its existing Utility Structures in each Transport Corridor, where known;
 - b) advise the Corridor Manager of the presence (not detailed location) of its Utility Structures in each Transport Corridor within the Corridor Manager's territory as soon as practicable from the commencement of the Code;
 - c) provide specific detailed location information at other times, when required by Corridor Managers or other Utility Operators;
 - d) ensure the information supplied is as accurate as reasonably possible; and
 - e) supply technical assistance, to a Party planning Works, for locating Utility Structures where reasonable and appropriate.
2. Corridor Managers must:
 - a) provide an appropriate process for capturing the information from Section 2.8.1.1(b);

- b) provide, on request by any Utility Operator, advice as to what Transport Corridor, Utility Structures and Works notified under Sections 2.7 and 4.3 are likely to be in the area of, and affected by, proposed Works; and
 - c) provide, on request by any Utility Operator, advice on usage patterns in the Transport Corridor and on nearby Roads (to the extent known).
3. Each Party must, in respect of Works in Transport Corridors completed after commencement of the Code:
 - a) keep accurate records and, within a reasonable timeframe, make them available on request to Corridor Managers and Utility Operators planning Works in those Transport Corridors; and
 - b) complete the final as-built plans as soon as practicable but no later than three months after the completion of Works.
 4. For underground Utility Structures in Transport Corridors, the Utility Operators must ensure that methods other than simple depths are used to record the location of those Utility Structures in the future, given that surface level changes (reseals, etc) will occur over time.

Information that the Utility Operator captures on the location of new and exposed Utility Structures should be accurate enough to enable future location and identification of the Utility Structures. Where practicable, the Utility Operator should aim for accuracy for new location data of ± 0.3 m in the horizontal direction and ± 0.1 m in the vertical direction, in relation to accepted survey datum.

Each Party should try to manage its records in an electronic format capable of being exchanged with other Utility Operators and Corridor Managers.

Poor data on location of Utility Structures in Transport Corridors is contributing to an unnecessary level of Third Party Damage, additional costs and liabilities, delayed Works and reduced performance of all Utility Structures. Placing responsibility for maintaining and providing accurate location information with the Utility Operator is a means of ensuring the information is accurate on an ongoing basis. However, some historical information held by Utility Operators regarding the location of Utility Structures may not be accurate: for example, it may be based on the location of other infrastructure that has since been relocated, such as kerb sides. Therefore, it is important that all Parties take the opportunity to confirm asset location when they expose Utility Structures during Works.

There may also be other important information exchanges, such as standards relating to any working practices in the vicinity of Utility Structures or urgent contact information in the event of damage to Utility Structures.

2.8.2 Verifying Asset Information during Works

Where a Utility Operator finds a new or changed location for its own Utility Structures, it must:

- a) confirm or amend the location of its own existing Utility Structures in its records; and
- b) add any previously unknown Utility Structures to its own records.

If a Utility Operator finds an Utility Structures not shown, or shown inaccurately on the plan, the requirements of Section 5.2.2 apply.

2.8.3 Maintaining Information Confidentiality

1. The recipient Party must, subject to its legal obligations, respect the confidentiality of information received according to the classification given by the provider.
2. Where a Utility Operator provides information classified as confidential, the Corridor Manager must check with that Utility Operator before disclosing the information to other parties.

Any sharing of commercial information requires a rigorous process to protect the confidentiality of that information and to ensure that the Parties only use the information for the purpose of improved Transport Corridor Works coordination. Given the commercial sensitivity of some Utility Operator information provided under this Code, care should be taken to ensure that release of the information is considered in the light of section 9(2) of the Official Information Act 1982 and section 7(2) of the Local Government Official Information and Meetings Act 1987. In particular sections 9(2)(b)(ii) and 9(2)(ba)(i) of the Official Information Act 1982 need to be considered before any commercial information provided in confidence is given to other parties.

This Code does not limit the rights or obligations of any Party under either of those Acts.

3. Planning for New Assets in the Transport Corridor

The requirements in this Section must be read in conjunction with the Principles, Roles and Responsibilities and General Requirements outlined in Sections 1 and 2.

3.1 General Requirements for Location of Utility Structures

1. Where practicable, Utility Structures must be positioned:
 - a) in the Transport Corridor:
 - i. as close as possible to the property boundary; and
 - ii. in an area designated for, or already used by, Utility Structures; and
 - b) in the Road Corridor (in addition to the requirement in Clause (a) above):
 - i. parallel or perpendicular to the Road centreline (to ensure that new Work does not intrude into space that could inhibit future use by others);
 - ii. outside the Carriageway (particularly where the operating speed is greater than 70km/h);
 - iii. with at least 300mm separation, and ideally with 1m separation, from the kerb and channel or vertical front face of the catchpit, sump or subsoil drainage area, leaving this area free for its land drainage function; and
 - iv. to maintain the following minimum footpath widths: 1.5m in residential areas, 2.5m in commercial areas, and 3m for combined foot/cycle paths;
2. If the Utility Structures cannot be located in accordance with the above requirements, or if the Utility Operator considers another location is optimal, then the Utility Operator must discuss and agree an alternative solution with the Corridor Manager.
3. If a Utility Structure is to be located in a section of Road scheduled to become a Motorway in the future, then placement must consider the factors in Section 4.8.

In identifying the proposed Utility Structure location, a Utility Operator should also consider the following:

- Spacing and location in accordance with the statutory and declared operational requirements of Utility Operators and Corridor Managers (such as subdivision standards, NZS 4404: Land Development and Subdivision Infrastructure, or district plan requirements);
- Using the preferred lay position, which is the 'back berm' (where the front berm is the zone between the kerb and the footpath and the back berm is the remainder of the area to the property boundary);
- Best use of available underground space, such as installing multiple ducts in a vertical configuration where it is practicable and not likely to cause conflict between longitudinal and lateral lines;
- Minimising effects on existing above-ground Utility Structures, trees and street furniture;
- Not unreasonably inhibiting the free flow of traffic, including pedestrians, especially on busy Roads (consideration should be given to using less busy Roads);
- Placing bulk Utility Structures beneath the Carriageway outside of wheel track alignments in urban areas (to free berm space for other Utility Structures);
- Positioning Utility Structures so that access to maintain and develop the network can be undertaken while minimising the effect on traffic;
- Minimising the number of transverse crossings in the Transport Corridor;
- Minimising impacts on other Utility Operators and property owners and occupiers;
- Coordinating Works with other Parties;
- Avoiding Roads with high speeds, traffic volumes or of other significance to one of the Parties for some reason (more appropriate in a Greenfields situation); and

- The risks of land stability or earth movement, if placing Utility Structures in embankments (specialist technical investigation may be required).

3.2 Specific Requirements for Underground Utility Structures

3.2.1 Location and Design for all Transport Corridors

As well as the general requirements in Section 3.1, underground Utility Structures must meet the following requirements:

1. The Corridor Manager must, in consultation with owners of any affected Utility Structures, approve the specific location of underground Utility Structures prior to their installation.
2. Underground Utility Structures must be of minimal size to meet functional requirements.
3. Duct colours for the different Utility Structures must be in accordance with the guidelines as specified in Clause 34 of the Department of Labour Guide for Safety with Underground Services (2002).

3.2.2 Depth Requirements for Railway Corridors

Depth requirements for KiwiRail's Railway Corridors are specified in KiwiRail's Specifications for Working in Railway Corridors. Other Railway Corridor Managers may have the same or similar requirements.

3.2.3 Depth Requirements for Road and Motorway Corridors

Road and Motorway Corridor Managers and Utility Operators must agree a suitable process for optimal depth determination that takes into account the risks and outcomes required by all Parties.

This process for optimal depth determination should be in accordance with the risk assessment process in Table 3-1, unless both Parties agree otherwise. As a starting point, there could be an agreement to continue to use those depths applied historically for that area, with the use of a risk assessment model only for defined circumstances.

The depth of existing Utility Structures varies between localities, Corridor Managers and Utility Structures. There are many factors that influence the optimal location and depth of a Utility Structure, such as traffic volume/loading, underground environment and the type of assets being laid. Therefore this Section sets out a process for establishing depths rather than prescribing standard depths.

Where a temporary arrangement may be required because of coordination of Works in the Road Corridor, the Parties may form an agreement to locate Utility Structures in a temporary location for an agreed period.

3.2.4 Lids and Chambers in Roads

- 1 Lids and Service Covers in the Road Carriageway must:
 - a) in the Carriageway, achieve a skid resistance classification of either class 'V' or 'W'; in accordance with AS/NZS 4586: 2004, Slip resistance of new pedestrian surface materials;
 - b) be positioned outside the wheelpath and the area within any intersection (where they have to be in the Carriageway); and
 - c) be secured to prevent displacement by traffic in Carriageway areas.
- 2 Chambers, covers, lids and Structures in the Road Carriageway must:

- a) be designed in accordance with the loadings in the NZTA Bridge Manual, including allowance for impact factors for dynamic effects due to traffic; and
- b) be installed in accordance with the manufacturer's instructions.

Utility Operators and Road Corridor Managers should develop agreements on the use of adjustable lids in Carriageways, to facilitate future changes in surface level.

Chambers in footpaths may require special surface treatment to minimise hazards to pedestrians, particularly those that need to be installed at steeper slopes to match the adjoining surface.

Table 3-1: Risk Assessment Process for Determining Depth of Underground Utility Structures in Road or Motorway Corridors

<p>The Utility Operator must:</p> <ol style="list-style-type: none"> establish the minimum separation distances for safety of its own Utility Structures; establish the minimum separation distances for safety from other Utility Structures, street furniture, trees or Road or Motorway Structures; determine other minimum separation requirements such as for maintenance of its own and others Utility Structures in the Road and Motorway Corridors; comply with applicable legislation, standards and codes of practice which provide minimum depths and separation distances for Utility Structures; consider Utility Structure, Road, Motorway and third party factors (see below) and known future requirements of all parties, for example future Road widening projects; prepare the design proposal for discussion at liaison meetings; and discuss risk issues with the Corridor Manager. <p>The Corridor Manager must:</p> <ol style="list-style-type: none"> provide traffic loading, future Road and Motorway construction, events and other information which could potentially impact on Utility Structures in the Road Corridor; consider Utility Structure, Road, Motorway and third party factors (below) and known future requirements of all parties; where appropriate, provide details of possible alternative Road Corridors which could be used; and discuss risk issues with the Utility Operator. 		
Utility Factors	Road /Motorway Factors	Third Party Factors
<p><i>As depths increase, generally:</i></p> <ul style="list-style-type: none"> - costs, time and the level of disruption increase; - the performance rating of electricity cables can reduce; - some hazards increase (e.g. water ingress into gas pipes); - initial trenching costs increase; - maintenance and Emergency Work costs increase; and - Works cause greater disruption to the public and road user. <p><i>Other factors include:</i></p> <ul style="list-style-type: none"> - disruption and costs of moving or relocating Utility Structures are highest when there are a high number of customers or the Utility Structures is of a high rating; - asset damage incurs the cost of urgent repairs, loss of service and environmental damage from spillages; - the relationship or proximity to other Utility Structures and any special protection requirements; and - the Utility Operator regulatory / economic framework may not recognise associated or increased cost to CMs. 	<ul style="list-style-type: none"> - construction and environmental factors influence Road /Motorway deterioration - Traffic loadings form a significant element of Road/Motorway deterioration and are a major design consideration. Corridor Managers generally try and achieve an economic life of 25 years between major construction events; - NZ Road Carriageways use thin flexible pavements that require a high level of maintenance which (with increased traffic volumes/loads) may occur with greater frequency and at short notice; - Reconstructed Roads often have greater pavement depth than the existing Road; - Pavement reconstruction may require excavation below the existing subgrade to obtain the required Road strength, particularly where there are restrictions on raising the Road surface level. It is important that Utility Structures are not damaged by construction activity and a suitable solution may need to be considered; - Rural Roads do not have fixed vertical edge constraints, which allow reconstruction to be above the existing level, so there are significantly different minimum cover requirements between urban and rural Roads; - Other factors are tree root zones, vehicle vibration, trench compaction and surface reinstatement costs. 	<p><i>Third party disruption is generally highest on the more busy Roads and includes:</i></p> <ul style="list-style-type: none"> - Delay: effects are greatest for business trips; - Vehicle operating costs: e.g. wear on tyres, suspension, damage to goods, due to rough or uneven surfaces; - Crash effects: cost of repairs to vehicles, medical and rehabilitation costs to those injured, trauma to families and loss of business productivity due to down time; and - Utility service disruption: Apart from the nuisance and complaints, there is an associated cost for the reduction in service to the customer. <p><i>The selection of methodology and timing can have both positive and negative influences on third party effects.</i></p>

3.3 Specific Requirements for Above-Ground Utility Structures in Road and Motorway Corridors

As well as the general requirements in Section 3.1, Utility Structures must meet the following requirements for above-ground Utility Structures:

3.3.1 Position

1. New installations must be positioned:
 - a) at maximum practicable separation from the Carriageway; and
 - b) as close as practicable to the property boundary.
2. The following issues must be considered and balanced in determining the location of above-ground Utility Structures:
 - a) the safety of all road users including workers, pedestrians and cyclists;
 - b) the practicalities of working in the Road or Motorway in future (for example workers accessing, maintaining or operating above-ground Utility Structures and those maintaining the Road or Motorway); and
 - c) the impact of the location on Utility Structures and other property owners and occupiers (for example, whether the Work creates an aerial trespass).

For new installations, the intent is to provide the maximum practicable separation from the Carriageway. In some circumstances, a combination of solutions may need to be agreed and employed if, after a risk assessment of the particular site, this distance is not considered to be wide enough.

The preferred position of a pedestal, cabinet or other Utility Structure is where it will present the lowest safety risk, cause least nuisance or hazard to the public, adjoining property owners, road maintenance workers, postal delivery services or other legitimate activity within the Road or Motorway Corridor. Ideally this would be beside fences or boundaries and grouped near other similar Utility Structures but clear of driveways and high maintenance areas.

District plans may have specific requirements for above-ground assets in relation to amenity issues.

3.3.2 Road Safety Risk Assessment

1. Any assessment of potential safety hazards for above-ground Utility Structures must be undertaken jointly by the Utility Operator and Road Corridor Manager before a decision is made whether a formal risk management process needs to be instigated.
2. The assessment must consider risks to all road users, workers, other Utility Operators and adjoining property owners and occupiers.

Given the significant number of Utility Structures required to support the provision of utility services, it is not practical for all existing above-ground Utility Structures to be assessed and evaluated. The risk management process should generally be undertaken when placing new Utility Structures in the Road Corridor and when determining priorities in regard to existing Utility Structures. For example, either Party may initiate a risk assessment because:

- A safety concern has been identified relating to existing Utility Structures; or
- One of the Parties is undertaking a safety initiative in the area; or
- A Party is planning other Works and there is an opportunity to reduce risk from existing Structures at minimal extra cost.

Schedule C provides guidance on undertaking risk assessments.

3.4 Utility Assets on Transport Corridor Structures

3.4.1 Planning for New Bridges

A Corridor Manager must, when considering building a new or replacement bridge:

- a) advise known (existing or potential) Utility Operators at the investigation/planning stage, so that consideration can be given to accommodating Utility Structures in the design; and
- b) provide for the installation of Utility Structures based on Utility Operators' known requirements, where practicable; or
- c) allow Utility Operators to install Utility Structures, where practicable.

3.4.2 Planning Utility Works on Existing Transport Corridor Structures

When doing any Works on existing Transport Corridor structures, all Parties must, where practicable:

- a) recognise any impact of structural maintenance Work on the provision of utility services and the impact of the presence of Utility Structures on the efficiency of the bridge maintenance Work; and
- b) consider the above issue and any cost sharing implications in their Work planning activities.

Utility Operators should take the opportunity during Works planning to consider changes to maximise the remaining space and capacity of the bridge for other Utility Operators.

3.4.3 Locating New Utility Structures on Existing Transport Corridor Structures

1. The Utility Operator, in consultation with the Corridor Manager, must assess the following during design and planning:
 - a) whether there is structural capacity for the additional dead load of the Utility Structures;
 - b) the need to upgrade the existing Transport Corridor structure or other facilities as necessary to install their new Utility Structure; and
 - c) the ability to carry out future maintenance on the Utility Structures and any impact this may have on the Transport Corridor structure.
2. All Parties must:
 - a) design new installations to maximise use of any remaining space and capacity;
 - b) where practicable, locate Utility Structures on the downstream side of the bridge, away from the working zone that can be required when attending to flood debris during or after a flood event;
 - c) not install Utility Structures carrying flammable gases or liquids inside the boxes of box girder bridges; and
 - d) in the case where significant movement of the bridge is possible due to seismic events, include risk-based solutions to ensure public safety and the integrity of both Transport Corridor and Utility Structures.

In general, space for Utility Structures on bridges and Transport Corridor structures is constrained. In addition to the above, Utility Operators and Corridor Managers should also follow the guidance in Sections 3.5 and 3.6 on sharing space on unused ducts and releasing space where practicable by removing redundant assets. Existing infrastructure should be fully utilised before new infrastructure is added.

3.4.4 Abandoning a Bridge or Transport Corridor Structure

Before deciding to demolish or abandon a bridge or Transport Corridor structure, a Corridor Manager must:

- a) advise all affected Utility Operators of the proposed demolition/abandonment; and
- b) allow Utility Operators adequate time to implement their own alternative arrangements for support of their Utility Structures, whether on a replacement bridge or Transport Corridor structure (if any) or otherwise.

3.5 Future Proofing

1. On request by the Corridor Manager, the Utility Operator must, where practicable and reasonable, allow in their Works planning for the installation of additional ducts for any Party during trenching.
2. Unless otherwise agreed, the Corridor Manager must cover the cost of these future proofing Works carried out by the Utility Operator for the benefit of other Parties.

For a variety of reasons, Utility Operators may not be able to bring forward or delay planned Works in order to carry them out at the same time as other planned Works in the Corridor. However, all Parties should consider opportunities to have ducts installed during other Parties' Works, to enable future installation of new assets with minimal Road disruption. The colour of these additional ducts needs to be appropriate and in accordance with the Department of Labour guidelines.

The Parties should only install ducts with a stated specific purpose/s and if they are not reasonably used for that purpose within a reasonable timeframe, then the provisions of Section 3.6 may be applied.

Utility Operators are encouraged to develop agreements between Utility Operators on trench sharing and use of spare standby capacity assets.

For avoidance of doubt, the Party that pays for the cost of the additional ducts is the owner of the additional ducts.

3.6 Use of Redundant or Abandoned Utility Structures

When a Utility Operator determines that its Utility Structures are redundant or abandoned in a Congested Corridor location where another Party is carrying out Works, that Utility Operator must consider:

- a) the removal of its Utility Structures, at its own cost; or
- b) allowing other Parties to share, remove or recycle those Utility Structures.

Congested Transport Corridors: In a congested Road Corridor where space for Utility Structures is at a premium, redundant, abandoned or dormant Utility Structures may become an impediment to new Utility Structures Work. While the Utility Operator will decide whether infrastructure is unused or abandoned and should be removed or re-used, the Utility Operator should act reasonably in making that decision and consider the wider interest of the community to maximise the use of the Transport Corridor.

Where a Party has unused Utility Structure with no stated purpose in a congested Transport Corridor, and it is practicable for other Parties to better utilise these Utility Structures and free up alternate lay positions for future Utility Structures, the unused Utility Structures should be made available to another Party for their use. The Utility Structures remain as assets of the Party who installed them until such time as the Utility Operator transfers ownership.

Uncongested Transport Corridors: In an uncongested Transport Corridor, removal of redundant or abandoned Utility Structures could cause unnecessary disruption. Where such Utility Structures do not impede installation of new Utility Structures, there is no expectation for Parties to consider removing

Utility Structures. However a Utility Operator is encouraged to consider removal of its own redundant Utility Structures where they are themselves working in the location.

The above provisions do not prevent any Party exercising any right to have Utility Structures moved.

3.7 Arrangements between Utility Operators

3.7.1 Work Affecting Other Utility Structures

1. When a Utility Operator does Work that will affect, or is likely to affect, another Utility Operator's Utility Structures, they must:
 - a) give notice to and obtain the general requirements of that Utility Operator for working in proximity to their Utility Structures; and
 - b) confirm on the CAR that they have undertaken the steps outlined in Clause (a).
2. Where a Utility Operator wishes to alter (permanently or temporarily) the position of another Utility Operator's Utility Structures, the Parties must comply with any relevant legislation.
3. Where legislation permits a Utility Operator to alter the position of another Utility Operator's Utility Structures it must:
 - a) notify, consult with and obtain that Utility Operator's requirements;
 - b) provide that Utility Operator the first option to alter the position of its Utility Structure within a reasonable specified timeframe; and
 - c) that Utility Operator must move the Utility Structure in this timeframe or, as soon as it becomes apparent that the specified timeframe can no longer be met, negotiate a new timeframe.
4. Either Utility Operator may contact the Corridor Manager to discuss whether any conditions may be applicable to the Works. The Corridor Manager must consider this request for discussion in accordance with Section 4.5.
5. If either Utility Operator is unhappy with the outcome of the application of this Section they may use the Dispute resolution procedures set out in this Code. If a Dispute is notified then the Party notifying the Dispute must inform the Corridor Manager that this Dispute has been notified.

3.7.2 Work Unexpectedly Affects Other Utility Structures

1. Work that will affect, or is likely to affect, another Utility Operator's Utility Structures should normally be identified in the planning stages and the Parties comply with Section 3.7.1.
2. If during the course of Work it becomes apparent for the first time that the Work will affect, or is likely to affect, another Utility Operator's Utility Structures, the affecting Utility Operator must immediately give notice to, and obtain the general requirements of, the affected Utility Operator for working in proximity to their Utility Structures. The Parties should try to come to an arrangement to ensure all Parties' requirements are accommodated, in the spirit of the principles of this Code.
3. The Corridor Manager must be informed by the Utility Operator as soon as a situation under Section 3.7.2.2 is identified. This should include a discussion of the impact on the approved Works and timetable.

A Utility Operator may also use the Dispute resolution procedures in this Code.

4. Obtaining Corridor Access and Works Approval

The requirements in this Section must be read in conjunction with the Principles, Rules, Roles and Responsibilities and General Requirements outlined in Sections 1 and 2.

4.1 Introduction

Sections 4.1, 4.2 and 4.3 apply to all Transport Corridors except where more specific requirements are outlined for Motorways in Section 4.8 and Railways in Section 4.9.

4.1.1 Corridor Access Request (CAR) Requirements for Road, Motorways and Railways

1. The CAR processes are illustrated in:
 - a) figure 4-1 for Road Corridors (the Road CAR form is attached as Schedule A3);
 - b) figure 4-2 for Motorway Corridors (the Motorway CAR form is attached as Schedule A4); and
 - c) figure 4-3 for Railway Corridors (the Railway CAR form is attached as Schedule A5).
2. Section 4 applies to Motorway and Railway Corridors where requirements do not conflict with Sections 4.8 and 4.9.
3. The CAR process for Railway Corridors is a two part process:
 - a) the first part is the negotiation of a Deed of Grant for property rights access to the Railway Corridor (this part applies where no Deed of Grant or historical property rights access exists);
 - b) the second part is to obtain a Permit to Enter (Railway Corridor) prior to carrying out any physical Works. The process for this second part generally follows Sections 4.2 and 4.3, with some additional railway-specific requirements which are included in Section 4.9.
4. The CAR process for Motorways is also a two part process:
 - a) the first part is for the installation of new or upgraded assets and requires the Utility Operator to obtain approval of the Preliminary Works notification from the NZTA Board;
 - b) the second part is the completion of the CAR application to obtain a Works Access Permit prior to carrying out any physical Works.

A key distinction for Road Corridors, compared to Motorway and Railway Corridors, is that legislation provides an automatic right of access for Utility Operators to work in Roads, subject to Reasonable Conditions applied by the Corridor Manager.

A key distinction for railways, compared to Roads and Motorways, is that railways are required to operate on a commercial basis. This includes setting fees, charges and rentals that reflect commercial value (with some exceptions, refer Section 4.9.7).

4.1.2 Agreement to Modify Processes

Where the Parties have agreed to modify the processes outlined in Section 4, the Parties must still comply with all legislative requirements.

For example, it is a statutory obligation to notify the Corridor Manager and other Utility Operators that may be affected by the Work. However some other processes in Section 4 could be simplified for some Minor Works where the Parties have agreed a generic TMP can be applied, including the ability to have multiple Works applied for on a single CAR. The Works should be similar in nature, or follow similar or repetitive procedures, for a period of time as agreed. The liaison meetings provide an opportunity to review the efficiency of these processes while still balancing the need to ensure public and worker safety and access for other users of the Transport Corridor.

Figure 4-1: Process for Road Corridor Access

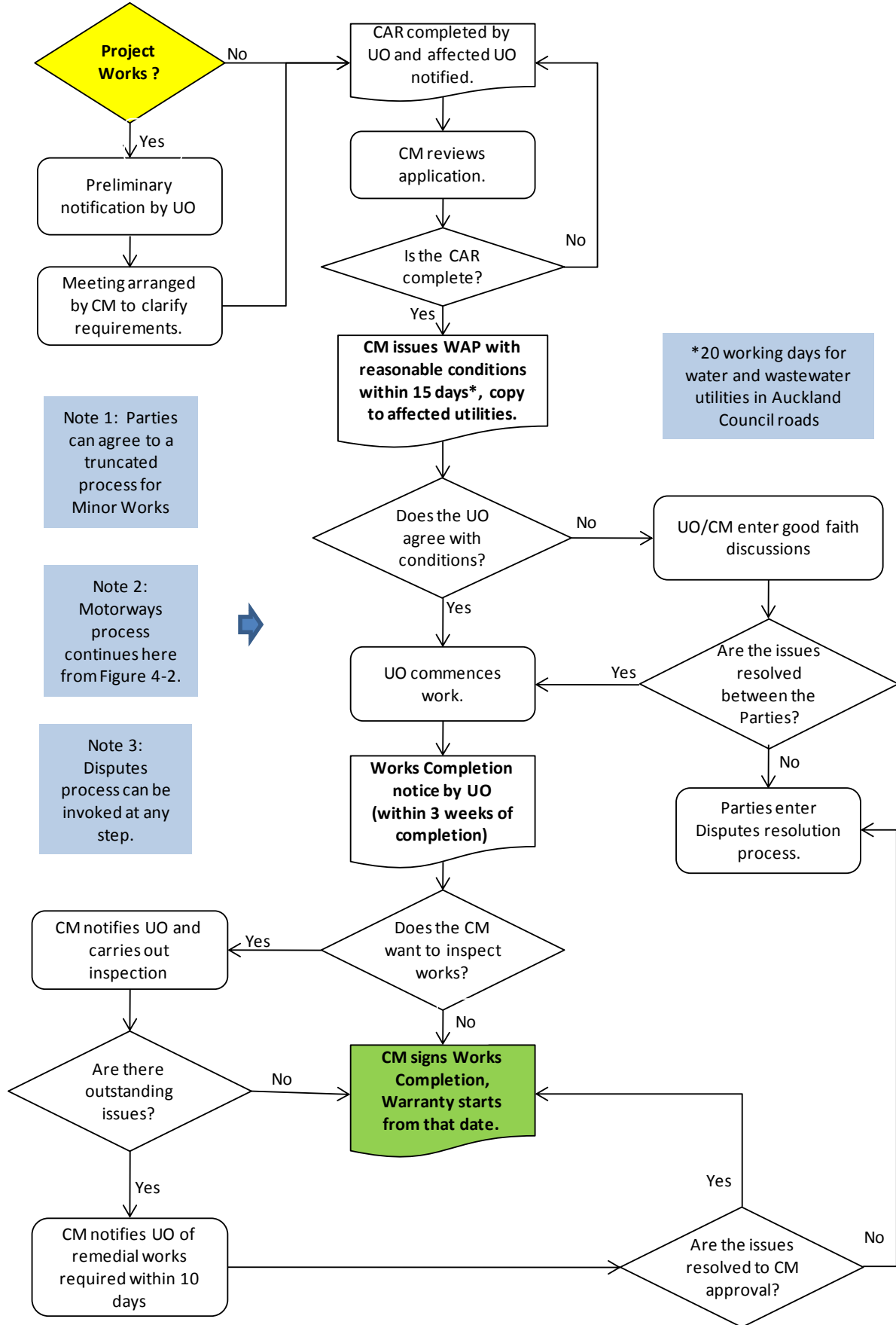


Figure 4-2: Process for Motorway Corridor Access

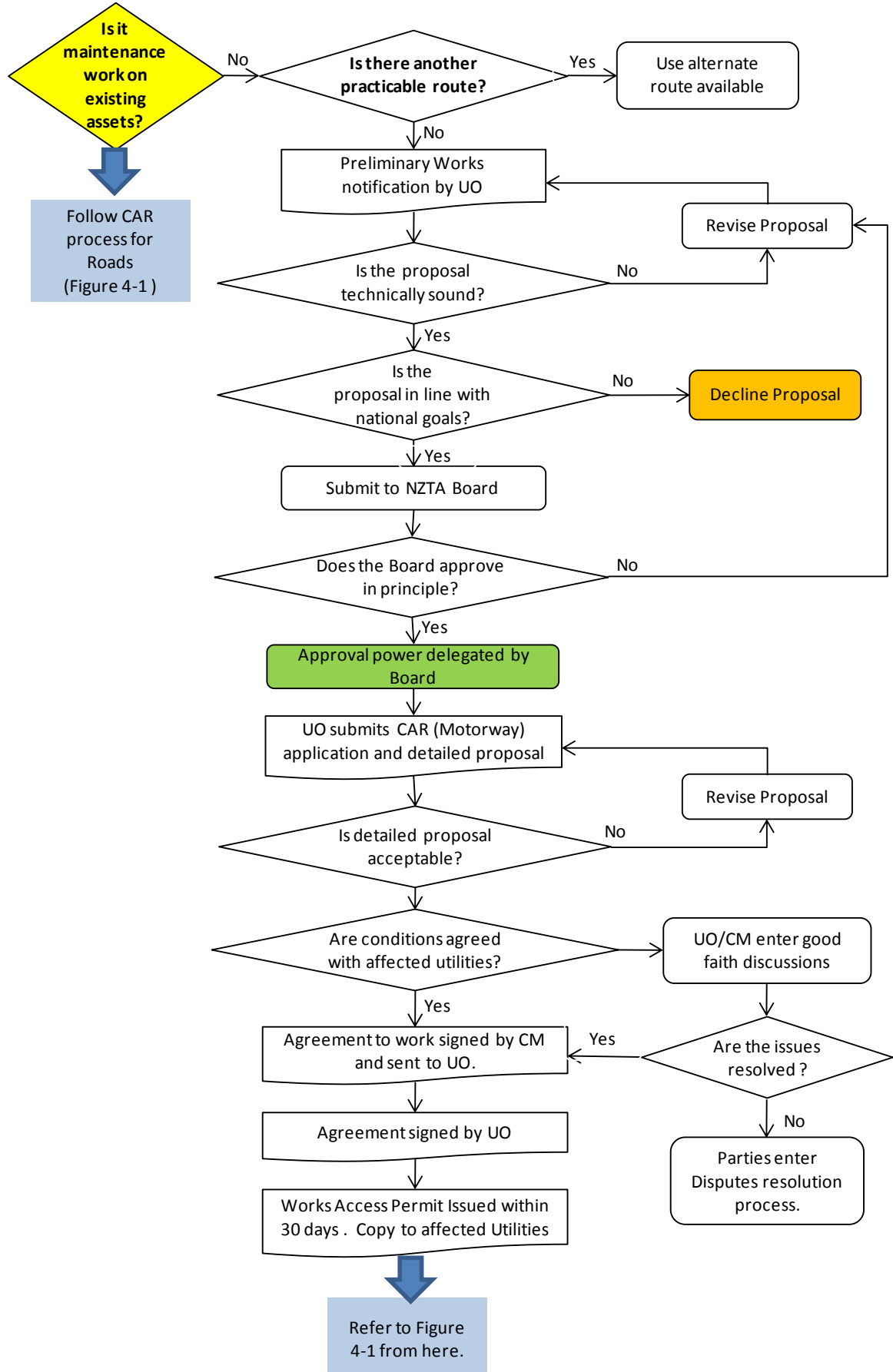
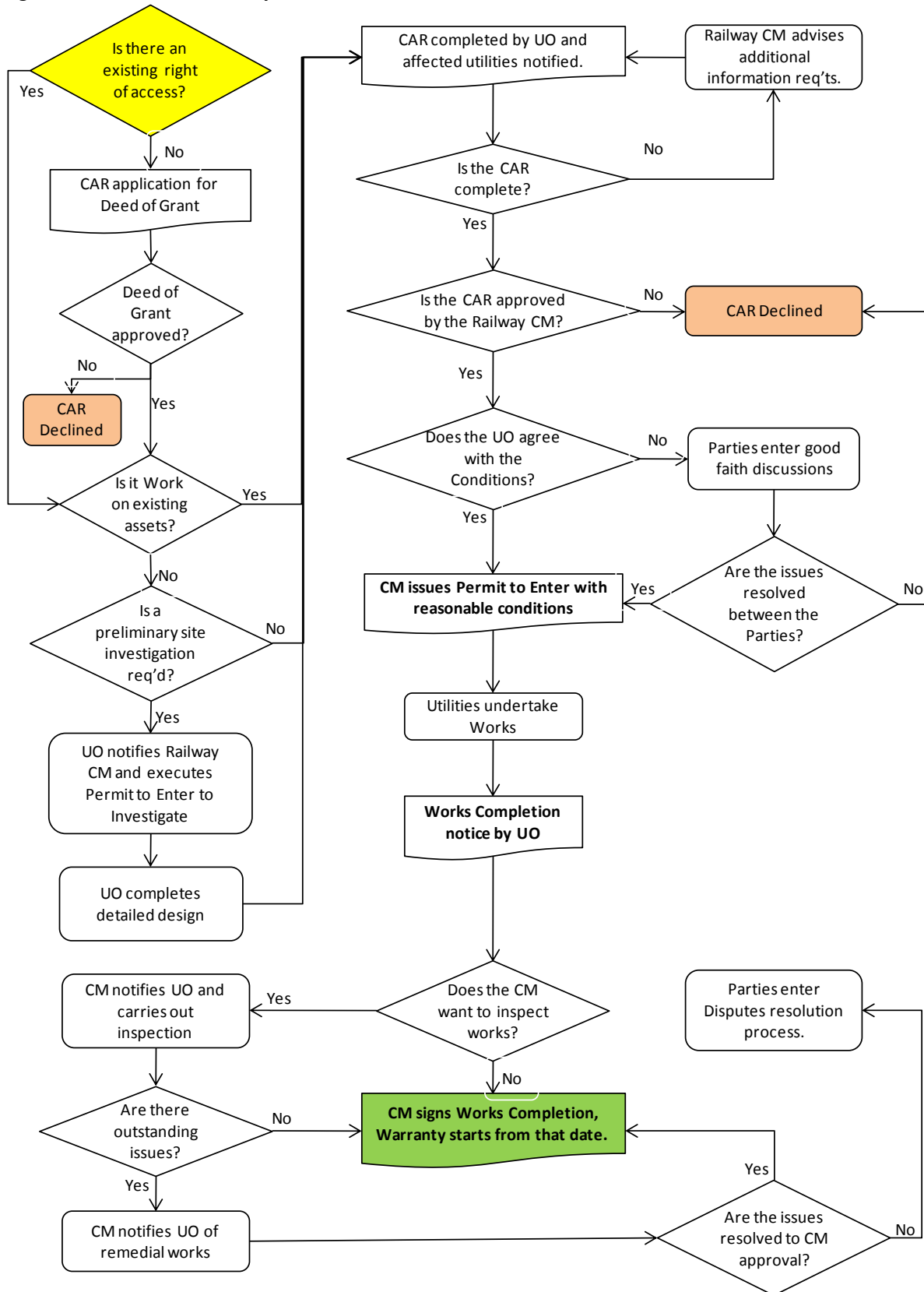


Figure 4-3: Process for Railway Corridor Access



4.2 Preliminary Notification and Liaison

4.2.1 Early Consultation over Lay Positions of Utility Structures

The Corridor Manager co-ordinates Lay Positions of new Utility Structures.

The Utility Operator should consult the Corridor Manager early in the process (generally before the design phase) when a Utility Operator is developing proposals to place new Utility Structures in the following situations:

- Greenfield areas: generally new subdivisions or new Roads;
- Roads in developing urban areas; areas of steady growth where space is still available in Roads;
- Congested Transport Corridors: areas where little or no space is available to lay new Utility infrastructure;
- Roads in rural lifestyle areas: areas that provide for a mix of rural residential lifestyle and intensive farming and horticultural uses;
- Roads in other special rural areas such as access ways to large farms or rural business areas;
- Roads subject to known future road widening;
- State highways or Motorways; and
- Across freight or other operational rail yards.

4.2.2 Situations Requiring Preliminary Notification

Prior to lodging a CAR, Utility Operators must provide Corridor Managers with Preliminary Notice of the Works using the form attached in Schedule A1 (Roads/Motorways) and Schedule A2 (Railway), in the following situations:

- a) for all Project Works in Transport Corridors; and
- b) for new or upgrading Works in Motorway Corridors (refer Section 4.8.2).

This Preliminary Notice does not constitute a formal notice of intention to undertake Works in the Transport Corridor under relevant legislation. For Works on Motorway Corridors and Railway Corridors, Utility Operators may need to book a time to use either Corridor and therefore use of the Preliminary Notification process is advised.

The timeframe for Preliminary Notification will vary depending on the type and scale of Works, but the Utility Operator should generally provide this about the same time as conceptual design or planning.

4.2.3 Information to be Provided with the Preliminary Notification

The Utility Operator must submit as much information as possible with the Preliminary Notification including (where possible):

- a) a preliminary plan indicating scope and scale of the intended Works, including depth and route of any proposed Utility: and with respect to Road Corridors the presence of any adjoining Utility Structures, kerbs, footpaths and trees; and with respect to Rail Corridors the presence of any Utility Structures, services, embankments, railway lines or other infrastructure;
- b) details of when the Work is scheduled including times of day as well as dates; and
- c) proposed location of any chambers or above-ground Utility Structures.

If the information is not available, the Utility Operator should provide the best information available at the time of the preliminary notification.

Additional information is required with the Preliminary Notification for Motorways, as outlined in Section 4.8.2.

4.2.4 Liaison Process

2. Following receipt of the Preliminary Notification, the Corridor Manager must discuss the proposed Works with the Utility Operator as soon as practicable and jointly identify any issues, such as:
 - a) the potential to coordinate with planned Works by the Corridor Manager or other Utility Operators; and
 - b) any matters where there is a potentially major impact on the public.

At the meeting with the Corridor Manager, the Utility Operator should inform the Corridor Manager of the key points of relevant external meetings and consultation.

3. When planning Works in business precincts or in footpaths in retail areas, Utility Operators and the Corridor Manager must co-operate to ensure that, where practicable:
 - a) other Parties are aware of any short to medium term planned Works;
 - b) other Utility Operators have a reasonable opportunity to provide or upgrade Utility Structures, if they wish to do so; and
 - c) no further Planned Works are undertaken for an agreed period following completion of the Works.

4.3 Corridor Access Request (CAR)

4.3.1 Lodgement of the CAR

1. The CAR constitutes formal notice of intention to carry out Works in the Transport Corridor.
2. The number of CAR applications required must be the minimum to efficiently achieve the outcome of co-ordination of Works between Parties.
3. Prior to lodging a CAR for Motorway or Railway Corridors, a Utility Operator must have:
 - a) received approval of the Preliminary Notification of Works (for Motorways) and for Project Works in Railway Corridors; or
 - b) a deed of grant or evidence of historic property rights (for Railway Land - refer Section 4.9.2).

A Utility Operator or a delegated agent must lodge a CAR before carrying out any Work in Transport Corridors. The CAR application forms are contained in Schedules A3 to A5. The CAR must be submitted with the following minimum period before the Utility Operator intends to start the Work, unless otherwise agreed::

- a) five Working Days for Minor Works;
- b) 15 Working Days for Major Works and Project Works in Roads except for water and wastewater Utility Structures in Auckland Council Roads;
- c) 20 Working Days for water and wastewater Major Works and Project Works in Auckland Council Roads; and
- d) 30 Working Days for Works in Motorway and Railway Corridors.

The five Working Day period for Minor Works is by best efforts and the requirement for an actual start of the Work on site is dependent on the issue of the WAP or the expiry of the statutory period.

4. The Utility Operator must submit more than one CAR, if requested by the Corridor Manager, where another Utility Operator or party is working on the same Work Site and the Corridor Manager does not have an agreement for one Party to take complete responsibility for the site.

4.3.2 Receipt and Evaluation of the CAR

1. Following receipt of the CAR, a Corridor Manager must:

- a) acknowledge receipt within five Working Days (except for Minor Works); and
 - b) advise the applicant as soon as practicable if a CAR does not include the information in Section 4.3.3 and as otherwise required on the forms (and if so, that the processing of the CAR will not commence until the specified information has been provided).
2. Following receipt of the full information required with the CAR, the Corridor Manager must:
- a) advise the Utility Operator of the Reasonable Conditions for access it will impose in accordance with Section 4.5, as soon as practicable and no later than the timeframes set out in this Code; or
 - b) for Work on Motorway or Railway Corridors, set out the reasons the application is declined.

4.3.3 Information to be Provided with the CAR

1. A Utility Operator must submit the following information with a CAR for Major Works and Project Works:
- a) a site-specific Traffic Management Plan that:
 - i. is approved by a suitably qualified person as defined in NZTA manuals and approved by the relevant Road Corridor Manager;
 - ii. demonstrates that safety and other impacts on road users and workers are protected; and
 - iii. complies with CoPTTM for State highways and the Local Roads Supplement for Local Roads and any special requirements of the Corridor Manager.
 - b) a plan indicating the proposed scope and scale of the Works, including depth and route of proposed Utility Structures and the location of nearby Utility Structures, kerbs, footpaths trees and street furniture;
 - c) details of other Utility Operators that may be affected and evidence they have been consulted;
 - d) details of when the Work is scheduled including times of day as well as dates; and
 - e) proposed location of any chambers or above-ground Utility Structures.
2. Additional information may be required when:
- a) the location of the Work Site moves to a position not described on the WAP or CAR; or
 - b) the Utility Operator does not complete the Works within six months of the issue of the WAP (or other period agreed between the Parties).

Additional information is required when installing new or upgraded Utility Structures in Motorway Corridors (refer Section 4.8) or working on Utility Structures in Railway Corridors (refer Section 4.9).

4.3.4 Emergency Works Notification and Approval

1. Before accessing the Motorway Corridor for Emergency Works, Utility Operators must notify the Corridor Manager to agree conditions for access.
2. Prior to accessing KiwiRail's Railway Corridor for Emergency Works, Utility Operators must ring Network Control on 0800-808400 to agree conditions for access. For other railways, the Utility Operator must contact the person designated as the corridor manager for that railway.
3. When Emergency Works are required in Road Corridors, the Utility Operator is not required to lodge a CAR under Section 4.3 but must:
 - a) be excused from the pre-entry written notification requirements;
 - b) notify the Corridor Manager as soon as practicable;
 - c) where the Corridor Manager requests a CAR, lodge a CAR as soon as practicable;

- d) where practicable, notify the owners of adjacent retail and other business premises of the Works being undertaken and the likely duration; and
- e) notify any Utility Operator whose Utility Structures are likely to be affected as soon as practicable.

This CAR should generally be submitted within two Working Days following the start of Emergency Works, though there may be some exceptional situations such as a widespread disaster, where this is not practical.

4.4 Issuing the Works Access Permit (WAP) for Roads

1. A Road Corridor Manager must issue the WAP (refer template in Schedule A6) within:
 - a) 15 Working Days of receiving a compliant CAR, where the applicant is a Utility Operator of electricity, gas or telecommunications infrastructure;
 - b) 15 Working Days of receiving a compliant CAR, where the applicant is a Utility Operator of water and wastewater infrastructure other than in Auckland Council Roads; and
 - c) 20 Working Days of receiving a compliant CAR, where the applicant is a Utility Operator of water and wastewater infrastructure in Auckland Council Roads;
 and specify any appropriate and Reasonable Conditions for the Works in accordance with this Section 4.4 and Section 4.5.
2. Where the WAP is issued for a set date or Work period and there is any change to the expected date or Work period, the Utility Operator must obtain the specific approval of the Corridor Manager to the time change as soon as practicable.
3. Where affected Parties have been identified, the Corridor Manager must provide those Parties with a copy of the WAP.

The Works Access Permit requirements for Motorways and Permit to Enter for Railways are set out in Sections 4.8.5 and 4.9.6 respectively.

4.5 Setting Reasonable Conditions

This section applies fully to Roads. It applies to Motorways in accordance with Figure 4-2 once the requirements of section 4.8 have been completed, including the additional evaluation criteria.

Railway Corridor Managers are able to apply the principles outlined in Section 4.5.1 as appropriate.

4.5.1 Evaluation Criteria for Setting Reasonable Conditions

1. The Road Corridor Manager must comply with the criteria for setting Reasonable Conditions in the Gas Act, the Electricity Act, Auckland Council Act and the Telecommunications Act.
2. When considering whether a Reasonable Condition should be imposed, the specific criteria to be considered by Road and Motorway Corridor Managers are as follows:
 - a) the **safe and efficient flow of traffic** (whether pedestrian or vehicular). The Road and Motorway Corridor Managers have powers to impose traffic management conditions to minimise traffic impacts on road users in the immediate location and wider Road and Motorway network. Traffic management must be appropriate to the situation and recognise that temporary interference with traffic movement is generally considered acceptable when balanced against the community benefits of the utility services;

- b) the **health and safety of any person** who is, or class of persons who are, likely to be directly affected by the Work on the Road or Motorway. Such conditions are to protect workers or road users;
 - c) the need to **lessen the likelihood of damage to property** (including the structural integrity of the Road or Motorway) as a result of Work on the Road or Motorway. Considerations include appropriate reinstatement conditions, such as 'like-for-like' surface replacement, damage restoration conditions, and conditions on working restrictions to protect other Road and Utility Structures in the Road and Motorway Corridors;
 - d) the **compensation that may be payable** for property that is likely to be damaged as a result of Work on the Road or Motorway (refer Sections 5.1 and 5.2);
 - e) the need to **lessen disruption to the local community** (including businesses). Such conditions include limiting the time when Works can take place (Section 5.3.4), traffic management restrictions (Section 5.3.3), and requiring a communication plan to be in place (Section 5.3.6);
 - f) the **coordination of installation of other Works** by other Utility Operators. Any conditions imposed to enable coordination of Works, or to require ducts to be installed for later use by others, must balance the nature of all of the Works and the effects on the community and on any Utility Operator of any delays in undertaking Works;
 - g) the **coordination with Road and Motorway Corridor construction and maintenance Works**, by the Road or Motorway Corridor Manager subject to the considerations in Clause (f); and
 - h) the needs of the **Utility Operator to establish or maintain its network in a timely manner**. Any conditions must ensure that Works undertaken in the Road and Motorway Corridors do not impede the establishment of a network in a timely manner and consider the effects on the community of any delay.
3. In addition to the statutory criteria listed above, the Road and Motorway Corridor Manager must also consider the following criteria when considering setting Reasonable Conditions:
- a) **protection of access to private land from a Road:**
 - private property owners are entitled to access to a Road and reasonable access should be maintained during Works; and
 - this right must be balanced against the rights of Utility Operators to locate their infrastructure on or above Roads;
 - b) **the extent of quality assurance required:** The level of quality assurance must be appropriate to the size and complexity of the Works, and the scale of the Road or Motorway;
 - c) **protection of Amenity Areas' values:** These must only be included as a condition if:
 - there are considerations, rules or requirements for that area identified in the district plan; and
 - the costs of achieving Amenity Areas' values more than 'like-for-like' are met by the Road Corridor Manager;
 - d) **the interests of other Parties** that have planned future projects, including any other Utility Operator's Works and other activities on the Road or Motorway. Such conditions would be on the location of utility infrastructure to avoid conflict with other users of the Road or Motorway Corridor.
4. **For the avoidance of doubt**, conditions must not:
- a) have the effect of preventing, frustrating or unreasonably delaying the Utility Operator from constructing, placing, or maintaining Utility Structures or Works in, on, along, over, across, or under any Road or Motorway;

- b) have as their primary purpose the unreasonable avoidance of future costs incurred by the Road or Motorway Corridor Manager under any legislation;
- c) relate to the appropriateness of the Works rather than the actual undertaking of the Works itself;
- d) be such that no reasonable Road or Motorway Corridor Manager could have imposed them; and
- e) try to address matters that are properly dealt with under the Resource Management Act, such as any matters addressed under district plans or requiring consents. The Road Corridor Manager's role in setting Reasonable Conditions must be distinguished from the regulatory role that Territorial Authorities have under the Resource Management Act.

Environmental effects are managed by the district plan process under the Resource Management Act and it is not appropriate for the CAR/WAP process to be used to achieve these effects.

4.5.2 Standard Template for Reasonable Conditions in Schedule B

The standard template of Reasonable Conditions set out in Schedule B must apply to all Works undertaken in Road and Motorway Corridors. Additional conditions may be applied to Works in Motorway Corridors.

When, in relation to a CAR for access to undertake Works in a Road Corridor:

- a) there are no Special Conditions or Local Conditions specified in the WAP;
- b) the WAP is not issued within the required timeframe within 15 Working Days (20 Working Days for water and wastewater Utility Structures in Auckland Council Roads); or
- c) any Special Conditions or Local Conditions that apply to the CAR are not notified to the Utility Operator within 15 Working Days (20 Working Days for water and wastewater Utility Structures in Auckland Council Roads);

then, the relevant Corridor Manager will be deemed to have notified the Utility Operator of the conditions set out in the standard template in Schedule B of this Code through the issue of this Code (and the relevant Utility Operator will be deemed to have accepted this form of notification by submitting the relevant CAR) and such conditions will, for the purposes of section 25(3) of the Electricity Act, section 26(3) of the Gas Act, section 68 of the Auckland Council Act and sections 138 and 144 of the Telecommunications Act, be treated as being the Reasonable Conditions notified in writing to the Utility Operator in relation to that CAR.

The intent of this Section is to accelerate approvals of Works to improve the efficiency of the process. The template will assist Parties to make agreements to simplify processes.

This Section does not apply to Railway Corridors because the legislation does not provide a right to proceed without formal confirmation from the Corridor Manager. However the template will generally provide a starting point for agreement of Reasonable Conditions in Railway Corridors and the general principles will be applied where possible.

An additional template for Works on State highway (including Motorways) intended to meet the requirements of section 51 of the Government Rounding Powers Act is currently under development.

4.5.3 Imposing Local and Special Conditions in Road and Motorway Corridors

This Section 4.5.3 applies only to Road and Motorway Corridors.

Railway Corridor Managers are able to apply the principles outlined in Section 4.5.3 as appropriate.

1. **Local Conditions** are unique conditions affecting a defined geographical area that are:
 - a) not already covered within the appropriate template WAP;
 - b) not specific to a particular CAR; and
 - c) relate to a unique condition or event.
2. When a Road or Motorway Corridor Manager considers that a **Local Condition** is necessary:
 - a) the Road or Motorway Corridor Manager must notify all Utility Operators affected by the proposed Local Condition and provide that condition to those Utility Operators;
 - b) the Road or Motorway Corridor Manager must provide the opportunity for Utility Operators to discuss and agree these Local Conditions, and this must be done separately from any CAR application process;
 - c) all Parties who have an objection must notify the Road or Motorway Corridor Manager as soon as possible and enter into good faith discussions with other interested Parties to resolve the areas of disagreement;
 - d) all affected Utility Operators must have the opportunity to be involved in these discussions; and
 - e) if, following these discussions, any Utility Operator still disputes the reasonableness of the conditions imposed, the Utility Operator may either invoke the Dispute resolution procedures in Section 7 of this Code or appeal to the District Court (subject to specific legislation).

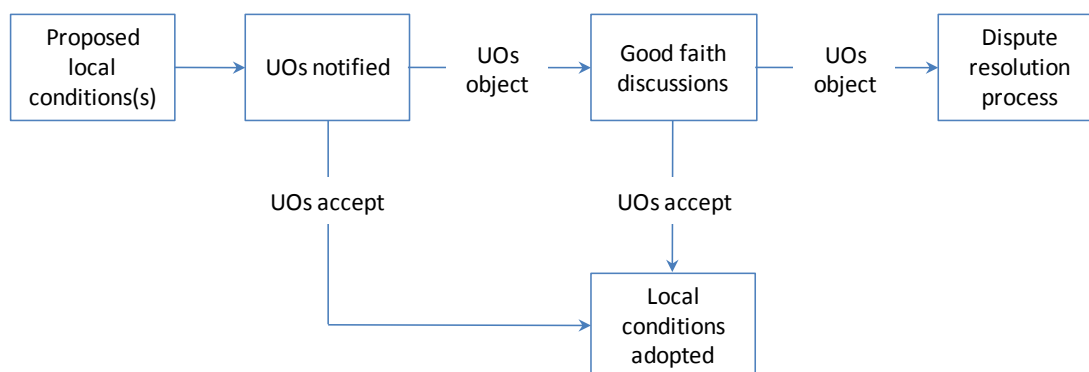


Figure 4-4: Process for determining Local Conditions with Utility Operators

While Local Conditions are not specific to a CAR, the Road or Motorway Corridor Manager may initiate them because consideration of a CAR raises awareness that a broader Local Condition is required. However it may not be possible to go through the full Local Conditions adoption process within the CAR application period. In this case the Road or Motorway Corridor Manager should issue the conditions as Special Conditions on the CAR and then follow the full consultation process to establish it as a Local Condition.

Liaison meetings provide an opportunity to discuss and agree appropriate Local Conditions in an area.

3. **Special Conditions** are unique conditions not already covered within the appropriate template WAP or Local Conditions and which relate to a particular CAR only.
4. The Road or Motorway Corridor Manager must include any Special Conditions on the WAP. Following receipt of the WAP:
 - a) if any Utility Operator believes that the Special Conditions are not reasonable, it must advise the Road or Motorway Corridor Manager and enter good faith discussions;
 - b) if, following these discussions, any Utility Operator still disputes the reasonableness of the Special Conditions imposed, the Utility Operator may either invoke the Dispute resolution

procedures in Section 7 of this Code or appeal to the District Court (subject to specific legislation); and

- c) if the Utility Operator wishes to start Works before the Dispute is resolved, they must comply with the original conditions set out in the WAP until such time as agreement is reached otherwise.

4.5.4 Applying Local Conditions and Special Conditions in any Transport Corridor

The Parties should consider the following Transport Corridor-specific factors in proposing and setting Local Conditions and Special Conditions:

- Possible restrictions in areas or particular Roads or Motorways such as where annual seasonal or individual events are to take place or where there is a danger of causing significant disruption to traffic;
- Traffic sensitive Roads and Motorways (generally high volume arterial and principal routes): Open trenching may not be the first choice option on or near the Carriageway. Motorways are often congested in and around peak traffic periods and access will have impacts that can cause severe consequences. Access restrictions may apply even for Emergency Works (refer Section 4.8);
- Tunnels and bridges: The ability to provide access is very limited and restrictions may apply. Note that tunnels and bridges are classified as buildings under the Building Act 2004 and any alteration requires compliance with that Act;
- Pedestrian areas: Works in areas of high pedestrian use, areas of special paving, school and retail areas, may have special restrictions such as, for example, avoiding peak traffic flows, special events and peak trading periods;
- Railway Corridor: Railway access requirements have significant differences from Roads and access to Railway Corridors is on a commercial basis. There are also particular safety and access requirements detailed in Section 4.9;
- Railway-Road level crossings: These are areas where two Transport Corridors cross as well as other facilities and Utility Structures cross. Work Site safety is at a premium and extra care is required when planning Works in these areas;
- Long term instability: A number of Roads cross areas of mass earth movement. Utility Operators should consider options that limit the impact on the existing instability and also consider ongoing movement impacts on their Utility Structures. Corridor Managers cannot guarantee the long-term integrity of Roads in such areas. Treatments for such areas often include underground horizontal elements such as bored drains or tied-back anchors; and
- Steep topography: In areas of steep topography where there is limited shoulder width, options other than trenching may need to be the first choice option, particularly as such areas are often of marginal stability.

Until such time as the additional template of Reasonable Conditions for the State highways is provided for in Schedule B, the Reasonable Conditions set out in 4.5.2 will apply to access for Works in State highways.

4.6 Non-Conforming Work

This section applies to all Transport Corridors.

4.6.1 Utility Operator to Demonstrate Compliance

- When, during the course of the Works, the Corridor Manager is of the opinion that material or workmanship does not meet the required standards defined in this Code, they must advise the Utility Operator and request information to demonstrate compliance.

The process for dealing with potentially non-conforming Work is identified in Figure 4-5.

If the Utility Operator does not provide satisfactory information, the Corridor Manager may then:

- request an independent quality assurance audit; and
- if satisfactory compliance is still not demonstrated, or the Utility Operator does not respond appropriately; the Corridor Manager may issue a non-conformance notice or elevate this matter to Dispute (refer Section 7).

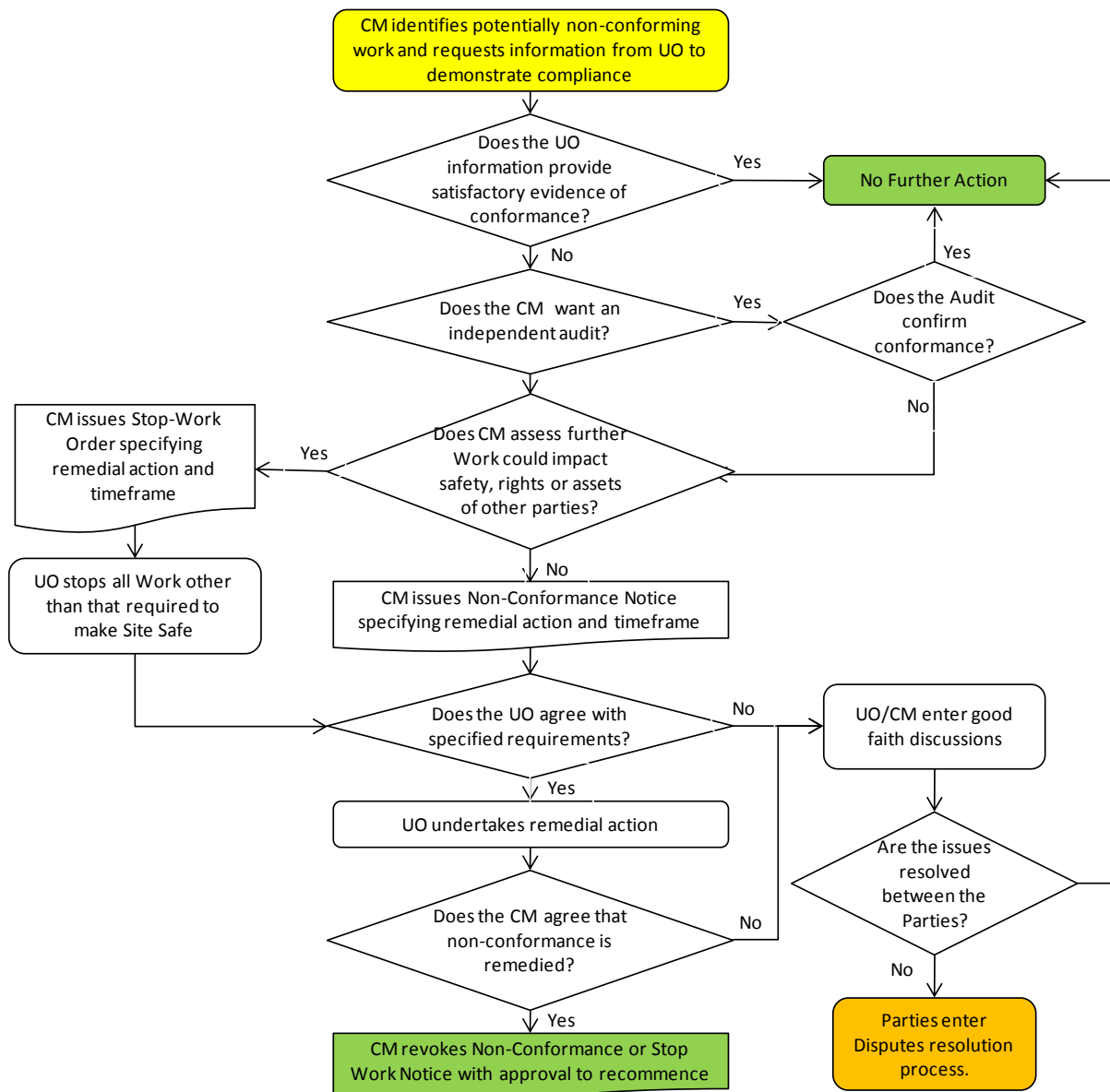


Figure 4-5: Process for dealing with non-conforming Work

- If the Corridor Manager requests an independent quality assurance audit (including any sampling, testing or investigation) the responsibility for costs is as follows:

- a) if the Utility Operator provides appropriate information, and materials and workmanship comply with the Code, then the Corridor Manager is responsible for the costs;
- b) if the Utility Operator provides appropriate information, but materials or workmanship do not meet requirements of the Code, then the Utility Operator is responsible for the costs; or
- c) if the Utility Operator does not provide appropriate information, as required by the independent auditor, then the Utility Operator meets the costs.

4.6.2 Non-Conformance Notices

Non-conformance notices issued by the Corridor Manager must state the non-conforming matter, the remedial action required and the specified timeframe for completion (refer Schedule A13).

4.6.3 Remedial Actions

1. The Utility Operator must undertake remedial Works required within the timeframe specified in the Non-Conformance Notice.
2. If the Utility Operator does not complete the remedial Work in a timely manner, and this creates an Emergency Work situation, the Utility Operator must cover all reasonable costs to complete the Emergency Work.
3. For Railway Corridors, a new Permit to Enter is required for any remedial Works.

If the Utility Operator does not undertake the remedial Work within the agreed timeframe the Corridor Manager may undertake the Work and recover all reasonable cost of completing the remedial Work from the Utility Operator.

4.6.4 Stop Work Orders

1. If a stop Work order is issued by the Corridor Manager because of non-compliance with the WAP or this Code, the Utility Operator must from that point only carry out such Work required to:
 - a) remedy the non-compliance issues;
 - b) make the Work Site safe; and
 - c) remedy any inconvenience to pedestrian and vehicular traffic.
2. The Utility Operator must stop Work until an order from the Corridor Manager allowing Work to recommence.

A template for a stop Work order and approval to recommence is in Schedule A11.

4.7 Works Completion and Maintenance Period

This section applies to all Transport Corridors.

4.7.1 Works Completion Notice

1. Within 15 Working Days of the completion of all Work for which a WAP has been issued, the Utility Operator must lodge a Works Completion Notice with the Corridor Manager (refer template in Schedule A9). The Works Completion Notice must include the following, unless otherwise agreed by the Corridor Manager:
 - a) any amendments to information supplied on the original CAR, as necessary to describe accurately the location and extent of the work;
 - b) quality assurance records or certification;

- c) a written statement confirming that the completed Works fully comply with the conditions imposed by the WAP, signed by a person authorised to bind the Utility Operator; and
 - d) details of any outstanding Work that the Utility Operator has agreed to complete, for example, permanent surfacing or road marking.
2. The Corridor Manager must as soon as practicable, but within ten Working Days (or as soon as practically possible for Railway Corridors):
 - a) sign and return the Works Completion Notice;
 - b) request further information if the notice as lodged is not adequate; or
 - c) advise the Utility Operator that it intends to carry out an inspection of the Works.
 3. If the Corridor Manager intends to carry out an inspection of the Works, the Corridor Manager must:
 - a) notify the Utility Operator and agree an appropriate time for the inspection;
 - b) carry out the inspection jointly if the Utility Operator requires; and
 - c) carry out the inspection as soon as practicable, but no later than ten Working Days after receipt of the Works Completion Notice.
 4. Within ten Working Days of completing the inspection the Corridor Manager must advise the Utility Operator if:
 - a) there are any issues with the quality of the Road Corridor and the standard of reinstatement; and
 - b) there are any additional actions required to ensure the completed Works are of the required standard and comply with the WAP.
 5. The Utility Operator must promptly complete any Work required at its own cost and advise the Corridor Manager by sending out a new Works Completion Notice.
 6. The Corridor Manager must then complete any additional inspections as soon as practicable (but no later than ten Working Days after receipt of the new Works Completion Notice) and advise the Utility Operator if the Works are accepted as complete or if further actions are required.

A new Permit to Enter is required for all Works in Railway Corridors, including inspections and maintenance.

4.7.2 Warranty Period

This Section 4.7.2 applies only to Works in Roads, Motorways and railways other than KiwiRail.

1. The Utility Operator must:
 - a) warrant all Works completed under this Code for a period of two years after the date that the Corridor Manager signs the Works Completion Notice (except where those Works have been impacted by subsequent Works by other third parties);
 - b) undertake any repair or maintenance Work required to those Works for that period within an agreed timeframe when notified in writing by the Corridor Manager; and
 - c) warrant substantial repairs for a further two years after the Utility Operator has completed the repair.

The Warranty Period may be shortened by agreement between the Parties.

2. If other Works are scheduled and agreed to be completed after that date (such as permanent surfacing), the Warranty period for that part of the Works starts from the date that part is completed.

3. A Warranty or the expiration of a Warranty does not restrict liability for other breaches of either the Code or of common law, which extends beyond the Warranty period.

4.7.3 Completion of Maintenance Notice

1. For Road Corridors, at the end of the two year Warranty Period and immediately after, the Utility Operator must:
 - a) complete a maintenance inspection (unless an audit sampling programme has been agreed with the Corridor Manager) and carry out any repair or maintenance Work required; and
 - b) submit a Completion of Maintenance Notice (refer Schedule A10).
2. The Road Corridor Manager must as soon as practicable, but within ten Working Days:
 - a) sign and return the Completion of Maintenance Notice;
 - b) request further information if the notice as lodged is not adequate; or
 - c) advise the Utility Operator that it intends to carry out an inspection of the Works.
3. If the Road Corridor Manager intends to carry out an inspection of the Works, then the same procedures and timeframes apply as for inspections for the Works Completion Notice (Sections 4.7.1.3 to 4.7.1.6).

4.7.4 Maintenance of Above-Ground Utility Structures

The Utility Operator must, for as long as the above-ground assets exist:

- a) maintain all above-ground Utility Structures, cabinets and pedestals in good condition; and
- b) repair damage and vandalism within a reasonable timeframe.

4.8 Specific Conditions for Access to Motorways

4.8.1 Purpose

The purpose of this Section 4.8 is to set out the Motorway Corridor Manager's specific procedures for access to Motorways. Where these procedures differ from those described in Sections 4.1 to 4.3, the requirements in this Section will prevail. This Section also sets out the evaluation criteria that the Motorway Corridor Manager will apply in deciding access to Motorway Corridors. The Motorway Corridor Manager's intention is to allow Utility Operators access to Motorway Corridors, provided it is satisfied a number of key objectives are met.

4.8.2 Corridor Access Request Process for Motorway Corridors

1. Utility Operators must obtain written approval from the Motorway Corridor Manager prior to all access to Motorway Corridors. Each maintenance activity is treated as a separate application.
Figure 4-2 illustrates the process for achieving Access. Once the Motorway Corridor Manager has issued the WAP, the process is the same as for the general Road Corridors (Refer Figure 4-1).
2. The Utility Operator must follow the general CAR process outlined in Section 4.3 for access to maintain existing Utility Structures.
3. For access to install new or upgraded Utility Structures, the Utility Operator must follow the process in Figure 4-2, and:
 - a) submit a preliminary notification of Works for approval in principle, setting out the information in Section 4.2.3, as well as clearly setting out:
 - i. the reasons for the request for access to the Motorway Corridor;

- ii. the evaluation of other options; and
 - iii. the reason for the rejection of other options.
- b) following preliminary approval by the Corridor Manager, the Utility Operator must submit a CAR with a report consistent with the provisions of the NZTA's Standard Professional Service Specification for Investigation and Reporting. The report must include the detailed evaluation of proposal, provide proposed Conditions for the Work, and detail the likely future access requirements for maintenance.
4. The Corridor Manager must work with the Utility Operator to reach an acceptable access solution.
5. Following consideration of the CAR application, the Corridor Manager must, within 30 Working Days:
- a) provide consent for access in the form of a WAP; or
 - b) reject the application, outlining the reasons.

Motorways are excluded from Utility Operators' general rights of access under the Gas and Electricity Acts. The Telecommunications Act does provide for access but does not override the need for consent by the Corridor Manager.

The requirement to consent obligates the Corridor Manager to ensure that all persons carrying out Work in a Motorway do so in a manner that protects both the people carrying out the Work and the public affected by it.

Where a Utility Operator requests access, the Corridor Manager should designate a person to liaise and provide technical support and assistance to help the Utility Operator meet the requirements to gain access approval. If practicable, a meeting near the site will be held to identify the particular site requirements and possible solutions. The Corridor Manager should provide an estimate of costs for assisting with the development of a proposal at the beginning of the process, which reflects a reasonable charge for the service required.

Local Roads that pass the Motorway on underpasses and overbridges are not defined as Motorways under the legislation; and therefore the standard CAR processes for Road Corridors apply to Local Roads. While the Corridor Manager should aim to facilitate access to underpasses and bridges, access may be limited by space or structural capacity. In general terms the Corridor Manager would take responsibility for the Structure and the Territorial Authority would take responsibility for the footpath and Road Carriageway over or under the Structure (except where the other Road is also a Motorway).

4.8.3 Key Requirements

In the proposal to carry out Works in the Motorway, Utility Operators must demonstrate that the Works:

1. Minimise the 'footprint' it leaves on the Motorway environment including safety hazards and damage to the Motorway. This includes assessing the technical feasibility of ensuring:
 - a) construction tolerances are met, taking into account the difficulty of reinstatement in high performance pavements;
 - b) health and safety risks to workers exposed to Motorway traffic are managed; and
 - c) maintenance of the integrity of the Motorway pavement to provide acceptable levels of structural performance, deformation and safety.

Generally, the issues with Utility Structures crossing the Motorways are considered more minor than those that run longitudinally and have a larger operational area impact. Where Utility Structures cross a Motorway at a logical network point, the Corridor Manager should encourage multi-use crossing projects that improve the use and Utility for all Parties to minimise the footprint.

2. Minimise the need for ongoing access and therefore any associated Road safety issues and traffic flow disruption.

Applications demonstrating minimal repair and maintenance access are more likely to be successful and therefore more expensive design and construction techniques may be warranted. Where practicable and where there is a reasonable expectation that this would be required in the future, the Corridor Manager may also ask that the Utility Operator builds in larger capacities to prevent the need for later upgrades.

The Corridor Manager is unlikely to permit trenching options in Motorway Carriageways.

The procedures in this Section recognise that:

- *The high speeds and volumes of traffic on Motorways warrant the highest design standards and more discretionary and closely managed access than for other Roads. For example, surface irregularities that may be tolerable on relatively low speed urban streets would cause a safety hazard for high-speed Motorway traffic; and*
- *The Corridor Manager's top priorities are traffic flow and safety but the Corridor Manager should also consider the impact on the Utility Operator's customers if the Utility Operator cannot access the Motorway.*

4.8.4 Evaluation Criteria

The Corridor Manager will assess each application for access on the following criteria, where applicable:

1. There are no practicable alternative routes.
2. The shortest practicable route has been taken across the Motorway.
3. Where longitudinal placements of above-ground Utility Structures are necessary, the safety risks have been assessed, they are as close to the boundary as possible, and consideration has been given to Motorway pinch points such as interchanges, structures and grade-separated Local Road crossings.
4. Motorway pavement reinstatement meets safety requirements of vehicles travelling at higher speeds.
5. The use of existing ducts or galleries within bridges and service culverts has been fully explored.
6. Utility Structures, cables and pipes proposed on the underside of bridges and viaducts will not overload the bridge, affect its load bearing capacity, reduce the clearance from the Motorway Carriageway or cause safety issues resulting from possible vehicle impact strikes.
7. The minimum depth of cover of the Utility Structure is in accordance with Section 3.2.2.
8. Work will be carried out in such a way that minimises disruption and distraction as much as possible (such as timing Work at night).

The Corridor Manager will also apply the following criteria, where practicable and foreseeable:

9. The likelihood or impact of future maintenance is minimised.
10. The capacity of all Utility Structures is sized to cater for the maximum envisaged long term requirement for the area, to avoid the need for duplication or future replacements.
11. Allowance is made for planned future Motorway developments (particularly where Utility Structures are to be placed longitudinally, as the costs of moving them will be higher).
12. Utility Structures cross Motorways in ducts or gantries, except overhead electricity wires or cables.
13. There is multiple use of crossing ducts.

14. Ability to access Utility Structures from outside the Carriageway for emergency and maintenance Works.
15. The Works provide opportunity for the Corridor Manager or other Utility Operator/s to carry out required Works in the area, where they will not adversely impact on its Works.

As there is often long-term restricted space in a Motorway, 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.

4.8.5 Issuing the Works Access Permit (Motorways)

1. The Motorway Corridor Manager must respond to a compliant CAR within 30 Working Days of receipt of that CAR. Where access is granted by the Motorway Corridor Manager, the WAP issued for the Works will specify any applicable conditions for the Works.
2. Where the Motorway Corridor Manager issues the WAP for a set date or Work period and there is any change to the expected date or Work period, the Utility Operator must obtain the specific approval of the Motorway Corridor Manager as soon as practicable.
3. Where the Motorway Corridor Manager or Utility Operator identifies other affected Parties, then the Motorway Corridor Manager must provide those Parties with a copy of the WAP.

4.9 Specific Conditions for Access to Railway Corridors

4.9.1 Purpose

The purpose of this Section is to specify the procedures that Utility Operators must follow to gain access for installation or maintenance of Utility Structures on, in or over Railway Land. Where they differ from those described in Sections 4.1 to 4.6 and 4.6, the requirements in this Section will prevail. The procedures apply regardless of whether the land is part of a Railway Corridor that is open or closed for railway traffic.

4.9.2 Corridor Access Request Process for Railways

1. The following documents are required for all access to Railway Land:
 - a) an access right (Deed of Grant or an historical access right); and
 - b) a Permit to Enter prior to each and every occasion on which the Utility Operator physically enters Railway Land.
2. If preliminary site investigation is required, the Utility Operator should seek a Permit to Enter from KiwiRail's area office or the Railway Corridor Manager for other Railway Land to get access for these purposes (refer Section 4.9.6). If a Utility Operator has a historical access right but no Deed of Grant,

refer to Section **Error! Reference source not found.** Territorial Authorities hold contact details for Railway Corridor Managers in their districts or details for most heritage Railway Corridor Managers are obtainable through the Federation of Rail Organisations of New Zealand at www.fronz.org.nz

3. Utility Operators must lodge CARs for access to KiwiRail Railway Land with the National Lease Manager, KiwiRail Network, PO Box 593, Wellington (Attention: Grant Administrator) or the Railway Corridor Manager for other Railway Land.
4. The CAR must identify any relevant permits or licences and specify whether the proposed Works are:
 - a) new Works; or
 - b) under an existing Deed of Grant; or
 - c) existing Works (as defined in the Acts referred to above); or
 - d) existing unauthorised Works (ie there is no Deed of Grant or relevant statutory authority authorising the Works to be on Railway Land).
5. The CAR must also specify the type of Works to be carried out and whether they:
 - a) involve maintenance, upgrading or replacement or installation of new Utility Structures;
 - b) involve the Utility crossing over (ie running latitudinal to) the Railway Corridor at only a single point from one side to another (which could include short distances along the Railway Corridor in order to reach a suitable crossing point); or
 - c) involve the Utility running along (ie longitudinal to) the Railway Corridor.
6. The Utility Operator must use the CAR form to request access to maintain existing assets even where a Deed of Grant is in place.

While the Utility Operator will use the same form for Maintenance and New Works access, it is noted that the purpose of the Maintenance application is so that the Railway Corridor Manager and the Utility Operator can agree when and how the Work is to be done so that it does not impede safe railway operations or otherwise put safety at risk. Subject to agreement on conditions relating to these matters and compliance with the terms of the Deed of Grant, the Railway Corridor Manager will approve applications of this type. When approved, the Railway Corridor Manager will document the terms and conditions in a Permit to Enter.

4.9.3 Information to be Provided with the CAR (Railways)

1. Utility Operators must provide the information in Table 4.1 with the CAR application for Railway Land, along with any unique site-specific data, where appropriate, and any additional information specified in the CAR conditions.
2. Utility Operators requiring a Deed of Grant prior to lodging a CAR must provide items 1, 5, 6 and 11 at the first step (negotiation of the Deed of Grant) and the remaining information at the second step (the CAR application).

The design/construction details may still be conceptual at the time of applying for a Deed of Grant.

Table 4-1 summarises the information required to be provided with the CAR (Railways).

Information Required by request type	Maintain existing or install temporary assets	Replace/upgrade existing assets	New assets across Corridor	New assets along Corridor
1. Description of proposed Works, location plan and site plan.	√	√	√	√
2. Procedure to ensure that KiwiRail's Network Control Manager will be notified (0800 808 400) in the event of an emergency.	√	√	√	√
3. Details of the Contractors, subcontractors and contract-works insurance.	√	√	√	√
4. Site-specific Health and Safety plan.	√	√	√	√
5. Design plans, including photographs if applicable, clearly indicating the Utility to be installed, the location of any on or above-ground features and the Railway Land boundaries.		√	√	√
6. Details of the construction materials and methodology.		√	√	√
7. Details of how the design and specifications of the crossing minimises the need for ongoing access for maintenance purposes.		√	√	√
8. Details of how the minimum requirements in KiwiRail's or the other Railway Corridor Managers' codes, standards, guidelines and relevant legislation are met and complied with ³ .	√	√	√	√
9. Evidence that demonstrates how the safety and operational impact of the Work will be minimised (including impact on third parties).	√		√	√
10. Evidence that other Utility Operators and Corridor Managers affected by the proposed Works have been notified and, if required, their consent obtained.	√		√	√
11. Evidence that alternatives have been investigated and why they are not preferred.	√		√	√

Table 4-1: Information Required with Railway CAR

4.9.4 Evaluation Criteria

The Railway Corridor Manager will consider applications for new access rights on the basis of physical and operational considerations, as well as commercial considerations.

The Corridor Manager will assess each application for access on the following criteria, where applicable:

1. Consistency with the safe operation of the existing or future Railway network;
2. Space availability. This may be limited in cuttings, embankments, tunnels and on bridges;
3. Any conflict with future proofing the Railway network: Placement of utility assets may be limited to allow for expansion of the Railway network (for example, electrification, additional tracks, maintenance operations);

³ KiwiRail guidance and specifications for access to rail corridors is at <http://www.ontrack.govt.nz/networkaccess/aboutnetworkaccess/Pages/Utilities.aspx>

4. Existing agreements/third party rights;
5. Value proposition to the Railway Corridor Manager, as access to the Railway Corridor is on a commercial basis (reference 4.9.7);
6. There are no practicable alternative routes.
7. The shortest practicable route has been taken across Railway Land.
8. Where longitudinal placements of above-ground Utility Structures are necessary, the safety risks have been assessed, they are as close to the boundary as possible, and consideration has been given to pinch points such as interchanges, structures and Local Road crossings.
9. Any Road(including level crossings) pavement reinstatement meets durability and safety requirements of vehicles travelling at higher speeds.
10. The use of existing ducts or galleries within bridges and service culverts has been fully explored.
11. Utility Structures, cables and pipes proposed on the underside of bridges and viaducts will not overload the bridge, affect its load bearing capacity, reduce the clearance from Railway Infrastructure or cause safety issues resulting from possible vehicle impact strikes.
12. The minimum depth of cover of the Utility Structure is in accordance with the Railway Corridor Manager's requirements. KiwiRail's technical specifications are available on its website <http://www.ontrack.govt.nz/networkaccess/aboutnetworkaccess/Pages/Utilities.aspx>
13. Work will be carried out in such a way that minimises disruption and distraction as much as possible (such as timing Work at night).

The Corridor Manager will also apply the following criteria, where practicable and foreseeable:

14. The likelihood or impact of future maintenance is minimised.
15. The capacity of all Utility Structures is sized to cater for the maximum envisaged long term requirement for the area, to avoid the need for duplication or future replacements.
16. Allowance is made for planned future developments (particularly where Utility Structures are to be placed longitudinally, as the costs of moving them will be higher).
17. Utility Structures cross Railway Land in ducts or gantries, except overhead electricity wires or cables.
18. There is multiple use of crossing ducts.
19. Ability to access Utility Structures from outside the Railway Corridor for emergency and maintenance Works.

4.9.5 Access to Existing Facilities without a Deed of Grant

1. There are some situations where utility assets have been laid legally through historic access rights. Where Utility Operators believe this to be the case they must submit evidence of these historical access rights with the CAR.
2. Where there are existing utility assets in Railway Land without an executed Deed of Grant, the Railway Corridor Manager will seek to negotiate a Deed of Grant with the Utility Operator when it next seeks Railway Corridor access to work on that Utility Structure.

While KiwiRail has a preference for negotiating a Deed of Grant in situations where Utility Operators have historical access rights, this preference does not remove those historical access rights.

4.9.6 Permit to Enter (Works Access Permit)

1. All third parties entering Railway Land must have authority for access in the form of a Permit to Enter, to ensure adherence to safety requirements (the Permit to Enter for KiwiRail is available on the KiwiRail website and for other Railway Corridor Managers is included in Schedule A7).
2. The Railway Corridor Manager must respond to a compliant CAR within 30 Working Days of receipt of that CAR. Where access is granted by the Railway Corridor Manager, the WAP issued for the Works will specify any applicable conditions for the Works.
3. The Railway Corridor Manager must set out all conditions of entry in the Permit to Enter, which may include Reasonable Conditions as described in Section 4.5, processes to be followed such as site induction, site rules, hazards, requirements to contact other parties and any other relevant conditions.
4. Electrical safety permits are required if the Works will be undertaken within 4m of the electrified traction system or wire. These permits are obtained from the Railway Corridor Manager and require that the Utility Operator's staff or agents must:
 - a) be qualified to work within 4m of the electrified traction system; and
 - b) have received specific Electrification Awareness training.
5. Any Works undertaken within 5m of a railway line must be supervised by a Railway Corridor Manager approved, qualified 'protector'.

A Permit to Enter is required for all access on Railway Land, however the safety requirements for non-operational land may be less stringent. In the case of a heritage railway or tramway, it may be possible for Work to be done during non-operational times.

4.9.7 Fees and Charges

The Railway Corridor Manager's fees and charges will reflect the reasonable commercial value to them of the access right granted, taking account of the terms and conditions on which that right is granted as documented in the Deed of Grant or in another relevant historic right for access as referred to in Section 4.9.5.

Fees and charges imposed by the Railway Corridor Manager are subject to any relevant historic agreements which establish an existing charge for access, and section 35(5) of the NZRCA and section 75(7) of the Railways Act which provide that rights granted to public bodies at level crossings must be at nominal rental.

5. Procedures for Working in Road and Motorway Corridors

The requirements in this Section must be read in conjunction with the Principles, Rules, Roles and Responsibilities and General Requirements outlined in Sections 1 and 2.

Chapter 5 only applies to Works in Roads and Motorways. Guidance for working in Railway Land are provided in KiwiRail's Specifications for Working in Railway Corridors General Requirements <http://www.ontrack.govt.nz/networkaccess/aboutnetworkaccess/Pages/Utilities.aspx>.

5.1.1 Works Access Permit

The Utility Operator must:

- a) not start the Work until a WAP has been issued or until 15 Working Days (20 Working Days for water and wastewater Utility Structures on Auckland Council Roads) after the CAR is lodged, whichever comes first (this time may be extended under certain conditions, refer Section 4.4);
- b) ensure that all Works comply with the conditions of the WAP issued by the Corridor Manager concerning those Works;
- c) keep a copy of the WAP, including conditions, on site while Work is being carried out; and
- d) complete the Works within six months of issue of the WAP or apply for another (Section 4.4).

5.1.2 Protection of Existing Assets (Road, Motorway, Utility Structures, Survey Marks)

1. When undertaking Works in Road and Motorway Corridors, all Parties must:
 - a) comply with the Department of Labour Guide for Safety with Underground Services;
 - b) take measures to ensure all existing Utility Structures that may be affected by site construction are not damaged during the course of the Work;
 - c) carry out its Work in a manner that protects the separation requirements of other Utility Operators as provided for in relevant codes and regulations;
 - d) maintain the integrity of, and not destabilise, any embankments or adjoining properties when they are working in or near and maintain safety distances for Utility Structures if they modify embankments or Road or Motorway surfaces; and
 - e) where survey marks are likely to be disturbed or damaged, the Government agency responsible for maintaining the survey marks (Land Information New Zealand) must be notified and arrangements must be made to replace or offset the marks prior to the Work being undertaken.
2. Before undertaking Works, the Utility Operator must:
 - a) carry out a site assessment;
 - b) record the existing condition of all surfaces and above-ground Utility Structures in the immediate vicinity of the Work Site; and
 - c) take photos to record the pre-existing condition of the Work Site, particularly any existing damage.
3. All traffic signal ducts, cables, chambers and poles affected by the Utility Works must be reinstated by the Utility Operator as soon as practicable and in any event within 48 hours of final reinstatement of the excavation in the immediate vicinity, using a Contractor approved by the Corridor Manager.
4. If damage is caused to any Road, property or utility assets:

- a) the Utility Operator must notify the Corridor Manager and the respective Utility Operator of any damage caused to its assets or property as a direct result of the Work it is undertaking;
- b) if it is not clear who or what was responsible for the damage, all relevant parties involved with the particular Works that have resulted in the damage must cooperate with the owner of the damaged assets in identifying the Party responsible for the damage;
- c) noticeable settlement in Carriageways and footpaths must be rectified within the period set out in the notice issued in accordance with Section 4.6.2; and
- d) all other Road or Motorway assets, properties and existing Utility Structures that are damaged by any Work must be repaired as soon as practicable after the damage occurs. The affected Utility Operator responsible for the Utility Structure or the Corridor Manager must decide who will carry out the repair Work.

Damage may include, but is not limited to, subsidence or settlement of trenches or Road and Motorway infrastructure, Road or Motorway surface deterioration such as erosion of poor surface material, the appearance of the joint crack through the joint sealing or pot holing of the adjoining surface at the edge of the Work. It also includes damage to any or all adjacent utility infrastructure affected by the Works and any vehicles or any other private property damaged during the implementation of the Works.

The Utility Operator is responsible for all Work it undertakes within the Road or Motorway Corridor in regard to property connections it is responsible for. Connections in high-density use areas such as large shopping precincts and other similar areas require special care as these are generally congested with other utility connections which may be shallow and not shown on utility plans. There may have been unauthorised excavations and connections not commissioned by the owner of the Utility Structure. If any damage to other Parties' assets is found that is believed to have been caused by such unauthorised activity, the Party that finds the damage should notify the Utility Operator who should follow this up directly with the property owner.

5.1.3 Maintaining Stormwater Networks

Utility Operators must:

- a) take appropriate steps to keep excavations free of water, to minimise risks associated with rainfall and subsoil drainage;
- b) install appropriate drainage or flow control devices where a Utility Operator cuts across a slope or intersects a subterranean groundwater flow path, as agreed with the relevant Territorial Authority or Corridor Manager;
- c) protect any roadside stormwater systems that are potentially affected by the Works. In Road or Motorway situations where there is no kerb, the water channel is either the clearly formed side drain, or must be taken as a 1 m wide zone along which any stormwater can flow on the edge of the Road or Motorway formation;
- d) assess whether additional consents or conditions are required, or when modifications to existing consents are required, when working in the vicinity of roadside stormwater systems; and
- e) retain existing formed and natural stormwater drainage paths during Works and fully reinstate after Works, including stormwater drainage lines from residential private property.

Utility Operators should also consider the following:

- Roadside drains are generally the stormwater drainage channels for adjoining land as well as the Road or Motorway itself, and therefore can carry significant flows. Roads may also operate as the secondary flow path for stormwater runoff in heavy rainfall events.

- An increasing number of roadside stormwater treatment and disposal systems exist for road runoff. These systems are generally consented under the Resource Management Act.
- Parties should take care in low lying areas where the natural groundwater level may be close to the ground surface; dewatering may not be practical in these circumstances.

Private stormwater drainage lines from residential private property kerbs are not part of this Code, but Utility Operators should be aware that these lines may exist (often at shallow depths) and make allowance for them in their construction and reinstatement Work.

5.1.4 Trenchless Construction

1. When using trenchless construction, the Utility Operator must:
 - a) agree the construction technique with the Corridor Manager, taking into account the design requirement and site constraints; and
 - b) use plans, locators and trial excavations as appropriate to locate existing Utility Structures in the same way as for excavation methods.
2. The Utility Operator must use trenchless construction in State highways and Main Roads, particularly in the Carriageway, unless it can demonstrate that this is not reasonable or practicable.

Reticulation by trenchless construction rather than open trenching is encouraged to minimise any adverse effects on the Road or Motorway Corridor, unless it is impracticable, technically infeasible, unsafe, uneconomic or represents an unacceptable level of risk to other underground Utility Structures.

When using trenchless construction, the Parties should also consider:

- Increasing clearances from other Utility Structures, taking into account factors such as the construction of adjacent plant, ground conditions, bore diameter, the accuracy and reliability of the technique/equipment being used and whether the other Utility Structures are parallel to or crossing the proposed line;
- Increasing minimum cover requirements due to soil conditions and their potential to deflect the bore or drill; and
- Exercising special care to ensure that other underground Utility Structures are not damaged.

5.1.5 Working in the Vicinity of Trees

The Utility Operator must:

- a) comply with the rules in the relevant district plan or any specific resource consent related to the affected trees;
- b) have a best-practice management plan for working within the dripline of trees (see Figure 5-1) and carry out such Works in accordance with this plan and provide the management plan to the Corridor Manager on request;
- c) comply with the Electricity (Hazards from Trees) Regulations 2003, where applicable, when working within the canopy of trees; and
- d) comply with the requirement of NZECP 34 when using machinery close to overhead conductors (refer also to the Department of Labour Approved Code of Practice for Safety and Health in Tree Work: Part 1 Arboriculture and Part 2: Maintenance of Trees Around Power Lines).

In developing the management plan, the following matters should be considered:

- a) providing guidelines for when expert assistance or advice should be required;
- b) when hand excavation may be required;

- c) methodologies for cutting root;
- d) when an experienced person should carry out the pruning required;
- e) where practicable, use of trenchless methods near trees and shrubs;
- f) retaining larger roots in an undamaged state, protected from drying and, where exposed, backfill as soon as possible;
- g) take care when working with trees in the vicinity of other Utility Structures as moving the tree may cause physical damage to other Utility Structures;
- h) use adequate measures to protect trees and shrubs when working with machinery in close proximity to established trees and shrubs; and
- i) mitigation for removal of trees to accommodate infrastructure.

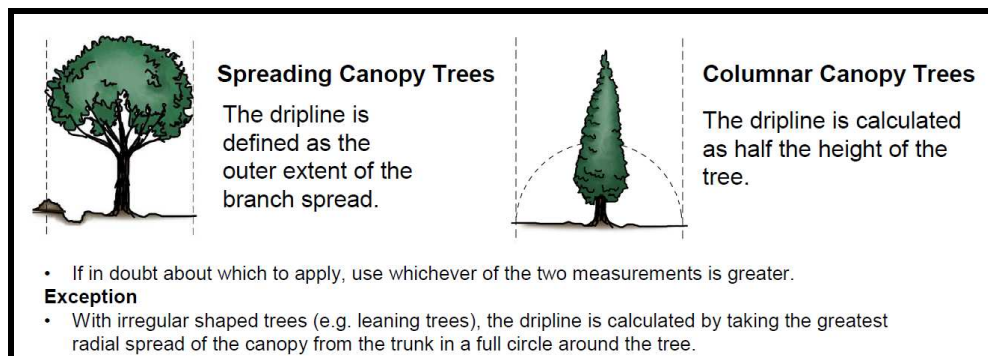


Figure 5-1: Tree Dripline Calculation.

5.1.6 Public Liability

The Utility Operator must have sufficient public liability cover that:

- a) extends for a minimum of two years from the date of the completion of the Works or longer if agreed with the Corridor Manager but not, in any circumstances, longer than six years; and
- b) includes all reasonably foreseeable risks normally applicable to construction Work in Road and Motorway Corridors including vibration or dust damage to property and compensation costs due to removal of support to land.

The Corridor Manager may discuss with the Utility Operator the form, terms and value of the cover. The cover should be sufficient to indemnify the Corridor Manager against any claims of loss or damage to property of the Corridor Manager or Parties claiming against the Corridor Manager that may arise out of, or in consequence of, the construction or maintenance (or lack of) of the Works.

5.1.7 Emergency Contact Details

Prior to undertaking any Works, the Utility Operator must exchange contact details with the Corridor Manager for use in emergency situations.

5.2 Locating Existing Underground Utility Structures

5.2.1 General Procedures for Location

1. Before commencing Work, the Party undertaking the Work must:
 - a) identify and notify the Utility Operators and Corridor Manager and obtain requirements required for Work under, adjacent to or over their Utility Structures and Road Structures;

- b) have located all affected underground Utility Structures and Road Structures, such as traffic light loops, fibre cables etc, in accordance with the requirements of the Corridor Manager and Utility Operators responsible for their affected Utility Structures and Road Structures;
 - c) where excavations are required to locate the structures, safe digging practices must be employed; and
 - d) if the Party cannot locate an identified structure in close proximity to the identified location, notify the respective Utility Operator or Corridor Manager who is responsible for identifying or correctly locating its assets.
2. During underground Work, the Utility Operator must:
- a) comply with the safe digging requirements in Department of Labour Guide for Safety with Underground Services (2002); and
 - b) allow other Utility Operators to observe Work in close proximity to their Utility Structures.

All Parties should always assume that underground Utility Structures are present until it is proved otherwise. Refer also to Section 3.2.

Utility Operators with Utility Structures in proximity to the Works may assist by marking their service locations on the ground.

If another Party affects the Work of a Utility Operator by not reasonably complying with their obligations under this Code, the affected Utility Operator may seek to recover any additional costs incurred by it from the Party that failed to comply.

5.2.2 Finding Unmarked Assets owned by Others

Where a Party or its agent locates or exposes assets not shown (or shown inaccurately) on any plan:

- a) the Party must notify the owner of that asset of the true location, and the owner of that asset must amend its records and notify the Corridor Manager accordingly; or
- b) if the Utility Operator is unidentified, the Party must notify the Corridor Manager and the Corridor Manager must promptly try to identify and notify the Utility Structure's existence and location to the owner; and
- c) the Party that owns that Utility Structure must promptly provide any assistance reasonably required.

During underground Work, the Utility Operator should:

- make allowance for unforeseen delays due to the discovery of unmarked or unknown Utility Structures; and
- assume that there is a field (subsoil) drain located under all kerbs or water channels, at a depth of up to 1 m (these are not normally marked on plans).

5.2.3 Locating Traffic Signal Assets

Before any excavation or saw cutting Work near traffic lights the Utility Operator must liaise with the Corridor Manager to verify the location of cables and detector loops.

Most existing traffic signal cables carry mains voltage and are housed in ducts that can have 300 to 600 mm cover. Traffic detector loops, including traffic counting equipment, are typically located in the Road surfacing within 6 m of a stop line at any signalised location and connected to the signal control box in ducts. In heavily trafficked Roads, there may also be advanced traffic detector loops to detect queues at some distance from the traffic signals on the approach lanes. Figure 5-2 illustrates the approximate layout of underground cables around a traffic signal.

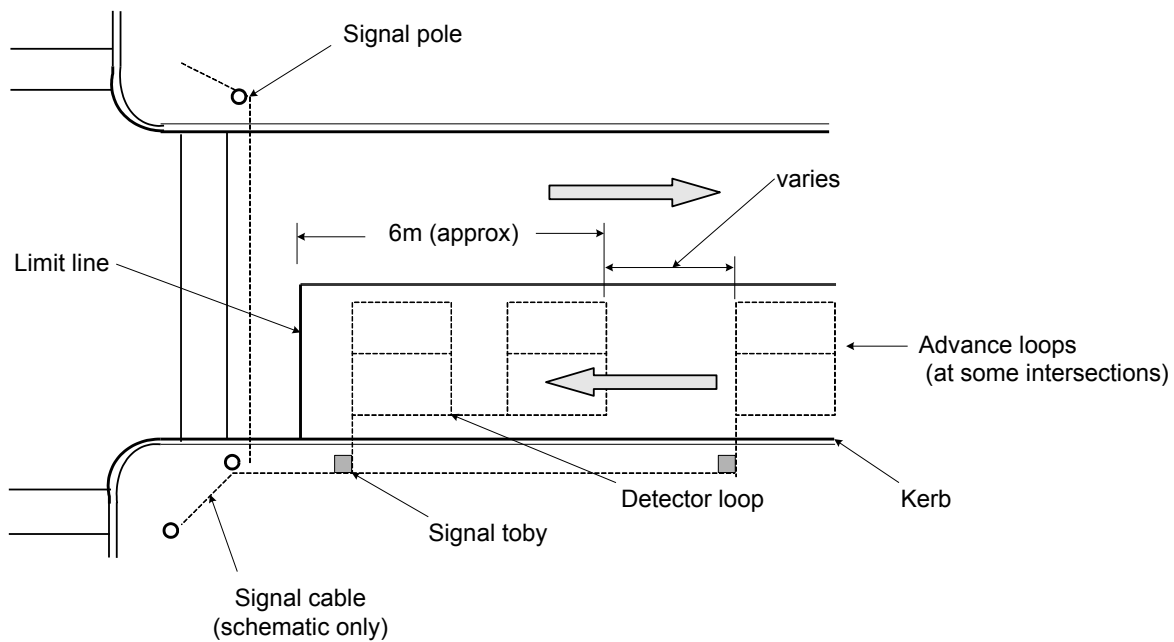


Figure 5-2: Indicative locations for traffic signal cables, power cables and detector loops

5.3 Site Management

5.3.1 General

1. The construction site must be clearly defined, and barricaded where appropriate, including any area of the Corridor used for storage or that does not have a proper temporary surface for public use.
2. The Utility Operator must also ensure:
 - a) the size of the Work and the Road or Motorway portion of the site is kept as small as is reasonably possible;
 - b) the site is kept tidy at all times;
 - c) safe provision is made for all Road Corridor users including traffic, trains, pedestrians and cyclists;
 - d) access to properties adjacent to the site is avoided or minimised to the extent reasonably practicable;
 - e) stormwater and siltation control is managed; and
 - f) at completion, the area must be tidied and left in a similar condition to that which existed before the Works commenced.

5.3.2 Pollution Control

Utility Operators have a duty to comply with the Resource Management Act, which avoids unauthorised discharge of contaminants to open water channels.

Utility Operators should:

- Identify environmental risks and include sufficient written instructions and supervision included in their contracts to avoid discharges of contaminants to the environment from its own or Contractor activities;
- Ensure that the Contractor is aware of the potential issues and has appropriate action plans; and
- Protect ground and surface water from point source pollution and minimise any impacts on waterways.

5.3.3 Traffic Management

1. The Utility Operator must implement the approved TMP, agreed as part of the CAR process (refer Section 4.3.3), throughout the duration of the Works.
2. If a Work Site audit shows that the traffic management does not comply with the above or any other condition, the Utility Operator must remedy the non-compliance immediately, or cease working until authorised to recommence, except for that Work required to ensure the safety of the Work Site.
3. The Utility Operator must follow all instructions given by an officer of the NZ Police in respect of traffic management, except that any Work Site ordered closed must be made safe before it is vacated.

5.3.4 Hours of Work

Hours of Work must be:

- a) agreed between the Parties or specified in the Reasonable Conditions; and
- b) carried out outside peak traffic flows (except for Emergency Works), unless otherwise agreed.

Hours of Work may be restricted to limit interference with property access, or to minimise noise, other environmental impacts and traffic congestion. Where the Hours of Work may be severely restricted the Parties may agree on special arrangements to work extended hours.

5.3.5 Noise and Vibration Management

The Utility Operator must:

- a) comply with the limits specified in New Zealand Standard NZS 6803: 1999, Acoustics – Construction Noise and district plan provisions relating to construction noise; and
- b) resolve excessive noise and vibration conditions where they occur as a result of the Works.

Utility Operators should:

- Address noise management in its Work planning;
- Muffle all plant and equipment in accordance with good industry practice;
- Avoid unreasonable nuisance and use methods that minimise noise levels, such as avoiding the use of breakers and other similar loud noise when required to work at night; and
- Take additional care when undertaking Work adjacent to asbestos pipes, as these are prone to failure when subjected to vibration.

5.3.6 Public Relations and Communication

All Parties must keep affected parties appropriately informed of proposed Works and Works in progress.

A written communication strategy must be prepared when both Parties agree this is required or where the Corridor Manager specifies this in the Reasonable Conditions (refer Section 4.5).

A sample communication checklist is included in Schedule C. A written strategy may be appropriate where Major Works or Project Works may have a significant effect on the public or property owners or occupiers. Reasonable Conditions may also specify communications such as:

- Production and distribution of a suitable leaflet advising the public of the forthcoming project at least one month before Work starts;
- Advertisement/public notice in specified local newspapers at least two Working Days before Work is started; and
- Advertisement/public notice on specified local major radio stations in advance of the Work and throughout the period of the Work (typically before and during peak traffic times).

5.3.7 Signage for Works in Road Corridors

1. The Utility Operator must display signs for Major Works or Project Works, unless otherwise agreed with the Corridor Manager, as follows:
 - a) placed at each end of the Work Site;
 - b) erected a minimum of two days prior to construction;
 - c) minimum dimensions of 1200 mm by 800 mm;
 - d) clearly visible to pedestrians and other traffic;
 - e) include the name of the Utility Operator and Contractor, the nature of the Works, the likely duration and contact details; and
 - f) with colour and font size conforming to either the Corridor Manager's requirements or the requirements of the NZTA Manual of Traffic Signs and Markings (MOTSAM).
2. The signs must, where practicable:
 - a) be at right angles to the Road centreline;
 - b) not obstruct access to private property;
 - c) not obstruct visibility at pedestrian crossings or intersections;
 - d) not be on a handrail, fence or tree;
 - e) not be on a pole or Structure without first obtaining the agreement of the owner;
 - f) not obstruct the visibility of road users, particularly at or near intersections or entrances;
 - g) not physically obstruct road users including pedestrians and cyclists;
 - h) be at least 2.4m above ground level if mounted above pedestrian areas;
 - i) have lateral clearance from the Carriageway edge and minimum mounting height as per MOTSAM; and
 - j) be on frangible (easily broken) posts, if placed in the clear zone as defined in Part 6 of the NZTA's State Highway Geometric Design Manual.
3. The Utility Operator must remove signs immediately the Work has been finished and the site cleared.

5.4 Procedures for Undertaking Emergency Works

1. In carrying out Emergency Works, the Utility Operator must:
 - a) comply with any legislative provisions relating to Emergency Works;
 - b) undertake notifications and obtain approvals as per Section 4.3.3;
 - c) before starting Work, secure the working area and apply safety measures to protect workers and the public; and
 - d) identify the location of other Utility Structures prior to Works starting.
2. Under section 77(5) of the Government Roading Powers Act, the Corridor Manager has the power to carry out Work in an emergency and the duty to notify the Utility Operator as soon as possible.

In the event of an Emergency, the Corridor Manager should determine (in discussion, where possible, with other affected Utility Operators) the appropriate course of action to ensure the community's needs are best served.

The development of agreed processes for use by the Parties in Emergency Works is encouraged.

5.5 Trenching Procedures

5.5.1 General

Utility Operators must operate and manage Work Sites with trenches:

- a) to protect public safety at all times;
- b) to avoid impacts on other assets (for example, collapse of kerbing support);
- c) in accordance with the Department of Labour Approved Code of Practice for Safety in Excavations and Shafts for Foundations (1995); and
- d) in compliance with all other requirements of this Code.

Corridor Managers should use discretion in setting reasonable tolerances for completed Work which has not been completed in full conformance with Sections 5.5 and 5.6.

5.5.2 Trench Cutting and Excavation

1. Prior to the excavation of the trench:
 - a) any concrete, asphalt or chip seal surfaces must be cut with a power saw in a clean, straight line through the full thickness of the surface layer;
 - b) the separation distance from the original saw cut (the trimming allowance, refer Figure 5-3) must be a minimum of 150mm, except for concrete Carriageways where a minimum of 300mm applies, but more may be required to maintain the integrity of the final trench reinstatement;
 - c) if necessary, a second saw-cut must be made to ensure that all edges are straight, smooth, parallel to the line of the trench and that minimum trench trimming allowance is achieved; and
 - d) all joints must be cut to a depth sufficient to avoid disturbance of adjoining pavement. The depth of cutting must be not less than 30mm, or for concrete Carriageways, footpaths and vehicle crossings the depth must be not less than 80% through the concrete pavement layer.
2. If any over-break occurs:
 - a) a further cut must be made to maintain trimming allowances and a clean edge for reinstatement;
 - b) any change in direction of the saw cut must not exceed an angle of 45° to the trenchline;
 - c) the total length of over-break must not exceed 10% of the length of the trench; and
 - d) the length of trim at any one section of over-break must not be less than 5m (refer Figure 5-4).
3. During excavation of the trench:
 - a) there must be no undercutting of areas adjacent to the excavation;
 - b) if slumping at the sides of the excavation causes depressed areas adjacent to the excavation, or if the edges of the pavement are lifted during excavation, additional trench cutting outside the original line of the excavation and outside the area of damage must be carried out;
 - c) excavation to profile/depth must be in accordance with the construction drawings;
 - d) the length of open trench must be kept to a minimum and backfilled as soon as practicable;
 - e) excavated material that is not being used for backfill must be removed from the site;
 - f) where groundwater is likely to accumulate as a result of Utility Works, excavations must be permanently drained; and
 - g) the Utility Operator must provide temporary support/shoring to all trenches if required to provide lateral support to the excavation and to comply with health and safety codes, including the Department of Labour (OSH) Approved Code of Practice for Safety in Excavations and Shafts

for Foundations (1995). The Utility Operator must certify this Work in accordance with the requirements of the Building Act 2004. Alternative trench support can include battering, ground stabilisation and sheet piling.

Effective drainage of the trench is particularly important in rural situations where trenches run through cut areas, fill embankments or slip prone areas.

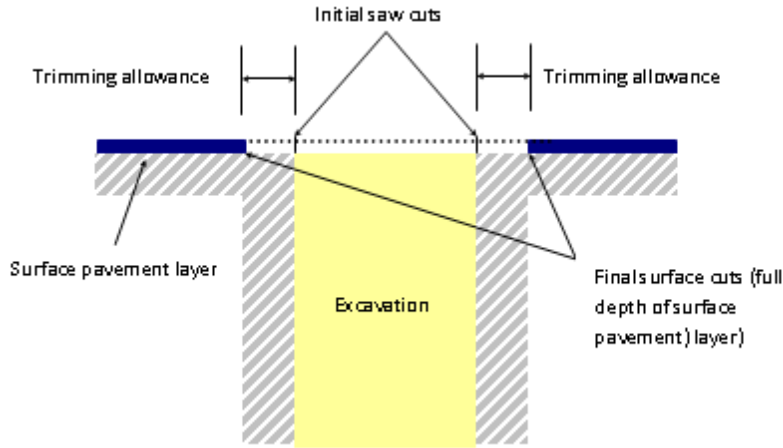


Figure 5-3: Standard trimming for trench cuts

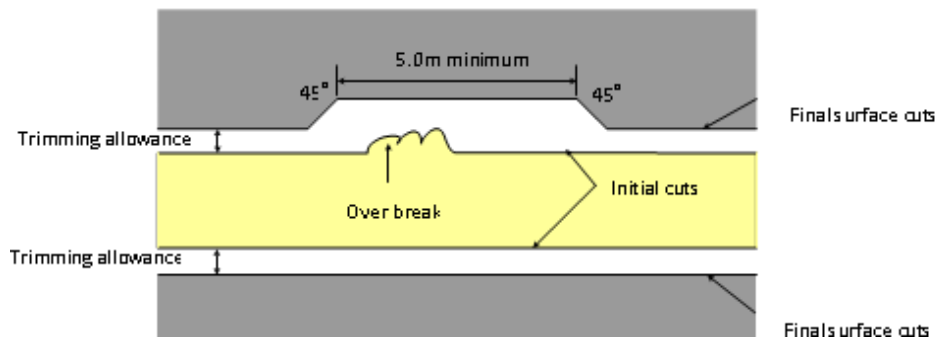


Figure 5-4: Parallel cutting of joints

4. After backfill and prior to surface reinstatement, the Utility Operator must re-cut surfaces if required, to achieve a neat simple pattern for reinstatement and to maintain minimum trimming allowances.

Generally this will mean parallel saw cuts on the sides of any area, but for open graded porous asphalt saw cutting is not the recommended method.

5. When a trench turns a corner, additional allowances must be made, as shown in Figure 5-5.

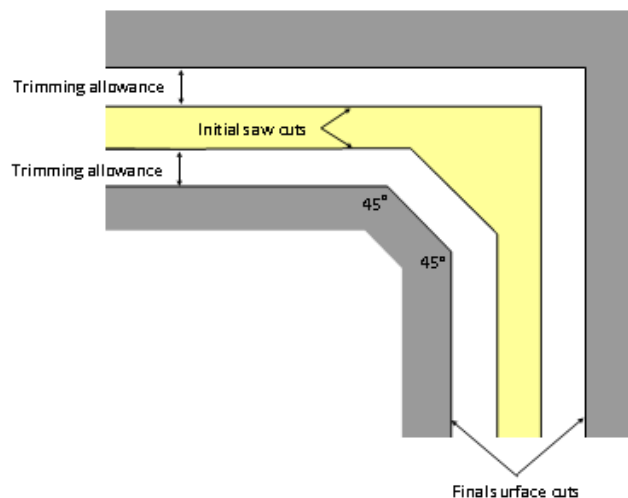
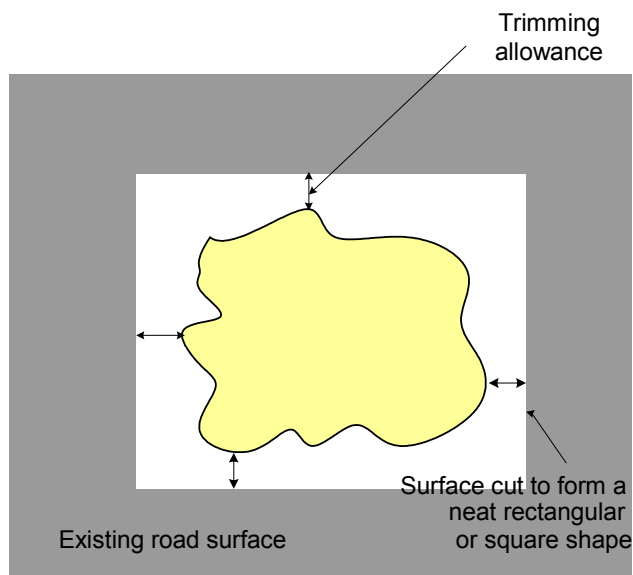


Figure 5-5: Trench excavation with corners

Figure 5-6 is an example of how an irregular excavation should be expanded to form a more regular shape to minimise disruption to the surface.

Figure 5-6: Finishing of irregular shaped excavations



5.5.3 Backfill Materials

1. All backfill materials:
 - a) must be in accordance with recognised standards and approved by the Corridor Manager;
 - b) must be adequate to ensure that the backfilled area can at least match the pre-trench subsurface integrity;
 - c) must be of sufficient quality and strength to support the imposed loading, including traffic and Road construction loading; and
 - d) where concrete or other stabilised layers, including geotextile material, exist in the Road pavement, the Utility Operator must reinstate the trench with similar material (further guidance on concrete reinstatement is included in Section 5.6.4).
2. Thermally-stable backfill:
 - a) where thermally-stable backfill is required (typically for power cables), the Utility Operator, Power Cable owner and Corridor Manager must agree on the compaction and standard, prior to CAR application, and put these in the Reasonable Conditions; and
 - b) when excavations make contact with trenches of power cables laid in thermally stable backfill, the Utility Operator must restore the thermally stable backfill to the standards applying before the excavation.

Figure 5-7 illustrates typical trench zones, with requirements for each zone detailed below.

3. The Bedding Material must be specified by the Utility Operator and placed:
 - a) in a loose state (sand must be dampened) and tamped to achieve compaction and surround of Utility; or
 - b) in a fluidised state where specifically approved by the Corridor Manager; and
 - c) to a depth of not more than 300 mm above the top of the Utility Structure, unless a variance is agreed between the Utility Operator and Corridor Manager.

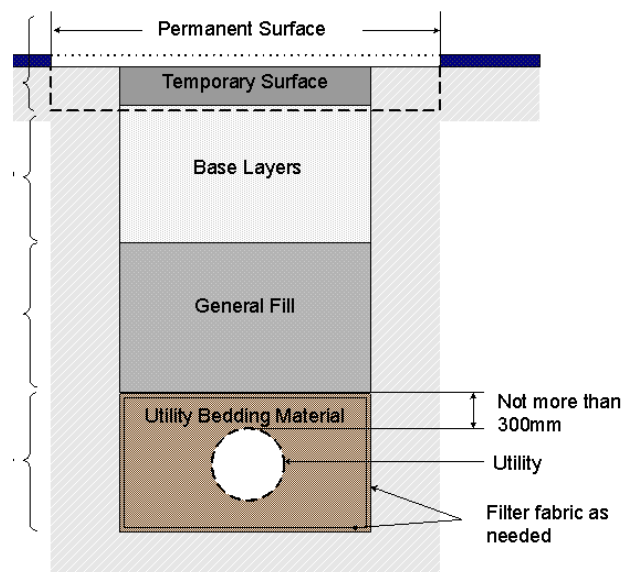


Figure 5-7: Fill layers in trench

4. General fill:
 - a) in Road Carriageway, shoulder and footpath, general fill must be well graded granular material free of deleterious material with maximum stone size 75mm;
 - b) where the Utility Operator uses suitable excavated material in berms, the required compaction standards must be achieved (refer Section 5.5.5).
5. Base layers – Road Carriageways: where there is more than one base layer:
 - a) the lower base layer (sub-base) material must be well-graded crushed granular, with maximum aggregate size 65mm, and a controlled grading curve and weathering and crushing resistance; and
 - b) the upper base layer (basecourse) for the Carriageway, or the whole basecourse if it is a single layer, must comply with NZTA specification TNZ M/4: Basecourse aggregate unless the Corridor Manager has approved an alternative basecourse product specification.
6. Base layers – footpaths: must be well graded GAP40 granular material.
Berms generally do not need a separate base layer other than general fill.
7. Prior to backfilling, excavated material that is unsuitable for backfilling must be removed from site and not be used to backfill trenches.

5.5.4 Backfill Placement and Compaction

1. Placement and compaction of all layers must:
 - a) be in layers not exceeding 200 mm (solid) thickness;
 - b) allow for appropriate compaction methods around the Utility Structures;
 - c) have mechanical compaction completed for each subsequent layer in turn; and
 - d) ensure lapping of any geotextile material in accordance with the manufacturer's specification.
2. During backfilling and compaction:
 - a) care must be taken to ensure no damage occurs to Utility Structures during compaction; and
 - b) if over break or other disturbance of the pavement layers occurs, the surface of such areas must be re-cut, excavated and backfilled in compliance with this Section.

Where the strata exposed as side walls of a trench is considered relatively soft, such that there may be risk of settlement arising from ongoing post-construction penetration of the granular fill material into the trench sides, the Utility Operator should discuss backfill options with the Corridor Manager. These may include, for example, the application of a geo-textile liner in the trench, or the use of modified (lime or cement-treated) granular materials in the vicinity of the soft layer/s.

3. Compaction must:
 - a) be carried out using suitable plant and equipment to achieve the specifications in Section 5.5.5; and
 - b) be confirmed by a Clegg hammer, or an agreed alternative, for sub-base and deeper fill.
4. When reinstating excavated concrete layers in the Carriageway, the Utility Operator must ensure that the new concrete:
 - a) retains at least the performance characteristics of the existing layer;
 - b) is installed at a minimum depth of 250mm;
 - c) has a 28-day compressive strength of 20 MPa;

- e) is manufactured in accordance with New Zealand Standards NZS 3104: 2003, Specification for concrete production – High grade and special grade or NZS 3109:1997, Concrete construction;
 - f) interlocks with the old concrete using R20 steel reinforcing bars placed centrally perpendicular to the face at 500 mm spacings along all joint faces. The bars must be bonded 250 mm into the existing concrete and extend into the new concrete a minimum of 250mm. The concrete must be reinforced with 665 steel mesh placed centrally. Where expansion or contraction joints are affected these must be reinstated; and
 - g) has a coarse broom finish surface and matches the line and crossfall of the Road surface, with allowance for asphalt overlay to be placed to the same thickness as on adjacent pavement as appropriate.
5. When reinstating concrete in any other areas, the concrete used should be of similar type and finish as the adjacent concrete.

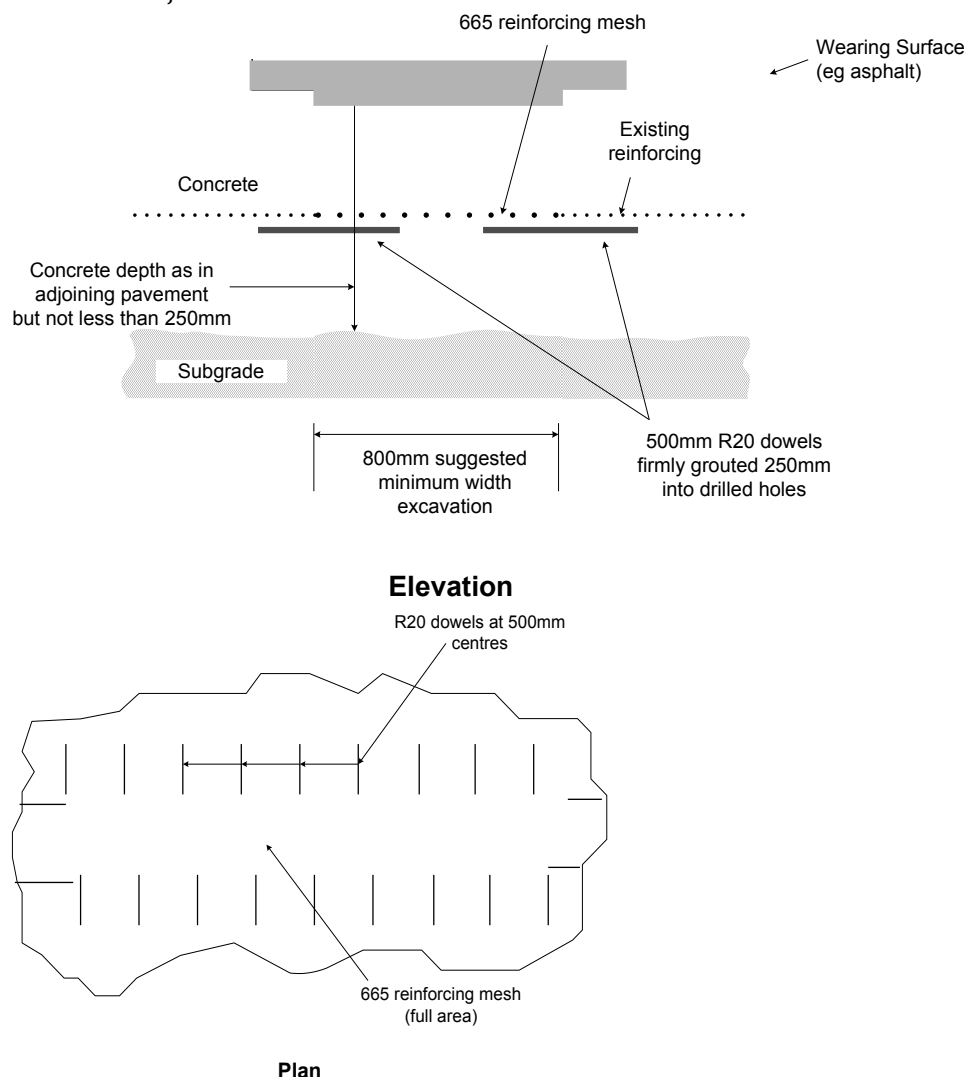


Figure 5-8: Concrete Road Carriageways

Table 5-1: Compaction testing

5.5.5 Compaction testing

1. Compaction testing must be carried out:
- a) by a suitably qualified person;
 - b) using equipment with a current calibration certificate;

	Carriageway	Footpath	Berm
Basecourse	98% MDD	IV 25	N/A
Sub-base	IV 35	IV 25	N/A
Deeper Fill	IV 25	IV 15	IV 10

IV = impact value

- c) as specified in the Reasonable Conditions and Quality Plan; and
- d) as necessary to achieve the standards in Table 5-1 at all depths of any backfill.

A lesser compaction for sand may be approved by the Corridor Manager if it can be clearly shown that the compaction is at least as much as the undisturbed sand in the adjoining ground. In the case of low volume roads a minimum impact value of 55 for carriageway basecourse may be accepted by the Corridor Manager as an alternative to specifying a maximum dry density (MDD).

2. A testing regime must be carried out as agreed with the Corridor Manager, or, in the absence of any agreement, as outlined below:
 - a) for trenches in berms, tests at a rate of at least one test per layer of backfill per 15m of trench, with a minimum of two tests;
 - b) for trenches in Carriageways or under footpaths, tests at a rate of at least one test per layer of backfill per 5m of trench with a minimum of two tests;
 - c) where the excavated area is greater than 0.5m² and less than 5m², tests at a rate of one test per backfill layer or, for larger excavations, one test per 5m²;
 - d) all test locations must be uniformly spaced in the pavement; and
 - e) tests must be carried out on every lift of each tested backfill layer to be assured of proper compaction of all of the backfill.
3. The above specifications do not remove the responsibility of the Utility Operator to ensure that no settlement occurs.

Also note that:

- *Subject to satisfactory test results the above frequency of testing may be reduced with the prior agreement of the Corridor Manager;*
- *The Clegg hammer may be used for testing of general fill and base layers but not for the upper base layer of Carriageways;*
- *Clegg hammer tests only indicate the compaction of the lift last laid of any backfill layer. The impact tester method covers material of 37.5mm and down and may not be suitable for sub-base material with larger stone sizes.*

4. The Utility Operator must retain the test records and make them available to the Corridor Manager on request.

5.6 Surface Layer Reinstatement

5.6.1 General Requirements

1. The Utility Operator must:
 - a) use suitably qualified and experienced persons for the construction of Road surfacing; and
 - b) comply with this Code and relevant industry standards.
2. The Utility Operator must, unless otherwise agreed with the Corridor Manager:
 - a) not open trenched sites to traffic until temporary or permanent resurfacing is in place;
 - b) not use temporary resurfacing unless permanent resurfacing is not practicable; and
 - c) have permanent resurfacing in place within seven days of completion of backfill or temporary surfacing.

3. The Utility Operator must ensure the reinstated surfacing:
 - a) is installed in clean, long, straight lines parallel to the kerb or footpath, or for transverse trenches, perpendicular to the kerb and channel;
 - b) uses materials that match the surrounding surface in type, quality, texture, skid resistance and strength;
 - c) matches at least the pre-existing surface in smoothness or ride quality for vehicles (vertical movements);
 - d) has a finished surface level and adjoining surface shaped to avoid ponding of surface water, such that the deviation of the surface from a 3m straight edge does not exceed 5mm;
 - e) does not vary more than 5mm in any location from the original surface;
 - f) is continuously graded towards stormwater drainage channels or gully entries; and
 - g) has no lips greater than 3mm high in pedestrian surfaces.
4. If the Corridor Manager requires a Road surface level survey prior to Work commencing, the Utility Operator must at its own cost carry out a survey that:
 - a) measures the surface level at 5 m intervals on each kerb and immediately around the proposed excavation; and
 - b) is accurate and has sufficient offset marks for levels to be re-established at the same points at any stage of the Work.
5. At the Corridor Manager's request, the Utility Operator must carry out Road surface roughness testing on a before-and-after basis for large projects.

5.6.2 Reinstatement near a Joint or Edge

If the edge of the trench in a footpath or Road Carriageway is within 1m of a joint or existing edge of the pavement, then the existing pavement must be replaced to that joint or edge as part of the surface reinstatement, and cut accordingly.

This requirement is commonly referred to as the '1 m rule' and is illustrated in Figure 5-9 and Figure 5-10. However the Corridor Manager may waive the requirement to extend reinstatement to a construction joint in a concrete surface when the concrete is significantly cracked.

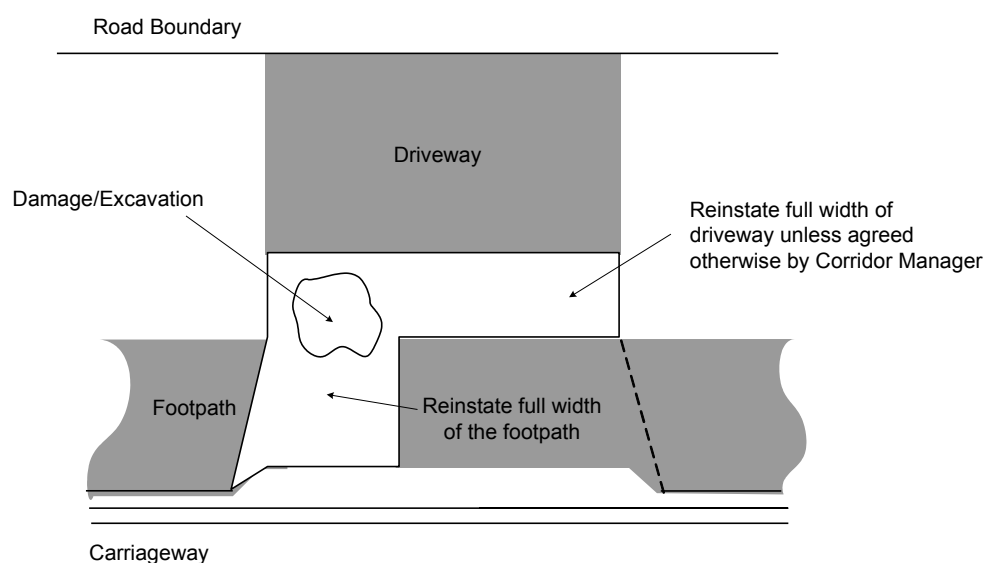


Figure 5-9: Excavation in footpath or driveway

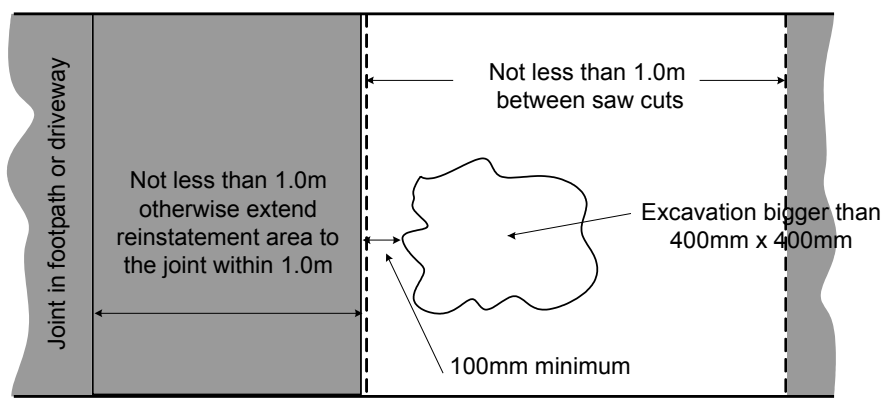


Figure 5-10: Reinstatement of concrete path or driveway

5.6.3 Temporary Surface Reinstatement

1. Temporary surfaces constructed by the Utility Operator must be:
 - a) 'cold mix' asphalt or an equivalent approved by the Corridor Manager;
 - b) at a surface level must be between 5mm below and 15mm above the original surface level, with a lip not greater than 5mm in any part of the surface;
 - c) laid in a manner and to a depth that is durable for both vehicular and pedestrian use;
 - d) maintained by the Utility Operator until permanent surfacing has been undertaken, including undertaking any repairs as soon as possible if damaged; and
 - e) fully removed prior to reinstatement with permanent materials.
2. Where the Utility Operator considers that special circumstances (but not at pedestrian crossings) require leaving an area of Road Carriageway and footpath without a proper temporary surface, the Utility Operator must:
 - a) seek prior agreement from the Corridor Manager;
 - b) provide additional 'Uneven Surface' and 'Speed Restriction' signage;
 - c) maintain the surface within agreed tolerances of the surrounding surface level; and
 - d) reinstate the surface with a proper temporary surface within one Working Day or as agreed with the Corridor Manager.
3. Where steel plates are used, they must:
 - a) be in place for no more than seven days or as agreed with the Corridor Manager;
 - b) have their use approved by the Corridor Manager;
 - c) be securely fixed in place to prevent dislodgement and to not be a nuisance or danger to passing traffic (vehicles, pedestrians, cyclists) users of local properties;
 - d) be skid resistant, secured and cushioned to prevent them from rocking, moving or creating noise;
 - e) be of sufficient strength and quality to support imposed traffic loading;
 - f) have appropriate signposting with temporary speed restrictions and hazard warnings (refer Section C4 of the CoPTTM; for Local Roads, see the Local Roads Supplement);

- g) have a ramp formed and filleted to ensure safe pedestrian and vehicular access; and
- h) have any temporary markings required by the Corridor Manager.

5.6.4 Specific Requirements for Different Surface Types

1. Asphaltic concrete surfaces must be constructed as follows:
 - a) not more than 75mm thick;
 - b) laid on a waterproof membrane seal coat;
 - c) surface mix design in accordance with the NZTA specification TNZ M/10: Asphaltic Concrete, TNZ Mix 15;
 - d) material laid and compacted to comply with the NZTA specification TNZ P/9: Asphaltic Concrete Paving Construction;
 - e) where the asphaltic concrete is laid in-situ for the wearing layer, the target air voids must meet any conditions in the CAR;
 - f) the basecourse layer swept free of all loose material before the membrane seal is applied;
 - g) if the asphalt concrete surface will be deferred for some time, provide a first coat seal consisting of a hot bitumen or emulsion seal coat sprayed on the edges of the existing pavement and the surface of the basecourse at a residual bitumen application rate of 1l/m² with a Grade 4 chip surface; and
 - h) within one week of final asphalt reinstatement, both sides of joints in the Carriageway must be sealed with an approved hot poured rubber bitumen in accordance with the NZTA specification TNZ C/6: Repair of Surface Defects. All joints must be clean and dry and the sealant must be applied and levelled with a sealing shoe in a 100 mm band across the joint, with an overlap of 50mm on either side of the joint.

Note that the limited thickness of asphalt and limited width usually makes use of instrument confirmation impractical.

Paver-laid asphaltic concrete is recommended to achieve the density and surface level tolerances of this Code. Extra care should be taken with hand-placed asphaltic concrete.

2. Open graded porous asphaltic surface must comply with the following requirements:
 - a) surface mix design, paver laying and compacting must be undertaken in accordance with the NZTA specification TNZ P/11: Open Graded Porous Asphalt;
 - b) the base of all areas to be covered by the porous asphaltic concrete must be chip sealed evenly with a bitumen emulsion complying with the NZTA specification TNZ M/1: Roading Bitumens;
 - c) the surface must be laid on self-draining waterproof surfaces; and
 - d) joint sealing must be undertaken as per Sections 5.6.4.1(g) and (h) above.
3. Structural asphalt concrete surfaces must:
 - a) be specifically designed and constructed to restore the structural integrity of the original pavement; and
 - b) have reinstatement details approved by the Corridor Manager.
4. Chip seal Carriageways must:
 - a) be reinstated using a two coat chip seal; the first coat must be a coarse grade chip (e.g. Grade 3) and the second coat a finer grade (e.g. Grade 4 or 5) to visually blend with the existing adjacent surfacing. The second coat must overlap the existing surface by not less than 100mm;

- b) where the area being reinstated is adjacent to a concrete channel, the new seal must overlap the channel by a minimum of 50mm; and
- c) be laid in accordance with the NZTA specification TNZ P/3: First Coat Sealing and the Chipsealing in New Zealand Handbook.

5. Texturised asphalt reinstatement must:

- a) be laid in accordance with the NZTA specifications TNZ P/4: Resealing or TNZ P/17: Performance Based Specification for Bituminous Reseals; and
- b) within one year of the initial reinstatement, the area must be texturised with a single or two coat chip seal, with chip size selected to visually blend with the existing adjacent surface. The seal coat must overlap the existing surface by not less than 100mm.

Instead of the Utility Operator carrying out the Work, the Corridor Manager and Utility Operator may agree an equivalent fee to transfer the responsibility for texturising to the Corridor Manager.

6. Segmental block paved surfaces must:

- a) be reinstated in the same materials and to a standard at least equivalent to the original surface in accordance with NZS 3116;
- b) be laid in accordance with the requirements of the manufacturer and the Corridor Manager;
- c) have any chipped or damaged blocks replaced with the same type; and
- d) where reinstating around surface features in coloured concrete to match blocks (if agreed with the Corridor Manager), the concrete must not extend more than one block length from the base of the pole or feature.

To re-establish a tight interlocking pattern with specified joint widths, it may be necessary to remove adjoining blocks and relay them up to a bordering physical feature such as the Road kerb.

5.6.5 Special Paving, Amenity Areas and Decorative Areas

1. Special paving areas must:

- a) be reinstated by a specialist Contractor;
 - b) match the original standard, with the same quality, texture, type, colour and material of the existing pavement and minimal visible evidence of the trench reinstatement;
 - c) have the whole panel replaced, where the paving is laid out in panels;
 - d) match any special treatments used in the existing construction (e.g. geogrid membranes, chip seal, high friction surface, grooved asphaltic concrete); and
 - e) use alternatives agreed with the Corridor Manager, where matching materials are not available.
- Some treatments such as geogrids need extended excavation to properly anchor the product.

2. Amenity and special decorative areas must:

- a) be reinstated by a Contractor approved by the Corridor Manager;
- b) match the original standard, with the same quality, texture, type, colour and material as the existing pavement with minimal visible evidence of the trench reinstatement; and
- c) have any urban design features, architectural finishes, gardens, artworks and landscaping properly reinstated to the pre-existing condition.

5.6.6 Road Markings, Signs and Furniture

1. **The Utility Operator must ensure** that road markings are:
 - a) recorded prior to being impacted by Works, including description of markings by type, their location and any special items;
 - b) located by way of an offset at the side of the Road to enable accurate remarking; and
 - c) reinstated prior to completion of Works and, in urban areas, preferably prior to reopening the lane or road to traffic.

The Utility Operator should take photographic evidence of pre-existing markings where significant impacts on markings are expected. The Corridor Manager may hold records of existing road markings and, if so, should make this available as required.

2. The Utility Operator must ensure that temporary road markings, where required for traffic safety purposes, are:
 - a) of an approved type and suitable for the purpose as specified by the Corridor Manager;
 - b) in place prior to traffic usage of the Road surface areas affected;
 - c) in an effective condition for the period of use until the permanent situation is established;
 - d) fully removed prior to re-opening the area; and
3. The Utility Operator must ensure that signs, furniture and lids:
 - a) are protected and maintained during the Work;
 - b) are replaced if they become damaged or lost prior to completion of the Work; and
 - c) have utility chamber lids and covers restored to the finished road level.

The Corridor Manager may carry out reinstatement of signs and markings on behalf of the Utility Operator, if agreed between both Parties or if not reinstated within a reasonable timeframe.

4. The specification, location and marking of fire hydrants must be in accordance with SNZ PAS 4509, Appendix L.

The Utility Operator must ensure that:

- a) fire hydrant box lids are not covered over during Works;
- b) fire hydrant box lids remain identifiable during Works;
- c) full markings indicating the location of fire hydrants are visible before the Utility Operator leaves the site.

Temporary markings include:

- a) the yellow fire hydrant box lid;
- b) an indicator plate or marker post at the edge of the road or footpath

Some markings may not be affected, such as painted hydrant covers, which would serve as temporary markers until full markings were reinstated.

6. Cost Allocation

6.1 Purpose

The purpose of this chapter is to provide guidance relating to the apportionment of cost between Corridor Managers and Utility Operators in Road Corridors.

The provisions set out in the Electricity, Gas, Telecommunications and Government Roothing Powers Acts⁴ prevail over the requirements in this Code. However the legislation does allow for a Corridor Manager and a Utility Operator to reach other agreements. The broad principles and definitions outlined Section 6.4 are intended to provide guidance to any negotiations where Parties wish to reach other agreements to provide clarity and consistency and to improve the collaboration between a Corridor Manager and a Utility Operator.

6.2 Legislative Provisions for Utility Operators

The following is a general summary of the implications of the legislative provisions. Parties will need to refer to the applicable legislation for more specific details. Cost allocation arrangements between a Corridor Manager and the relevant Utility Operators are set out in the Electricity, Gas, Auckland Council and Telecommunications Acts and in the Government Roothing Powers Act.

6.2.1 General Provisions in the Road Corridor

1. When a Corridor Manager requires Utility Structures to be moved for the purposes of its own Works Programme, then the Corridor Manager must pay all reasonable costs of the Work.
2. The exceptions to Clause 1 above include:
 - a) if the Utility Structures have been laid or erected contrary to applicable legislation;
 - b) if the Utility Structures are in a dangerous or unsafe condition;
 - c) where the Parties have specific cost sharing arrangements in place; and
 - d) any claims for betterment.⁵
3. The amount to be paid should either be agreed between the Parties or, if no agreement can be reached, the issue should go to the Disputes resolution process (Section 7).
4. When a Corridor Manager imposes a Reasonable Condition for the purpose of increasing amenity value (i.e. in addition to 'like-for-like'), the Corridor Manager is required to pay the net costs of achieving this additional amenity value.

6.2.2 Government Roads, State Highways and Motorways

1. For Motorways, the Electricity, Gas and Auckland Council Acts do not apply.
2. For Government Roads and State highways, the cost allocation sections set out in the Electricity, Gas and Telecommunications Acts and the 'Causer Pays' approach outlined in Section 6.2.1 apply, with the following exceptions:
 - a) Utility Operators must pay for the cost of all fittings that are used in the carrying out of the required Work (other than fittings used only during the course of construction);

⁴ See the Electricity Act (sections 24A, 33 & 34), the Gas Act (sections 25A, 34 & 35) and the Telecommunications Act (sections 119, 147B & 147C)

⁵ For guidance on betterment, refer Section 6.4(d) below.

- b) in the following situations, the owner of the Works must pay to the controlling authority the increase in costs to the controlling authority associated with that construction or those alterations;
 - (i) as a consequence of the requirement to move assets, the owner of the Works elects to fix works to, or install Works over, under, or through, a Road Structure that is being, or is to be, constructed or altered; and
 - (ii) the cost of the construction or those alterations is increased by reason that those Works will be fixed to, or installed over, under, or through, the Road Structure.
 - c) if the Utility Operator relocates and reconstructs the Works to specifications different from the original Works and the new specifications increase the cost of the Works, the Utility Operator must pay for the difference in cost between what it would have cost to build the Works as near as possible to their original specification (taking into account factors specified in the legislation) and the actual cost of the Works.
3. For NZTA controlled Motorways the following legislative exception (section 54(4) of the Government Rounding Powers Act) to the 'Causer Pays' approach outlined in Section 6.2 applies except for Utility Operators under the Telecommunications Act: NZTA and Utility Operator are subject to a 50:50 cost share for the NZTA requested relocation.
 4. If any Territorial Authority Corridor Manager constructs and controls a Motorway in accordance with sections 80 and 81 of the Government Rounding Powers Act, the following legislative exception applies to the 'Causer Pays' approach: No cost share provisions exist for the Territorial Authority Corridor Manager requested relocation and a special agreement will be required except for Utility Operators under the Telecommunications Act.

6.3 Legislative Provisions for Other Utility Operators

The Crown applies the cost allocation provisions in section 54 of the Government Rounding Powers Act for all Government Roads and State highways.

For other Works to which cost allocation could apply (such as for water services), the Parties will need to resolve an arrangement between them. Where the arrangements are internal to an organisation, that organisation is encouraged to separate the Corridor Manager and Utility Operator roles as much as possible and maintain a formal approach to the access process, at least similar to this Code.

6.4 Guidance for Arriving at Agreements outside the Legislative Provisions

This Section applies to Road Corridors to assist the Parties in reaching their own cost share agreements.

In most cases where Utility Structures are located in the Road Corridor, the principle of 'Causer Pays' applies in that the costs arising from an action should generally be met by the Party causing that cost to be incurred.

However, there are legislated exceptions as noted in Section 6.2 above. Moreover, sometimes the legislative prescription may not be sufficiently comprehensive or refined to deal adequately with the ongoing relationship between a Utility Operator and a Corridor Manager, or a specific project. Sometimes the legislation (see section 33(5) of the Electricity Act, section 34(5) of the Gas Act and section 147B(5) of the Telecommunications Act) allows for parties to reach other agreements. While the provisions set out in the legislation prevail, the principles and ideas in this Section might be helpful in developing any agreements between Corridor Managers and Utility Operators.

Also, where existing cost allocation arrangements conflict with legislative provisions or there are historical issues relating to cost allocation, parties are encouraged to use the principles and approaches described in this Section (in addition to the overarching principles in Section 6.2) to find a path forward.

Nothing in this Section prevents any parties (after the commencement of the Code) from agreeing to cost allocation arrangements that are different from the principles set out in this Section.

Cost allocation agreements should give consideration to the following principles:

- a) **non-discrimination:** All Utility Operators should be treated the same, even where Utility operations (e.g. water services, fibre optic cables) are owned and managed by the Corridor Managers.
- b) **direct costs only:** Costs should be measurable and material. Indirect costs such as the delays and inconvenience caused by Road Works to road users, or the effect on adjoining property values or business trading while Road Works are underway are difficult to quantify accurately and are better dealt with by way of appropriate Reasonable Conditions when the Works are being consented.
- c) **efficiency and contestability:** Cost allocation agreements should reflect the concept of economic efficiency. Accordingly, the direct costs will be founded on contestability.
- d) **betterment:** This issue arises with the replacement of assets owned by the other Party. If Parties choose to arrive at an arrangement regarding betterment that is different from that set out in legislation, a good rule of thumb is that neither Party should unduly benefit from Work carried out on their asset by the other Party without contributing to it and existing materials should be re-used to the maximum practicable extent. Where a true betterment situation exists then the Parties will need to reach a mutually agreeable means of valuing the agreed betterment and sharing that value.
- e) **wrongly located Utility Structures:** The Utility Operator should, under the 'Causer Pays' principle, meet the cost of relocating a wrongly located Utility Structure to the correct location, if necessary for another Party's Works. However, if the cost of relocating a wrongly located Utility Structure is no greater than would have been the case if the Utility Structure had been located correctly, then principle f) applies.

'A 'wrongly located' Utility Structure is where it has been proven that a Utility Structure has been located contrary to a specific approval (or plan supplied under a notice to the Corridor Manager as the basis for setting Reasonable Conditions) under this Code or previous Codes. However, provided that the Utility Operator has taken all due care in assisting with the location of that asset beforehand, a wrongly located Utility Structure is not treated as a wrongly located Utility Structure in the following situations:

- A historically existing Utility Structure in the Road does not in comply with a current standard; or
- Where no standard applied at the time the Utility Structure was installed; or
- Where a standard had changed since the Utility Structure was installed; or
- Where a Transport Corridor profile has changed (e.g.: changes in ground levels, kerb lines).

Sections 3.7 and 5.2.2 refer.

- f) **Economically Efficient Solution:** Notwithstanding the 'Causer Pays' principle, Corridor Managers and Utility Operators should seek to optimise the overall costs and benefits to the end users of their services. For example, where the relocation of a Utility may result in reduced costs for the 'relocated Utility there could be an opportunity to provide an efficiency gain to all parties. Under their respective legislation, Electricity, Gas and Telecommunication Utility Operators could choose to agree to a different arrangement here than that set out in the legislation. However, cross subsidies should be avoided as this would not encourage an economically efficient outcome. Innovative solutions to minimise the costs should be encouraged, for example, by rewarding better performers in the Road Corridor with reduced audit requirements.

6.5 Corridor Manager Cost Recovery

The utility legislation only allows for the recovery of actual costs.

Corridor Managers have the role of governing Transport Corridors efficiently and effectively, including the administration of the CAR and monitoring of consent compliance. Following the 'Causer Pays' principle it is appropriate that Corridor Managers recover the reasonable costs of managing the CAR activity from Utility Operators. Costs incurred by a Corridor Manager for this service should be separately identified and fees set through an appropriate consultative procedure.

7. Dispute Resolution

7.1 General

The aim of the procedures in this Section is to encourage Parties to discuss issues in good faith and resolve Disputes in a timely manner, if possible within five Working Days. The procedures apply to any Dispute that may arise concerning any matter within this Code. The Parties agree to submit to the dispute resolution process set out in this Section provided that where the provisions of the relevant legislation (e.g. section 141 of the Telecommunications Act or section 28 of the Gas Act or section 27 of the Electricity Act or section 70 of the Auckland Council Act) provide recourse to the courts, then any Party may exercise that right without first using the dispute resolution process.

This does not preclude the Parties seeking urgent interlocutory or injunctive relief from the courts where they consider it necessary, for example, to require a Party to cease working to prevent damage.

The Parties should try to:

- a) only use the Dispute resolution process as means of last resort when both Parties have exhausted all efforts to collaborate and cooperate and a resolution is required to an ongoing situation; and
- b) initially use the Dispute resolution process in preference to referring the matter to the courts.

7.1.1 Good Faith and Continuity

Pending resolution of any Dispute, each Party must:

- a) make all reasonable efforts in good faith to resolve the Dispute promptly and in a manner which minimises any impact on the performance of the Works; and
- b) continue to perform its other obligations under this Code.

7.1.2 Multiple Parties

Where there are more than two Parties to a Dispute this Section applies with the necessary amendments so that each separate Party has the same rights and obligations; unless they agree that their interests coincide and that one Party can represent other Parties as one Party.

For example, multiple Parties may be involved in a Dispute where more than one Utility Operator is involved, or a Utility Operator's operations affect more than one Corridor Manager.

7.2 Notice of Dispute

1. Where a Party issues a written notice requiring that a Dispute be determined in accordance with this Section, the notice must specify:
 - a) the nature of the Dispute;
 - b) its representative for negotiations; and
 - c) its suggestion for settling the Dispute.

A Notice of Dispute is included in Schedule A14.

2. Even if the Dispute does not affect the Corridor Manager (ie a Dispute between Utility Operators), the Corridor Manager must be informed that a Dispute exists in relation to this Code and must be informed when that Dispute is resolved.

3. The Party receiving the Notice of Dispute must, within five Working Days of receipt, reply to the other Party by notice in writing specifying:
 - a) its representative for negotiations; and
 - b) its suggestion for settling the Dispute.
4. Corridor Managers must retain a record of Disputes lodged and resolved.

7.3 Negotiations

1. Once a Notice of Dispute has been issued, the Parties must:
 - a) within ten Working Days of receipt of the Notice of Dispute, enter into negotiations to resolve the Dispute; and
 - b) be represented during negotiations by a senior representative of each Party who has the authority to settle the Dispute.

The Parties should try to resolve the Dispute under this Section 7.3.1(b) within 20 Working Days of receipt of the Notice of Dispute.

2. If the senior representatives are not able to resolve the Dispute within 20 Working Days of receipt of the Notice of Dispute then the Dispute will be deemed to have reached a Deadlock, in which case the Parties must:
 - a) agree in writing to refer the Dispute to expert determination in accordance with Section 7.4; or
 - b) agree in writing to refer the Dispute to mediation in accordance with Section 7.5 or
 - c) refer the Dispute to arbitration in accordance with Section 7.6 (either Party); or
 - d) refer the Dispute to proceedings in the District Court, if the Dispute is capable of resolution in accordance with section 141 of the Telecommunications Act, section 27 of the Electricity Act, section 28 of the Gas Act, section 70 of the Auckland Council Act or section 54 of the Government Rounding Powers Act.

7.4 Expert Determination

If the Dispute reaches Deadlock in accordance with Section 7.3.2 and the Parties agree in writing to refer a Dispute to expert determination in accordance with Section 7.3.2(a), the following provisions apply:

- a) the expert must be appointed by agreement between the Parties. If, within 15 Working Days of the agreement in writing to refer the Dispute to expert determination the Parties are unable to agree on the appointment of an expert, then either Party must by notice in writing to the other refer the Dispute to either mediation or arbitration;
- b) the expert must adopt a procedure which, in the expert's opinion, is the most simple and expeditious procedure practicable in the circumstances;
- c) the Parties must provide the expert with any information that the expert reasonably requires;
- d) the expert must act as an independent expert and not as an arbitrator. The expert will be entitled to rely on his or her own judgement and opinion;
- e) the expert must provide his or her written determination (which must include reasons for that determination) to the Parties within 20 Working Days of the expert's appointment;
- f) the expert's determination will, subject to Section 7.5 and 7.6 or any adjudication proceedings, be final and binding upon the Parties;
- g) the costs of the expert must be borne equally by the Parties; and
- h) each Party must bear its own costs in relation to the expert's determination.

7.5 Mediation

1. If the Dispute reaches Deadlock in accordance with Section 7.3.2 and the Parties:
 - a) agree to refer the Dispute to mediation; or
 - b) have not agreed to refer the Dispute to expert determination, or
 - c) have agreed to refer the Dispute to expert determination but are unable to agree on the appointment of an expert as set out in Section 7.4; or
 - d) agreed to refer the Dispute to expert determination and the expert has not made a determination within 20 Working Days of the expert's appointment; or
 - e) have agreed to refer the Dispute to expert determination but either Party is not satisfied with the expert's determination;then the Parties may agree that the matter in Dispute be referred to mediation.
2. If the Parties agree to refer to mediation under any of the above conditions, the following provisions apply:
 - a) the mediator must be appointed by agreement between the Parties. However, if the Parties cannot agree on a mediator within five Working Days of the agreement to refer to mediation, then the mediator will be appointed at the written request of either Party by the president for the time being of LEADR – Lawyers Engaged in Alternative Dispute Resolution, New Zealand (or his or her nominee) or its successor body. The Party making this request must copy the request to the other Party;
 - b) unless the Parties agree otherwise in writing, the terms of reference for the mediation will be the model mediation terms suggested by LEADR; and
 - c) either Party may, by written notice to the other, revoke the agreement to refer the Dispute to mediation at any time.

7.6 Arbitration

1. If the Dispute reaches Deadlock in accordance with Section 7.3.2 and the Parties:
 - a) have agreed to refer the Dispute to mediation and have not resolved the Dispute by the earlier of the conclusion of the mediation or the revoking of the agreement to refer the Dispute to mediation; or
 - b) agreed to refer the Dispute to expert determination and the expert has not made a determination within 20 Working Days of the expert's appointment; or
 - c) have not agreed to refer the Dispute to mediation or expert determination; or
 - d) have agreed to refer the Dispute to expert determination but are unable to agree on the appointment of an expert as set out in Section 7.4; or
 - e) have agreed to refer the Dispute to expert determination but either Party is not satisfied with the expert's determination;then either Party may refer the Dispute to arbitration by a sole arbitrator (who must be a New Zealand resident) under the Arbitration Act 1996, by written notice to the other (Arbitration Referral Notice).
2. If the Dispute is referred to arbitration under any of the conditions above, the following provisions will apply:
 - a) the arbitrator must be appointed by agreement between the Parties. However, if the Parties cannot agree on an arbitrator within five Working Days of receipt of the arbitration referral

notice, the arbitrator will be appointed at the written request of either Party by the President of the New Zealand Law Society (or his/her nominee) or its successor body. The Party making this request must copy the request to the other Party;

- b) in the absence of agreement, the arbitration will take place in Auckland or Wellington (at the arbitrator's discretion);
- c) the arbitrator must adopt a procedure which, in the arbitrator's opinion, is the most simple and expeditious procedure practicable in the circumstances;
- d) the arbitrator may determine the Dispute without a hearing unless either Party gives notice requiring one, in which case the arbitrator must treat that as a material consideration in assessing costs;
- e) the Second Schedule of the Arbitration Act 1996 applies;
- f) where the Dispute has been referred to mediation, neither Party is entitled to call the mediator as a witness and any determination of the mediator must not be referred to in the arbitration;
- g) the Parties must co-operate to ensure the expeditious conduct of the arbitration. In particular, each Party must comply with any reasonable time limits sought by the other for settling the terms of reference, interlocutory matters and all other steps preliminary and incidental to the hearing and determination of the Dispute; and
- h) the award in the arbitration is final and binding on the part of Parties.

8. Code Monitoring and Review

8.1 Code Administration

The NZUAG is the Code administrator on behalf of the wider industry sector. Administration of the Code must include:

- a) ensuring the Code is up to date with legislative changes and current best practice;
- b) ensuring the Code is freely available to the sector;
- c) collecting and maintaining information on key performance measures;
- d) managing the review and amendment process, and ensuring all parties are consulted and involved in the amendment process as appropriate; and
- e) NZUAG liaison with government representatives on policy issues as they arise.

8.1.1 NZUAG Code Review and Amendment Process

Reviews of the Code must be undertaken by NZUAG at least biennially (or more often if necessary change is identified), with the first being undertaken two years after the date when the Code takes effect following the Minister's approval.

NZUAG may delegate authority to any industry sub-group to oversee a full review of the Code on its behalf.

1. In undertaking a review, NZUAG or its delegated body must:
 - a) notify the industry through representative industry groups that it proposes to carry out a review of the Code;
 - b) consult with industry during the review process, particularly any Utility Operators and Corridor Managers likely to be affected by the proposed change/s;
 - c) consider any submitted changes proposed at each meeting it holds and advise the proposing Party of its recommended action in respect of the proposed change; and
 - d) provide a summary of recommendations and proposed changes back to the industry for comment and the comments will be reported back to a subsequent meeting for a final decision on adopting amendments to the Code.
2. If the agreed amendments to the Code are held off from formal issue, so that a number of amendments can be made together, the NZUAG must advise when the amendment will be made.

8.1.2 Approval of Code Amendments

In accordance with section 16 of the Utilities Access Act, the authorisation of Code amendments requires the Minister's approval. Any proposed amendments to the Code must be forwarded by the NZUAG to the Minister for approval and must be accompanied by the required report to set out the matters described in section 16(3) of the Utilities Access Act.

8.2 Monitoring, Reporting and Key Indicators

8.2.1 Principles

NZUAG must undertake monitoring of Code performance under the following principles:

- a) monitoring provides meaningful, cost effective information for decision-making;

- b) all Parties have a responsibility to provide information in accordance with the monitoring framework;
- c) monitoring is undertaken through existing processes or processes mandated by the Code; and
- d) the monitoring framework has an identified outcome and is based on the development of key performance indicators.

Examples of identified outcomes include:

- *Indicators to identify the effectiveness of the Code to deliver Party outcomes;*
- *Indicators to identify the effectiveness of the processes and procedures developed under the Code; and*
- *Indicators that identify trends that are detrimental to the ongoing effectiveness of the Code or compromise the industry's ability to deliver Party outcomes.*

8.2.2 Key Performance Data

The following key performance measures for the Code are to be recorded by Corridor Managers as at 30 June of each year and reported to NZUAG at the time of the next formal Code review in two years' time as set out in 8.1.1:

- a) number of CARs submitted each year;
- b) number of completed Works Completion Notices each year;
- c) number of notices of Dispute issued in accordance with the Code each year;
- d) number of Disputes resolved in accordance with Chapter 7 (from which can be derived the number unresolved and work in progress) each year; and
- e) number of known Third Party Damages incidents recorded each year.

Utility Operators must provide the above data to Corridor Managers as outlined in Sections 4.3.1, 5.1.2 and 7.2.

This data should be collected for the first two years and then evaluated as to the worth of the data being collected and the appropriateness of the data to the observed outcomes, as part of the formal review process. The key performance measures are not intended to be ongoing if the value is not demonstrable.

8.2.3 Information Reporting

NZUAG must:

- a) aggregate performance information on a national basis and report this to the NZUAG members, the industry sectors and to the Government; and
- b) analyse the performance on an ongoing basis, to identify whether Code compliance, operational understanding or the quality control process needs attention and whether any amendments to the Code are necessary.

Schedule A: Forms

1. Preliminary Notification of Project Works in the Road
2. Preliminary Notification of Work in the Railway Corridor
3. Corridor Access Request (CAR) for Roads
4. Corridor Access Request (CAR) for Motorways
5. Corridor Access Request (CAR) for Railway
6. Works Access Permit (WAP) For Roads and Motorways
7. Works Access Permit for Railway land other than that owned/ managed by KiwiRail
8. Permit to Enter Railway Land: *this form is available at:*
<http://www.ontrack.govt.nz/Documents/Permit%20to%20Enter%20application%2030Sep10.pdf>
9. Works Completion Notice
10. Completion of Maintenance Notice
11. Stop Work Order
12. Standard Letter Advising Utility Works
13. Non-Conformance Notice
14. Notice of Dispute

A1:Preliminary Notification of Project Works in the Road

Space for logo here

To:	
From:	
Date:	

(Corridor Manager)

(Utility Operator)

Preliminary notification is provided for the following Project Works:

The following plans are attached.

Major work situations that occur on this job are (tick all those that are applicable, where known):

	A trench is to extend more than 20m along the Road
	A traffic lane needs to be closed on a Main Road (Refer to list of Main Roads provided by the Corridor Manager)
	A Road needs to be closed for more than 2 minutes
	Work is proposed on a State highway (Refer to list of State highways provided by the Corridor Manager)
	Metered parking or other restricted parking areas may be affected
	Work may affect a Road Structure such as a bridge, tunnel, or retaining wall
	Work needs to be done outside normal hours of work
	Property access will be restricted for more than 10 minutes for business or 1 hour for residential
	A footpath will be diverted for more than 8 hours
	A variation from either the requirements of this Code of Practice or any other known requirements of the Corridor Manager is sought
	A financial contribution is sought such as towards the reinstatement of the Road surface
	The Work will affect, or is likely to affect, other Utility Structures in the Road

Comments: (e.g. about above situations/ when the Work is scheduled to start and finish, other Utility Structures that may be affected)

Signed		Print Name	
Phone		Email	

A2: Preliminary Notification of Project Works in the Railway Corridor

To:		(Corridor Manager)
From:		(Utility Operator)
Date:		

Preliminary notification is provided for the following Project Works:

<p>Project Name:</p> <p>Location:</p> <p>Railway/tramway Line:</p> <p>Railway Distance (From):</p> <p>Railway Distance (To):</p> <p>Type Of Service:</p> <p>Description of Works:</p> <p>The following plans are attached:</p>
--

Comments: (e.g. about above situations/ when the Work is scheduled to start and finish, other Utility Structures that may be affected)

Signed		Print Name	
Phone		Email	

A3: Corridor Access Request (CAR) for Roads		No:
Utility Operator		
Contact Name		
Contact Details		

Notifies

Corridor Manager/s	
Contact details	

of our intention to undertake the following Work:

Type of Work (tick): Project Major Minor Emergency

Details of proposed Work (tick all relevant aspects):

<input type="checkbox"/>	Open Trenching	<input type="checkbox"/>	Installing Cabinets / Pedestals
<input type="checkbox"/>	Horizontal / Vertical Drilling	<input type="checkbox"/>	Installing other Structure/s (Specify Below)
<input type="checkbox"/>	Installing Chamber/s	<input type="checkbox"/>	Removing/pole/cabinet/pedestal/Structure/s
<input type="checkbox"/>	Installing Poles / Posts / Piles	<input type="checkbox"/>	Other (Specify Below)
Description of Work:			
Address:			

Location in Road (tick):

<input type="checkbox"/>	Carriageway	<input type="checkbox"/>	Footpath	<input type="checkbox"/>	Berm
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Estimated timing	Start Date Time	End Date	Duration Days
Reference No's:	Utility	Consents	
Utility Structures likely to be affected by the Work	Name of UO	Contact person	Contact details UO has been notified and consulted with.

Applicant's details

Role in Work (tick): Utility Operator Consultant Contractor Other

Company name	Contact person
Postal address	
Phone (W)	Phone (Mob)
E-mail	Fax number

If the above information is not provided, the CAR will be deemed not to have been lodged. Lodgement will be deemed when the information required has been specified.

We hereby agree for/ or on behalf of the Utility Operator to comply in full with the requirements of the Code: *Utility Operators' Access to the Transport Corridors*, and any other Reasonable Conditions required by the Corridor Manager and to keep this notice on site while Work is in progress. This request is valid for 6 months from date of issue.

Signed	Date
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A4: Corridor Access Request (CAR) for Motorways		No:
Utility Operator		
Contact Name		
Contact Details		

Notifies

Corridor Manager	
Contact details	

of our intention to undertake the following Work:

Type of Work (tick):

Maintenance	<input type="checkbox"/>	Major	<input type="checkbox"/>	Minor	<input type="checkbox"/>	Emergency	<input type="checkbox"/>
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Details of proposed Work (tick all relevant aspects):

<input type="checkbox"/>	Open Trenching	<input type="checkbox"/>	Horizontal / Vertical Drilling
<input type="checkbox"/>	Installing Chamber/s	<input type="checkbox"/>	Other (Specify Below)
Description of Work:			
Address:			
Details attached: as per 4.8.2 3(b)			

Location in Road (tick):

Carriageway	<input type="checkbox"/>	Berm	<input type="checkbox"/>	Ramp	<input type="checkbox"/>
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Estimated timing	Start Date Time		End Date		Duration Days	
Reference No's:	Utility		Consents			
Utility Structures likely to be affected by the Work	Name of UO	Contact person	Contact details	UO has been notified and consulted with.		

Contractor's or Agent's details

Company name		Contact person	
Postal address			
Phone (W)		Phone (Mob)	
E-mail		Fax number	

Processing of the CAR will not commence until the specified information has been provided.

We hereby agree to comply in full with the requirements of the Code: *Utility Operators' Access to the Transport Corridors*, and any other Reasonable Conditions required by the Corridor Manager and to keep this notice on site while Work is in progress. This request is valid only for date/s of approval as agreed.

Signed		Date	
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A5: Corridor Access Request (CAR) for Railway Land		No:
Utility Operator		
Contact Name		
Contact Details		

Notifies

Corridor Manager	
Contact details	

of our intention to undertake the following Work:

Type of Work (tick):	New Works	<input type="checkbox"/>	Maintenance	<input type="checkbox"/>	Upgrading Existing	<input type="checkbox"/>	Emergency	<input type="checkbox"/>
	Existing Works	<input type="checkbox"/>	Grant No. G_____	<input type="checkbox"/>	Statutory Right	<input type="checkbox"/>	Unauthorised	<input type="checkbox"/>

Details of proposed Work (tick all relevant aspects):

<input type="checkbox"/>	Latitudinal	<input type="checkbox"/>	Longitudinal	Prelim approval date:	/ /
Above Ground/UnderGround (delete one)		Compliant with NZRC specification Yes/No (delete one)			
Type of utility:		Size/Capacity/No.			
Railway Line		Distance			
Location		Nearest Road Name			

Information detailed in 4.9.3 of the Code: *Utilities' Access to the Transport Corridors* to be appended hereto

Estimated timing	Start Date Time		End Date		Duration Days	
Reference Numbers:	Utility			Consents		
Utility Structures likely to be affected by the Work	Name of UO	Contact person	Contact details	UO has been notified and consulted with.		

Contractor's or Agent's details

Company name		Contact person	
Postal address			
Phone (W)		Phone (Mob)	
E-mail		Fax number	

Processing of the CAR will not commence until the specified information has been provided.

We hereby agree to comply in full with the requirements of the Code: *Utility Operators' Access to the Transport Corridors*, and any other reasonable conditions required by the Corridor Manager and to keep this notice on site while Work is in progress. This request is valid only for date/s of approval as agreed.

Signed		Date	
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A6: Works Access Permit (WAP) for Roads and Motorways

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CAR No:	
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1. Details of proposed Work

Activity:

Address:

Location in Road:

Estimated Start Date:

Estimated completion date:

2. The Parties

..... being a body corporate in accordance with the Local Government Act 2002/Land Transport Management Act 2003* (* delete as appropriate) ('the Corridor Manager');

..... being an approved Utility Operator in accordance with the Telecommunications Act 2001/Electricity Act 1992/Gas Act 1992/Local Government (Auckland Council) Act 2009* (* delete as appropriate) submitting a request for access in accordance with that Act);

..... being the agent of the Utility Operator, submitting this request on behalf of the Utility Operator and in accordance with the Utility Operator's statutory rights ('the Applicant').

2. Attachments (delete as appropriate)

Attachment 1 being the Corridor Access Request.

Attachment 2 being the Schedule of Reasonable Conditions.

Attachment 3 being plan showing the agreed service location.

3. Background

- a) The Utility Operator wishes to carry out the works stated on CAR Number and thereafter maintain the utility structures established in the corridor;
- b) The Corridor Manager is required to provide a written consent in accordance with its governing legislation and to provide a schedule of reasonable conditions, if required, by the utility legislation under which the request for access has been made; and
- c) In accordance with the Code: Utilities' Access to the Transport Corridors and on behalf of the Corridor Manager, I give my written consent for access to the corridor at the agreed location and attach my schedule of reasonable conditions.
- d) In the case of State highways this Works Access Permit serves as the approval required under S51 of the Government Roadway Powers Act.

Signed		Date	
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Acting pursuant to delegated authority.

FOR Corridor Manager APPROVAL USE ONLY

	Approved Contractor		Route Plan Submitted		TMP Submitted		Stockpiling arrangements
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A7: Permit to enter Railway Land other than that owned by KiwiRail

CAR No:	
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1. The Parties

..... being licensed access provider in accordance with the Railways Act 2005 (‘the Corridor Manager’);

..... being an approved Utility Operator in accordance with the Telecommunications Act 2001/Electricity Act 1992/Gas Act 1992/Local Government (Auckland Council) Act 2009* (* delete as appropriate) submitting a request for access in accordance with that Act);

..... being the agent of the Utility Operator, submitting this request on behalf of the Utility Operator and in accordance with the Utility Operator’s statutory rights (‘the Applicant’).

2. Attachments (delete as appropriate)

Attachment 1 being the Corridor Access Request.

Attachment 2 being the Schedule of conditions.

Attachment 3 being plan showing the agreed service location.

3. Background

In accordance with the Code: Utilities’ Access to the Transport Corridors and on behalf of the Corridor Manager, I give my written consent for access to the Road Corridor as specified in CAR Number _____

and attach my schedule of conditions; and

Signed		Date	
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Acting pursuant to delegated authority.

FOR Corridor Manager APPROVAL USE ONLY

	Approved Contractor		Route Plan Submitted		TMP Submitted		Stockpiling arrangements
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A8: Permit to enter Railway Land owned or managed by KiwiRail

The current KiwiRail permit process is used for a wide range of third party activities including Utility Operators. For instance it may be for a surveyor entering on to railway land, or for a temporary fence for construction of an adjoining development etc.

As the form is modified to suit each individual circumstance (such as the nature of the Work or the nature of the particular railway or railway land (corridor, yard, electrified, etc etc)), the form will be located on the link below:

<http://www.ontrack.govt.nz/Documents/Permit%20to%20Enter%20application%2030Sep10.pdf>

A9: Works Completion Notice

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To:	
From:	
Date:	

(Corridor Manager)
(Utility Operator or their agent)

This is to advise that Work on CAR No.: _____ is now complete

on:

(street name)

Please find attached:

	Amendments to information provided on the CAR
	A copy of the compaction tests
	A written statement confirming that the completed Works comply with the WAP conditions
	A sketch or plan showing the extent and location of the Work carried out
	Details of any Work for the Corridor Manager to complete

Type of Work:

<input type="checkbox"/>	Project	<input type="checkbox"/>	Major	<input type="checkbox"/>	Minor	<input type="checkbox"/>	Emergency
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Contractor Details

Role in Work to be undertaken:

<input type="checkbox"/>	Utility Operator	<input type="checkbox"/>	Consultant	<input type="checkbox"/>	Contractor	<input type="checkbox"/>	Other
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Company name:		Contact person:	
Postal address:			
Phone (W):		Phone (Mob):	
E-mail:		Fax number:	

Works meet required standards. Signed by Utility Operator or their agent:

Date:		Signature:		Print Name:	
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Works comply and 2-year Warranty commences. Accepted by Corridor Manager:

Date:		Signature:		Print Name:	
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A10: Completion of Maintenance Notice

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To:	
From:	
Date:	

(Corridor Manager)
(Utility Operator or their agent)

This is to advise that the 2-year Warranty audit of CAR No. _____

on: (street name)

has been completed and complies with the conditions of the CAR.

Type Work: of Project Major Minor Emergency

This audit was accomplished by:

<input type="checkbox"/>	A site inspection
<input type="checkbox"/>	Not inspected, but was one of a batch covered by random inspections in accordance with the Quality Plan agreed with the Corridor Manager

Audited by:

Signature:		Print Name:	
Company:		Date:	

Works meet required standards. Signed by Utility Operator or their agent:

Date:		Signature:		Print Name:	
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Date audit undertaken by the Corridor Manager:

Works comply and 2-year Warranty expires (Section 4.7.2). Accepted by Corridor Manager:

Date:		Signature:		Print Name:	
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A11: Stop Work Order

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Pursuant to the authority and responsibilities of the (Corridor Manager) as stated or assumed in any of the Local Government Act, Health and Safety in Employment Act, and various Utility Acts, an order is hereby given to stop work on the following job/s:

The reason for this is that the Work does not comply with the following requirements:

In the meantime, the only work to be carried out is work that is necessary to remedy either the above aspects that do not comply, or work necessary to protect the safety of road users, and to remedy any inconvenience to pedestrian and vehicular traffic.

The stopped work is not to recommence until appropriate remedial work is carried out and an 'Approval to Recommence Work' authority is signed and issued by the Corridor Manager.

Signed by:	
Corridor Manager:	
Time:	
Date:	
Received by:	
Time:	
Date:	

(Utility Operator)

Approval to Recommence Work

This is to confirm that following the 'Stop Work Order' issued for the following Work, the remedial work has been satisfactorily completed and the stopped work may now re-commence from _____(date).

Signed by:	
Corridor Manager:	
Time:	
Date:	

A12: Standard Letter Advising Utility Works

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To: The Property Owner / Resident / Business

PROPOSED UTILITY WORKS

This is to let you know that work on the following Utility Structure will soon be carried out in the Road.

Location of Work:

Description of the Work:

This Work is being done for:

Expected duration (dates):

Hours of Work:

(Normally 7.00 a.m. to 6.00 p.m. Mon to Sat)

Any parking restrictions:

Problems you may experience:

We regret any inconvenience that may be caused by this Work. If you have a problem or any queries please contact us on the telephone number below.

Contractor:

Phone:

Day		Night (24 hour availability)	
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A13: Non-Conformance Notice

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To:	
From:	
Date:	

(Utility Operator)

(Corridor Manager)

The following item/s of non-conformance with the Reasonable Conditions or the Code of Practice: Utilities' Access to the Transport Corridor has been identified:

--

The Utility Operator is required to undertake the following remedial work within days. If the remedial work is not undertaken within this timeframe, the Corridor Manager may undertake the work and recover all reasonable cost of completing the remedial work from the Utility Operator.

--

Signed by:	
Corridor Manager:	
Time:	
Date:	

Revocation of Non-Conformance Notice

This is to confirm that the remedial work has been satisfactorily completed.

Signed by:	
Corridor Manager:	
Time:	
Date:	

A14: Notice of Dispute

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To:	
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(Party you wish to resolve a Dispute with)

I/we	
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(Complainant)

hereby set out the details of a Dispute as required by Section 7.2 of the National Code of Practice (Utilities' Access to Transport Corridors).

Nature of Dispute:

(explain what the Dispute is about and any relevant legislation or Code clauses)

Desired Outcome:

(write what you want to achieve)

Suggested Approach:

(explain what you think each Party should do to resolve the Dispute).

Representative:

(name of the person who will represent the Party in negotiations and who has the authority to settle the Dispute).

Representative's Signature:

Date:

A copy of this Notice must be provided to the relevant Corridor Manager, where the Corridor Manager is not the recipient of the Notice of Dispute.

Schedule B: Template for Reasonable Conditions

Where a Road Corridor Manager has received a CAR from a Utility Operator, the Road Corridor Manager may request the Utility Operator comply with Reasonable Conditions placed on the Works in accordance with the governing legislation (being the Telecommunications Act, Electricity Act, Auckland Council Act and/or Gas Act).

In accordance with Section 4.5.2 of the Code, when:

- a) there are no Special Conditions or Local Conditions specified in the WAP;
- b) the WAP is not issued within the required timeframe within 15 Working Days (20 Working Days for water and wastewater Utility Structures in Auckland Council Roads); or
- c) any Special Conditions or Local Conditions that apply to the CAR are not notified to the Utility Operator within 15 Working Days (20 Working Days for water and wastewater Utility Structures in Auckland Council Roads);

then, the relevant Corridor Manager will be deemed to have notified the Utility Operator of the conditions set out in the standard template in Schedule B of this Code through the issue of this Code (and the relevant Utility Operator will be deemed to have accepted this form of notification by submitting the relevant CAR) and such conditions will, for the purposes of section 25(3) of the Electricity Act, section 26(3) of the Gas Act, section 67 of the Auckland Council Act and section 137 of the Telecommunications Act, be treated as being the Reasonable Conditions notified in writing to the Utility Operator in relation to that CAR.

General Conditions

- 1) The Utility Operator must:
 - a) carry out all Work in Transport Corridors in accordance with the Code and KiwiRail's Specifications for Working in Railway Corridors;
 - b) undertake all Works in compliance with the Acts of Parliament and mandated codes of practice that relate to their industry and the type of Work described within the plans and methodology submitted;
 - c) install assets more or less in the location shown on the attached plans, and agree the exact location and position with the Road Corridor Manager before Work commences;
 - d) locate any Utility Structures in the Road Corridor in the agreed position shown on the drawings and clear of the Carriageway, Road Corridor furniture and kerbs, drains, manholes, etc. Utility Structures agreed to be within the trafficable part of the Road are to be flush with the surface and designed to withstand full heavy traffic loading (NZTA's HN-HO-72 Traffic Loading);
 - e) provide a full description of the construction methodology, reinstatement, resurfacing and compaction and agree this with the Road Corridor Manager prior to Work commencing;
 - f) make the Works available at all times for inspection by any person representing the Road Corridor Manager;
 - g) if requested, pay the reasonable costs of the Road Corridor Manager in connection with the processing of this notice and for the monitoring and auditing of the Works;
 - h) keep a full copy of the Works Access Permit/ Permit to Enter and Reasonable Conditions on the Work Site at all times during the Works;
 - i) undertake remedial action on non-conforming Work within the timeframe set by the Road Corridor Manager, where reasonable and practicable;

- j) gain all the necessary consents, approvals and permits from the relevant statutory and regulatory authorities at its own cost;
 - k) keep plans of the installed Work and make them available to the Railway Corridor Manager (in all cases) and Road Corridor Manager (on request);
 - l) compensate the Road Corridor Manager for any damage or costs incurred to the Road Corridor due to the Work or for costs resulting from the removal of abandoned installations, Utility Structures, components and equipment that belong to the Utility Operator;
 - m) repair all Road Corridor assets damaged as a result of the Works, should the Road Corridor Manager determine these are necessary prior to the end of the Warranty period;
 - n) restore to their original condition any surface or Utility Structure that was damaged or removed as a result of the Works;
 - o) control the surface water channels so as to cause minimal interference to existing flows;
 - p) fully restore the surface water channels at the completion of the Works;
 - q) notify the Road Corridor Manager of any maintenance Work it proposes to undertake within the two-year Warranty period;
 - r) have in place an approved TMP for Roads and Motorways at least two days prior to Work commencing on the Work Site;
 - s) provide the Road Corridor Manager with two Working Days' notice before commencement of Work on the Work Site;
 - t) ensure that the Work is carried out under the control of a warranted supervisor as required by the Code of Practice for Temporary Traffic Management and ensure that there are sufficient people on site specifically to control the flow of traffic through the site in accordance with the TMP;
 - u) comply with instructions from an officer of the NZ Police Traffic Safety Branch or a duly authorised agent of the Road Corridor Manager in respect of traffic management and safety;
 - v) complete Works in the Road Corridor in one continuous operation (suspension of Works over five continuous days requires the prior written permission of the Road Corridor Manager);
 - w) protect and maintain all Road Corridor signs, markers, signals, barriers and associated marking and replace them to the appropriate industry standard where they have been damaged by the Works;
 - x) complete and submit a Works Completion Notice form when the Works are complete; and
 - y) stop Work as necessary to meet the requirements of section 10 of the Historic Places Act 1993.
- 2) Work must not take place on or near a State highway during and one day either side of a public holiday or public holiday weekend.
 - 3) Where otherwise required due to traffic volumes or specific residential or Central Business District requirements, the hours of Work must be as specified in the Local Conditions and Special Conditions.
 - 4) The Warranty period starts from the date the Road Corridor Manager has given signed acceptance that the Work is complete.
 - 5) Unless the Works stated in the WAP have started on the Work Site, the agreement relating to the Works will only remain valid for six months from the date of approval on the Works Access Permit.
 - 6) The Road Corridor Manager must manage all applications relating to Road Corridor access in accordance with the timeframes and processes in the Code.
 - 7) The Corridor Manager may:

- a) assess the suitability of any action proposed by the Utility Operator during the Warranty period and impose Reasonable Conditions that will maintain the integrity of the Road assets;
 - b) arrange for remedial Work to be done and recover the costs incurred from the Utility Operator, if the Utility Operator fails to take action within the agreed timeframe; and
 - c) instruct the Utility Operator to stop Work and leave the Work Site (having made the site safe) if the Works are not complying with the relevant Reasonable Conditions including any plans, relevant conditions or specifications contained in the Code, or permission requirements.
- 8) In granting this WAP, no vested right is created.
- 9) This WAP is not transferable without the written permission of the Road Corridor Manager.

Local and Special Conditions

These are attached to the Schedule of Reasonable Conditions as Attachment I (Local Conditions) and Attachment II (Special Conditions).

Schedule C: Supporting Processes

Risk Management Process: Above-Ground Utility Structures in Roads

Context

The purpose of this schedule is to provide a framework to improve Road safety outcomes in regard to above-ground Utility Structures. It sets out the preferred industry practice for the placement of new Structures in the Road Corridor. It will also help in prioritising safety responses to ensure funding is being spent where there is greatest need, taking into account opportunities that future Planned Work/budgets allow.

This framework is not prescriptive, but sets out some principles, resources and processes to guide safety improvements. The overall objective is to reduce the socio-economic costs of having Utility Structures where they pose a safety risk, provided that this can occur in a practicable manner. Other principles include:

- all Parties will work together towards community outcomes and assess risks and solutions in a holistic and collaborative way (looking at all the risks and opportunities in the Road Corridor, rather than in isolation); and
- all Parties wish to contribute to the goals of the Safer Journeys: New Zealand's Road Safety Strategy 2010 - 2020.

Risk Management Process

The process will generally be initiated as outlined in Section 3.3.2 It should follow a process similar to that shown in Figure C-1, as per ISO 31000 Risk Management – Principles and Guidelines. The diagrams used have been adapted from those publications.

Stage 1: Establish context

The Parties should assess the size and context of the problem before instigating the full risk assessment/treatment process, for example:

- Could a significant risk be easily mitigated, for example, as part of upcoming Planned Work, at minimal cost? Parties may quickly agree the appropriate course of action, or common sense may indicate that the issue is out of proportion to the resource required for a full risk assessment.
- How important is the route in relation to each Party's infrastructure network, taking into account factors such as number of customers affected, level of disruption during remedial work, the importance of the route for emergency response times and the additional travel times by alternative routes? More critical routes warrant more effort to minimise risk.

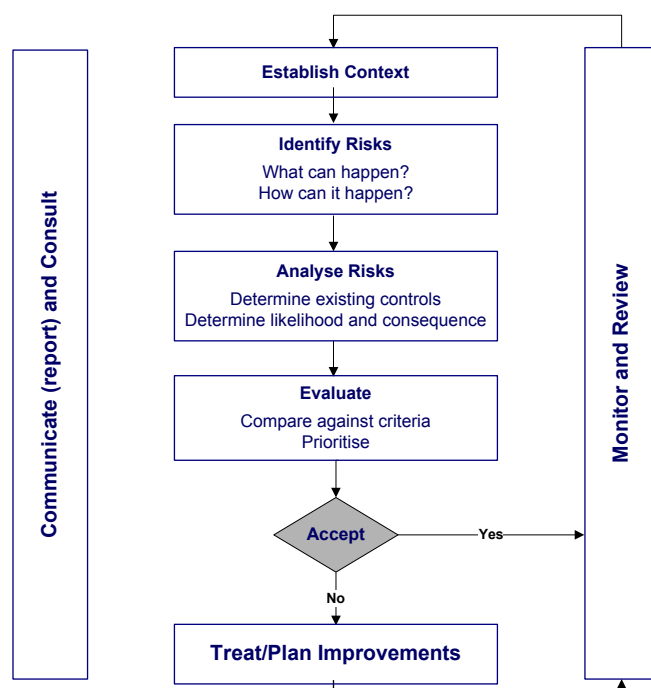


Figure C-1: The risk management process

- The extent to which other parties may be affected, such as property owners or other Utility Structures that may be affected by the movement of an above-ground Utility Structure.

Stage 2: Identifying risks

Parties should identify the range of risks by considering 'What can happen?' and 'How can it happen?' to the Structure/s, not just concerning Road safety, but also loss of service and wider safety considerations. For example, a pole that is struck may fall down and may cause loss of service as well as safety issues from live wires falling on the Road or footpaths.

A potential risk may be raised by a variety of sources. For example:

- A third party may bring their concerns to one of the Parties;
- A Party may identify a possible issue while undertaking routine work; or
- A Corridor Manager may identify a potential area for concern during a safety initiative, by analysing data such as local crash data, local knowledge of Parties as to repetitive crash occurrences, local risk factors and a site assessment of accident potential.

Both Corridor Managers and Utility Operators have a number of risk data sources within their own organisations, but sometimes this data is not shared and consolidated to provide a wider perspective of safety issues and identify opportunities for joint initiatives. For example, Utility Operators will have records of where their Structures are being damaged and Corridor Managers have Safety Management Systems which identify hazards within their Transport Corridors. Also, NZTA requires reporting on incidents in Railway Corridors and maintains a database of Road crashes sourced from NZ Police crash report. This data should be combined to give overall priorities for action based on the highest likelihood of 'lost control' incidents in Transport Corridors.

Stage 3 – Analyse and evaluate risks

The Parties should assess the likelihood and consequence of the risks identified in Stage 2. This may result in agreement (possibly with some conditions) on a Party's proposal or it may lead to a site inspection to assess the need for, and type of, possible solutions.

Typically risk management is undertaken either quantitatively or qualitatively, but it is accepted industry practice to undertake a qualitative assessment because of the difficulties of calculating monetary values for intangible benefits such as minimising adverse publicity. A standard risk assessment matrix is given as a guide in the example later in this Schedule.

Likelihood and consequence can be identified by considering factors such as:

- Contextual considerations identified in Stage 1 above;
- Local crash and 'run-off-the-road' history;
- The volume of traffic (AADT);
- The number of above-ground Utility Structures within the affected length of Road (includes both sides);
- The separation between the Carriageway and the above-ground Utility Structure;
- The location of the above-ground Utility Structures – there may be local variations as to which types of locations are more likely to be hit, but typically Structures located on the outsides of corners and those near intersections are more likely to require a risk assessment/site inspection;
- Speeds, which will be a factor in both the likelihood and severity (consequence) of an impact with an above-ground Utility Structures; and

- Type of above-ground Utility Structures, which may impact on severity (consequence).

Stages 4 and 5: Determine optimum treatment/s and implementation strategy

Where Stage 3 identifies the need for risk management action, Stage 4 establishes what the optimal solution/s are to reduce risk and improve safety at reasonable cost. The acceptability of residual risks should be considered, along with the effects of any risk transfer.

In the case of new installations, the intent is to provide the maximum practicable separation from the Road Carriageway. In some circumstances, a combination of solutions may need to be agreed and employed if a risk assessment determines that the distance is not be wide enough.

If more than one site is being considered, work may need to be prioritised, considering budgets and future work programmes to arrive at the optimal risk reduction strategy (Stage 5). If, at the end of this stage, agreement cannot be reached, the Parties can agree to initiate a Disputes resolution process.

Given the variable nature of each Corridor environment, the associated safety risks, and the practicalities involved, site specific judgement will most often be needed to determine the most appropriate solution. Therefore, visits or meetings at the site will be very useful.

Safety should be considered both from road user and worker perspectives (for example, Utility Operators’ staff maintaining or operating above-ground Utility Structures and road workers). Any decision on the location of new installations needs to consider access for installation and ongoing access as well as future Planned Works. Impacts on other Utility Structures and other property owners and occupiers also need to be considered (for example, whether the treatment will create an aerial trespass).

In considering the appropriate treatment options, consider:

- The level of risk;
- The range of available solutions (see ‘Possible Treatments’ below);
- The practicalities and costs of those solutions;
- The relative costs/benefits of different risk treatments;
- Relative priorities and budgets; and
- Opportunities presented in future planned Works.

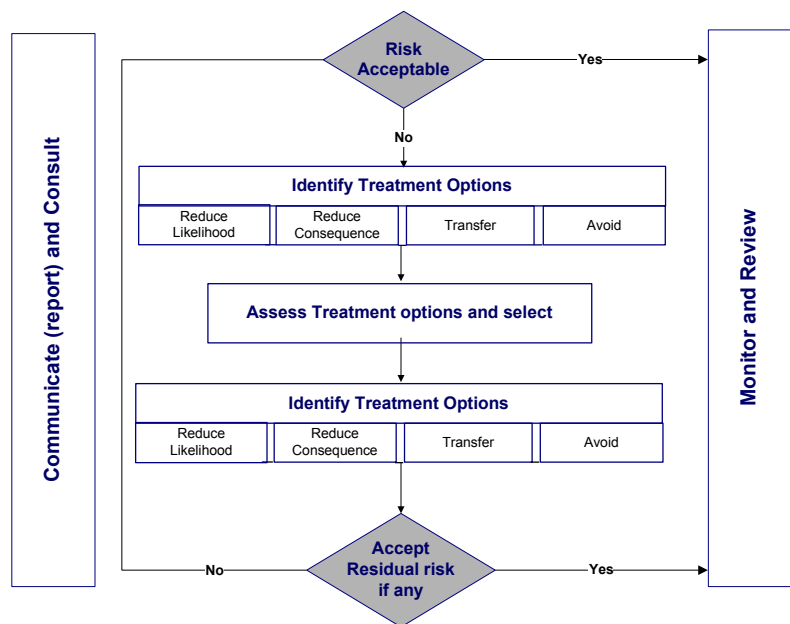


Figure C-2: Risk acceptance treatment process

Risk transfer occurs when risk is moved to another Party. Sometimes a Road safety risk may be reduced by a treatment that effectively shifts that risk elsewhere. If an above-ground Utility Structure is moved from a roadside to a park, for example, there may be increased risks and costs for other parties in managing the risks in the new location. These impacts must be considered and, if still the preferred option (for example, the transferred risk is considered lower than the original risk), the solution needs to be discussed and agreed with affected parties.

Possible treatments fall into three broad categories:

- ***Keeping the vehicle from leaving the Carriageway:***
 - Install shoulder rumble strips;
 - Provide delineation e.g. line markings or profile markings to show where the Road is going;
 - Install centre line rumble strips;
 - Provide an enhanced shoulder;
 - Provide improved highway geometry;
 - Provide improved skid resistance surfaces;
 - Apply shoulder treatments;
 - Improve signage;
 - Improve lighting;
 - Improve texture;
 - Improve safety barriers;
 - Educate road Users;
 - Enforcement;
 - Improve camber.
- ***Minimise the likelihood of crashing if the vehicle travels off the Carriageway:***
 - Design safer slopes and ditches;
 - Relocate hazards;
 - Redirect vehicles away from the hazard using, for example, soft earth mounds and barriers;
 - Underground or otherwise remove Utility Structures;
 - Select an alternative route with lower risk exposure;
 - Co-locate above-ground Utility Structures to minimise the number of these structures;
 - Reduce the frequency of Utility Structures (note that there is often a trade off with bigger Utility Structures).
- ***Reduce the severity of the crash:***
 - Improve the design of the above-ground Utility Structures;
 - Reduce vehicle speeds;
 - Consideration should be given to a number of possible treatments, and their costs, to arrive at the optimal risk reduction solution;
 - Install flexible, energy-absorbing barrier systems.

Due consideration needs to be given to all relevant legislation when determining which solution to employ. As an example, there are rules and considerations surrounding trees that have to be taken into account (for example, some trees may be protected under district plans) and may preclude some options.

Approach in a Greenfields Environment

In a 'Greenfields' environment where no existing Utility Structures are present, higher levels of safety can often be achieved at little or no extra cost during the design and construction stages. The design and construction phase can be used to:

- Reduce the likelihood of vehicles leaving the roadway; and
- Reduce the likelihood and consequence of an incident involving an above-ground Utility Structure, should a vehicle leave the Carriageway.

For new above-ground Utility Structure installations, the intent is to provide the maximum practicable separation from the Road Carriageway, but other solutions may be needed if this distance is still considered to pose unacceptable risk (such as those listed above). The Corridor Manager may determine

an ideal lateral requirement for the site with the minimum vertical separation specified in the appropriate Utility legislation. Target separations should consider a number of factors, including the speed of the roadway section, topography, traffic conditions (AADT), alignment and the roadside slope, and the type of traffic using the road (for example over-dimension loads).

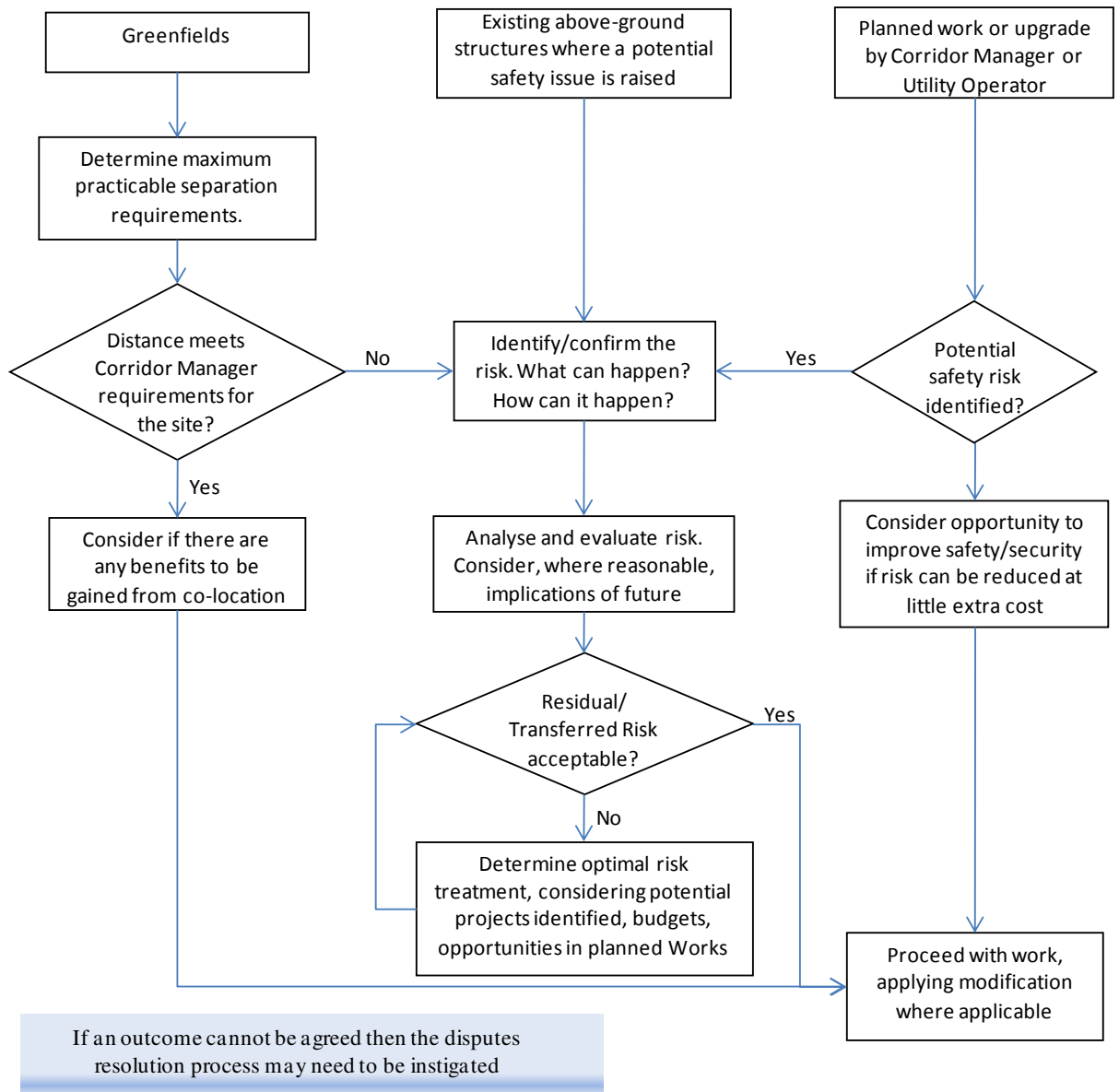


Figure C-3: Risk Assessment Flowchart

Example: Application of the risk management process

Problem:

A sewer line is running near capacity. There is an air lock at a high point that, if removed, would add additional capacity. It is proposed that an air valve be installed, requiring a 1500mm diameter concrete pipe for protection, which will be approximately 1.0 m in height if installed at ground level.

The sewer line runs parallel with a major road (AADT > 7000) with variable speed designations. The location of the proposed valve is within 2.5 m of the carriageway and is located near an intersection in an 80km/h speed zone. There are also a number of cyclists who travel along the route. The road is separated from an estuary by a grass strip.

Stage 1: Establish Context

There is a history of intersection crashes and ‘run-off-the-road’ crashes along the route. The route is also a major road. There is limited capacity to store sewage should the sewer line be damaged at any point and continuity of flow is therefore critical.

Using the standard risk assessment matrix illustrated in Figure C-4, the two Parties agreed the probability of an event is ‘Likely’ given the history of crashes and traffic volumes and the consequences of a crash with a sewer valve would be ‘Major’ for both the Utility and road user. The initial risk assessment was therefore rated ‘Very High’.

The Corridor Manager and the sewerage infrastructure provider agree to proceed to Stage 2, to look further into the risk the valve would present, determine if treatments would be required at the site and, if so, what the optimal solution would be.

Frequent	H	H	VH	E	E
Likely	M	H	VH	VH	E
Possible	L	M	H	VH	VH
Unlikely	L	M	M	H	VH
Rare	L	L	L	M	H
	Minor	Moderate	Serious	Major	Catastrophic

L = Low M = Moderate H = High VH = Very High E = Extreme

Figure C-4: Risk assessment matrix

Stage 2: Identify risk

The Parties agree to meet at the site to assess the potential risks. The site is on a straight, near an intersection, and it was thought most likely that an inattentive or fatigued driver would be at risk of hitting the Utility Structure if they left the Carriageway. Another risk was someone losing control after an incident at the intersection. The Parties noted this was an area where the speed limit was often exceeded.

Analyse and evaluate risks

Using a table based on local risk factors, the two Parties discussed further what the risk factor would be of a driver leaving the Road and impacting with the proposed valve.

Table C2: Example of risk assessment factors

	<i>Risk factors in local area (based on local crash history data in 100km/h area)</i>				
Traffic Volume (AADT)	<i>Is the above-ground Utility Structure on outside of a corner?</i>	<i>Is the above-ground Utility Structure located at an intersection?</i>	<i>Is there very limited separation between Roadway and above-ground Utility Structures?</i>	<i>Is there another risk factor for example based on local data?</i>	<i>None of these factors apply</i>
<i>Rural</i>					
<i>> 10,000</i>	<i>Extreme</i>	<i>Extreme</i>	<i>Very High</i>	<i>Very High</i>	<i>Medium</i>
<i>4000–10,000</i>	<i>Very High</i>	<i>Very High</i>	<i>High</i>	<i>High</i>	<i>Medium</i>
<i>1000–4000</i>	<i>High</i>	<i>High</i>	<i>Medium</i>	<i>Medium</i>	<i>Low</i>
<i>< 1000</i>	<i>Medium</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>	<i>Low</i>

According to the table, being located near an intersection, with 7,000 AADT in a 100 km/h area was rated as a ‘Very High’ risk. In this case the speed limit is 80 km/h, the consequences and likelihood are likely to be lower, and the Parties agreed the risk indicator might be downgraded to ‘Medium’. They then considered their site knowledge to see if a greater or lesser priority was appropriate. Given the proposed aboveground Utility Structure was located in a road noted for its speed limits being regularly exceeded, and their overall assessment at the site, they felt that risk assessment remained ‘Very High’, and that some form of treatment would be advisable.

It was agreed to proceed to Stage 4.

Stage 4: Determine optimum treatment for the site

Options considered to mitigate the ‘very high’ risk included:

- *Speed Reduction, such as through improved signage and enforcement.*
- *Provide an earth-mound to protect the valve (though the slope of the mound and closeness to the edge-line could be a potential roll over hazard).*
- *Provide a rumble strip to reduce the risks from driver inattention and fatigue (though it would not mitigate the risk for drivers taking evasive action to avoid a crash at the intersection).*
- *Barrier protection to protect the air valve, although it would also reduce the sealed shoulder.*
- *Moving the proposed location of the above-ground Utility Structures (not practical in this case as this would require moving the whole sewerage line).*
- *An alternative valve type, such as a smaller manual valve instead of the proposed automated valve (it would protrude less than 100mm above-ground but would require manual operation and monitoring).*

It was agreed that the optimal solution was to ensure drivers adhered to the posted speed limit (using improved signage and traffic enforcement) as this would reduce risk significantly. It was also decided after consideration of all the various factors at the site, including the importance of there being no interruption to the sewerage infrastructure, that it was also advisable to install a barrier.

Stage 5: Determine implementation strategy

The two Parties set out the project timeline and each Party’s actions. Costs were apportioned using the cost sharing methodology outlined in Section 6.

Communication Checklist

A communications process is a means of ensuring all parties affected by Works are informed of the project and its impact on them. For Major Works, written communication is preferred. The checklist below identifies the key actions points for communicating with all parties.

Description of Project:

1. The purpose and description of the project is:
2. Benefits of this project are:
3. Key parties include:
 - Customers who will benefit from the project;
 - Business associations and affected retailers or business in the area;
 - Pedestrian and vehicle or road users who travel the route;
 - Media;
 - Emergency services including Police, Ambulance and Fire;
 - Transport companies including passenger transport operations;
 - Schools, hospitals or other community facilities;
 - Community boards and Corridor Manager;
 - Local residents.

Objectives

- To minimise disruption to residents, business and commuters along the route of the project by addressing matters of potential inconvenience;
- To ensure access for emergency services at all times;
- To reach agreement with passenger transport operators to ensure access is maintained or alternative arrangements are in place;
- To keep all affected parties informed and give them certainty about the scope and duration of Works;
- To demonstrate high standards of professionalism and competence in consultation processes.

Key Matters for Communication:

- Route – an evaluation of options;
- Timing and extent of disruption to residents and business and other parties;
- Process of notification;
- Method of installation and reinstatement;
- Contact point for customers (who they will call, how and when);
- Measures to be taken to minimise disruption to residents, business and other parties.

Parties

It is important that the benefits associated with the project are clearly communicated to the affected parties. Key parties will be approached and provided with the appropriate level of information. Regular updates must be provided on the progress of the project. Examples of key messages include:

- The new service will provide you with more choice of suppliers;
- The route and methodology has been carefully designed and consultation has taken place with Corridor Manager;
- Disruption will be minimised and regular updates of the project will be made available;

- Reinstatement will take place in accordance with this Code;
- Acknowledgement of your patience and cooperation;
- You can call 0800 Example to address any concerns you may have.

Business Areas

Undertaking work in business areas requires the following considerations:

- That all efforts are made to minimise disruption;
- That coordination of planned Works between Utility Operators and Corridor Managers takes place;
- Consultation with the business association concerned must take place at least three weeks prior to Project Works commencing;
- All Utility connections and Minor Works undertaken in retail areas must be reinstated within 36 hours;
- Access must be maintained at all times.

Letter Drops

When undertaking any Major Work or Project Works, written notification must be given to affected parties at least five days prior to the commencement of Works (a suggested format is included in Appendix A12). Affected parties are public who are working or residing within 100 m of the Work Site in any of the following situations:

- Work is to be performed outside normal hours of work (7am–6pm);
- Where parking or access from a street may be affected;
- Resurfacing or trench work within 50 m of a shop during shopping hours;
- Resurfacing or excavation work within 50 m of a school during school hours and an hour before and after school;
- Where the use of breakers, road profiling, saw cutting, pile driving or other very loud equipment is likely to extend for more than an hour.

Schedule D: Referenced Documents

The referenced documents are, in the first instance, for the versions listed below, but include any later versions, amendments or replacements.

New Zealand, Australian and international Standards

The following documents may be purchased from Standards New Zealand, Private Bag 2439, Wellington 6140, Telephone 04 498 5990, or www.standards.co.nz

New Zealand Standards

NZS 3104:2003	Specification for concrete production – High grade and special grade
NZS 3109:1997	Concrete construction
NZS 3116:2009	Concrete Segmental and Flagstone Paving for Reinstatement of Interlocking Block Pavements
NZS 4404: 2010	Land Development and Subdivision Infrastructure
NZS PAS 4506: 2008	New Zealand Fire Service Firefighting Water Supplies Code of Practice
NZS 6803:1999	Acoustics – Construction Noise

Joint Australian/New Zealand Standard

AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials
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International Standard

ISO 31000	Risk Management – Principles and Guidelines
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KiwiRail

Specifications for working in Railway Corridors at

<http://www.ontrack.govt.nz/networkaccess/aboutnetworkaccess/Pages/Utilities.aspx>

New Zealand Transport Agency (formerly Transit New Zealand)

These documents are available online at <http://www.nzta.govt.nz>

Specifications

TNZ C/6	Repair of surface defects
TNZ M/1	Roading bitumens
TNZ M/4	Basecourse aggregate
TNZ M/10	Asphaltic concrete
TNZ P/3	First coat sealing
TNZ P/4	Resealing
TNZ P/9	Asphaltic concrete paving construction
TNZ P/11	Open graded porous asphalt
TNZ P/17	Bituminous reseals

Manuals

SP/M/010	Code of practice for temporary traffic management (CoPTTM)
SP/M/033	Transit Quality Standard (TQS1)
SP/M/034	Transit Quality Standard (TQS2)
MOTSAM	Part 1 Manual of Traffic Signs and Markings Part 1: Traffic Signs
SHGDM	State Highway Geometric Design Manual (draft)

HN - HO 72 Traffic loading
SP/M/022 Bridge Manual

Other Publications

Department of Labour

Approved Code of Practice for Safety in Excavations and Shafts for Foundations, 1995

Approved Code of Practice for Safety and Health in Tree Work

 Part 1 Arboriculture, 1994

 Part 2 Maintenance of Trees Around Power Lines, 1996

Guide for Safety with Underground Services, 2002

These documents are available online at <http://www.osh.dol.govt.nz/order/catalogue/>

Ministry of Economic Development

NZIECP 34:2001 New Zealand Electrical Code of Practice for Electrical Safe Distances

This document is available online at http://www.energysafety.govt.nz/upload/33443/nziecp34_2001.pdf

Road Controlling Authorities' Forum

Local Roads Supplement to the NZ Transport Agency's Code of Practice for Temporary Traffic Management, available at www.trainingaspirations.co.nz/lrsdefault.htm

Transit New Zealand, Road Controlling Authorities' Forum and Roading New Zealand

"Chipsealing in New Zealand Handbook" 2005. available for purchase from the NZTA. To order, visit:

<http://www.nzta.govt.nz/resources/chipsealing-new-zealand-manual/order-instructions.html?id=1358>

List of documents replaced by this Code

Code of Practice for Working in the Road: Auckland Region (published by Auckland Utility Operators Group)

Standards New Zealand Handbook 2002: 2003 Working in the Road

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