Schedule 13: Performance Regime

In this Schedule:

Actual Base Travel Time has the meaning given to that term in paragraph 2.1 (Fundamental Diagram Envelope) in Appendix 5 (Calculation of the Fundamental Diagram and Flow-Density Envelope) to this Schedule 13;

Adverse Travel Time Event means, at any time during the Operating Term:

(a) the Contractor proves to the Transport Agency that the average annual daily traffic (AADT) volumes for any Unavailability Section of the main Transmission Gully alignment exceed 35,000, measured over the previous Contract Year;

(b) the Contractor proves to the Transport Agency that the mix of Qualifying Vehicles using the TGR changes such that LCVs comprise more than the greater of:

(i) 10% of all Qualifying Vehicles using the TGR; or

(ii) the Base LCV Percentage, multiplied by two,

in each case based on Total Observations over the previous Contract Year;

(c) the posted speed limit for the TGR is amended from 100 km/h; or

(d) an event or circumstance occurs which:

(i) the Contractor, acting in accordance with Good Industry Practice, could not have reasonably foreseen as at the Execution Date; and

(ii) has, or is expected to have, a material adverse impact on travel times,

(provided that for the purposes of this paragraph (d) any change to traffic volumes or to the mix of Qualifying Vehicles for any section of the main Transmission Gully alignment will not be considered to be an event or circumstance);

Availability Criteria means:

(a) in relation to a Lane or Ramp, that Lane or Ramp:

(i) is fully open to Users for the continuous passage of vehicles; and

(ii) is not subject to a Traffic Management Event;

(b) in relation to a Shoulder, that Shoulder:

(i) subject to (ii) below, is able to be used for the continuous and unimpeded access for motor vehicles to and from the adjacent Lane;

(ii) where temporarily used or designated as a Lane by notice from the Contractor to the Transport Agency, meets the criteria set out in paragraph (a) of this definition; and

(iii) is not subject to a Traffic Management Event,

provided that for the avoidance of doubt Lanes and/or Ramps which are open to the traffic that are used as contraflow to manage unavailability are deemed to not be subject to a Traffic Management Event for the purposes of the Availability Criteria

Base LCV Percentage means, in the First Complete Year, the percentage of all Vehicle Journeys on the TG Main Alignment comprised by LCVs;

Base Reliability Travel Time means, in respect of any period, the time (to the nearest second) representing the [redacted] percentile of Qualifying Vehicle Observations for that period;

Carriageway means either the northbound or the southbound carriageway of the TG Main Alignment, incorporating all Lanes and Shoulders in the applicable direction;

Chainage means:

(a) with reference to a point on the TG Main Alignment, that point measured to the nearest metre (with the northern demarcation point of the TG Main Alignment represented by Chainage 0 and the southernmost demarcation point of the TG Main Alignment represented by a Chainage to be determined in the Location Supplement);

(b) with reference to a point on an exit Ramp:

(i) where the point is Upstream from the Ramp Demarcation, that point will have a Chainage equal to the Chainage of the nearest point of the nearest Lane; and

(ii) where the point is Downstream from the Ramp Demarcation, that point will not have a Chainage attributed to it and will form part of the relevant Ramp Zone;

(c) with reference to a point on an entry Ramp:

(i) where the point is Downstream from the Ramp Demarcation, that point will have a Chainage equal to the Chainage of the nearest point of the nearest Lane; and

(ii) where the point is Upstream from the Ramp Demarcation, that point will not have a Chainage attributed to it and will form part of the relevant Ramp Zone;

Charge means the charge imposed, on the occurrence of a Charge Event, under paragraph 3 of this Schedule 13;

Charge Event means any:

(a) Road Crash (Fatality); and/or

(b) Road Crash (Serious Injury);

Closure Event means a seismic or rockfall event of a magnitude specified in Column 2, Column 3 or Column 4 of the table set out in paragraph 4 of Schedule 22 (Natural Events Regime);

Closure Period means:

(a) in respect of a Lane and/or a Ramp and a Required Closure, the period between that Lane and/or that Ramp being closed by order of a Lane Closing Authority and the time at which that Lane and/or that Ramp is able to be re-opened under the Lane Closure Protocols; or

(b) in respect of a Lane and/or a Ramp and a Requested Closure, the period specified in accordance with the Lane Closure Protocols;

D&C Charge Attribution, in relation to a Charge Event, means that the liability for that Charge Event is borne by the Construction Sub-contractor under clauses 14(d) and 14(e) of the Interface Agreement;

Deductions means any KPI Deductions and any Unavailability Deductions;

Downstream means, in respect of a point on a Carriageway or Ramp, the mandated direction of travel from that point on the relevant Carriageway or Ramp;

Entry Asymmetric Zone means each zone specified as such by Chainage in the Interchange Tables;

Excluded Road Crash means, for the purposes of KPI 02 only:

(a) any Road Crash of a minor and inconsequential nature; or

(b) any Road Crash occurring during a Traffic Management Event undertaken by a person (for the purposes of this definition the **Traffic Manager**) other than a Contractor Related Person where either:

(i) the Traffic Manager was, at the time of the Road Crash, complying with its obligations under COPTTM; or

(ii) the Traffic Manager was, at the time of the Road Crash, not complying with its obligations under COPTTM and the Road Crash occurred before the earlier of:

(A) the time at which the Contractor should, having regard to the location of the breach of COPTTM and acting in accordance with Good Industry Practice, have arrived at the scene to remove the Traffic Manager or require and enforce compliance with COPTTM; and

(B) 25 minutes after the time the Contractor became aware of the relevant breach of COPTTM,

without limitation to its actual knowledge the Contractor will be deemed to have become aware of any breach of COPTTM, where detected by the Monitoring Technology, at the time at which it was detected by the Monitoring Technology;

Excluded Observations means any Hourly Observations collected at a time at which the relevant section of the TGR was not subject to Normal Operating Conditions;

Exit Asymmetric Zone means each zone specified as such by Chainage in the Interchange Tables;

Fatality means a person dies:

(a) in a Road Crash; or

(b) within 30 days after a Road Crash, as a result of injuries sustained in that Road Crash;

Fifteen Minute Period means, in respect of any hour (x), each of the following time periods (in minutes):

(a) x.00 until (but excluding) x.15;

(b) x.15 until (but excluding) x.30;

(c) x.30 until (but excluding) x.45; and

(d) x.45 until (but excluding) x.60;

First Complete Year means the first four full Contract Quarters, excluding the first Contract Quarter if comprised by less than 90 days;

Fixed Transition Zone means each zone specified as a Fixed Transition Zone – Exit or a Fixed Transition Zone – Entry in the Interchange Tables;

Floating Transition Zone means each zone specified as a Floating Transition Zone – Exit or a Floating Transition Zone – Entry in the Interchange Tables;

Fundamental Diagram Dataset means, in respect of the First Complete Year, the data required to derive the fundamental diagrams as referred to in Appendix 5 (Calculation of Fundamental Diagram and Flow-Density Envelope);

Fundamental Diagram Envelope has the meaning given to that term in Appendix 5 (Calculation of the Fundamental Diagram and Flow-Density Envelope);

Hourly Observations means, in relation to any hour during the Operating Term, the observation of the time taken for each Vehicle Journey through the TG Main Alignment in either direction during that hour. Where a Vehicle Journey starts in one hour and ends in the next, it will be attributed to the hour in which the relevant vehicle completed that Journey;

ICI Closure means, in respect of a Road Crash (Serious Injury), the second closure of one or more Lanes, Shoulders and/or Ramps required by the ICI to prepare the ICI Report in respect of that Road Crash (Serious Injury);

ICI Report means a report prepared by an ICI in respect of a Charge Event in accordance with paragraph 6 (ICI Reports);

Incident Response means the time at which the Contractor arrives at the scene of an Incident with an attenuator vehicle and commences its response to the Incident in accordance with its obligations under Schedule 12 (Service Requirements);

Independent Crash Investigator or **ICI** means an Independent Crash Investigator appointed by the parties to prepare an ICI Report in relation to a Charge Event;

Interchange Tables means Tables (1A) to (1J) (Interchange Zones) of Appendix 4 (Systemic Zones) to this Schedule 13;

KPI01A Hour means each hour during which traffic flows were below the Lower Boundary of the Fundamental Diagram Envelope applicable to that hour;

KPI Table means Table 2 as set out in Appendix 1 to Schedule 13 (Performance Regime);

Lane means a defined lane comprising part of the TGR, and excludes any Shoulder or Ramp;

Lane Closing Authority means any person with the legal power or authority, including any delegated power or authority, to close a road or any part of a road to traffic, however for the purposes of this Schedule 13, no exercise of the delegated powers referred to in Schedule 23 by the Contractor nor any Contractor Personnel will give rise to relief unless otherwise expressly provided for in Schedule 13;

Lane Closure Protocols means the lane closure protocols prepared by the Contractor in accordance with Schedule 9 (Operative Documents) and Finalised under the Review Procedures;

LCV means a Qualifying Vehicle that is a light commercial vehicle, being a goods vehicle that has a gross vehicle mass not exceeding 3.5 tonnes;

Location Supplement means the location supplement prepared by the Contractor in accordance with Schedule 9 (Operative Documents) and Finalised under the Review Procedures;

Lower Boundary means the lower boundary of the Fundamental Diagram Envelope;

Mainline Zone means any part of a Carriageway that does not fall within a Specific Zone;

Maximum Closure Period means, in respect of a Closure Event, the maximum period of time the Contractor may close the TG Roads, or part of the TG Roads, as a result of that Closure Event, as set out in the table in paragraph 3 of Schedule 22 (Natural Events Regime;

Maximum Treatment Length has the meaning given in paragraph 12.1(d)(v);

Monitoring Technology means the Contractor's monitoring technology in respect of the TG Infrastructure at any time, including but not limited to its radar and CCTV installations and their associated software and hardware;

Motorway Boundaries means the boundaries of the motorway comprised within the TGR, as set out in Appendix 12 of Schedule 5 (Property) (provided that if there are any differences between the final gazetted motorway boundaries and those set out in Appendix 12 of Schedule 5 (Property), the gazetted boundaries will prevail);

Net Observations means, in respect of any period, Total Observations less Excluded Observations for that period;

Net Qualifying Vehicle Observations means, in respect of any period, Net Observations for that period with respect to Qualifying Vehicles only;

Non-Attributable Breach means, if Excluded Observations or any other identifiable factors outside the control of the Contractor that were demonstrated to have affected travel times were excluded from a relevant week's Qualifying Vehicle Observations, KPI 01B would still have been breached;

Normal Operating Conditions means any time during the Operating Term, other than during periods when maintenance works are being carried out or for so long as an Incident has occurred and its effects are subsisting (including the entire period during which temporary traffic management devices are deployed on the road);

North Bound or **NB** means the northbound Lanes and associated Shoulders and Ramps comprising part of the TGR, and (for the avoidance of doubt) includes those Lanes of the Kenepuru Link Roads directly linking to the northbound Lanes of the TG Main Alignment;

Northbound Observed Fundamental Diagram means the Baseline Observed Fundamental diagram that is determined for North Bound in accordance with Appendix 5 (Calculation of Flow-Density Envelope) to this Schedule;

Obstruction Failure means:

(a) the Contractor has been advised or has otherwise become aware that an obstruction (including but not limited to vegetation, rockfall, litter, refuse, debris, detritus, animals and animal remains) or any other item that could cause a safety issue is on or affecting the TG Roads. Without limitation to its actual knowledge the Contractor will be deemed to have become aware of any obstruction at the time at which it was identified by the Monitoring Technology; and

(b) the Contractor's Incident Response has not occurred within the lesser of:

(i) the time at which the Incident Response should have occurred, having regard to the location of the Incident and acting in accordance with Good Industry Practice; and

(ii) 25 minutes after the time the Contractor became aware of the obstruction as set out in paragraph (a) above;

O&M Charge Attribution, in relation to a Charge Event, means that the liability for that Charge Event is borne by the O&M Sub-contractor under paragraph 4.6 of Schedule 13 (Performance Regime) of the O&M Sub-contract and clause 14(b) of the Interface Agreement;

OMR KPI means any failure to comply with any Service Requirements other than those to which other Key Performance Indicators apply;

Pre-agreed Deduction means all Charges, Deductions, and amounts payable by or recoverable from the Contractor under clauses 25.9 (Delays – liquidated damages), 29.5 (Snagging Defects) and/or 29.8 (Planned Close-out Dates) of the Base Agreement;

Public Holiday means a day specified in section 44(1) of the Holidays Act 2003, and includes the day on which the Wellington provincial anniversary is observed;

Qualifying Vehicle means any vehicle that is undergoing a non-stop passage along the complete TG Main Alignment, with a maximum of two axles, a maximum axle spacing of 3.2 metres and a maximum chassis length of 6 metres and is either:

(a) a passenger vehicle, comprising a motor vehicle that is constructed primarily for the carriage of passengers and has at least four wheels and has a gross vehicle mass not exceeding 3.5 tonnes; and

(b) a light goods vehicle, comprising a goods vehicle that has a gross vehicle mass not exceeding 3.5 tonnes,

and excludes in either case any vehicle or combination of vehicle and trailer that is not legally entitled to travel at the maximum speed limit on open roads in New Zealand. For the purposes of this definition **non-stop** means the relevant vehicle does not stop or break its passage other than as a result of traffic or road conditions not attributable to the Contractor's performance of the Services;

Qualifying Vehicle Observations means, in respect of any period, Hourly Observations for that period with respect to Qualifying Vehicles only;

Ramp means a connection between the TG Main Alignment or the Kenepuru Link Road and adjoining State Highways or Local Roads;

Ramp Demarcation means each Ramp Demarcation set out in Table 3 (Ramp Demarcations) of Appendix 4 (Systemic Zones) to this Schedule 13;

Ramp Zone means each Ramp Zone set out in Table 4 (Ramp Zones) of Appendix 4 (Systemic Zones) to this Schedule 13;

Rehabilitation Treatment means a treatment (not being patching or resealing) completed to improve the pavement that is at least [redacted] long and at least 3.5m wide (one lane);

Relevant Event has the meaning given to that term in paragraph 4.1 (Mitigation);

Relief Cycle means one or more of the relief cycles (as applicable) specified in columns 2-5 of Table 12.1 at paragraph 12.1;

Requested Closure means a closure of one or more Lanes, Shoulders and/or Ramps requested by the Contractor and agreed to by the Transport Agency under the Lane Closure Protocols;

Required Closure means that one or more Lanes, Shoulders and/or Ramps is required to be closed by order of a Lane Closing Authority;

Required Closure (Environmental) means a Required Closure ordered as a result of weather or other environmental conditions, including flooding, landslide, mudslides and rockfalls;

Required Closure (Other) means an ICI Closure and any other Required Closure:

(a) that does not comprise a Required Closure (Road Crash) or Required Closure (Environmental); and

(b) that requires resolution by specialised external personnel and/or equipment (including without limitation the containment and clearing of any hazardous chemical spill);

Required Closure (Road Crash) means a Required Closure ordered as a result of a Road Crash, but excludes an ICI Closure;

Required Closure Instruction means an instruction given by a Lane Closing Authority to the Contractor under the Lane Closure Protocols to close one or more Lanes, Shoulders and/or Ramps;

[redacted]

Road Closure (Maintenance) means road closures in respect of which the Contractor is entitled to KPI Deduction relief under paragraph 12.1(d) of this Schedule 13, being reseals and Rehabilitation Treatment as set out in table 12.1 but excluding maintenance comprising pre-seals or patching;

Road Crash means a collision on the TGR between a motor vehicle or trailer and:

(a) one or more other motor vehicles or trailers;

(b) any barrier, post, signage or other temporary or permanent element of the infrastructure comprising the TGR; and/or

(c) (subject to paragraph 4.5 (Non-occupants) any person or animal, or any object, obstruction or debris permanently or temporarily present on the TGR with or without lawful permission;

Road Crash (Fatality) means that a Road Crash occurs and results in one or more Fatalities;

Road Crash Location means, in respect of a Charge Event, the Chainage determined by the ICI under paragraph 6.5 (ICI Reports) and specified in the relevant ICI Report;

Road Crash (Serious Injury) means that a Road Crash occurs and results in one or more Serious Injuries;

Rounding Convention means any Vehicle Journey measured in minutes and seconds will have seconds converted to a decimal and rounded to one decimal place, with any result falling exactly between decimal places to be rounded up (for example 17 minutes and 45 seconds would be converted to 17.75 minutes and rounded to 17.8 minutes);

Serious Injury means fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock, and any other injury which, in each case, involves or requires hospital treatment, and **Seriously Injured** shall have a corresponding meaning;

SFP Stepdown means the Contractor's accrued SFPs being reduced to [redacted] in accordance with clause 76.4(g) (Warning Notice) of the Base Agreement;

Shoulder means a defined shoulder comprising part of the TGR, provided that where a Shoulder is temporarily used or designated as a Lane by notice from the Contractor to the Transport Agency, a Shoulder will be deemed to be a Lane;

Significant Causal Factor means any of the following that is determined, in accordance with paragraph 6 (ICI Reports), to comprise a Significant Causal Factor in respect of a Charge Event:

(a) the surface of the road (including pavement markings and raised pavement markers);

(b) the performance of a type of barrier, road furniture or gantry;

(c) ponding or flowing water on the road surface;

(d) vegetation encroaching on the road or obstructing sight lines;

(e) an Obstruction Failure;

(f) the Contractor's breach of its lighting obligations under this Agreement; or

(g) the Contractor's breach of its signage obligations under this Agreement,

and each of paragraphs (a) to (g) above represents a category of Significant Causal Factor;

Single Charge Event means, in respect of any Charge Event, that Charge Event and any additional or incremental Charge Event occurring between the time of the first Charge Event and the earlier of:

(a) the Contractor's arrival at the scene of the Charge Event to undertake its Incident Response;

(b) the time at which the Contractor should, having regard to the location of the Charge Event and acting in accordance with Good Industry Practice, have arrived at the scene of the Charge Event to undertake its Incident Response; and

(c) 25 minutes after the time of the first Charge Event;

Snow/Ice Event means there is an accumulation of snow or ice that is rendering it unsafe, as determined by the Contractor (acting reasonably), to maintain an operating speed at the then-applicable legal limit, and such event will cease when the road surface has been cleared or has become clear of such accumulation;

Southbound Observed Fundamental Diagram means the Baseline Observed Fundamental Diagram that is determined for South Bound in accordance with Appendix 5 (Calculation of Flow-Density Envelope) to this Schedule;

Specific Zone means a Fixed Transition Zone, a Floating Transition Zone, an Entry Asymmetric Zone or an Exit Asymmetric Zone as defined in Appendix 4 (Specific Zones);

South Bound or **SB** means the southbound Lanes and associated Shoulders and Ramps comprising part of the TGR, and (for the avoidance of doubt) includes those Lanes of the Kenepuru Link Roads directly linking to the southbound Lanes of the TG Main Alignment;

Synchronised or Congested Behaviour means flow density above the critical density as determined for each mainline exit in accordance with the methodology in Appendix 5;

Systemic Event, with reference to any Relevant Event, refers to:

(a) the Road Crash Location of that Relevant Event being within the Systemic Zone of a Charge Event that occurred within the 10 years prior to that Relevant Event;

(b) any previous Charge Event that was recorded as having one or more of the same categories of Significant Causal Factors as was recorded in respect of the Relevant Event; and

(c) both a previous Charge Event and the Relevant Event occurring during (and with proximity to) a traffic management event which is managed by the Contractor or a Contractor Related Person;

Systemic Zone means, in relation to a Charge Event, the Systemic Zone attributed to that Charge Event in accordance with paragraph 5 (Systemic Zones);

Total Observations means, in respect of any period, all Hourly Observations collected in respect of that period;

Traffic Management Event means:

(a) any activity (as defined in COPTTM);

(b) the provision of temporary traffic management by:

(i) the Contractor or any Contractor Related Person, whether on the TGR or adjoining roading networks; or

(ii) any other party on the TGR; or

(c) any activity undertaken under a Traffic Management Plan (as defined in COPTTM);

Travel Time (NB) means the time taken (measured to the nearest second) for a Qualifying Vehicle travelling in the northbound carriageway to make a Vehicle Journey;

Travel Time (SB) means the time taken (measured to the nearest second) for a Qualifying Vehicle travelling in the southbound carriageway to make a Vehicle Journey;

Travel Time Deduction means Deduction imposed as a result of any breach of KPI 01A in accordance with paragraph 10 of this Schedule 13 (Performance Regime);

Travel Time SFPs means Service Failure Points attributable to any breach of KPI 01B;

Treatment Length means the contiguous distance (in linear metres) of carriageway over which works comprising Road Closure (Maintenance) are or are to be carried out, (measured in respect of the entire relevant length of the carriageway regardless of whether or not all Lanes and Shoulders of that carriageway are subject to the relevant Road Closure (Maintenance) works), but excludes:

(a) any additional road closure distance related to Temporary Traffic Management (where that distance is not in itself subject to Road Closure (Maintenance) works; and

(b) any section of carriageway that has previously been included in a Treatment Length in respect of the relevant Relief Cycle;

Unavailability Event means a Lane, Ramp, Shoulder or any combination of Lanes, Ramps and Shoulder do not meet the applicable Availability Criteria;

Unavailability Deductions means deductions imposed as a result of any Unavailability Event in accordance with paragraph 14 of Schedule 13 (Performance Regime);

Unavailability Direction means, as applicable, North Bound or South Bound;

Unavailability Points means points calculated in accordance with Appendix 3 to Schedule 13 (Performance Regime) for the purpose of quantifying Unavailability Deductions;

Unavailability Section means each of the following sections of the TGR:

(a) **MacKays** (being the northernmost Chainage of the TG Operating Site) **to SH58 Interchange**;

(b) **SH58 Interchange to James Cook**;

(c) **James Cook Interchange to Kenepuru Interchange**;

(d) **Kenepuru Interchange to the southernmost Chainage of the TG Operating Site**; and

(e) **Kenepuru Link Road**,

each to be more particularly described in the Location Supplement;

Unavailability Segment means any Lane, Ramp, Shoulder or any combination of Lanes, Ramps and Shoulder that is subject to an Unavailability Event;

Unavailability Tables means the tables, from Table 7 to Table 12, set out in Appendix 3 to Schedule 13 (Performance Regime);

Unavailability Time Periods means, in respect of any day, each of the following time periods:

(a) the **AM Peak** (comprising 6.00 am until, but excluding, 10.00 am);

(b) the **Inter Peak** (comprising 10.00 am until, but excluding, 3.00 pm);

(c) the **PM Peak** (comprising 3.00 pm until, but excluding, 8.00 pm); and

(d) **Night** (comprising midnight until, but excluding, 6.00 am and 8.00 pm until, but excluding, midnight);

Upstream means, in respect of a point on a Carriageway or Ramp, the direction opposite to the mandated direction of travel from that point on the relevant Carriageway or Ramp;

Vehicle Journey means a non-stop and complete vehicle journey from Chainage 0 to 27,500 (in the southbound Carriageway) or from Chainage 27,500 to Chainage 0 (in the northbound Carriageway), as the case may be and each as may be amended prior to Service Commencement in accordance with the Location Supplement provided that the Chainages described in this definition will not be amended so as to result in the length of a vehicle journey being more than 5 metres greater or less than 27,500 metres. For the purposes of this definition **non-stop** means the relevant vehicle does not stop or break its passage other than as a result of traffic or road conditions not attributable to the Contractor's performance of the Services;

Visibility Event means that visibility measured by at least two Visibility Sensors is less than 120 metres, and such event will cease at the time that all Visibility Sensors report visibility of at least 120 metres for 5 continuous minutes;

Wider Network Event means any of a Wider Network Event (Linden), a Wider Network Event (Mackays) or a Wider Network Event (Interchange);

Wider Network Event (Linden) means that:

(a) speed averaged across one whole minute of Qualifying Vehicle Observations crossing Chainage 27,500 in the Southbound carriageway is less than 85kmh; and

(b) the traffic flow at that point exhibits Synchronised or Congested Behaviour,

and will cease when the speed averaged across one whole minute of Qualifying Vehicle Observations crossing chainage 27,500 in the Southbound carriageway is greater than or equal to 85kmh;

Wider Network Event (Mackays) means that:

(a) speed averaged across one whole minute of Qualifying Vehicle Observations crossing Chainage 0 in the Northbound carriageway is less than 85kmh; and

(b) the traffic flow at that point exhibits Synchronised or Congested Behaviour,

and will cease when the speed averaged across one whole minute of Qualifying Vehicle Observations crossing chainage 0 in the Northbound carriageway is greater than or equal to 85kmh;

Wider Network Event (Interchange) means that:

(a) speed averaged across one whole minute of Qualifying Vehicle Observations through the Exit Asymmetric Zone for that Interchange as defined in Appendix 4 (Specific Zones) (excluding, for the avoidance of doubt, Linden Transition Systemic Zones - Southbound) is less than 85kmh; and

(b) the traffic flow at that point exhibits Synchronised or Congested Behaviour,

and will cease when the speed averaged across one whole minute of Qualifying Vehicle Observations through the Exit Asymmetric Zone for that Interchange is greater than or equal to 85kmh;

Wind Event means either of the following wind conditions is measured at the Wainui Saddle weather station:

(a) the wind speed averaged over one whole minute is greater than 90kmh, or

(b) frequent gusts exceed 110kmh and the speed averaged over one whole minute is greater than 60kmh,

and will cease to apply when either:

(c) (in the case of an event to which paragraph (a) above applies) the wind speed averaged over one whole minute is less than 90kmh; or

(d) (in the case of an event to which paragraph (b) above applies) it has been five or more minutes since the last wind gust exceeding 110kmh.

Part 1 – Performance Standards and Remedies

1. Performance Standards and remedies

1.1 Charge Events

(a) The Contractor must design and construct the TGR, and provide the Operational Services, to a standard that prevents and precludes any Charge Events from occurring.

(b) The parties agree that the Contractor will only be liable for Charges in relation to Charge Events which occur on and from the Service Commencement Date.

1.2 Key Performance Indicators

The Contractor must:

(a) in undertaking the Works Provisioning, at all times comply with the Key Performance Indicator set out in KPI 05 of the KPI Table; and

(b) in providing the Operational Services, at all times comply with each of the Key Performance Indicators set out in KPI 01 to KPI 15 of the KPI Table.

1.3 Availability

The Contractor must ensure that, from Service Commencement, the Availability Criteria are continuously met, subject to the terms of this Schedule, for each Lane, Ramp and Shoulder.

1.4 Application

The parties agree that this Schedule 13 (Performance Regime) only applies to Charge Events, KPI Breaches and Unavailability Events that occur within the TG Operating Site.

2. The Transport Agency's remedies

(a) The Transport Agency's sole remedies:

(i) where a Charge Event occurs, are:

(A) the imposition of the Charges set out in Part 2 of this Schedule 13; and

(B) the imposition of Service Failure Points in accordance with this Schedule 13, and the consequences of the imposition of Service Failure Points in accordance with this Agreement;

(ii) where a KPI Breach occurs, are:

(A) the imposition of a KPI Deduction in accordance with this Schedule 13 and Schedule 14 (Payment Mechanism); and

(B) the imposition of Service Failure Points in accordance with this Schedule 13, and the consequences of the imposition of Service Failure Points in accordance with this Agreement;

(iii) where an Unavailability Event occurs, are:

(A) the imposition of an Unavailability Deduction in accordance with this Schedule 13 and Schedule 14 (Payment Mechanism); and

(B) the imposition of Service Failure Points in accordance with this Schedule 13, and the consequences of the imposition of Service Failure Points in accordance with this Agreement,

in each such case together with, where applicable, the remedies available to the Transport Agency under clause 49.1 (Obligation to pay and sole remedy) of the Base Agreement.

(b) The Contractor acknowledges that this Agreement is a performance-related contract under which it must, to earn or be paid the full Unitary Charge without deduction, provide the Services to a standard where:

(i) no Charge Events occur;

(ii) no Unavailability Events occur; and

(iii) no KPI Breaches occur,

in addition to its obligations to ensure that Service Commencement occurs on or before the Planned Service, with no Snagging Defects, and that each Planned Close-out Date is achieved.

(c) The parties acknowledge that each Pre-agreed Deduction, to the extent it comprises liquidated damages payable by or recoverable from the Contractor:

(i) represents a genuine pre-estimate of the Losses attributable to the circumstances giving rise to that Pre-agreed Deduction; and

(ii) is recoverable by the Transport Agency in its own right and, as applicable, by or for and on behalf of the Crown.

Part 2 – Charge Events

3. Charge Events

3.1 Occurrence of Road Crash or Charge Event

If a Road Crash occurs that would or would be reasonably likely to comprise a Charge Event or a KPI Breach:

(a) without prejudice to its other obligations under this Agreement, the Contractor must give the Transport Agency notice of such Road Crash as soon as reasonably practicable during or following its occurrence and in any event:

(i) such notice must be given verbally to the Transport Agency's Representative within one hour of the Contractor becoming aware of that Road Crash occurring; and

(ii) such notice must be given in writing within five Business Days of the Contractor becoming aware of that event occurring.

For the avoidance of doubt, the notices referred to in this paragraph 3.1(a) are in addition to any reports or notices that the Contractor is required to deliver under Schedule 21 (Reporting); and

(b) where the Road Crash comprises a Charge Event, the Contractor will pay to the Transport Agency (and the Transport Agency may recover as Moneys Owing) the amounts set out in paragraph 3.2 (subject, where applicable, to paragraphs 2(c)(ii) and 4 (Charge Event Relief)).

3.2 Calculation of Charges

(a) If a Road Crash (Fatality) occurs, the Charge payable for that Charge Event will be the aggregate of:

(i) $[redacted] for each motor vehicle in which the driver and/or any other occupants of that motor vehicle is a Fatality; and

(ii) $[redacted] where there are one or more people (other than the driver or any other occupants of a motor vehicle) who are Fatalities as a result of that Road Crash (Fatality).

(b) If a Road Crash (Serious Injury) occurs, the Charge payable for that Charge Event will be the aggregate of:

(i) $[redacted] for each motor vehicle in which a driver and/or any other occupants of that motor vehicle is Seriously Injured as a result of that Road Crash; and

(ii) $[redacted] where there are one or more people (other than the driver and/or any other occupants of a motor vehicle) who are Seriously Injured as a result of that Road Crash (Serious Injury).

(c) If a Road Crash occurs in which there is a combination of one or more Fatalities and one or more Serious Injuries, the Charge payable for that Charge Event will be the aggregate of:

(i) $[redacted] for each motor vehicle in which there is one or more Fatalities and one or more Serious Injuries as a result of that Road Crash;

(ii) $[redacted] where there are one or more people (other than the driver and any other occupants of a motor vehicle) who are Fatalities and there are one or more people (other than the driver and any other occupants of a motor vehicle) who are Seriously Injured as a result of that Road Crash;

(iii) $[redacted] for each motor vehicle in which there is one or more Serious Injuries and no Fatalities as a result of that Road Crash; and

(iv) $[redacted] where there are one or more people (other than the driver or any other occupants of a motor vehicle) who are Seriously Injured (but no such persons are Fatalities) as a result of that Road Crash.

4. Charge Event Relief

4.1 Mitigation

Where any Charge Event occurs (the **Relevant Event**), the Charges applicable to that Relevant Event will be reduced, where applicable, as set out in this paragraph 4.

4.2 Application of Mitigation

(a) Where the Relevant Event includes a Road Crash (Fatality) and:

(i) neither paragraph 4.2(a)(ii) nor paragraph 4.2(a)(iii) applies, then each reference to '$[redacted] in paragraph 3.2 will be substituted with '$[redacted] for the purposes of that Relevant Event;

(ii) there is one Systemic Event applicable to the Relevant Event, then each reference to '$[redacted] in paragraph 3.2 will be substituted with '$[redacted] for the purposes of that Relevant Event; and

(iii) there are two or more Systemic Events applicable to the Relevant Event, then paragraph 3.2 will apply without alteration or mitigation to that Relevant Event.

(b) Where the Relevant Event includes a Road Crash (Serious Injury) and:

(i) neither paragraph 4.2(b)(ii) nor paragraph 4.2(b)(iii) applies, then each reference to '$[redacted] in paragraph 3.2 will be substituted with '$[redacted] for the purposes of that Relevant Event;

(ii) there is one Systemic Event applicable to the Relevant Event, then each reference to '$[redacted] in paragraph 3.2 will be substituted with '$[redacted] for the purposes of that Relevant Event; and

(iii) there are two or more Systemic Events applicable to the Relevant Event, then paragraph 3.2 will apply without alteration or mitigation to that Relevant Event.

4.3 Multiple Systemic Events

For the purposes of paragraph 4.2:

(a) where any Charge Event prior to the Relevant Event would have comprised more than one Systemic Event in respect of the Relevant Event, that Charge Event will be

deemed to comprise a single Systemic Event in assessing the Charge attributable to that Relevant Event; and

(b) where no less than three Charge Events (including the Relevant Event) have occurred, paragraphs 4.2(a)(iii) or 4.2(b)(iii) (as applicable) will be triggered in respect of that Relevant Event where any combination of two or more previous Systemic Events within any or all of paragraphs (a), (b) or (c) of the definition of Systemic Event apply to that Relevant Event.

4.4 Fatality not as a result of a Road Crash

(a) Where a Coronial Finding concludes that a person who was found dead at the scene of a Road Crash died of causes other than the Road Crash, that death will be not be included as a Fatality for the purpose of calculating any amount payable by the Contractor to the Transport Agency under paragraph 3.1 (Occurrence of Road Crash or Charge Event) of this Schedule 13. For the avoidance of doubt, this relief only applies to that person and does not relieve the Contractor from the obligation to pay other amounts payable where the relevant Road Crash resulted in other Fatalities or Serious Injuries.

(b) If the conclusions of the Coronial Finding of a Road Crash become known to the Transport Agency after any amounts have been calculated in accordance with paragraph 3.2 of this Schedule 13 in relation to that Road Crash, the calculation will be re-performed taking into account the conclusions of the Coronial Finding. If the re-performed calculation results in a change to the amount paid or payable by the Contractor to the Transport Agency then:

(i) if the Contractor has not made a payment to the Transport Agency, the amount payable will be adjusted to incorporate the results of the re-performed calculation; and

(ii) if the Contractor has paid some or all of the amount calculated before the conclusions of the Coronial Finding were known to the Transport Agency, the re-performed calculation will be compared to the original calculation in relation to that Charge Event and:

(A) any amount payable by the Contractor to the Transport Agency will be paid in accordance with paragraph 7.1 of this Schedule 13; and

(B) any amount payable by the Transport Agency to the Contractor will be paid within ten Business Days after the re-calculation is completed.

4.5 Non-occupants

(a) Except where paragraph 4.5(b) applies, any Fatality of or Serious Injury to a person who was, at the time of the relevant Road Crash, not an occupant of a vehicle (**Non-occupant**), will comprise a Road Crash (Fatality) or a Road Crash (Serious Injury), as applicable.

(b) A Fatality or Serious Injury in respect of a Non-occupant will not comprise a Charge Event if:

(i) that Fatality or Serious Injury occurs prior to the earlier of:

(A) the time at which the Contractor should, having regard to the location of the Incident and acting in accordance with Good Industry Practice, have arrived at the scene to undertake its Incident Response; and

(B) the time 25 minutes after the time at which the Contractor became aware that the Non-occupant was present on or within the TG Infrastructure. Without limitation to its actual knowledge the Contractor will be deemed to have become aware of any Non-occupant at the time at which it was identified by the Contractor's Monitoring Technology; or

(ii) that Fatality or Serious Injury occurs after the Contractor reached the location of the Incident and:

(A) the Non-Occupant had refused to leave the relevant element of the TG Infrastructure despite the Contractor using reasonable endeavours to procure the same (provided the Contractor shall not be required to breach any law or health and safety obligation in complying with such reasonable endeavours obligation); and

(B) following the Contractor having used its reasonable endeavours as set out in paragraph 4.5(b)(ii)(A) above, the Contractor had initiated a call to the New Zealand Police in respect of the Non-occupant.

4.6 Caps on liability for certain Charges

(a) Notwithstanding any other provision of this Agreement, the Contractor's Liability to make payment to the Transport Agency for Charges under this Schedule 13 is capped at the amounts set out in this paragraph 4.6.

(b) The maximum amount payable by the Contractor to the Transport Agency under paragraph 3 (Charge Events) in respect of any Single Charge Event will be $[redacted] (Indexed).

(c) The maximum amount payable by the Contractor to the Transport Agency under paragraph 3 (Charge Events) in any Contract Year (pro rated for any such year comprising less than 365 days) shall be the aggregate of:

(i) the dollar amount of Charges to which D&C Charge Attribution applies;

(ii) the dollar amount of Charges to which O&M Charge Attribution applies; and

[redacted]

with any amount that would, but for this paragraph 4.6(c), be payable by the Contractor to the Transport Agency under paragraph 3 (Charge Events) to be permanently disregarded and not to be recoverable by the Transport Agency in any subsequent Contract Year.

4.7 Limited application of Charges outside Motorway

Where a Road Crash occurs on any area of the TGR outside the Motorway Boundaries, paragraph 3.2 will only apply to that Road Crash to the extent that any Fatality or any person suffering a Serious Injury is the driver or occupant of a motor vehicle.

5. Systemic Zones

5.1 Systemic Zones

(a) Each Charge Event will be attributed one Systemic Zone in accordance with this paragraph 5 and paragraph 6.5. The Contractor must keep a record of all Systemic Zones and provide full details of the same to the Transport Agency on request.

(b) Each Systemic Zone will be attributed based on the Chainage of the Road Crash Location of the relevant Charge Event. Each Charge Event will be attributed to one of the following categories of Systemic Zone:

(i) a Mainline Zone;

(ii) a Fixed Transition Zone;

(iii) a Floating Transition Zone;

(iv) an Exit Asymmetric Zone;

(v) an Entry Asymmetric Zone; or

(vi) a Ramp Zone.

(c) Where a Charge Event occurs within a Mainline Zone, the Systemic Zone attributable to that Road Crash will be the distance between the Chainage [redacted] Upstream of the Road Crash Location and the Chainage [redacted] Downstream of the Road Crash Location.

(d) Where a Charge Event occurs within a Floating Transition Zone, the Systemic Zone attributable to that Road Crash will be the Systemic Zone calculated in respect of the applicable Road Crash Location in the applicable Interchange Table.

(e) Where a Charge Event occurs within a Fixed Transition Zone, the Systemic Zone attributable to that Road Crash will be the Systemic Zone applicable to that Fixed Transition Zone as set out in the applicable Interchange Table.

(f) Where a Charge Event occurs within an Exit Asymmetric Zone, the Systemic Zone attributable to that Road Crash will be the distance between the Chainage [redacted] Upstream of the Road Crash Location and the Chainage [redacted] Downstream of the Road Crash Location.

(g) Where a Charge Event occurs within an Entry Asymmetric Zone, the Systemic Zone attributable to that Charge Event will be the distance between the Chainage [redacted] Upstream of the Road Crash Location and the Chainage [redacted] Downstream of the Road Crash Location.

(h) Where a Charge Event occurs within a Ramp Zone, the Systemic Zone attributable to that Charge Event will comprise that entire Ramp Zone.

(i) In this paragraph 5 all references to 'between' mean 'between and including'.

(j) For the avoidance of doubt, where a Charge Event occurs on Kenepuru Link Road or on SH58 the Systemic Zone attributable to that Road Crash will be a Mainline Zone.

(k) Where the upstream or downstream boundary point of a Systemic Zone would extend beyond a boundary point of Kenepuru Link Road or SH58 the limit of that Systemic Zone will be at the boundary point of the road. Systemic Zones attributable to Kenepuru Link Road or SH58 will apply to the carriageway (including all lanes of that carriageway) on which the Road Crash occurred and will not extend to include the opposite carriageway.

6. ICI Reports

6.1 Purpose of ICI Reports

The parties agree that the purpose of ICI Reports to be procured under this paragraph 6 is to ascertain:

(a) the Road Crash Location of any Charge Event;

(b) whether or not there were any Significant Causal Factors to that Charge Event; and

(c) whether there was any other primary or major cause of the Road Crash.

6.2 Independence

The ICI is to be an independent third party appointed to use its own professional judgement in undertaking its role under this paragraph 6. The ICI will not be entitled to receive a copy of this Schedule 13 for the purposes of undertaking its role and will be required to act strictly within the terms of its engagement.

6.3 Terms of engagement

The terms of the ICI's engagement must, no later than 12 months prior to the Planned Service Commencement Date, be established in accordance with Appendix 6 (ICI Engagement). The terms of engagement must be consistent with this paragraph 6, and the parties agree that if they have not mutually agreed the terms of engagement by such date, such failure will be deemed to be a Dispute.

6.4 Significant Causal Factor

The terms of the ICI's appointment must require it to:

(a) consider each of the categories of Significant Causal Factor and whether one or more of such categories applies to a Charge Event; and

(b) only state that a category of Significant Causal Factor applies to a Charge Event if, in the professional judgement of the ICI:

(i) that Significant Causal Factor:

(A) was the primary or a major cause of the Road Crash comprising the Charge Event; and

(B) in the absence of that Significant Causal Factor the relevant Road Crash was unlikely to have occurred; or

(ii) that Significant Causal Factor:

(A) was the primary or a major cause of the relevant Road Crash resulting in a Serious Injury or Fatality (and not a less serious outcome); and

(B) in the absence of that Significant Causal Factor the relevant Road Crash was unlikely to have resulted in a Fatality or Serious Injury.

6.5 Establishment of Road Crash Location

When determining the Road Crash Location for a Charge Event, the terms of the ICI's appointment must require it to:

(a) determine, to the extent practicable based on the information available, the Chainage or point on a Ramp where the first major cause of the applicable Road Crash occurred; or

(b) to the extent it cannot make an absolute determination of the location of the Road Crash in accordance with paragraph 6.5(a), make a reasonable estimation of the Chainage or point on a Ramp where the first major cause of the applicable Road Crash occurred.

6.6 Primary Contributing Factor

The terms of the ICI's appointment must also require it to:

(a) identify, where possible, the primary cause of the Road Crash; and

(b) identify any other major causes of the Road Crash.

6.7 Costs of ICI Report

(a) Subject to paragraph 6.7(b), the Transport Agency will bear the costs of preparation and submission of any ICI Report.

(b) To the extent the costs of preparation and submission of any ICI Report are increased due to it opining on any of the matters set out in paragraph 6.6 (Primary Contributing Factor) or in relation to any subsequent dispute between Contractor Related Persons in relation to such opinion, such increased costs will be borne by the Contractor.

6.8 ICI Report to prevail

If there is any inconsistency between an ICI Report and any reporting provided in respect of the same Charge Event by the Contractor, the ICI Report will prevail.

7. Payment of Charges

7.1 General

(a) Subject to paragraph 7.2(a) and the following sub-paragraphs in this paragraph 7.1, the Contractor must make all payments due in respect of Charges within 10 Business Days after the Transport Agency provides an invoice specifying the amount to be paid by the Contractor in respect of any Charge Event.

(b) If the amount invoiced to the Contractor in any Contract Quarter for Charges (**Aggregate Charge Amount**) is in excess of the Non-Setoff Amount defined in paragraph 7.1(c), then:

(i) the Contractor must pay all Charges up to the Non-Setoff Amount at the times otherwise provided for in this paragraph 7;

(ii) the Transport Agency will set-off against the next payment of the Quarterly Unitary Payment the remainder of any Charges invoiced to the Contractor in

that Contract Quarter (being an amount equal to the Aggregate Charge Amount less the Non-Setoff Amount);

(iii) if on the next Relevant Payment Date the Quarterly Unitary Payment is insufficient for the Transport Agency to make the set-off referred to in paragraph 7.1(b)(ii), the remainder of any Charges invoiced to the Contractor in that Contract Quarter which have not been subject to set-off will be payable within 10 Business Days after the end of that Contract Quarter; and

(iv) amounts paid by way of set-off under paragraphs 7.1(b)(ii) or 7.1(b)(iii) will also bear interest at a rate equal to the Threshold Equity IRR, payable on the date of set-off or payment (as the case may be), and calculated from the date of the Charge Event until the date of the set-off or payment.

(c) The **Non-Setoff Amount** in a Contract Quarter shall be the aggregate of:

(i) $[redacted] (indexed);

(ii) amounts received by the Contractor from the D&C Subcontractor or O&M Subcontractor in respect of Charges invoiced in that Contract Quarter; and

(iii) the minimum Charge (being the amount set out under paragraph 4.2(a)(i) or 4.2(b)(i) (as applicable)) in relation to any Road Crash that occurred prior to the Relevant Payment Date applicable to the previous Contract Quarter but was invoiced in the current Contract Quarter.

7.2 Disputed Charge Event

(a) If the Contractor disputes:

(i) that a Charge Event has occurred; or

(ii) the Transport Agency's assessment of the Charge due as set out in the Transport Agency's invoice,

in either case within 10 Business Days after the Transport Agency provides an invoice under paragraph 7.1, payment of the relevant amount must be made by the Contractor within 10 Business Days after resolution of that dispute in favour of the Transport Agency under the Accelerated Dispute Resolution Procedures.

(b) For the avoidance of doubt, for the purpose of determining when an amount is payable in respect of a Charge Event and when Service Failure Points are attributable to a Charge Event:

(i) if the Charge Event is not disputed, payments are due in accordance with paragraph 7.1 and Service Failure Points (if any) are attributable at the time of the Charge Event occurring; and

(ii) if the Charge Event is disputed in accordance with paragraph 7.2(a), payments are due in accordance with paragraph 7.2(a) and Service Failure Points (if any) will be attributed at the time the dispute is resolved under the Accelerated Dispute Resolution Procedures.

Part 3 – Key Performance Indicators and KPI Deductions

8. The Transport Agency's right to make deductions or demand payment

The Transport Agency is entitled to make deductions from the Quarterly Unitary Charge or require payments from the Contractor in accordance with Schedule 14 (Payment Mechanism) and this Part 3.

9. Key Performance Indicators

9.1 General

The Key Performance Indicators are numbered 01 to 15 (inclusive) in the KPI Table.

9.2 Measurement of Key Performance Indicators

Each Key Performance Indicator will be measured on the basis specified in the column entitled 'Measurement' in the KPI Table.

10. KPI Deductions

10.1 General

Where any KPI Breach occurs, the Transport Agency shall:

(a) where that KPI Breach occurs prior to the Service Commencement Date, invoice the Contractor for an amount equal to that KPI Deduction; or

(b) where that KPI Breach occurs on or after the Service Commencement Date, impose a KPI Deduction from the Quarterly Unitary Charge,

(as applicable) in each case at the level specified in the column for the relevant grade of Key Performance Indicator, as set out in the KPI Table (subject to adjustment in accordance with paragraph 12).

10.2 KPI ratchets

The KPI ratchets for each Key Performance Indicator are specified in the column entitled 'Ratchet', in the same row as the applicable Key Performance Indicator, in the KPI Table.

11. Payment of KPI Deductions prior to Service Commencement Date

Where a KPI Breach occurs prior to the Service Commencement Date, the Contractor must make all payments due in respect of the applicable KPI Deductions within 10 Business Days after the Transport Agency provides an invoice specifying the amount to be paid by the Contractor in respect of the applicable KPI Breach, and the Transport Agency may recover the same as Moneys Owing.

12. KPI Deduction Relief

12.1 Required closures

(a) Where the Contractor receives a Required Closure Instruction to close one or more Lanes and the closure is undertaken in accordance with the Lane Closure Protocols, the Travel Time Deduction will be calculated, for the Closure Period, in accordance with the KPI Table and multiplied by:

(i) in the case of a Required Closure (Road Crash) 0.50, such that the resulting Travel Time Deduction will be 50% of the amount that would have been deducted from the Quarterly Unitary Charge if no relief was granted; or

(ii) in the case of a Required Closure (Other) 0.00, such that the resulting Travel Time Deduction will be 0% of the amount that would have been deducted from the Quarterly Unitary Charge if no relief was granted.

(b) The Contractor will not be entitled to any relief from Travel Time Deductions:

(i) (except to the extent provided under paragraph 12.1(c) and paragraph 12.2) in the case of any Required Closure (Environmental); or

(ii) (except to the extent provided under paragraph 15.2) for any closure of any part of the TGR undertaken without a Required Closure Instruction.

(c) Where a Closure Event occurs that causes damage or obstruction to the TG Project such that any Lane, Ramp or Shoulder ceases to meet the Availability Criteria, and the Contractor closes such Lanes, Ramps and/or Shoulders in accordance with the Lane Closure Protocols, the Travel Time Deduction will, for a Closure Period not exceeding the Maximum Closure Period applicable to that Closure Event, be calculated in accordance with the KPI Table and multiplied by 0, such that the Travel Time Deduction will be 0% of the amount that would have been deducted from the Quarterly Unitary Charge for that Closure Period if no relief was granted. Following the expiry of the Maximum Closure Period applicable to that Closure Event, this paragraph 12.1(c) will cease to apply to the relevant Closure Event.

(d) In the case of Road Closure (Maintenance), relief will be applied by increasing the Base Travel Time (BTT) by 2 minutes, for all time periods in which relief is applicable, based on meeting the following conditions:

(i) Pavement Surfacing and Renewal Works that are the subject of an application for Maintenance Relief will only be eligible for such relief if they have been included in the Annual Work Plan and the Quarterly Maintenance Schedule;

(ii) the maximum allowable relief, being the maximum distance over which relief can be applied, the maximum number of Relief Cycles available, and the relief available, are set out in table 12.1;

(iii) the Contractor shall in its reporting under this relief regime specify the starting and finishing chainages for the Treatment Length for the Pavement Surfacing and Renewal Works;

(iv) each Treatment Length must not be less than 1000m. The maximum Treatment Length is to be determined by the Contractor taking into account the results of the User Satisfaction Survey;

(v) the maximum distance available for relief under 12.1(d) as set out in table 12.1 (the **Maximum Allowed Treatment Length**), being the aggregate of all

Treatment Lengths in relation to any one Relief Cycle, shall be Chainage multiplied by 2;

(vi) relief may be extended by an additional [redacted] period beyond the allowances in Table 12.1 in the event of an adverse event that occurs during the works related to a Treatment Length, where the Contractor acting reasonably and in accordance with Good Industry Practice determines that, due to the occurrence of that adverse event, additional time is required to embed the road surfacing to an equivalent standard as would have been achieved had that adverse event not occurred (**Relief Extension**);

(vii) the maximum in aggregate of all Relief Extensions in relation to any one Relief Cycle as per table 12.1 shall be no more than 10% of the Maximum Allowed Treatment Length (carriageway metres); and

where a Rehabilitation Treatment is completed for one lane only, then the period of time during which relief is available for that treatment will be reduced by 48 hours.

Table 12.1		**Relief Cycle (Reseal 1)**	**Relief Cycle (Reseal 2)**	**Relief Cycle (Rehabilitation)**	**Relief Cycle (Reseal 3)**
Maximum Allowed Treatment Length (carriageway metres) (exact lengths to be confirmed through the reviewable design process)		[56000]	[56000]	[56000]	[56000]
	AM Peak	-	-	-	-
	Inter Peak	-	-	-	-
	PM Peak	-	-	-	-
Day 1	**Night**	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes
	AM Peak	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes
	Inter Peak	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes
	PM Peak	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes
Day 2	**Night**	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes	BTT +2 minutes
	AM Peak	-	-	BTT +2 minutes	-
	Inter Peak	-	-	BTT +2 minutes	-
	PM Peak	-	-	BTT +2 minutes	-
Day 3	**Night**	-	-	BTT +2 minutes	-
	AM Peak	-	-	BTT +2 minutes	-
	Inter Peak	-	-	BTT +2 minutes	-
	PM Peak	-	-	BTT +2 minutes	-
Day 4	**Night**	-	-	BTT +2 minutes	-
	AM Peak	-	-	BTT +2 minutes	-
	Inter Peak	-	-	BTT +2 minutes	-
	PM Peak	-	-	BTT +2 minutes	-
Day 5	**Night**	-	-	BTT +2 minutes	-
	AM Peak	-	-	BTT +2 minutes	-
	Inter Peak	-	-	BTT +2 minutes	-
	PM Peak	-	-	BTT +2 minutes	-
Day 6	**Night**	-	-	BTT +2 minutes	-

	AM Peak	**-**	**-**	BTT +2 minutes	**-**
	Inter Peak	**-**	**-**	BTT +2 minutes	**-**
	PM Peak	**-**	**-**	BTT +2 minutes	**-**
Day 7	**Night**	**-**	**-**	BTT +2 minutes	**-**

12.2 Permitted Speed Restrictions

(a) The Contractor will be entitled to full relief from Travel Time Deductions under KPI01A and KPI01B while a Visibility Event, Snow/Ice Event or Wind Event subsists. In respect of KPI01A, such relief may be claimed by the Contractor by applying the travel time relief as per 1.2 of Appendix 2 – Travel Time Deduction. In respect of KPI01B, such relief may be claimed by the Contractor excluding the affected Hourly Observations from the relevant travel time calculations (in both cases reasonable supporting evidence for any such exclusion must be provided to the Transport Agency).

(b) The Contractor will not be entitled to relief from Travel Time Deductions for other environmental events.

12.3 Wider Network Events

(a) Where a Wider Network Event is persisting on a carriageway the Contractor will be entitled to full relief from Travel Time Deductions in relation to that carriageway for the duration of that Wider Network Event, as set out in this paragraph 12.3. In respect of KPI01A, such relief may be claimed by the Contractor by applying the travel time relief as per 1.2 of Appendix 2 – Travel Time Deduction. In respect of KPI01B, such relief may be claimed by the Contractor excluding the affected Hourly Observations from the relevant travel time calculations (in both cases reasonable supporting evidence for any such exclusion must be provided to the Transport Agency).

(b) Ramp performance deductions will not apply to South Bound Ramps at SH58 Interchange, James Cook Interchange and Kenepuru Interchange where and for so long as a Wider Network Event (Linden) subsists.

(c) Ramp performance deductions will not apply to the MacKays Interchange North Bound Ramps where and for so long as a Wider Network Event (MacKays) subsists.

(d) Ramp performance deductions will not apply to the exit ramp of the affected Interchange on the relevant carriageway for so long as a Wider Network Event (Interchange) subsists in relation to that Interchange.

(e) Wider Network Events will not result in any relief from Charges or Unavailability Deductions.

(f) The Contractor will not be entitled to any relief under this paragraph 12.3 to the extent that any Wider Network Event is the result of any event or incident on the TGR or any act or omission of the Contractor.

12.4 Natural Events relief

(a) The Contractor will be entitled to relief from Travel Time Deductions for the purpose of enabling it to perform repair and rectification work reasonably required as a result of any Natural Event, but only to the extent that such repair and rectification works are performed during Inter Peak and Night periods during the 30 day period following the occurrence of the Natural Event. The Contractor's right to relief from Travel Time

Deductions under this paragraph will apply only to the Inter Peak and Night periods during which the repair and rectification work is undertaken.

(b) In respect of KPI01A, such relief may be claimed by the Contractor by applying the travel time relief as per 1.2 of Appendix 2 – Travel Time Deduction. In respect of KPI01B, such relief may be claimed by the Contractor excluding the affected Hourly Observations from the relevant travel time calculations (in both cases reasonable supporting evidence for any such exclusion must be provided to the Transport Agency).

12.5 WTOC's ICT System

(a) Where:

(i) the WTOC's ICT System is unavailable for any reason other than the actions of the Contractor (**WTOC ICT Outage**); and

(ii) as a result of such WTOC ICT Outage, the Contractor is unable to provide the reports, notification or data entry required in respect of KPI01A and KPI01B to a standard that meets the accuracy and completeness requirements of KPI03,

then:

(iii) the Contractor will be entitled to relief from its obligation to comply with KPI 03 (which includes relief from any Deductions or SFPs that the Contractor would otherwise incur due to a breach of KPI03) to the extent that the breach:

(A) relates to reports, notification or data entry required in respect of KPI01A and KPI01B; and

(B) results from the WTOC ICT Outage; and

(iv) the Contractor must, as soon as reasonably practicable after such WTOC ICT Outage ceases to apply, update such reports, notification or data entry (where the same was impacted by the WTOC ICT Outage) to the standard required by KPI03, except to the extent the Contractor can demonstrate that the WTOC ICT Outage resulted in a permanent inability to do so.

(b) No relief will be available under this paragraph in connection with any incompatibility between the Contractor's ITS Equipment, the Contractor's Network Communications and the WTOC's ICT System and any such incompatibility will not comprise a WTOC ICT Outage.

12.6 Burden of proof

Where the Contractor seeks any relief from KPI Deductions under this paragraph 12, the burden of proving that any claimed grounds of relief exist will be on the Contractor.

Part 4 – Unavailability and Deductions

13. The Transport Agency's right to make deductions

The Transport Agency is entitled to make deductions from the Quarterly Unitary Charge in accordance with Schedule 14 (Payment Mechanism) and this Part 4.

14. Unavailability Deductions

14.1 General

Where any Unavailability Event occurs, the Transport Agency will impose an Unavailability Deduction from the Quarterly Unitary Charge in accordance with Appendix 3 to Schedule 13.

15. Unavailability Relief

15.1 Required closures

(a) Where the Contractor receives a Required Closure Instruction to close one or more Lanes, Ramps and/or Shoulders and the closure is undertaken in accordance with the Lane Closure Protocols, the Unavailability Points attributable to that Unavailability Event will be calculated, for the Closure Period, in accordance with the Unavailability Tables and multiplied by:

(i) in the case of a Required Closure (Road Crash) 0.25, such that the resulting Unavailability Points will be 25% of the Unavailability Points that would have been attributable to the Unavailability Event if no relief was granted; or

(ii) in the case of a Required Closure (Other) 0.00, such that the resulting Unavailability Points will be 0% of the Unavailability Points that would have been attributable to the Unavailability Event if no relief was granted.

(b) The Contractor will not be entitled to any relief from Unavailability Deductions:

(i) (except to the extent provided under paragraph 15.3) in the case of any Required Closure (Environmental); or

(ii) (except to the extent provided under paragraph 15.2) for any closure of any part of the TGR undertaken without a Required Closure Instruction.

15.2 Requested closures

Where the Contractor receives a request to close one or more Lanes from any person (excluding any Required Closure Instruction):

(a) the Contractor may refer that request to the Transport Agency under the Lane Closure Protocols; and

(b) the Transport Agency will consider any such request and will advise the Contractor whether, and the terms on which, it would grant relief from Unavailability Deductions and Travel Time Deductions in respect of the proposed closure.

15.3 Closure Events

Where a Closure Event occurs that causes damage or obstruction to the TG Project such that any Lane, Ramp or Shoulder ceases to meet the Availability Criteria, and the Contractor closes such Lanes, Ramps and/or Shoulders in accordance with the Lane Closure Protocols, the Unavailability Points attributable to that Unavailability Event will be calculated, for a Closure Period not exceeding the Maximum Closure Period applicable to that Closure Event, in accordance with the Unavailability Tables and multiplied by 0.00, such that the resulting Unavailability Points will be 0% of the Unavailability Points that would have been attributable to the Unavailability Event for that Closure Period if no relief was granted. If the TG Roads do not meet the Availability Criteria on the expiry of the Maximum Closure Period applicable to that Closure Event, this paragraph 15.3 will cease to apply to the relevant Closure Event.

15.4 Events outside TG Project

If any Wider Network Event occurs, no Unavailability Deductions will apply where and for so long as the TGR continues to meet the Availability Criteria.

15.5 Burden of proof

Where the Contractor seeks any relief from Unavailability Deductions under this paragraph 15, the burden of proving that any claimed grounds of relief exist will be on the Contractor.

Part 5 – Service Failure Points

16. Allocation and consequences of Service Failure Points

16.1 General

Service Failure Points will be allocated to the Contractor, in respect of Deductions, breaches of the OMR KPI, breaches of KPI 01B and the occurrence of Charge Events, on a cumulative basis, in accordance with this Part 5.

16.2 Allocation of Service Failure Points for Deductions

The Contractor will be allocated, in respect of each Quarter, one Service Failure Point for each $1,000 of KPI Deductions and Unavailability Deductions incurred by the Contractor in that Quarter.

16.3 Allocation of Service Failure Points for breach of OMR KPI

In addition to the allocation of Service Failure Points under paragraph 16.2, the Contractor will be allocated 10 Service Failure Points for each breach of the OMR KPI.

16.4 Allocation of Service Failure Points for Charge Events

In addition to the allocation of Service Failure Points under paragraphs 16.2 and 16.3, the Contractor will, subject to paragraph 16.5 be allocated Service Failure Points on the occurrence of Charge Events as follows:

(a) for the first Fatality in respect of which a Charge is payable under paragraph 3.2 in any rolling 12 Quarter period, the Contractor will be allocated 100 Service Failure Points;

(b) for the second Fatality in respect of which a Charge is payable under paragraph 3.2 in any rolling 12 Quarter period, the Contractor will be allocated 175 Service Failure Points;

(c) for the third and for each subsequent Fatality in respect of which a Charge is payable under paragraph 3.2 in any rolling 12 Quarter period, the Contractor will be allocated 500 Service Failure Points;

(d) for the first Serious Injury in respect of which a Charge is payable under paragraph 3.2 in any rolling four Quarter period, the Contractor will be allocated 25 Service Failure Points;

(e) for the second Serious Injury in respect of which a Charge is payable under paragraph 3.2 in any rolling four Quarter period, the Contractor will be allocated 50 Service Failure Points;

(f) for the third and for each subsequent Serious Injury in respect of which a Charge is payable under paragraph 3.2 in any rolling four Quarter period, the Contractor will be allocated 150 Service Failure Points; and

(g) the maximum amount of Service Failure Points that can be allocated to the Contractor in respect of any Single Charge Event will be 500 Service Failure Points.

16.5 Allocation of Service Failure Points for Charge Events following SFP Stepdown

If a SFP Stepdown occurs then, for the 12 month period commencing on the date of the SFP Stepdown:

(a) Service Failure Points will be allocated to the Contractor in accordance with paragraph 16.4 in respect of any Charge Event that is subject to either D&C Charge Attribution or O&M Charge Attribution; and

[redacted]

17. Consequences of Service Failure Points and associated Levels

17.1 Level 1 SFP

The Transport Agency may, at any time where Level 1 SFP applies, require the Contractor to provide the Transport Agency with such additional reporting in relation to the Contractor's performance of its obligations under this Agreement as the Transport Agency may, on written notice, request. Such additional reporting may include a requirement to provide reports with a greater level of detail, or more frequently, than the other periodic reports the Contractor is required to provide under this Agreement.

17.2 Level 2 SFP

The Transport Agency may, at any time where Level 2 SFP applies:

(a) take such actions as it would be entitled to where Level 1 SFP applies; and/or

(b) require the Contractor to:

(i) put forward a rectification programme that is acceptable to the Transport Agency (in its sole discretion) within 15 Business Days after the date it is requested to do so, establishing a work plan for the remedying of any existing KPI Breaches or Unavailability Events, or the underlying causes of the KPI Breaches, Unavailability Events or any Charge Event, within a timeframe acceptable to the Transport Agency; and

(ii) implement such rectification programme, at the Contractor's cost, in accordance with its terms.

17.3 Level 3 SFP

(a) The Transport Agency may, at any time where Level 3 SFP applies, take such actions as it would be entitled to where Level 1 SFP or Level 2 SFP applies.

(b) In addition, for so long as Level 3 SFP applies, it will be deemed that there is serious risk to the health and safety of persons or property for the purposes of clause 63 (When step-in applies) of the Base Agreement, and the Transport Agency will be entitled (but not obliged) to exercise its rights under clause 64 (Step-in Rights) of the Base Agreement.

17.4 Level 4 SFP

(a) The Transport Agency may, at any time where Level 4 SFP applies, take such actions as it would be entitled to where Level 1 SFP, Level 2 SFP or Level 3 SFP applies.

(b) In addition, Level 4 SFP comprises a Remediable Contractor Default and the Transport Agency will be entitled to exercise its rights under Part 19 (Termination) of the Base Agreement.

17.5 Additional provisions relating to Travel Time SFPs

(a) Except as set out in this paragraph 17.5, Travel Time SFPs will in all respects operate in the same way as all other SFPs for Deductions.

(b) If and for so long as the Contractor reaches Level 2 SFP, it must report the reasons and causes of each subsequent breach of KPI 01B and the Transport Agency may require it to put forward and implement, at the Contractor's cost, a rectification programme in accordance with paragraph 17.2. If the Transport Agency, acting reasonably, is not satisfied with the Contractor's report, the Transport Agency will be entitled to commission an independent report into the reasons and causes of the persistent breaches including recommendations for rectification of any such breaches. If this report indicates a deficiency in the Contractor's provision of the Services or any act or omission of the Contractor affecting actual travel time which was not identified in the Contractor's reporting, the Contractor must reimburse the NZTA the full cost of the independent report and carry out, at its own cost, any rectification programme recommended by the independent report to the satisfaction of the NZTA.

(c) Travel Time SFPs will expire on the earlier of:

(i) the date 52 weeks after the week in respect of which they were incurred; or

(ii) the date on which the Contractor demonstrates to the Transport Agency's satisfaction that the breach of KPI 01B, in any week, was a Non-Attributable Breach (in relation to the Travel Time SFPs incurred in respect of that week only).

Part 6 – Miscellaneous

18. Reporting

18.1 Quarterly Performance Report

The Contractor will, in the Quarterly Performance Report relating to each Contract Quarter, in accordance with paragraph 6 (Quarterly Performance Reports) of Schedule 21 (Reporting), record:

(a) all KPI Breaches that occurred in that Contract Quarter;

(b) all Unavailability that occurred in that Contract Quarter;

(c) the number and type of Charge Events that occurred in that Contract Quarter;

(d) the number of Service Failure Points incurred in respect of that Contract Quarter

(e) Travel Time SFPs incurred in respect of that Contract Quarter (being the aggregate of the Travel Time SFPs recorded in the Weekly Travel Time Reports for that Contract Quarter); and

(f) the number of Service Failure Points (including Travel Time SFPs) incurred in aggregate over that Contract Quarter and the previous three Contract Quarters.

18.2 Weekly Travel Time Report

The Contractor will, no more than 10 Business Days after completion of each 7 day period referred to in paragraph 22.2(c) (Subsequent Years of Operating Term), provide the Transport Agency with a duly completed Weekly Travel Time Report in accordance with Schedule 21 (Reporting) setting out (amongst other things) the Travel Time SFPs incurred (if any) in respect of that 7 day period.

19. Indexation

19.1 Indexation of dollar amounts

The dollar amount attributable to each:

(a) Charge Event; and

(b) KPI Deduction;

will be Indexed with effect from the end of each Contract Year.

19.2 Indexation of Service Failure Points

The number of Service Failure Points required to be incurred by the Contractor to reach Level 1 SFP, Level 2 SFP, Level 3 SFP and Level 4 SFP shall be Indexed with effect from the end of each Contract Year. The indexation calculations will be carried out by the Transport Agency within 20 Business Days following the end of the relevant Contract Year and (in the absence of manifest error) will be binding on the parties. The relevant Service Failure Point levels, adjusted in accordance with this paragraph 19.2, will prevail until they are subsequently Indexed in accordance with this paragraph 19.2.

20. Travel Time

20.1 Data collection – First Complete Year

(a) During the First Complete Year, the Contractor will collect the Hourly Observations and such other information required to develop the Fundamental Diagram Dataset in respect of each hour, including a description of the operating conditions on the relevant section of the TGR at the time of each Hourly Observation.

(b) Within 20 Business Days after the end of the First Complete Year, the Contractor will provide to the Transport Agency a report setting out:

(i) a detailed breakdown of the Total Observations collected during and in respect of the First Complete Year;

(ii) a detailed breakdown of all Hourly Observations which the Contractor proposes to exclude on the basis that they were Excluded Observations and reasonable and appropriate justification for each exclusion;

(iii) the Net Observations for the First Complete Year;

(iv) the Net Qualifying Vehicle Observations for the First Complete Year; and

(v) the Base LCV Percentage.

20.2 Data collection – subsequent years of Operating Term

During each year after the First Complete Year, the Contractor will collect the same data as was required in the First Complete Year and:

(a) in respect of the data required to calculate performance against KPI01A, will be required to report on the same on a quarterly basis; and

(b) in respect of the data required to calculate performance against KPI01B, will be required to report on the same on a weekly basis.

21. Travel Time – KPI 01A

21.1 First Complete Year

KPI 01A will be tested and applied, in respect of the First Complete Year, in arrears as follows (and not separately during the course of the First Complete Year or in respect of the first Contract Quarter (if comprised by less than 90 days):

(a) the Contractor will, within 20 Business Days after the establishment of the Net Observations for the First Complete Year in accordance with paragraph 20.1:

(i) carry out the calculations specified in Appendix 5 (Calculation of the Flow-Density Envelope) to establish each of the:

(A) Northbound Modelled Fundamental Diagram;

(B) Southbound Modelled Fundamental Diagram;

(C) Northbound Fundamental Diagram Envelope;

(D) Southbound Fundamental Diagram Envelope; and

(ii) establish each of the KPI01A Hours for the First Complete Year;

(iii) where the Observed Fundamental Diagram data point (density, flow) (NB) or (SB), as applicable, in any such KPI01A Hour was on or under the Lower Boundary, KPI 01A will apply to that KPI01A Hour; and

(iv) the aggregate Travel Time Deductions for the First Complete Year (if any) must be included in the report provided by the Contractor under clause 49.2 (Report and invoice) of the Base Agreement and will comprise deductions to be taken into account when calculating the Quarterly Unitary Payment for the first Payment Period after the First Complete Year.

21.2 Subsequent Years of Operating Term

KPI 01A will be tested and applied, after the end of the First Complete Year, as follows:

(a) the Contractor will, in respect of each Payment Period:

(i) collect the data required under paragraph 21.2 (Subsequent Years of Operating Term);

(ii) carry out the calculations specified in Appendix 5 (Calculation of the Flow-Density Envelope) to establish each of the applicable:

(A) Northbound Observed Fundamental Diagram; and

(B) Southbound Observed Fundamental Diagram;

(iii) establish each of the KPI01A Hours for that period; and

(iv) KPI01A will apply for each KPI01A Hour.

22. Travel Time – KPI 01B

22.1 First year of Operating Term

KPI01B will not apply during the first year of the Operating Term and will take effect from the first Sunday after the first year of the Operating Term.

22.2 Subsequent Years of Operating Term

KPI 01B will be applied, after the first year of the Operating Term, as follows:

(a) by no later than 20 Business Days after the end of the first year of the Operating Term, the Contractor will calculate:

(i) the Base Reliability Travel Time (to the nearest second) in respect of the first year of the Operating Term (the **Base Reliability Travel Time**);

(ii) the greater of [redacted] and [redacted] of the Base Reliability Travel Time (the **Buffer**);

(b) **Reliability Travel Time** will, subject to resetting in accordance with paragraph 23, be the aggregate of the Base Reliability Travel Time and the Buffer, *provided that* if the

Base Reliability Travel Time equates to a speed in excess of 100 kph, then all observations equating to a speed in excess of 100 kph will be removed from the dataset for the purposes of setting the Reliability Travel Time and the Reliability Travel Time will be set at the aggregate of the Base Reliability Travel Time calculated from the remaining data set and the Buffer;

(c) as at midnight on each Saturday during the Operating Term, the Base Reliability Travel Time (to the nearest second) in respect of the previous seven days Net Qualifying Vehicle Observations (excluding from the calculation of Net Qualifying Vehicle Observations any observations in hours in which Travel Time Relief applied along with reasonable and appropriate justification for each exclusion;) will be calculated by the Contractor (the **Actual Weekly Travel Time**), *provided that* if the Base Reliability Travel Time calculated in accordance with 22.2(b) above was determined using a dataset from which observations equating to a speed in excess of 100 kph had been removed then all observations in excess of 100 kph will also be removed from the dataset for the purposes of calculating the Actual Weekly Travel Time; and

(d) if the Actual Weekly Travel Time exceeds the Reliability Travel Time in respect of any applicable week, this will comprise a breach of KPI 01B.

23. KPI resets

23.1 KPI01A resets

Without prejudice to the Contractor's rights under paragraph 24 (Adverse Travel Time Event), the Transport Agency may (at its discretion) require a reset of the Fundamental Diagram Envelope with effect from:

(a) any of the fourth, eleventh, sixteenth or twenty first anniversary of the end of the first Contract Quarter; and/or

(b) the end of the Contract Quarter nearest to the date 12 months after any increase in the speed limit on the TG Roads becomes effective,

(with reference to the Fundamental Diagram Dataset collected, in each case, in respect of the 12 months immediately preceding the effective date of that reset) in which case the following process will apply:

(c) the Contractor will, within 20 Business Days after the establishment of Fundamental Diagram Dataset for the relevant 12 months of the Contract Term:

(i) carry out the calculations specified in Appendix 5 (Calculation of the Flow-Density Envelope) to establish each of the four elements specified in paragraph 21.1(a)(i);

(ii) provide the calculations and outcomes to the Transport Agency; and

(iii) KPI01A will, with effect from the relevant reset date, be applied as set out in paragraph 21.2 (Subsequent Years of Operating Term) but based on the four elements specified in paragraph 21.1(a)(i) established as at that time under this paragraph 23.1; and

(d) in the case of a reset under paragraph 23.1(b) only:

(i) the Contractor will, following the reset of the calculations specified in Appendix 5 (Calculation of the Flow-Density Envelope) in respect of the 12 months

immediately preceding the reset date, apply its performance against KPI01A against the revised four elements specified in paragraph 21.1(a)(i); and

(ii) if the aggregate Deduction calculated in accordance with paragraph 23.1(d)(i) is greater than the aggregate Deductions incurred by the Contractor in respect of KPI01A over the preceding 12 month period, the Transport Agency may recover the balance as Moneys Owing; or

(iii) if the aggregate Deduction calculated in accordance with paragraph 23.1(d)(i) is less than the aggregate Deductions incurred by the Contractor in respect of KPI01A over the preceding 12 month period, the Contractor may recover the balance from the Transport Agency as an Additional Amount.

23.2 KPI01B resets

Without prejudice to the Contractor's rights under paragraph 24 (Adverse Travel Time Event) Reliability Travel Time may be reset, in accordance with this paragraph 23:

(a) if more than [redacted] Non-Attributable Breaches occur in one Contract Quarter; or

(b) at the discretion of the Transport Agency, no less than 12 months after the most recent setting or resetting (as the case may be) of the Base Reliability Travel Time or the Revised Base Reliability Travel Time,

in which case the following process will apply:

(c) the Contractor must establish:

(i) the Base Reliability Travel Time (to the nearest second) in respect of the previous 12 months of the Operating Term (the **Revised Base Reliability Travel Time**); and

(ii) the greater of [redacted] and [redacted] of the Revised Base Reliability Travel Time (the **Revised Buffer**); and

(d) from the time of re-set the **Reliability Travel Time** will be the aggregate of the Revised Base Reliability Travel Time and the Revised Buffer, *provided that* if the Base Reliability Travel Time equates to a speed in excess of 100 kph, then all observations equating to a speed in excess of 100 kph will be removed from the dataset for the purposes of re-setting the Reliability Travel Time and the Reliability Travel Time will be set at the aggregate of the Revised Base Reliability Travel Time calculated from the remaining data set and the Revised Buffer.

23.3 KPI015(b)

If the Contractor proves to the Transport Agency that the average annual daily traffic (AADT) volumes for any section of the main Transmission Gully alignment exceed 35,000, measured over the previous twelve consecutive calendar months (on a rolling basis), the parties:

(a) must meet and negotiate in good faith an amendment or variation to KPI 015(b) to the extent required to place the Contractor in a position no better and no worse than its position, with reference to KPI 015(b), than it was in prior to the AADT exceeding 35,000 as set out above; and

(b) will, following the establishment of an appropriate amendment or variation to KPI 015(b), apply the same retrospectively across the twelve consecutive calendar months during which AADT exceeded 35,000, with the Transport Agency to pay to the Contractor, as an Additional Payment, any amount by which the amounts deducted by

way of the original application of KPI015(b) over those twelve months exceeded the amounts calculated in accordance with such retrospective application.

24. Adverse Travel Time Event

24.1 Notice of Adverse Travel Time Event

The Contractor may, if it reasonably considers that an Adverse Travel Time Event has occurred, provide the Transport Agency with written notice setting out the Adverse Travel Time Event that it considers to have occurred and reasonable particulars of the same.

24.2 Effect of notice

(a) If a notice is given under paragraph 24.1, then within 20 Business Days after the Transport Agency has received that notice, the parties must negotiate in good faith in an endeavour to agree on:

(i) whether or not the notice is valid; and

(ii) whether or not an Adverse Travel Time Event has occurred.

(b) If the parties do not reach agreement on the matters referred to in paragraph 24.2(a) within 20 Business Days after commencing the negotiations, then either party may refer the matter for dispute resolution under Part 21 of the Project Agreement.

24.3 Agreement or determination

(a) If it has been agreed or determined that the notice is valid and that an Adverse Travel Time Event has occurred, then the parties must negotiate in good faith in an endeavour to agree an adjustment to the Base Travel Times and Reliability Travel Times which are then applicable so as to ensure that the parties are in no better and no worse position than they were in immediately prior to the occurrence of the Adverse Travel Time Event, including by way of resetting of KPI01A.

(b) If the parties do not reach agreement on the matters referred to in paragraph 24.3(a) within 20 Business Days after commencing the negotiations, then either party may refer the matter for dispute resolution under Part 21 of the Project Agreement.

25. Evidence and Disputes

(a) The Contractor must undertake all observations required in respect of KPI01A and KPI01B to a standard of no less than 99.9 percent accuracy and 99.9 percent completeness.

(b) The Transport Agency may require the Contractor to provide it with such supporting evidence, including detailed workings and raw data, as it reasonably requires to validate the calculations and observations referred to in paragraphs 20 (Data Collection), 21 (KPI 01A), 22 (KPI 01B), 23 (KPI Resets) and 24 (Adverse Travel Time Event). If the Transport Agency disputes any such calculations and/or observations and the parties are unable to reach agreement on the disputed matters within 20 Business Days of the commencement of negotiations, either party may refer the matter for dispute resolution in accordance with Part 21 of the Project Agreement.

.

Appendix 1 Key Performance Indicators

Table 1 KPI Table contents

Term	Description
KPI #	The reference number of the KPI
Description	A short description of the KPI
Definition	The definition of the KPI
Measurement	The basis on which the KPI is measured. Measurements are either: (a) Per incident/event; (b) Per value in excess or below the threshold; or (c) Per time period.
Ratchet	The ratchet value for repeated instances of non-performance. Ratchets are applied in accordance with the KPI deduction amount formula
Deduction per incident	The KPI Deduction or KPI Payment as a consequence of a single incident of a KPI Breach
Example deduction calculation	Example calculations to demonstrate the calculation of the KPI Deduction or KPI Payment as a consequence of a KPI Breach
KPI deduction amount formula	$\text{KPI deduction amount} = \left(\text{Incidents}^{\text{Ratchet}}\right) \times \text{Deduction per incident}$

Table 2 KPI Table

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
01A	Travel time	Actual flow-density observation below the Lower Boundary of the fundamental diagram envelope	The deduction for this KPI (TTD_n) is calculated in accordance with Appendix 2 to this Schedule 13 (Performance Regime)			
01B	Travel time reliability	Actual Weekly Travel Time exceeds Reliability Travel Time.	Weekly. No Deductions apply. [redacted] Travel Time SFPs (indexed) will be imposed for each week in which this KPI is breached.			
02	Road Crash under TMP control	A Road Crash occurs during a Traffic Management Event (excluding any Excluded Road Crash).	Road Crashes during a traffic management event per Contract Quarter	1.1	$[redacted] per Road Crash during a traffic management event	Two Road Crashes during a traffic management event in Contract Quarter: [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
03	Reporting - accuracy	Inaccurate reporting within any of the reports, notifications or data entry the Contractor is required to deliver under Schedule 6 (Resource Management Act Requirements) and Schedule 21 (Reporting). This KPI 03 applies to all observations and calculations required for KPI01A and KPI01B. For the avoidance of doubt, inaccurate reporting includes inaccurate and/or incomplete recording or capturing of data.	Incidents per Contract Quarter	1.1	$[redacted] for each instance of materially inaccurate information (not per report). Where an inaccuracy is discovered that would have resulted in a higher KPI Deduction in any Contract Quarter, the higher KPI Deduction is calculated and three times this KPI Deduction is due to the Transport Agency (in addition to this reporting - accuracy KPI breach)	Two instances of inaccurate information in Contract Quarter: [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
04	Asset condition	Any failure to meet the Required Standard, on a per 100m section basis, as determined by either: (a) The Pavement Condition Assessment Survey; or (b) The Asset Condition Survey.	Following each Pavement Condition Assessment Survey and each Asset Condition Survey	1.1	$[redacted] for each 100 metre section of North Bound failure of either or both (a) and (b);and $[redacted] for each 100 metre section of South Bound failure of either or both (a) and (b)	Three 100m sections that do not comply: [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
05	Environmental consent	A notice is issued by a Local Authority under the Resource Management Act 1991 in respect of: (a) any breach of the Consent Conditions marked Contractor Responsibility in Schedule 6 (b) any breach of the Consent Conditions marked Transport Agency Responsibility or Consent Conditions marked Joint Responsibility in Schedule 6 caused by the Contractor's failure to comply with its obligations under this Agreement Each breach of such Consent Conditions will be treated individually for the purposes of this deduction calculation.	Incident notices per quarter	1.2	$[redacted] per incident notice	Two incident notices in quarter: [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
06	Not used					
07	Incident response	Failure to arrive and start work on site within 25 minutes after receipt of notification or becoming aware of an Incident (other than a Special Event).	10 minute delays (or part thereof) per incident per Contract Quarter	1.2	$[redacted] per incident per every 10 minutes (or part thereof) in excess of 25 minutes from the time of receipt of notification of an incident	Three incidents in Contract Quarter, response times of: 22 mins – on time 28 mins – one 10 minute delay 40 min – two 10 minute delays Total of three 10 minute delays: [redacted]
08	Reporting - timeliness	Failure to provide all of the reports or notices the Contractor is required to deliver under Schedule 21 (Reporting) within the required timeframes. There will be a 24 hour grace period to provide the late report before the KPI Deduction is applied.	Days late per report per Contract Quarter	1.2	$[redacted] per report for each day 24 hours after the due date that the report has not been provided to the Transport Agency	Three late reports in Contract Quarter: First provided within one day – no delay deductions Second provided two days late – one day delay deduction Third provided three days late – two day delay deduction Total of three days delay: [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
09	Public surveys	Six monthly User Satisfaction Survey results below the survey results in the Baseline.	Six monthly	1	$[redacted] per survey where the total percentage score for the survey is below the baseline. ($[redacted] is the total deduction if the survey is 5 percentage points or more below the baseline. For performance of up to 5 percentage points below the baseline, the deduction will be applied on a pro rata basis. If the Contractor fails to conduct a User Satisfaction Survey in accordance with Schedule 12 (Service Requirements), the total deduction will be $[redacted] The results of the first two User Satisfaction Surveys required under Schedule 12 (Service Requirements) will be exempt from KPI Deductions under this KPI 09. KPI Deductions under this KPI 09 may be applied in respect of the third and all subsequent User Satisfaction Surveys.	Survey result in the current Contract Quarter is below baseline (only tested twice annually): [redacted]

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
10	Public complaints	Failure to respond to all requests, enquiries and complaints appropriately and in accordance with paragraph 12 (Users) of Schedule 12 within 5 Business Days	Days late per compliant and appropriate response per Contract Quarter. Non-compliant responses and responses that are not appropriate will not be considered 'responses' for the purposes of measurement .	1.2	$[redacted] per day for each day five Business Days after the complaint was received that a compliant response has not been made	Three complaints in Contract Quarter: First responded to in three working days – no deduction Second responded to in six working days – one day delay deduction Third responded to in eight working days – three day delay deduction Total of four days delay: [redacted]
11	ITS	ITS uplink not available to TOC 99.9% of the time (performance rounded up to nearest 0.1%)	Each 0.1% below 99.9% per Contract Quarter	1.2	$[redacted] per 0.1% below 99.9% where the failure is caused by or is part of the infrastructure installed or operated by the Contractor that is under operational control of the Contractor.	Total performance of 99.6% - three increments of 0.1% below the target: [redacted]
12	Not used					

KPI #	Description	Definition	Measurement	Ratchet	Deduction per incident	Example deduction calculation
13	Weigh facility availability	Weigh facility is not available for use for its intended purpose. There will be a 24 hour grace period to remedy before the KPI Deduction is applied. Specific Availability Criteria for Weigh pit will be developed as part of the reviewable design process.	Days unavailable per Contract Quarter	1.1	$[redacted] per day	The weight facility is unavailable on three occasions: First occasion is fixed within 24 hours – no deduction Second occasion is fixed in four days – three day deduction Third occasion is fixed in seven days – six day deduction Total of nine days deduction: [redacted]
14	Not used					
15	Ramp performance	Failure to ensure that for a one hour period: a) The average time a vehicle remains stationary on a Ramp and/or in a queue to exit a Ramp is less than 30 seconds; and/or b) Traffic queuing to exit a Ramp does not extend beyond the ramp entry point at any stage.	Ramp failures per hour	1.1	$[redacted] per Ramp per hour	During the Contract Quarter: • One Ramp fails limb a only for 2 hours • Two Ramps fail limb b only for 1 hour each • One Ramp fails limbs a and b for 3 hours A total of seven hours of failure: [redacted]

Appendix 2 Travel Time Deduction

1.1. Travel time deduction

The Travel Time Deduction for Contract Quarter (n) will be calculated in accordance with the following formula:

$$TTD_n = \sum_{i=1}^{h} [(TTD_{i,NB} \times TTR_{i,NB}) + (TTD_{i,SB} \times TTR_{i,SB})]$$

Where:

TTD_n = the Travel Time Deduction for Contract Quarter (n)

i is the ith KPI 01A Hour in Contract Quarter (n), where each KPI 01A Hour is measured from x.00 until (but excluding) x.60

h is the total number of KPI 01A Hour in Contract Quarter (n)

$TTD_{i,NB}$ and $TTD_{i,SB}$ are calculated in accordance with paragraph 1.3 of this Appendix 2 to Schedule 13 (Performance Regime)

$TTR_{i,NB}$ and $TTR_{i,SB}$ (Travel Time Relief for KPI 01A Hour *i*) are calculated in accordance with paragraph 1.2 of this Appendix 2 to Schedule 13 (Performance Regime)

1.2. Travel time relief

TTR_i will be equal to either:

(i) 0.5 if relief is granted in accordance with paragraph 12.1(a)(i) of this Schedule 13 (Performance Regime); or

(ii) 0 if relief is granted in accordance with paragraph 12.1(a)(ii) of this Schedule 13 (Performance Regime); or

(iii) 0 if relief is granted in accordance with paragraph 12.1(c) of this Schedule 13 (Performance Regime); or

(iv) 0 if relief is granted in accordance with paragraph 12.2 of this Schedule 13 (Performance Regime); or

(v) 0 if relief is granted in accordance with paragraph 12.3 of this Schedule 13 (Performance Regime); or

(vi) 0 if relief is granted in accordance with paragraph 12.4(b) of this Schedule 13 (Performance Regime);

(vii) 0 if relief is granted in accordance with paragraph 15.2 of this Schedule 13 (Performance Regime); or

(viii) 1 otherwise.

1.3. Travel time calculation

The Travel Time Deduction for KPI 01A Hour i ($TTD_{i,NB} + TTD_{i,SB}$), will be calculated in accordance with the following formula:

$$TTD_{i,NB} = Max[Min(MTT_{i,NB} - BTT, 15) \times TDfactor_{i,NB}, 0]$$

$$TTD_{i,SB} = Max[Min(MTT_{i,SB} - BTT, 15) \times TDfactor_{i,SB}, 0]$$

Where:

$MTT_{i,NB}$	=	the median of all Travel Time (NB) observations that cross chainage 0 during hour *i,* with all such observations rounded in accordance with the Rounding Convention;
$MTT_{i,SB}$	=	the median of all Travel Time (SB) observations that cross chainage 27,500 during hour *i,* with all such observations rounded in accordance with the Rounding Convention;
BTT	=	Base Travel Time, being 17.7 minutes during AM Peak, Inter Peak and PM Peak, 19.7 minutes during Night. The Base Travel Time is set for a legal speed limit of 100km/h. If at any time during the Operating Term the legal speed limit is 110km/h the Base Travel Time will be 16.7 minutes during AM Peak, Inter Peak and PM Peak, and 18.7 minutes during Night

For Travel Time (NB), $TDfactor_{i,NB}$ = time of day, day of the week factor for KPI01A *i* as given the following table:

North Bound ($)	AM Peak	Inter Peak	PM Peak	Night
Mon-Thurs	250	250	750	50
Friday	250	250	1,000	150
Saturday	125	250	250	25
Sunday	75	250	250	25
Public Holidays	100	150	150	50
Weekday Prior Public Holiday	50	150	300	100

For Travel Time (SB), $TDfactor_{i,SB}$ = time of day, day of the week, factor for KPI01A i as given the following table:

South Bound ($)	AM Peak	Inter Peak	PM Peak	Night
Mon-Thurs	500	250	250	50
Friday	500	250	250	50
Saturday	125	250	250	25
Sunday	75	250	500	25
Public Holidays	100	150	250	50
Weekday Prior Public Holiday	100	50	50	50

Appendix 3 Unavailability Deduction

1.1. Unavailability definitions

In this Appendix, the following are defined terms:

Table 3 Unavailability Segment Definitions

Term	Definition
S	Shoulder does not meet all of the Availability Criteria
2	Outside lane does not meet all of the Availability Criteria (next to the centre line/centre barrier)
1	Inside lane does not meet all of the Availability Criteria (between shoulder and outside lane)
S,2	Shoulder and outside lane does not meet all of the Availability Criteria
S,1	Shoulder and inside lane does not meet all of the Availability Criteria
1,2	Inside and outside lane does not meet all of the Availability Criteria
S,1,2	Shoulder, inside and outside lane does not meet all of the Availability Criteria
Binary Sections	Each of the sections of TGR as defined in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)
Grade 1 (W) or Grade 1 (West)	A Binary Section of TGR classified as Grade 1 (W) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)
Grade 2 (W) or Grade 2 (West)	A Binary Section of TGR classified as Grade 2 (W) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)
Grade 3 (W) or Grade 3 (West)	A Binary Section of TGR classified as Grade 3 (W) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)
Grade 1 (E) or Grade 1 (East)	A Binary Section of TGR classified as Grade 1 (E) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)

Grade 2 (E) or Grade 2 (East)	A Binary Section of TGR classified as Grade 2 (E) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)
Grade 3 (E) or Grade 3 (East)	A Binary Section of TGR classified as Grade 3 (E) in the column entitled 'Grade' in Table 5 of this Appendix 3 to Schedule 13 (Performance Regime)

Table 4 Day Type Definitions

Term	Definition
Monday – Thursday	A day that is a Monday, Tuesday, Wednesday or Thursday but is not a Public Holiday or a Weekday Prior Public Holiday
Friday	A day that is a Friday but is not a Public Holiday or a Weekday Prior Public Holiday
Saturday	A day that is a Saturday but is not a Public Holiday
Sunday	A day that is a Sunday but is not a Public Holiday
Public Holiday	As defined at the beginning of this Schedule 13 (Performance Regime)
Weekday Prior Public Holiday	The day that is the first Monday, Tuesday, Wednesday, Thursday or Friday before a Public Holiday that is not itself a Public Holiday

Table 5 Binary Section definitions

Binary Section	Definition	Grade
SH58 (West section)	The section of SH58 to the west of the SH58 interchange	Grade 1 (W)
SH58 (East section)	The section of SH58 to the east of the SH58 interchange	Grade 1 (E)
MacKays Crossing (TGR entry, NB)	The ramp at the MacKays Crossing interchange to allow traffic to enter TGR	Grade 1 (W)

MacKays Crossing (TGR exit, SB)	The ramp at the MacKays Crossing interchange to allow traffic to exit TGR	Grade 1 (E)
SH58 (TGR entry, NB)	The ramp at the SH58 interchange allowing NB traffic to enter TGR	Grade 2 (W)
SH58 (TGR exit, NB)	The ramp at the SH58 interchange allowing NB traffic to exit TGR	Grade 2 (W)
SH58 (TGR entry, SB)	The ramp at the SH58 interchange allowing SB traffic to enter TGR	Grade 2 (E)
SH58 (TGR exit, SB)	The ramp at the SH58 interchange allowing SB traffic to exit TGR	Grade 2 (E)
Kenepuru (TGR entry, NB)	The ramp at the Kenepuru interchange allowing NB traffic to enter TGR	Grade 2 (W)
Kenepuru (TGR entry, SB)	The ramp at the Kenepuru interchange allowing SB traffic to enter TGR	Grade 2 (E)
Kenepuru (TGR exit, SB)	The ramp at the Kenepuru interchange allowing SB traffic to exit TGR	Grade 2 (E)
Linden (TGR entry, SB)	The ramp near Linden allowing SB traffic from the existing SH1 coastal route to enter TGR	Grade 2 (E)
Linden (TGR exit, NB)	The ramp near Linden allowing NB traffic from TGR to enter the existing SH1 coastal route	Grade 2 (W)
JC (TGR entry, NB)	The ramp at the James Cook interchange allowing NB traffic to enter TGR	Grade 3 (W)
JC (TGR exit, NB)	The ramp at the James Cook interchange allowing NB traffic to exit TGR	Grade 3 (W)
JC (TGR entry, SB)	The ramp at the James Cook interchange allowing SB traffic to enter TGR	Grade 3 (E)
JC (TGR exit, SB)	The ramp at the James Cook interchange allowing SB traffic to exit TGR	Grade 3 (E)
JC Overpass	The overpass crossing the Main Alignment at James Cook interchange comprising all areas outside of the Motorway Boundaries there.	Grade 3 (E)
MacKays crossing (TGR entry, SB)	The ramp at the MacKays Crossing interchange to allow traffic to enter TGR	Grade 3 (E)
MacKays crossing (TGR exit, NB)	The ramp at the MacKays Crossing interchange to allow traffic to exit TGR	Grade 3 (W)
MacKays crossing underpass	The underpass crossing the Main Alignment at MacKays crossing interchange comprising all areas outside of the Motorway Boundaries there	Grade 3 (W)

1.2. Unavailability deduction calculation

The Unavailability Deduction for Contract Quarter (n) will be calculated in accordance with the following formula:

$$UAD_n = QUC_n \times UAPC_n$$

Where:

UAD_n = the total Unavailability Deduction for the Contract Quarter (n)

QUC_n = the Quarterly Unitary Charge for Contract Quarter (n) calculated in accordance with paragraph 2 of Schedule 14 (Payment Mechanism)

$UAPC_{n\text{n}}$ = the Unavailability Percentage for Contract Quarter (n) calculated in accordance with the following formula:

$$UAPC_n = 1 - (1 - \frac{TUAP_n}{MUAP_n})^3$$

Where:

$TUAP_n$ = the Total Unavailability Points for Contract Quarter (n) calculated in accordance with paragraph 1.3 of this Appendix 3 to Schedule 13 (Performance Regime)

$MUAP_n$ = the Maximum Unavailability Points for Contract Quarter (n) calculated in accordance with paragraph 1.8 of this Appendix 3 to Schedule 13 (Performance Regime)

1.3. Unavailability points aggregation

The Total Unavailability Points for Contract Quarter (n), $TUAP_n$, will be calculated in accordance with the following formula:

$$TUAP_n = \sum_{e=1}^{f} P_e \times R_e$$

Where:

P_e means the Unavailability Points accrued from the *e*th Unavailability Event for Contract Quarter (n) calculated in accordance with paragraph 1.4 of this Appendix 3 to Schedule 13 (Performance Regime)

e means the *e*th Unavailability Event in Contract Quarter (n)

f means the total number of Unavailability Events in Contract Quarter (n)

R_e (unavailability relief) is equal to either:

(i) 0.25 if relief is granted in accordance with paragraph 15.1(a)(i) of this Schedule 13 (Performance Regime); or

(ii) 0 if relief is granted in accordance with paragraph 15.1(a)(ii) of this Schedule 13 (Performance Regime); or

(iii) 0 if relief is granted in accordance with paragraph 15.2 of this Schedule 13 (Performance Regime); or

(iv) 0 if relief is granted in accordance with paragraph 15.3 of this Schedule 13 (Performance Regime); or

(v) 1 otherwise.

1.4. Unavailability event points calculation

The Unavailability Points for the *e*th Unavailability Event for Contract Quarter (n), $P_{e,}$ will be calculated as follows:

If the duration of the Unavailability Event is less than 30 minutes $P_e = \sum_{t=1}^{T} P_{e,t} \mathrm{P_e} = \sum_{\mathrm{t=1}}^{\mathrm{T}} \mathrm{P_{e,t}}$

If the duration of the Unavailability Event is greater than or equal to 30 minutes and;

If $\sum_{t=1}^{T} \mathrm{P_{e,t}} = 0$ then $P_e = 0$;

If $\sum_{t=1}^{T} P_{e,t} > 0$ then $P_e = Maximum(\sum_{t=1}^{T} P_{e,t}, 200{,}000) \mathrm{P_e} = \mathrm{Maximum}\left(\sum_{\mathrm{t=1}}^{\mathrm{T}} \mathrm{P_{e,t}}, 200{,}000\right)$

Where:

t means the *t*th Fifteen Minute Period (or part thereof) of the *e*th Unavailability Event

T means the total number of Fifteen Minute Periods in the *e*th Unavailability Event

$P_{e,t}$ = the total number of Unavailability Points accrued in the *t*th 15 minute period of the *e*th Unavailability event and is calculated as the sum of (a), (b) and (c) below:

(a) The length of the North Bound Unavailability Event (in 100m lengths or part thereof) × the relevant Unavailability Points from the Unavailability Tables (with reference to the relevant Unavailability Direction (North Bound), the Unavailability Section, the Unavailability Day Type, the Unavailability Time Period and the Unavailable Segments.)

(b) The length of the South Bound Unavailability Event (in 100m lengths or part thereof) × the relevant Unavailability Points from the Unavailability Tables (with reference to the relevant Unavailability Direction (South Bound), the Unavailability Section, the Unavailability Day Type, the Unavailability Time Period and the Unavailable Segments.)

(c) The relevant Unavailability Points for any Binary Section from the Unavailability Tables (with reference to the Unavailability Direction, the Unavailability Day Type, the Unavailability Time Period and the relevant Binary Section.)

1.5. Unavailability event points – additional details

The calculation of $P_{e,t}$ should take account of the following requirements:

(a) Where a single Unavailability Event applies over two or more Unavailability Sections or Binary Sections, the $P_{e,t}$ will be a combination of the $P_{e,t}$ for each Unavailability Section or Binary Section calculated individually.

(b) Where a single Unavailability Event has multiple types of Unavailability Segments, the $P_{e,t}$ will be a combination of the $P_{e,t}$ for each Unavailability Segment calculated individually.

(c) Multiple Unavailability Events can occur over the same time period but in different locations on TGR. These will be treated as individual Unavailability Events and calculated independently.

(d) Where a bridge (or any other part of the road) does not include a Shoulder by design, the ‘S’, ‘2’, ‘1’ and ‘1,2’ columns of the Unavailability Tables should not be used. Full unavailability in a single direction on a bridge will be calculated using the ‘S,1,2’ column. Where the inner lane is closed, the ‘S,1’ column should be used. Where the outer lane is close, ‘S,2’ column should be used.

(e) For the Kenepuru Link Road Section, the 'S,1,2' column will be used if a lane is unavailable.

(f) The length of each Unavailability Event will be calculated as follows:

(i) for all Unavailability Events excluding those categorised as S,1,2 – the length measured from the point where the relevant Lane or Shoulder ceases to meet the Availability Criteria to the point where the relevant Lane or Shoulder again meets the Availability Criteria; and

(ii) for so long as an Unavailability Event is categorised as S,1,2 – the length of the full Unavailability Section on which the S,1,2 Unavailability is subsisting

1.6. Unavailability event example

This paragraph is an example only and does not have contractual effect.

Example for one Unavailability Event, P_e

A closure of the outside lane from 9:00am to 10:00am on a Friday of 2km of South Bound lane in the MacKays to SH58 section, that reduces to 1km from 10:00am to 11:00am.

Table 6 Unavailability Event calculation example

***t*th Fifteen Minute Period**	**Length (in 100m lengths)**	**Relevant factor**	**Unavailability Points**
1 (9:00am – 9:15am)	20	200 (MacKays to SH58, Friday, AM Peak, South Bound, '2')	4,000
2 (9:15am – 9:30am)	20	200 (MacKays to SH58, Friday, AM Peak, South Bound, '2')	4,000
3 (9:30am – 9:45am)	20	200 (MacKays to SH58, Friday, AM Peak, South Bound, '2')	4,000
4 (9:45am – 10:00am)	20	200 (MacKays to SH58, Friday, AM Peak, South Bound, '2')	4,000
5 (10:00am – 10:15am)	10	100 (MacKays to SH58, Friday, Inter Peak, South Bound, '2')	1,000

*t*th Fifteen Minute Period	Length (in 100m lengths)	Relevant factor	Unavailability Points
6 (10:15am – 10:30am)	10	100 (MacKays to SH58, Friday, Inter Peak, South Bound, '2')	1,000
7 (10:30am – 10:45am)	10	100 (MacKays to SH58, Friday, Inter Peak, South Bound, '2')	1,000
8 (10:45am – 11:00am)	10	100 (MacKays to SH58, Friday, Inter Peak, South Bound, '2')	1,000
Total			**20,000**

As the Unavailability Event was greater than 30 mins and the total Unavailability Points are less than 200,000, the minimum value of 200,000 Unavailability Points is accrued.

1.7. Contraflow

This paragraph is an example only and does not have contractual effect.

If the Contractor uses contra-flow to manage unavailability then the Unavailability Points from the Unavailability Tables need to reflect the direction traffic is travelling.

Example 1

If the Contractor:

(a) Closes the shoulder and both lanes usually running south bound traffic

(b) Uses the outside lane normally used for north bound traffic to run south bound traffic,

then the following Unavailability Segments would be applicable when determining Unavailability Points:

(i) South bound: S,1 (shoulder and lane one unavailable and lane two available – reflecting that through contraflow one south bound lane has been maintained).

(ii) North bound: 2 (shoulder and lane one available, lane two unavailable – reflecting that as a consequence of contraflow, one north bound lane is closed).

Example 2

If the Contractor:

(a) Closes the shoulder and inside lane usually running south bound traffic

(b) Leaves the outside lane open usually running south bound traffic

(c) Uses the outside lane normally used for north bound traffic to run south bound traffic,

then the following Unavailability Segments would be applicable when determining Unavailability Points:

(i) South bound: S (shoulder unavailable and two lanes available – reflecting that through contraflow two south bound lanes have been maintained).

(ii) North bound: 2 (shoulder and lane one available, lane two unavailable – reflecting that as a consequence of contraflow, one north bound lane is closed).

1.8. Maximum unavailability points

$MUAP_n$ calculates the total possible Unavailability Points for Contract Quarter (n), being the total points that would be accrued if the entire TGR was completely unavailable for Contract Quarter (n).

$$MUAP_n = 33{,}258{,}000 \times D_1 + 39{,}765{,}000 \times D_2 + 37{,}596{,}000 \times D_3 + 42{,}512{,}400 \times D_4 + 76{,}638{,}000 \times D_5 + 70{,}131{,}000 \times D_6$$

Where:

D_1 = The number of days in Contract Quarter (n) defined as Monday – Thursday

D_2 = The number of days in Contract Quarter (n) defined as Friday

D_3 = The number of days in Contract Quarter (n) defined as Saturday

D_4 = The number of days in Contract Quarter (n) defined as Sunday

D_5 = The number of days in Contract Quarter (n) defined as Public Holiday

D_6 = The number of days in Contract Quarter (n) defined as Weekday Prior Public Holiday

Table 7 Unavailability Points by Day Type, Time of Day and Direction of Travel – MacKays to SH58

				NB - points per Fifteen Minute Period per 100m (or part thereof)							SB - points per Fifteen Minute Period per 100m (or part thereof)						
Period	*Start*	*End*	*# periods*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*
MacKays to SH58																	
Monday – Thursday																	
AM Peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter Peak	10:00 a.m.	3:00 p.m.	20	50	100	125	150	150	400	500	50	100	125	150	150	400	500
PM Peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Friday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	50	100	125	150	150	400	500	50	100	125	150	150	400	500
PM peak	3:00 p.m.	8:00 p.m.	20	200	400	500	600	600	1,600	2,000	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	240	300	-	-	-	-	-	80	100
Saturday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	50	100	125	150	150	400	500
Inter peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Sunday																	
AM peak	6:00 a.m.	10:00 a.m.	16	30	60	75	90	90	240	300	30	60	75	90	90	240	300
Inter peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	100	200	250	300	300	800	1,000	200	400	500	600	600	1,600	2,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
PM peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	250	500	625	750	750	2,000	2,500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	400	500	-	-	-	-	-	400	500
Weekday Prior Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	50	100	125	150	150	400	500
PM peak	3:00 p.m.	8:00 p.m.	20	300	600	750	900	900	2,400	3,000	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	800	1,000	-	-	-	-	-	400	500

Table 8 Unavailability Points by Day Type and Time of Day – SH58 to James Cook

				NB - points per Fifteen Minute Period per 100m (or part thereof)							SB - points per Fifteen Minute Period per 100m (or part thereof)						
Period	*Start*	*End*	*# periods*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*
SH58 to James Cook																	
Monday – Thursday																	
AM Peak	6:00 a.m.	10:00 a.m.	16	75	150	188	225	225	600	750	150	300	375	450	450	1,200	1,500
Inter Peak	10:00 a.m.	3:00 p.m.	20	75	150	188	225	225	600	750	75	150	188	225	225	600	750
PM Peak	3:00 p.m.	8:00 p.m.	20	225	450	563	675	675	1,800	2,250	75	150	188	225	225	600	750
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	120	150	-	-	-	-	-	120	150
Friday																	
AM peak	6:00 a.m.	10:00 a.m.	16	75	150	188	225	225	600	750	150	300	375	450	450	1,200	1,500
Inter peak	10:00 a.m.	3:00 p.m.	20	75	150	188	225	225	600	750	75	150	188	225	225	600	750
PM peak	3:00 p.m.	8:00 p.m.	20	300	600	750	900	900	2,400	3,000	75	150	188	225	225	600	750
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	360	450	-	-	-	-	-	120	150
Saturday																	
AM peak	6:00 a.m.	10:00 a.m.	16	75	150	188	225	225	600	750	75	150	188	225	225	600	750
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
PM peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	120	150	-	-	-	-	-	120	150
Sunday																	
AM peak	6:00 a.m.	10:00 a.m.	16	45	90	113	135	135	360	450	45	90	113	135	135	360	450
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
PM peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	300	600	750	900	900	2,400	3,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	120	150	-	-	-	-	-	120	150
Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
Inter peak	10:00 a.m.	3:00 p.m.	20	225	450	563	675	675	1,800	2,250	225	450	563	675	675	1,800	2,250
PM peak	3:00 p.m.	8:00 p.m.	20	225	450	563	675	675	1,800	2,250	375	750	938	1,125	1,125	3,000	3,750
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	600	750	-	-	-	-	-	600	750
Weekday Prior Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	75	150	188	225	225	600	750	150	300	375	450	450	1,200	1,500
Inter peak	10:00 a.m.	3:00 p.m.	20	225	450	563	675	675	1,800	2,250	75	150	188	225	225	600	750
PM peak	3:00 p.m.	8:00 p.m.	20	450	900	1,125	1,350	1,350	3,600	4,500	75	150	188	225	225	600	750
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	1,200	1,500	-	-	-	-	-	600	750

Table 9 Unavailability Points by Day Type and Time of Day – James Cook to Kenepuru Interchange

				NB - points per Fifteen Minute Period per 100m (or part thereof)							SB - points per Fifteen Minute Period per 100m (or part thereof)						
Period	*Start*	*End*	*# periods*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*
James Cook to Kenepuru Interchange																	
Monday – Thursday																	
AM Peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter Peak	10:00 a.m.	3:00 p.m.	20	50	100	125	150	150	400	500	50	100	125	150	150	400	500
PM Peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Friday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	50	100	125	150	150	400	500	50	100	125	150	150	400	500
PM peak	3:00 p.m.	8:00 p.m.	20	200	400	500	600	600	1,600	2,000	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	240	300	-	-	-	-	-	80	100
Saturday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	50	100	125	150	150	400	500
Inter peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Sunday																	
AM peak	6:00 a.m.	10:00 a.m.	16	30	60	75	90	90	240	300	30	60	75	90	90	240	300
Inter peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	100	200	250	300	300	800	1,000	200	400	500	600	600	1,600	2,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	80	100	-	-	-	-	-	80	100
Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	150	300	375	450	450	1,200	1,500
PM peak	3:00 p.m.	8:00 p.m.	20	150	300	375	450	450	1,200	1,500	250	500	625	750	750	2,000	2,500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	400	500	-	-	-	-	-	400	500
Weekday Prior Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	50	100	125	150	150	400	500	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	150	300	375	450	450	1,200	1,500	50	100	125	150	150	400	500
PM peak	3:00 p.m.	8:00 p.m.	20	300	600	750	900	900	2,400	3,000	50	100	125	150	150	400	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	800	1,000	-	-	-	-	-	400	500

Table 10 Unavailability Points by Day Type and Time of Day – Kenepuru Interchange to Linden

				NB - points per Fifteen Minute Period per 100m (or part thereof)							SB - points per Fifteen Minute Period per 100m (or part thereof)						
Period	*Start*	*End*	*# periods*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*
Kenepuru Interchange to Linden																	
Monday – Thursday																	
AM Peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	200	400	500	600	600	1,600	2,000
Inter Peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM Peak	3:00 p.m.	8:00 p.m.	20	300	600	750	900	900	2,400	3,000	100	200	250	300	300	800	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	160	200	-	-	-	-	-	160	200
Friday																	
AM peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	200	400	500	600	600	1,600	2,000
Inter peak	10:00 a.m.	3:00 p.m.	20	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	400	800	1,000	1,200	1,200	3,200	4,000	100	200	250	300	300	800	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	480	600	-	-	-	-	-	160	200
Saturday																	
AM peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	100	200	250	300	300	800	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	200	400	500	600	600	1,600	2,000	200	400	500	600	600	1,600	2,000
PM peak	3:00 p.m.	8:00 p.m.	20	200	400	500	600	600	1,600	2,000	200	400	500	600	600	1,600	2,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	160	200	-	-	-	-	-	160	200
Sunday																	
AM peak	6:00 a.m.	10:00 a.m.	16	60	120	150	180	180	480	600	60	120	150	180	180	480	600
Inter peak	10:00 a.m.	3:00 p.m.	20	200	400	500	600	600	1,600	2,000	200	400	500	600	600	1,600	2,000
PM peak	3:00 p.m.	8:00 p.m.	20	200	400	500	600	600	1,600	2,000	400	800	1,000	1,200	1,200	3,200	4,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	160	200	-	-	-	-	-	160	200
Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	200	400	500	600	600	1,600	2,000	200	400	500	600	600	1,600	2,000
Inter peak	10:00 a.m.	3:00 p.m.	20	300	600	750	900	900	2,400	3,000	300	600	750	900	900	2,400	3,000
PM peak	3:00 p.m.	8:00 p.m.	20	300	600	750	900	900	2,400	3,000	500	1,000	1,250	1,500	1,500	4,000	5,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	800	1,000	-	-	-	-	-	800	1,000
Weekday Prior Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	100	200	250	300	300	800	1,000	200	400	500	600	600	1,600	2,000
Inter peak	10:00 a.m.	3:00 p.m.	20	300	600	750	900	900	2,400	3,000	100	200	250	300	300	800	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	600	1,200	1,500	1,800	1,800	4,800	6,000	100	200	250	300	300	800	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	1,600	2,000	-	-	-	-	-	800	1,000

Table 11 Unavailability Points by Day Type and Time of Day – Kenepuru Link Road

				NB - points per Fifteen Minute Period per 100m (or part thereof)							SB - points per Fifteen Minute Period per 100m (or part thereof)						
Period	*Start*	*End*	*# periods*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*	*S*	*2*	*1*	*S,2*	*S,1*	*1,2*	*S,1,2*
Kenepuru Link Road																	
Monday – Thursday																	
AM Peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	500	-	-	-	-	-	-	1,000
Inter Peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	500	-	-	-	-	-	-	500
PM Peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	1,500	-	-	-	-	-	-	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	100	-	-	-	-	-	-	100
Friday																	
AM peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	500	-	-	-	-	-	-	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	500	-	-	-	-	-	-	500
PM peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	2,000	-	-	-	-	-	-	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	300	-	-	-	-	-	-	100
Saturday																	
AM peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	500	-	-	-	-	-	-	500
Inter peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	1,000	-	-	-	-	-	-	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	1,000	-	-	-	-	-	-	1,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	100	-	-	-	-	-	-	100
Sunday																	
AM peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	300	-	-	-	-	-	-	300
Inter peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	1,000	-	-	-	-	-	-	1,000
PM peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	1,000	-	-	-	-	-	-	2,000
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	100	-	-	-	-	-	-	100
Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	1,000	-	-	-	-	-	-	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	1,500	-	-	-	-	-	-	1,500
PM peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	1,500	-	-	-	-	-	-	2,500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	500	-	-	-	-	-	-	500
Weekday Prior Public Holiday																	
AM peak	6:00 a.m.	10:00 a.m.	16	-	-	-	-	-	-	500	-	-	-	-	-	-	1,000
Inter peak	10:00 a.m.	3:00 p.m.	20	-	-	-	-	-	-	1,500	-	-	-	-	-	-	500
PM peak	3:00 p.m.	8:00 p.m.	20	-	-	-	-	-	-	3,000	-	-	-	-	-	-	500
Night	8:00 p.m.	6:00 a.m.	40	-	-	-	-	-	-	1,000	-	-	-	-	-	-	500

Table 12 Unavailability Points by Day Type and Time of Day – Binary

				West (NB)			East (SB)		
Period	*Start*	*End*	*# periods*	***Grade 1 (W)***	***Grade 2 (W)***	***Grade 3 (W)***	***Grade 1 (E)***	***Grade 2 (E)***	***Grade 3 (E)***
Monday – Thursday									
AM peak	6:00 a.m.	10:00 a.m.	16	5,000	2,500	1,250	10,000	5,000	2,500
Inter peak	10:00 a.m.	3:00 p.m.	20	5,000	2,500	1,250	5,000	2,500	1,250
PM peak	3:00 p.m.	8:00 p.m.	20	15,000	7,500	3,750	5,000	2,500	1,250
Night	8:00 p.m.	6:00 a.m.	40	1,000	500	250	1,000	500	250
Friday									
AM peak	6:00 a.m.	10:00 a.m.	16	5,000	2,500	1,250	10,000	5,000	2,500
Inter peak	10:00 a.m.	3:00 p.m.	20	5,000	2,500	1,250	5,000	2,500	1,250
PM peak	3:00 p.m.	8:00 p.m.	20	20,000	10,000	5,000	5,000	2,500	1,250
Night	8:00 p.m.	6:00 a.m.	40	3,000	1,500	750	1,000	500	250
Saturday									
AM peak	6:00 a.m.	10:00 a.m.	16	5,000	2,500	1,250	5,000	2,500	1,250
Inter peak	10:00 a.m.	3:00 p.m.	20	10,000	5,000	2,500	10,000	5,000	2,500
PM peak	3:00 p.m.	8:00 p.m.	20	10,000	5,000	2,500	10,000	5,000	2,500
Night	8:00 p.m.	6:00 a.m.	40	1,000	500	250	1,000	500	250
Sunday									
AM peak	6:00 a.m.	10:00 a.m.	16	3,000	1,500	750	3,000	1,500	750
Inter peak	10:00 a.m.	3:00 p.m.	20	10,000	5,000	2,500	10,000	5,000	2,500
PM peak	3:00 p.m.	8:00 p.m.	20	10,000	5,000	2,500	20,000	10,000	5,000
Night	8:00 p.m.	6:00 a.m.	40	1,000	500	250	1,000	500	250
Public Holiday									
AM peak	6:00 a.m.	10:00 a.m.	16	10,000	5,000	2,500	10,000	5,000	2,500
Inter peak	10:00 a.m.	3:00 p.m.	20	15,000	7,500	3,750	15,000	7,500	3,750
PM peak	3:00 p.m.	8:00 p.m.	20	15,000	7,500	3,750	25,000	12,500	6,250
Night	8:00 p.m.	6:00 a.m.	40	5,000	2,500	1,250	5,000	2,500	1,250
Weekday Prior Public Holiday									
AM peak	6:00 a.m.	10:00 a.m.	16	5,000	2,500	1,250	10,000	5,000	2,500
Inter peak	10:00 a.m.	3:00 p.m.	20	15,000	7,500	3,750	5,000	2,500	1,250
PM peak	3:00 p.m.	8:00 p.m.	20	30,000	15,000	7,500	5,000	2,500	1,250
Night	8:00 p.m.	6:00 a.m.	40	10,000	5,000	2,500	5,000	2,500	1,250

Sections

Appendix 4 – Specific Zones

The final locations of the Specific Zones, Ramp Demarcations and Ramp Zones will be established in accordance with the Location Supplement. The tables below will each be Finalised, as part of the Location Supplement, in accordance with the Review Procedures, and once Finalised will be deemed to replace the equivalent draft tables set out in this Appendix 4.

Interchange Tables

(1A) MacKays Interchange Transition Systemic Zones - Southbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	A	B	Chainage [x] to Chainage [y] [where x is B-[redacted]m and y is B+[redacted]m]
Floating Transition Zone - Exit	C	D	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] – (Road Crash Location – C))
Floating Transition Zone - Entry	E	F	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] + (F – Road Crash Location))
Fixed Transition Zone - Entry	G	H	Chainage [x] to Chainage [y] [where x is G-[redacted]m and y is G+[redacted]m]
Exit Asymmetric Zone	B	C	As per paragraph 5.1(f)
Entry Asymmetric Zone	F	G	As per paragraph 5.1(g)

(1B) MacKays Interchange Transition Systemic Zones – Northbound

[The lettering on the Northbound carriageway run in the mandated direction (ie, alphabetically increasing lettering corresponds to numerically decreasing chainage).]

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	I	J	Chainage [x] to Chainage [y] [where x is J+[redacted]m and y is J-[redacted]m]
Floating Transition Zone - Exit	K	L	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] - (K - Road Crash Location))
Floating Transition Zone - Entry	M	N	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] + (Road Crash Location – N))
Fixed Transition Zone - Entry	O	P	Chainage [x] to Chainage [y] [where x is O+[redacted]m and y is O-[redacted]m]
Exit Asymmetric Zone	J	K	As per paragraph 5.1(f)
Entry Asymmetric Zone	N	O	As per paragraph 5.1(g)

(1C)SH58 Interchange Transition Systemic Zones - Southbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	A	B	Chainage [x] to Chainage [y] [where x is B-[redacted]m and y is B+[redacted]m]
Floating Transition Zone - Exit	C	D	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] – (Road Crash Location – C))
Floating Transition Zone - Entry	E	F	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] + (F – Road Crash Location))
Fixed Transition Zone - Entry	G	H	Chainage [x] to Chainage [y] [where x is G-[redacted]m and y is G+[redacted]m]
Exit Asymmetric Zone	B	C	As per paragraph 5.1(f)
Entry Asymmetric Zone	F	G	As per paragraph 5.1(g)

(1D) SH58 Interchange Transition Systemic Zones - Northbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	I	J	Chainage [x] to Chainage [y] [where x is J+[redacted]m and y is J-[redacted]m]
Floating Transition Zone - Exit	K	L	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] - (K - Road Crash Location))
Floating Transition Zone - Entry	M	N	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] + (Road Crash Location – N))
Fixed Transition Zone - Entry	O	P	Chainage [x] to Chainage [y] [where x is O+[redacted]m and y is O-[redacted]m]
Exit Asymmetric Zone	J	K	As per paragraph 5.1(f)
Entry Asymmetric Zone	N	O	As per paragraph 5.1(g)

(1E) James Cook Interchange Transition Systemic Zones - Southbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	A	B	Chainage [x] to Chainage [y] [where x is B-[redacted]m and y is B+[redacted]m]
Floating Transition Zone - Exit	C	D	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] – (Road Crash Location – C))
Floating Transition Zone - Entry	E	F	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] + (F – Road Crash Location))
Fixed Transition Zone - Entry	G	H	Chainage [x] to Chainage [y] [where x is G-[redacted]m and y is G+[redacted]m]
Exit Asymmetric Zone	B	C	As per paragraph 5.1(f)

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Entry Asymmetric Zone	F	G	As per paragraph 5.1(g)

(1F) James Cook Interchange Transition Systemic Zones - Northbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	I	J	Chainage [x] to Chainage [y] [where x is J+[redacted]m and y is J-[redacted]m]
Floating Transition Zone - Exit	K	L	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] - (K - Road Crash Location))
Floating Transition Zone - Entry	M	N	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] + (Road Crash Location – N))
Fixed Transition Zone - Entry	O	P	Chainage [x] to Chainage [y] [where x is O+[redacted]m and y is O-[redacted]m]
Exit Asymmetric Zone	J	K	As per paragraph 5.1(f)
Entry Asymmetric Zone	N	O	As per paragraph 5.1(g)

(1G) Kenepuru Interchange Transition Systemic Zones - Southbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	A	B	Chainage [x] to Chainage [y] [where x is B-[redacted]m and y is B+[redacted]m]
Floating Transition Zone - Exit	C	D	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] – (Road Crash Location – C))
Floating Transition Zone - Entry	E	F	Chainage [x] to Chainage [x+[redacted]]

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
			where x is: Road Crash Location – ([redacted] + (F – Road Crash Location))
Fixed Transition Zone - Entry	G	H	Chainage [x] to Chainage [y] [where x is G-[redacted]m and y is G+[redacted]m]
Exit Asymmetric Zone	B	C	As per paragraph 5.1(f)
Entry Asymmetric Zone	F	G	As per paragraph 5.1(g)

(1H) Kenepuru Interchange Transition Systemic Zones – Northbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Floating Transition Zone - Entry	M	N	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] + (Road Crash Location – N))
Fixed Transition Zone - Entry	O	P	Chainage [x] to Chainage [y] [where x is O+[redacted]m and y is O-[redacted]m]
Entry Asymmetric Zone	N	O	As per paragraph 5.1(g)

(1I) Linden Transition Systemic Zones – Southbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Floating Transition Zone - Entry	E	F	Chainage [x] to Chainage [x+[redacted]] where x is: Road Crash Location – ([redacted] + (F – Road Crash Location))
Fixed Transition Zone - Entry	G	H	Chainage [x] to Chainage [y] [where x is G-[redacted]m and y is G+[redacted]m]
Entry Asymmetric Zone	F	G	As per paragraph 5.1(g)

(1J) Linden Transition Systemic Zones – Northbound

Interchange Zone	Starting Chainage	Finishing Chainage	Systemic Zone applicable to Relevant Event
Fixed Transition Zone - Exit	I	J	Chainage [x] to Chainage [y] [where x is J+[redacted]m and y is J-[redacted]m]
Floating Transition Zone - Exit	K	L	Chainage [x] to Chainage [x-[redacted]] where x is: Road Crash Location + ([redacted] - (K - Road Crash Location))
Exit Asymmetric Zone	J	K	As per paragraph 5.1(f)

Table 3 – Ramp Demarcations

Ramp	Demarcation (Chainage)
MacKays Crossing (TGR entry, NB)	
MacKays Crossing (TGR exit, SB)	
MacKays crossing (TGR entry, SB)	
MacKays crossing (TGR exit, NB)	
SH58 (TGR entry, NB)	
SH58 (TGR exit, NB)	
SH58 (TGR entry, SB)	
SH58 (TGR exit, SB)	
Kenepuru (TGR entry, NB)	
Kenepuru (TGR entry, SB)	

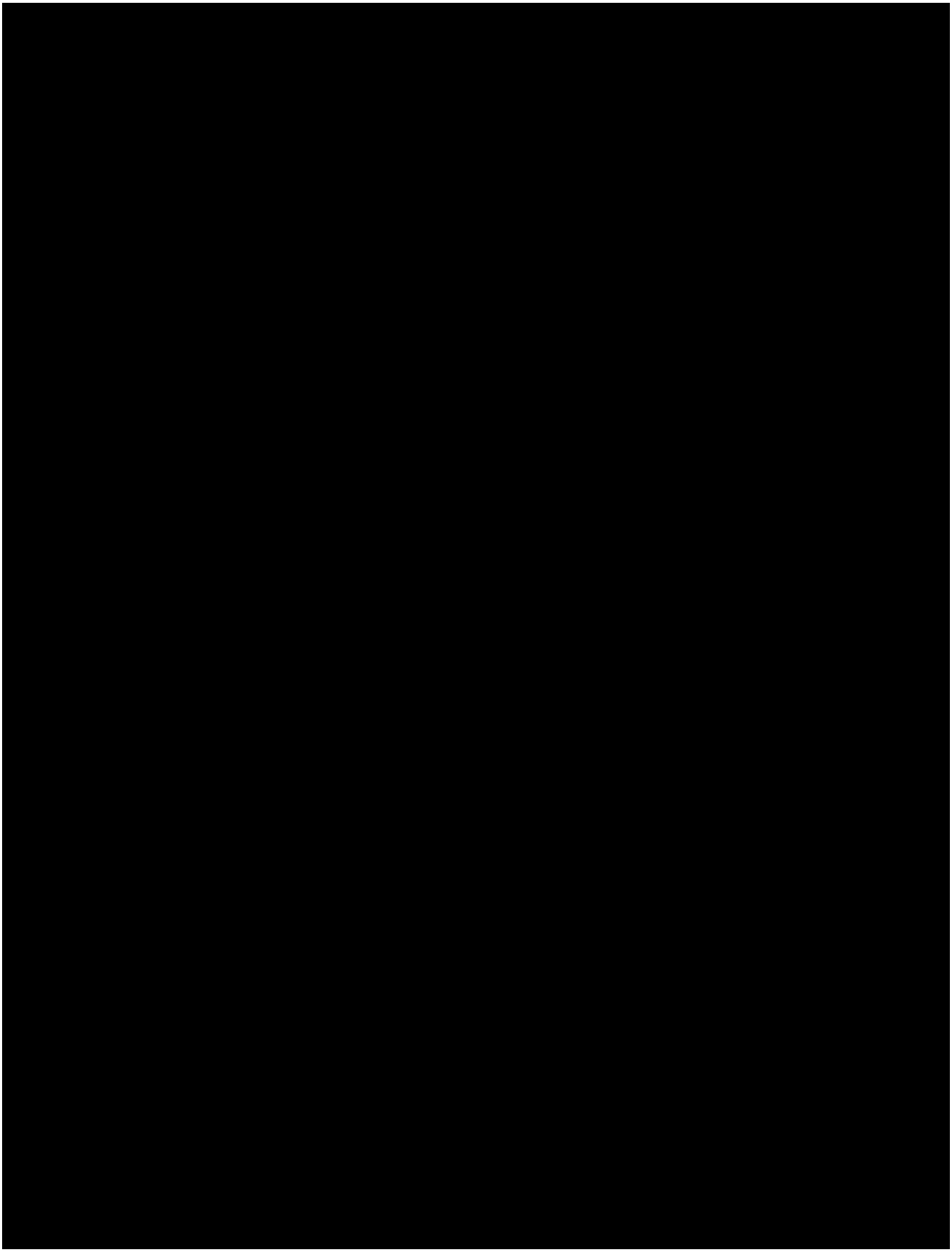
Kenepuru (TGR exit, SB)	
Linden (TGR entry, SB)	
Linden (TGR exit, NB)	
JC (TGR entry, NB)	
JC (TGR exit, NB)	
JC (TGR entry, SB)	
JC (TGR exit, SB)	

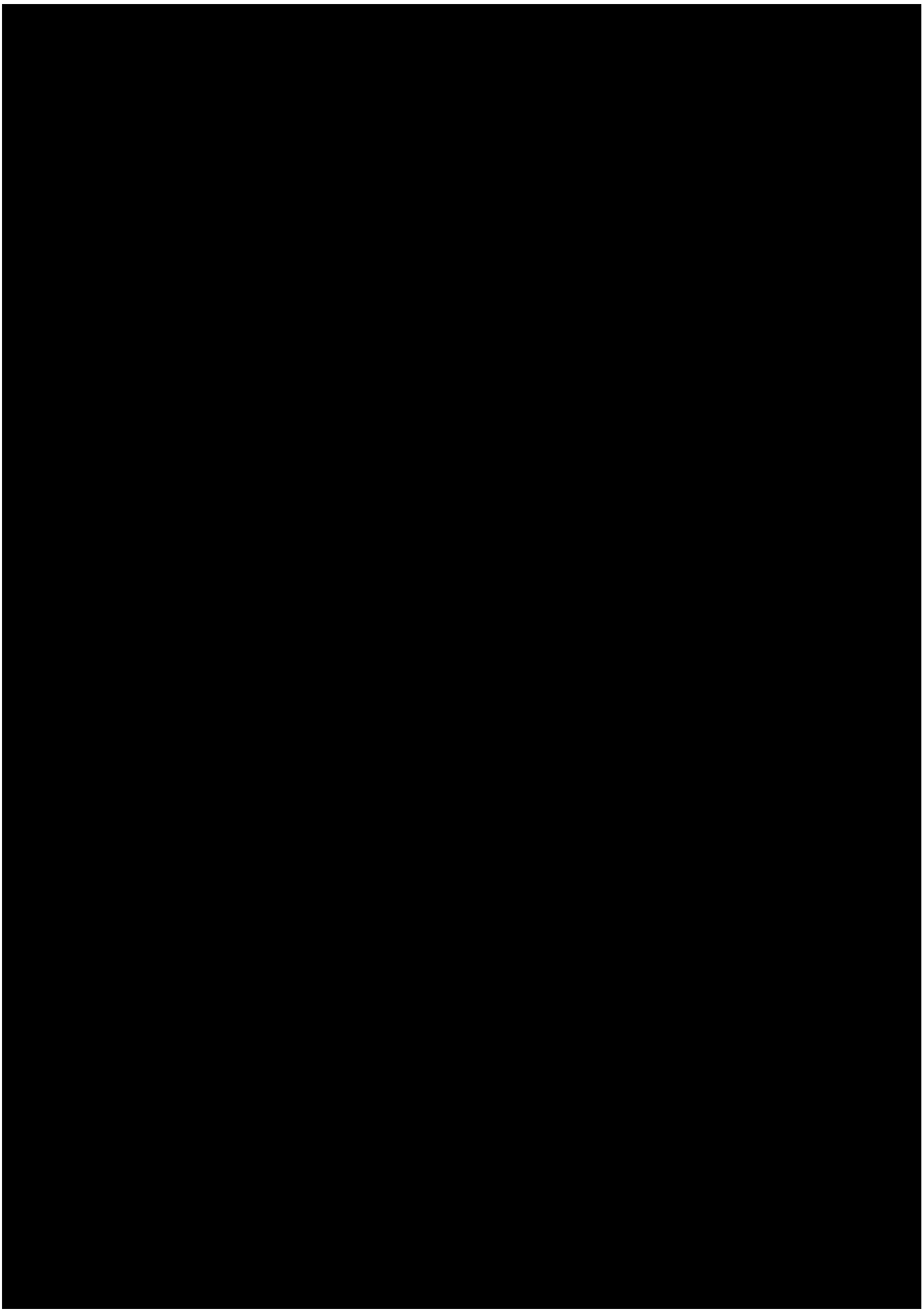
Table 4 – Ramp Zones

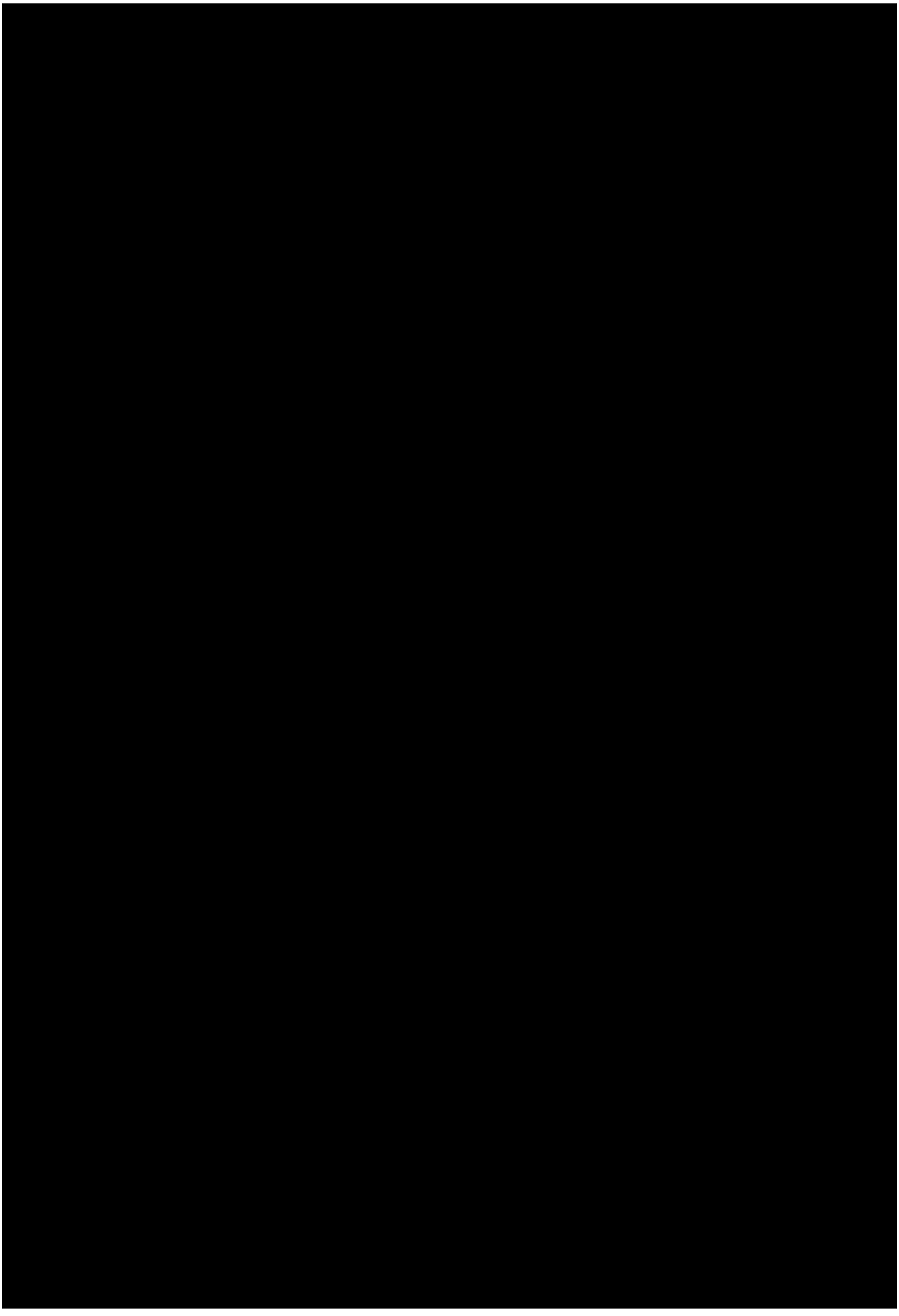
Ramp	Starting Point	Finishing Point
MacKays Crossing (TGR entry, NB)		
MacKays Crossing (TGR exit, SB)		
MacKays crossing (TGR entry, SB)		
MacKays crossing (TGR exit, NB)		
SH58 (TGR entry, NB)		
SH58 (TGR exit, NB)		
SH58 (TGR entry, SB)		
SH58 (TGR exit, SB)		

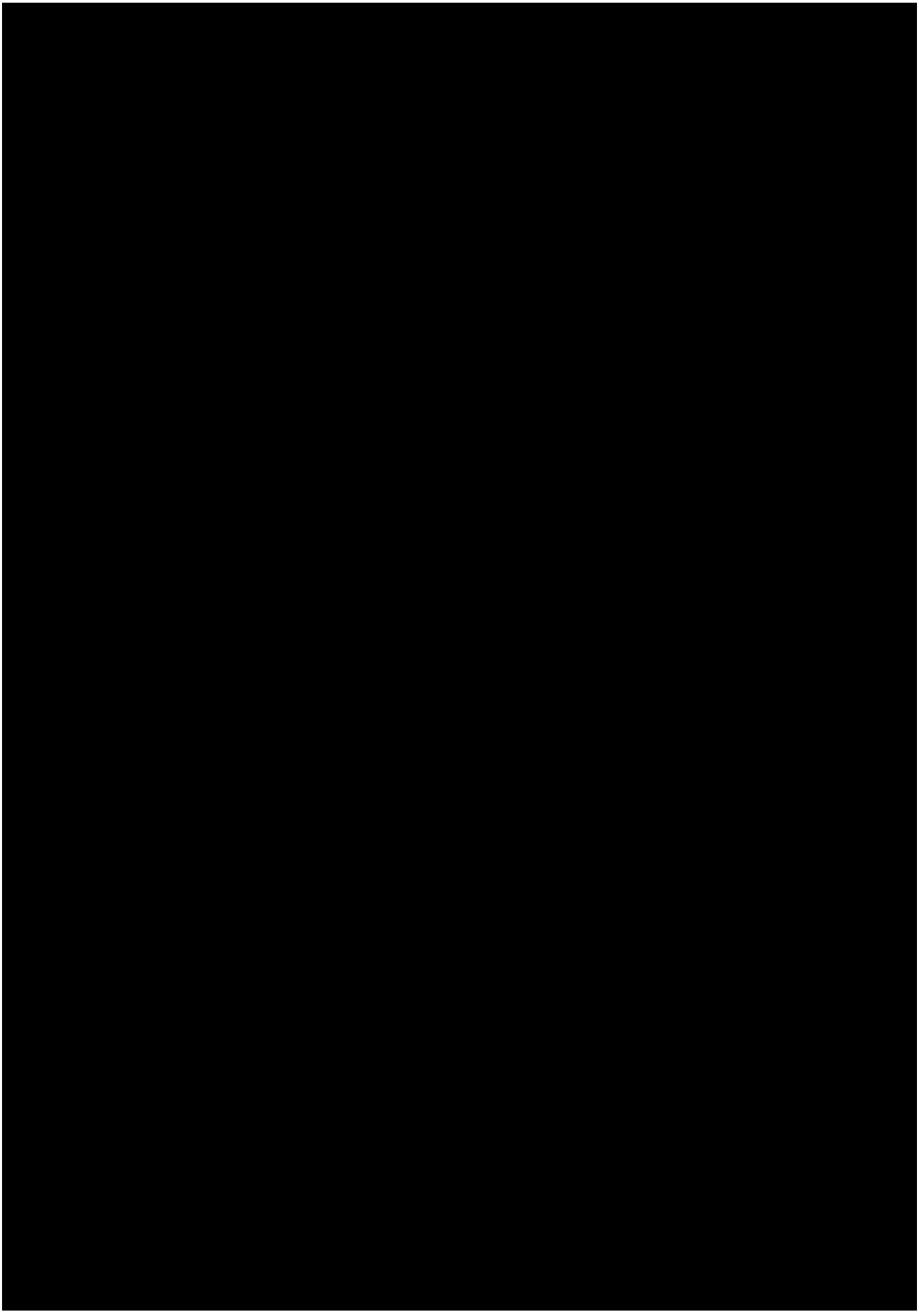
Kenepuru (TGR entry, NB)		
Kenepuru (TGR entry, SB)		
Kenepuru (TGR exit, SB)		
Linden (TGR entry, SB)		
Linden (TGR exit, NB)		
JC (TGR entry, NB)		
JC (TGR exit, NB)		
JC (TGR entry, SB)		
JC (TGR exit, SB)		

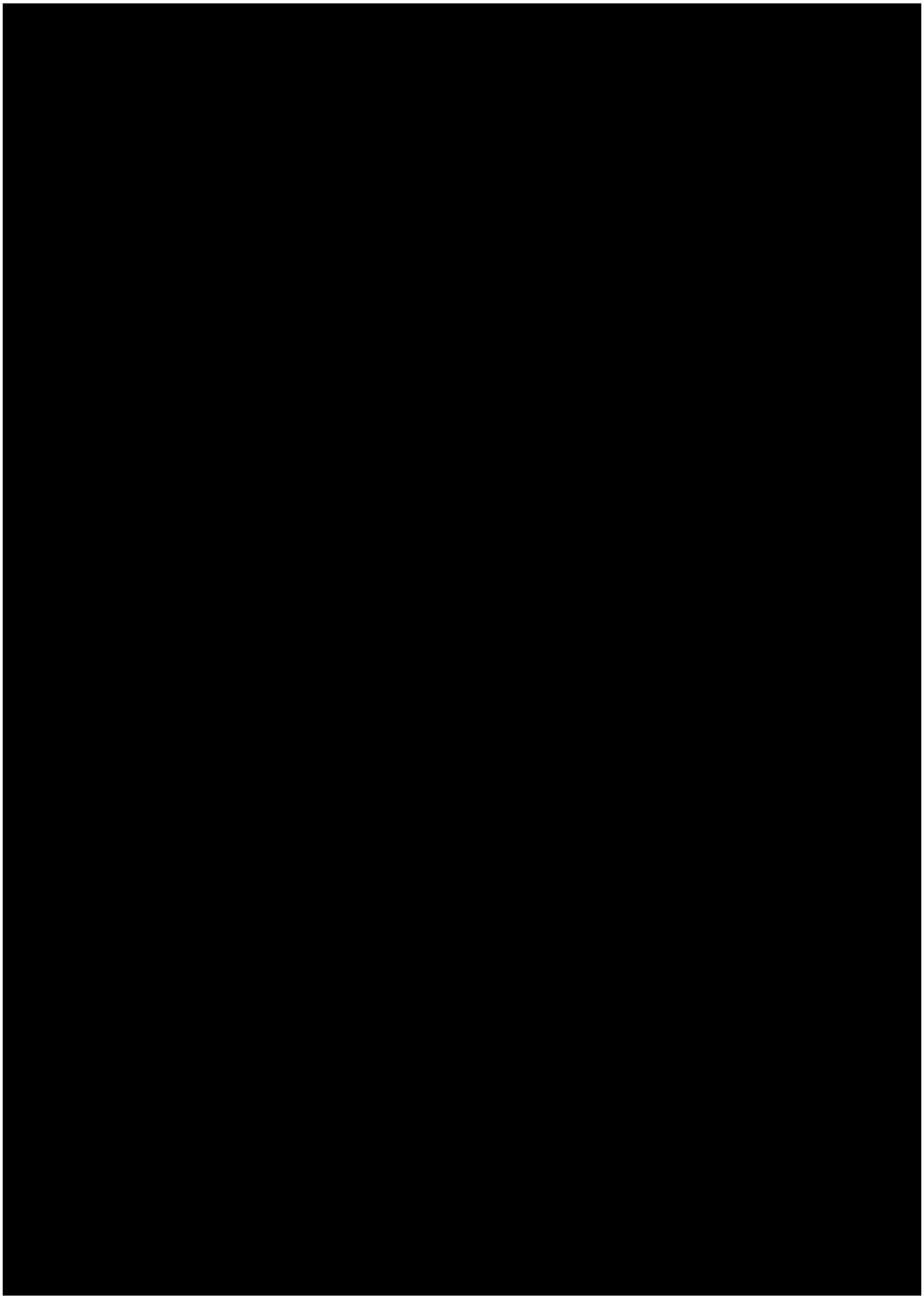
Appendix 5 - Calculation of Flow-Density Envelope Fundamental Diagram

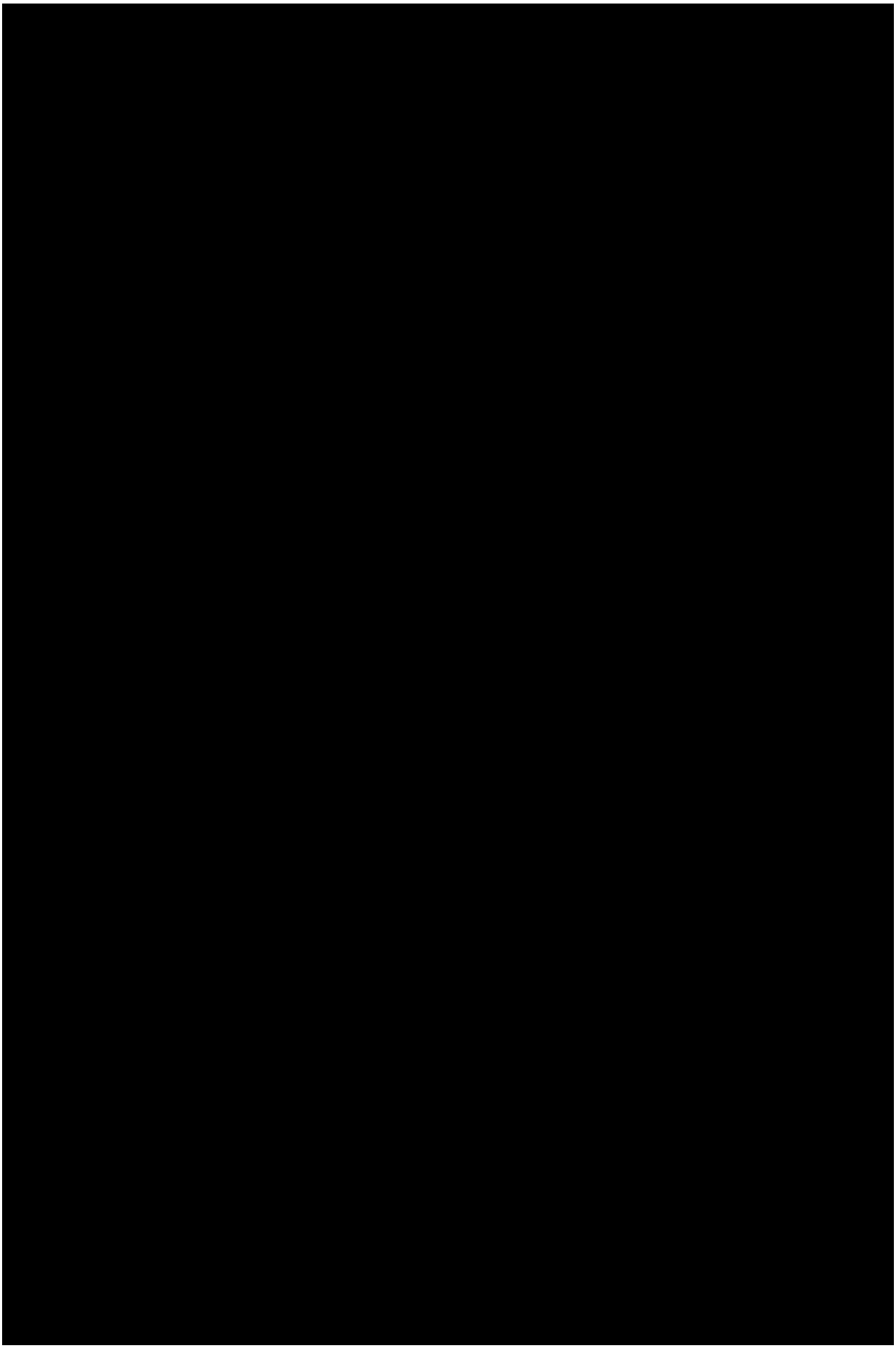












Appendix 6 - Appointment of ICI

1. The independence and professional integrity of the ICI are critical to the effectiveness of the ICI regime. The principles set out below are intended to protect this independence and provide reassurance as to the integrity of the ICI. The ICI regime should also be operated on a value for money basis.

2. The ICI will be a qualified safety engineer (the **ICI**) employed or engaged by a recognised and suitably qualified engineering consultancy firm operating in New Zealand (**ICI Contractor**). The legal engagement will be with the ICI Contractor.

3. The Transport Agency will, in consultation with the Contractor and having due regard to the Contractor's reasonable comments, select and appoint ICI Contractors on the basis of their professional standing and industry reputation and on the basis that their proposed safety engineer(s) have suitable and sufficient qualifications and experience to competently carry out the ICI duties.

4. To achieve cost efficiencies the Transport Agency, in consultation with the Contractor and having due regard to the Contractor's reasonable comments, may select a small revolving ICI Panel, made up of three or more ICI Contractors. In the event that an ICI is required under Schedule 13 the Transport Agency would appoint an ICI from the ICI Panel, with the appointment rotating among the Panel members. ICI Panel membership will be reviewed periodically.

5. The Contractor will have a right to object on reasonable grounds to a selection to the ICI Panel or if the Contractor becomes aware of a change to the suitability and qualification of an ICI Panel member, in which case that member will be removed from the ICI Panel.

6. ICI Contractors and ICIs cannot be Contractor Related Persons.

7. Appropriate procedures will be agreed to deal with conflicts of interest should they arise. This will include not selecting an ICI for a particular engagement if there is any actual or reasonably perceived conflict of interest in respect of that engagement.

8. The Transport Agency reserves the right to terminate an ICI Contractor's ICI Panel membership if the NZTA considers that the professional integrity of the ICI services has been breached.

9. ICI Contractors will be members of the Institution of Professional Engineers New Zealand (**IPENZ**) or its successor organisation and be bound by the IPENZ Code of Ethics and subject to IPENZ Rules (or others as relevant), including disciplinary regulations that govern the procedures and actions in the event of a complaint regarding the conduct of a member.

10. ICI Contractors will be required to carry appropriate Professional Indemnity insurance.

11. The Transport Agency and the Contractor may provide information and assistance as reasonably required to assist the ICI in carrying out its duties, however neither party or their respective related parties or personnel is entitled to influence or attempt to influence the ICI's findings.