TE TUPU NGĀTAHI
SUPPORTING GROWTH

South FTN and Key Connections
Appendix L: Route Protection Strategy

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Version 1.1

WAKA KOTAHI
NZ TRANSPORT AGENCY

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1 Introduction

1.1 Purpose and scope of this report

This report sets out the route protection strategy for the South Frequent Transit Network (**FTN**) Project (**the Project**) and is an appendix to the South FTN Detailed Business Case (**DBC**). The strategy is intended to be used as a guide for the owner-organisations, recognising that final decisions on proceeding with route protection (or not) sit with the owner-organisations. In providing this guidance, this route protection strategy comments on the following matters in particular:

- The optioneering process, and the extent to which the preferred option has evolved as a result of considering the strategic merits of route protection;
- The form of the preferred option, and the resultant extent of route protection required;
- The strategic merit and relative urgency of proceeding with route protection now, considering:
    - The benefits of route protection (and by extension the Project itself) relative to its costs and effects;
    - The existing and planned land use in the Project area, and the extent these conditions present opportunities to secure route protection and/or urgency to undertake route protection;
    - The foreseeable likelihood that the Project is prioritised for funding and implementation; and
    - Other projects that are adjacent/being concurrently planned, and the sufficiency of information regarding these projects to make sound route protection decisions at project interfaces; and
- The recommended form of route protection resulting from the above considerations, including the planning mechanism to be deployed, the segmentation of routes, and lapse periods.

1.2 Project Description and Corridor Segmentation

The South FTN Project is one of two long-term transport interventions (alongside the Takaanini Level Crossings (**TLC**) Project) proposed for the area of South Auckland between Manukau and Drury as part of the Te Tupu Ngātahi Supporting Growth Programme (**the Programme**)[1].These Projects are part of a wider planned multi-modal transport network intended to support growth and enable mode shift in South Auckland.

The Project proposes road upgrades intended to enable the operation of high-quality FTN bus services[2] along two routes – referred to as the Great South Road FTN, and the Takaanini FTN (see Table 1-1 and Figure 1-1). Active mode improvements are also proposed along both routes. In addition to the two FTN routes, the Project scope incorporates the urbanisation of three complementary (non-FTN) corridors – Popes Road, Croskery Road, and Great South Road to the south of Waihoehoe Road (see Figure 1-1). The Project extent in total is over 32km in length.

[1] The Programme is a collaboration between Auckland Transport (**AT**) and Waka Kotahi NZ Transport Agency (**Waka Kotahi**) to investigate, plan, and undertake route protection for the strategic transport networks needed to support Auckland's growth over the next 30 years.

[2] FTN services are defined in the Regional Public Transport Plan (RPTP) as bus routes operating at least every 15 minutes between 7am-7pm every day, supported by priority measures.

For the purposes of design and optioneering, the Project corridors have been divided into sections (see Table 1-1 and Figure 1-1) which are referred to as relevant throughout the report.

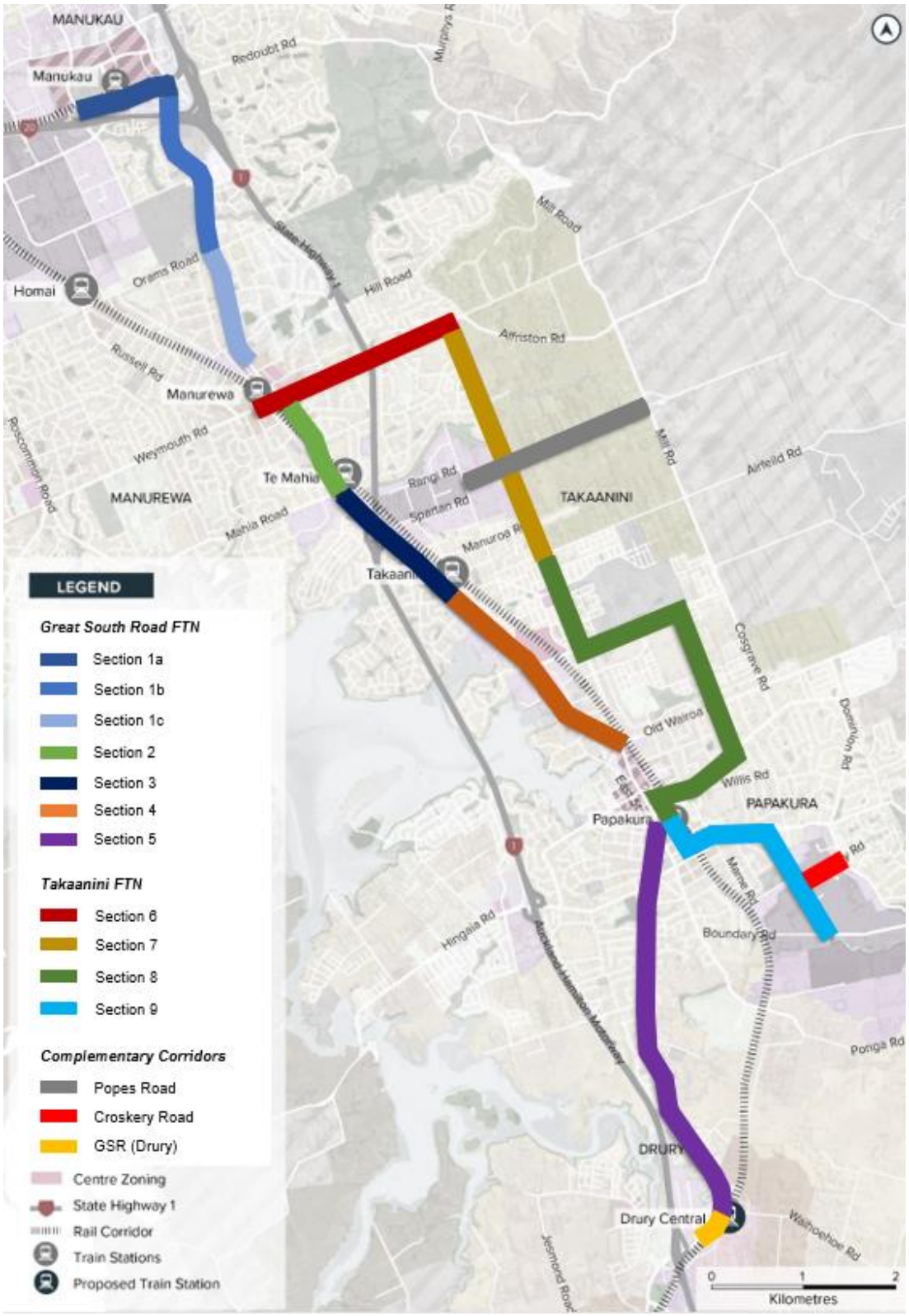


Figure 1-1 – South FTN Project corridors and sections

Table 1-1 – South FTN Project corridors and sections

Route	Section		Length
Great South Road FTN	1	Manukau to Manurewa *(n.b. divided into three sub-sections (1a, 1b, 1c) for the purposes of route protection assessment – see sections 2 and 3).*	4.8km
	2	Manurewa to Te Mahia	1.0km
	3	Te Mahia to Takaanini	1.6km
	4	Takaanini to Papakura	3.6km
	5	Papakura to Drury	4.5km
	Subtotal		*15.5km*
Takaanini FTN	6	Alfriston Road	2.3km
	7	Porchester Road (Alfriston to Manuroa Roads)	3.8km
	8	Porchester, Walters, Grove, Clevedon, Railway Roads	5.4km
	9	Chapel, Opaheke, Settlement, and Hunua Roads	2.5km
	Subtotal		*14km*
Popes Road urbanisation	Takanini School Road to Mill Road		2.2km
Croskery Road urbanisation	Hunua Road to Dominion Road		0.6km
Great South Road (Drury)	Waihoehoe Road to SH1 Drury Interchange		0.3km
Total Length			**32.6km**

1.3 Report Structure

The body of this report comprises four sections as follows:

- Section 2 outlines the physical form of the preferred option for the Project, and in doing so defines the resultant extent of route protection required. This includes discussion of the optioneering history for the Project, and in particular the extent to which the preferred option has changed as a result of considering the strategic merits of route protection;
- Section 3 outlines the strategic merit/relative urgency of proceeding with route protection for the various components of the Project by location; and
- Section 4 outlines key recommendations stemming from the previous two sections, setting out the recommended form of route protection including the planning mechanism to be deployed, the packaging of the various components, and recommended lapse periods.

2 The route protection requirement

2.1 The optioneering process

The route protection requirement for the Project is derived from the preferred option shown in the Revision A design (Rev A design). The preferred option in turn is derived from a comprehensive optioneering process. This process is covered in the **Appendix C: Options Assessment Report**. It is summarised here briefly to provide context for the route protection strategy, and to give context to how the preferred option has evolved as a result of considering the strategic merits of route protection.

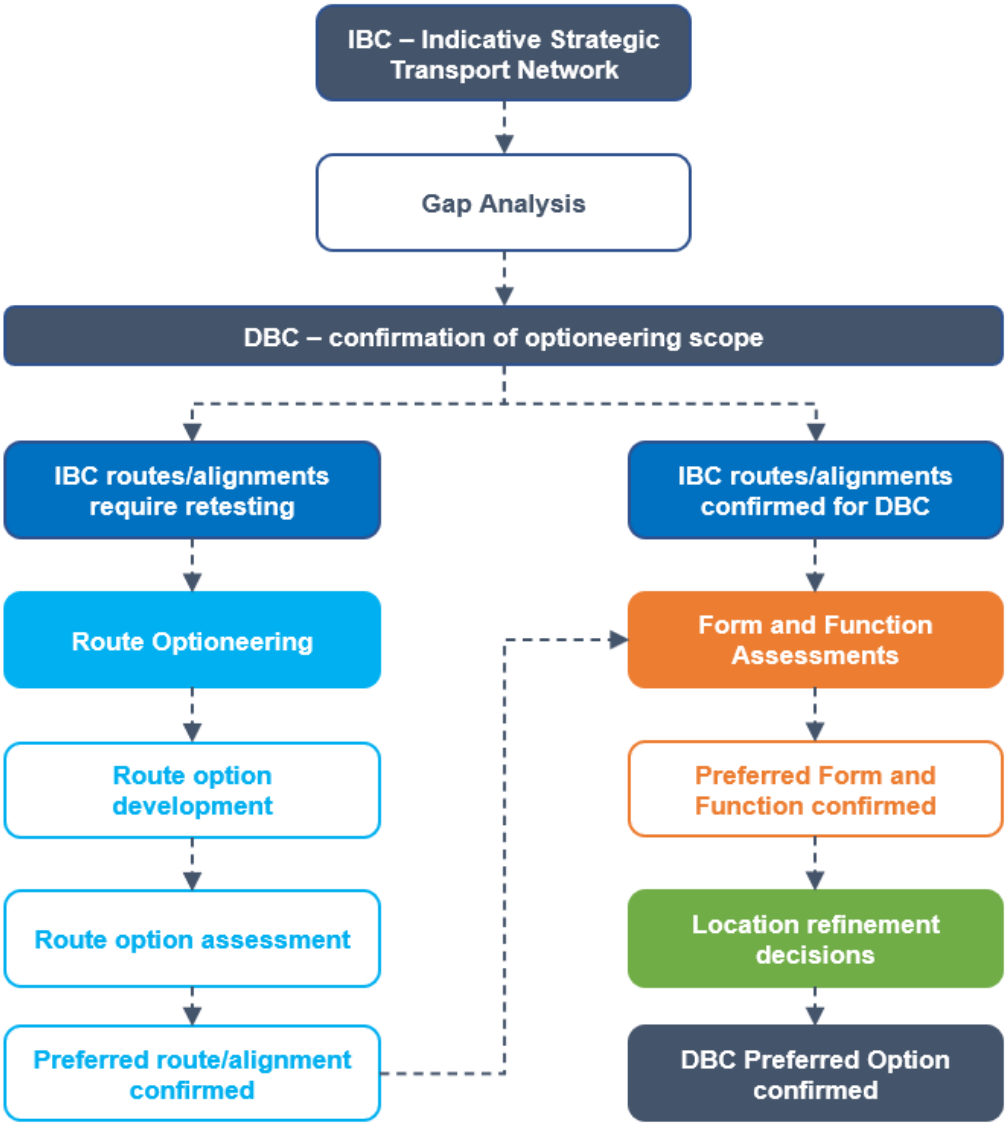


Figure 2-1 – South FTN optioneering process – simplified

The diagram at Figure 2-1 shows the optioneering process followed to reach the preferred option in simplified form. Briefly, the process comprised:

1. Steps to identify the preferred **routes** for the Project (as shown in Figure 1-1). In the case of the Great South Road, Popes Road, Croskery Road corridors, this step was satisfied by

retesting and validating previous option assessment undertaken during the Indicative Business Case (IBC) phase. In the case of the Takaanini FTN, this included a new MCA process with multiple options for various components comprising the route;

2. Steps to identify the preferred **form and function** for the Project corridors. This is a process of identifying the required physical form for each section of the Project (with a focus on both the midblock, intersections, and ancillary components such as stormwater treatment devices) based on the transport functions (e.g. provision for public transport, active modes, general traffic) needed to meet the investment objectives; and
3. The application of **route protection principles** and **constraints analysis** to identify preferred locations for corridor widening/realignment, and the resultant project boundaries denoting the route protection requirement.

As shown in Figure 2-1, the form and functional requirements were retested and refined after the 'interim Revision A' (**interim Rev A**) design was issued. This process was initiated after considering the implications of the extensive property requirements associated with this design for the wider viability of the Project. Accordingly, opportunities to reduce the spatial footprint of the preferred option, whilst continuing to achieve the investment objectives, were considered. The resultant changes to the wider route protection philosophy for the Project are set out in further detail at section 2.2 below.

The Revision A design (**Rev A**) which incorporates the changes resulting from the retesting and refinement of the form and functional requirements for the Project is the preferred option which forms the basis of this strategy and its recommendations.

2.2 The value proposition for route protection in the South FTN Project context

2.2.1 The interim Rev A design

The third-party land requirements for the interim Rev A design were derived through applying the Programme-wide approach to corridor design and route protection (process summarised in Figure 2-1 above). In short:

- The routes that define the Project extent were identified through business case optioneering;
- Along each route, a transport form and function assessment was undertaken to identify a suitable corridor form to meet future functional requirements. This process identified suitable midblock cross-sections (see Table 2-1), and compatible intersection forms;
- The space required for these cross-sections and intersection forms in turn informed the space requirements for the whole design, including allowances for earthworks and stormwater treatment devices. In numerous locations, the required space exceeded the currently available road reserve space, thus resulting in third-party land requirements necessitating route protection; and
- The application of widening considerations and constraints analysis informed decisions regarding the location of widening/realignment, and the exact location of project boundaries proposed.

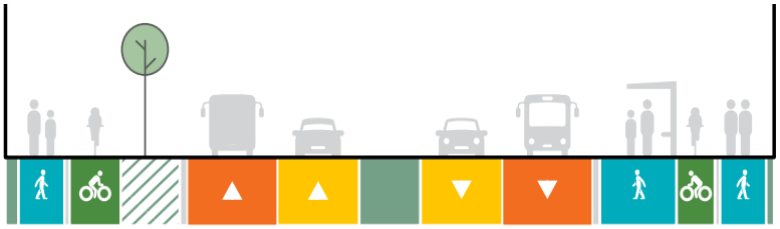
The interim Rev A design was found to require third-party land on over 2,000 properties over the Project extent, a large proportion of which would be full acquisitions. This scale of land requirement (and consequently cost) needs to be justified by compelling, transformational benefits. While the

outcomes provided for by the interim Rev A design delivers on the transport investment objectives set out in the DBC, the scale of the resultant benefits is inherently relatively modest and incremental given that:

- The Project area is already largely urbanised, meaning there is limited benefit attributable to the Project in terms of facilitating growth or shaping urban form;
- The benefits of route protection in this context are outweighed due to the complexity and disruption involved with delivering any intervention within the urban environment;
- FTN services do not seek to maximise patronage/mode shift at all costs, but rather balance patronage imperatives (e.g. speed, directness) with coverage and social service imperatives. Accordingly, the outright transport benefits of an FTN route will in most cases be less than (for example) a rapid transit network (RTN) route;
- Moreover, the transport benefits of individual FTN routes can be marginal given the complementary network role they can play – the Takaanini FTN for example is proposed in large part to provide 'feeder' access to rail services at Manurewa, Takaanini, and Papakura Stations; and
- While the reallocation of road space from private vehicles to public transport and active modes has clear benefits, any resultant predicted congestion can manifest as a disbenefit which accordingly contributes further to an unfavourable cost-benefit equation.

Given the above, it is considered that the strategic benefits of the Project are not sufficient to justify the cost and effects associated with the interim Rev A property requirements. Consequently, a bespoke approach was adopted for the Rev A design. The objectives of the redesign were to reduce the costs/spatial footprint of the Project to the extent that route protection can be made a viable proposition. In doing so, the Rev A design has deviated from the Programme-wide route protection approach through localised variations to the form and functional requirements which recognise contextual differences along the corridor extents. The route protection requirements of the Rev A design are described in section 2.3 below, and form the basis of the remainder of this strategy.

Table 2-1 – Interim Rev A cross-sections

Cross-section type / functionality	Generic example
Four-lane FTN arterial cross-section Incorporates one general traffic lane and one bus lane per direction, separated active mode facilities in both directions, and space for berms and a median.	
Two-lane FTN arterial cross-section Incorporates one mixed traffic lane per direction, separated active mode facilities in both directions, and space for berms and a median.	

2.3 The preferred option and resultant route protection requirements

The areas of route protection (third-party land) requirement, and the scale of the requirement associated with the preferred option (Rev A design) is set out in Table 2-3 below, and is mapped in Figure 2-4. Note that the transport form and function of the design is described in more detail in the DBC.

Table 2-2 – Route protection requirements associated with Rev A design

Section	Preferred option – scope / description	Third-party land required?				Scale of requirement (qualitative)
		Midblock	I/S	Bridges	S/W	
1a	Four-lane midblock, existing kerbs/active modes	No	No	No	No	None
1b	Four-lane midblock, separated kerbs/active modes; 4x intersections.	No	No	No	No	None
1c	Three-lane midblock, existing kerbs/active modes; 2x intersections.	No	Yes (x2)	No	No	Moderate
2	Four-lane midblock, revised kerbs/active modes (north of Myers); three-lane midblock, existing kerbs / active modes; 4x intersections.	Yes (north of Myers)	Yes (x2)	No	Yes (x1)	High
3	Four-lane midblock, existing kerbs/active modes; 4x intersections.	No	Yes (x1)	No	No	Low
4	Four-lane midblock (north of Tironui), three-lane midblock (south of Tironui), existing kerbs/active modes; 2x intersections.	No	Yes (x2)	No	No	Low
5	Three-lane midblock, existing/revised kerbs and active modes; 7x intersections.	No	Yes (x2)	Yes (x1)	Yes (x2)	Moderate
6	Four-lane midblock, revised kerbs/active modes; 8x intersections.	Yes (west of Magic)	Yes (x8)	Yes (x1)	Yes (x4)	High
7	Two-lane midblock, revised kerbs/active modes, 4x intersection.	Yes (north of Manuroa)	Yes (x4)	No	Yes (x2)	Moderate
8	Two-lane midblock, revised kerbs/active modes, 9x intersection.	Yes (Walters only)	Yes (x6)	No	No	Moderate
9	Two-lane midblock, revised kerbs/active modes, 5x intersection.	No	Yes (x4)	Yes (x1)	No	Moderate

Section	Preferred option – scope / description	Third-party land required?				Scale of requirement (qualitative)
		Midblock	I/S	Bridges	S/W	
Popes Road	Two-lane midblock, revised kerbs/active modes; 1x intersection.	Yes	No	No	Yes	Moderate
Croskery Road	Two-lane midblock, revised kerbs/active modes; no additional intersections.	No	No	No	No	None
Great South Road (Drury)	Four-lane midblock, revised kerbs/active modes, no additional intersections.	Yes	No	Yes	?	Moderate

The difference in the scale of route protection required by the interim Rev A and Rev A (preferred option) designs is summarised below in Table 2-3.

Table 2-3 – Features requiring route protection in the interim Rev A vs Rev A designs

	Interim Rev A design	Rev A design (preferred option)
Midblock widening required (approx. linear extent)	18.6km	7.5km
Number of intersection upgrades requiring third-party land	52	31
Number of bridge upgrades requiring third-party land	9	4
Number of stormwater treatment wetlands requiring third-party land	37	7

2.4 Implications of potential freight network changes

There is some uncertainty at the time of writing as to the strategic role of Popes Road in the future freight network relating to a range of factors, including:

- Uncertainty as to the implications of a potential Alfriston Plan Change (currently in pre-lodgement discussions) for freight routing from freight generators to the east such as the Brookby Quarry;
- Uncertainty as to the form, function, and sequencing of the proposed Mill Road Corridor; and
- Implications of decisions relating to the Rangi Road Viaduct (see **Appendix C – Options Assessment Report**).

Depending on the resolution of the above matters, the strategic significance of the Popes Road route as part of an east-west route connecting to Great South Road and SH1 via the proposed Manuia Road rail crossing (proposed as part of the TLC Project) may increase. This in turn may require further work to determine any future route protection requirements to provide a freight connection between Popes Road and Manuia Road. Given the above uncertainties, this work has not been undertaken as part of this business case, and so has not been considered in this route protection

strategy. It is recommended that this is considered further in future work when the implications of the above uncertainties become clearer.

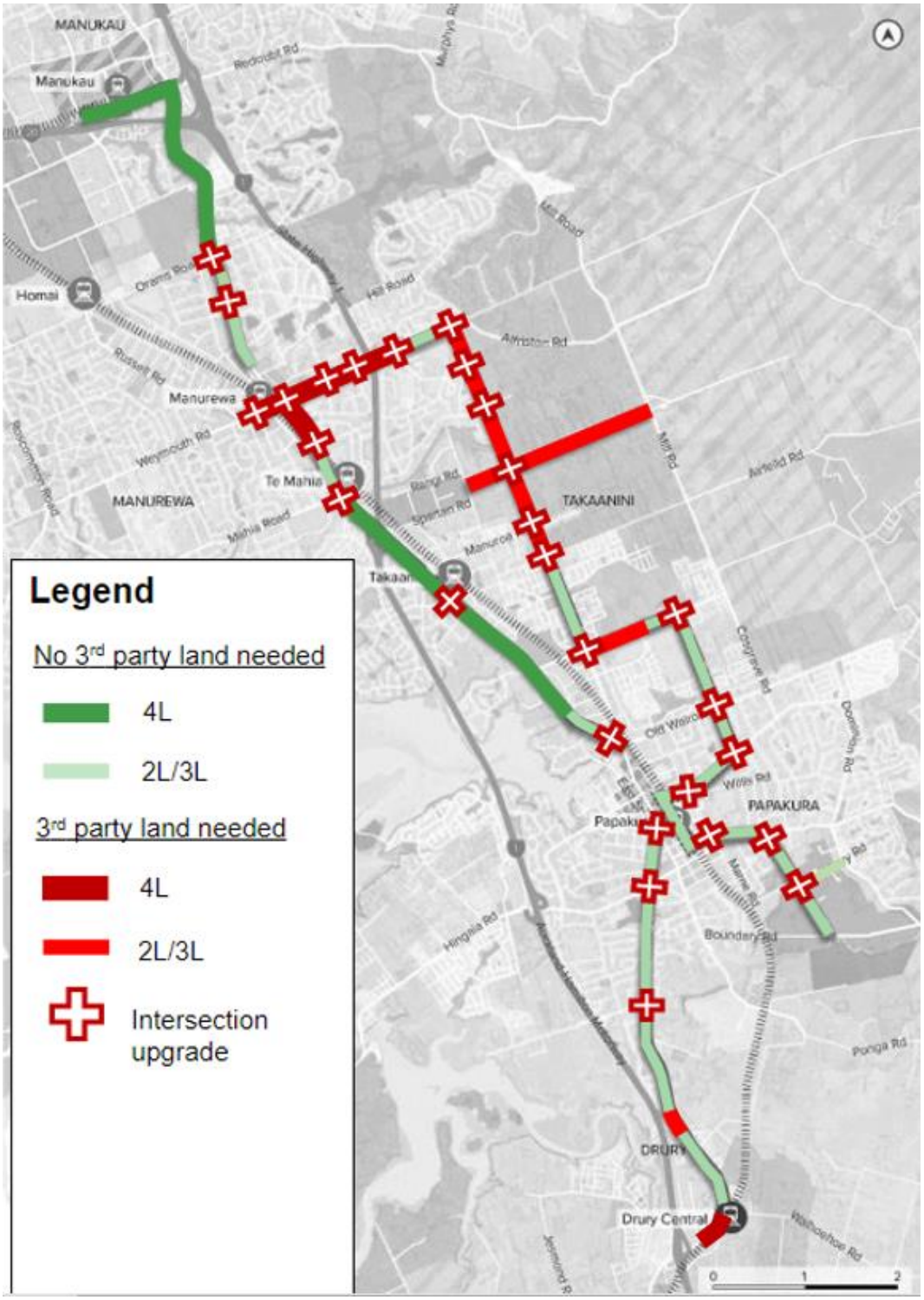


Figure 2-2 – Indicative map of locations where third-party land is still required for the Rev A design

3 The strategic context for route protection

3.1 Determinants of the strategic merit of route protection

The strategic merit of proceeding with route protection for the various sections of the preferred option has been assessed against a range of factors set out in Table 3-1 below. This table has been adapted from the Te Tupu Ngātahi Programme-wide route protection checklist to account for the contextual characteristics of the South FTN Project.

Table 3-1 – Determinants of the strategic merits of route protection for the South FTN

Factor	Explanation
Transport / urban form benefits of route protection	• The benefits of route protection from a transport and urban form perspective will vary – the greater these benefits, the stronger the case for route protection (and vice versa).
Scale / cost of route protection	• The third-party land requirements associated with the preferred option vary by location – the greater the scale/cost of the requirements relative to the transport/urban form benefits, the weaker the case for route protection (and vice versa).
Route protection benefit / development pressure	• Conventionally, route protection is proposed to ensure that no development precluding/hindering the proposed works can proceed and the South FTN is located in a largely urbanised context. • Notwithstanding the above, the zoning applying to the Project area (particularly under Plan Change 78) allows for a higher intensity of development than exists in many locations. Accordingly there is still an opportunity to 'get in ahead' of any further development/redevelopment – particularly where existing development is older/does not represent highest and best use of land. •
Interdependent projects	• The South FTN Project interfaces numerous other planned transport projects. Concurrent planning activities can strengthen the case for route protection given the opportunity to integrate plans and future-proof for an integrated network. • Conversely, insufficient information on interfacing projects may present risks/difficulties for making sound route protection decisions.
Likelihood of funding prioritisation / implementation + land use certainty	• While route protection is premised on the likelihood of long-term implementation, the case for route protection is strengthened where the likelihood of earlier funding/implementation is higher. • The case for route protection is similarly strengthened with greater certainty that future land use will continue to necessitate the Project. This is particularly relevant in the case of the Takaanini FUZ where future land use remains uncertain.

3.2 Route protection – strategic merits assessment

This section applies the criteria defined in Table 3-1 to the South FTN Project on a section-by-section basis to provide the owner organisations with a localised, high-level merits assessment of the case for (or against) route protection.[redacted]

In short, the high-level recommendations resulting from the assessment are as follows:

- **Sections 2 and 6** present the strongest case for route protection given that they provide the clearest strategic transport benefits which justify their high property requirements;
- **Section 7** and the **Popes Road urbanisation** also present a strong case for route protection, on the proviso that the Takaanini FUZ remains and is not downzoned following Auckland Council's forthcoming Future Development Strategy (FDS). If/when downzoning is confirmed through a post-FDS Plan Change, this recommendation may change. It is noted from AT SME feedback that irrespective of the FDS implications for future urbanisation, the two corridors have different network roles and significance – Popes Road remains seen as a strategically important east-west connection, particularly in the context of the future Mill Road Project;
- **Great South Road (Drury)** presents a strong case for route protection given the clear need to integrate with three concurrently proceeding adjoining projects – i.e. SH1 Drury Interchange upgrade, Drury Central Station, and Waihoehoe Road urbanisation;
- **Sections 3, 4, and 5** are recommended to be route protected given that the property requirements for the Rev A design in these sections are localised and relatively minimal. However, owner appetite for route protecting a series of five intersections and a bridge upgrade over a ~10km distance is unclear;
- **Section 1c** is tentatively recommended to be route protected given the two intersection upgrades maximise the benefits of the northern part of the Great South Road FTN. However, full acquisitions of commercial property would be required at both intersections;
- **Sections 8, and 9** are not recommended to be route protected for the following reasons:
    - Of the eight intersection upgrades that comprise the route protection requirement in these sections, four require full acquisitions of residential or commercial property including multiple new builds.
    - Accordingly, the property impacts are relatively high, while the risk of further buildout is relatively low given buildings are relatively new and dense – in other words the case to designate from a route protection perspective is relatively weak given that the route cannot be 'protected' from development that has already occurred;
    - The transport benefits relative to the property costs/impacts are likely incremental in isolation. The full benefits of this section of the route rely on completing sections to the north, as well as the Ōpaheke North-South Arterial to the south. The latter is provided for by an operative designation with a 20-year lapse period, and traverses areas not planned to be urbanised until the 2040s; and
    - The staging considerations appendix (see **Appendix N** of the DBC) identifies this section as a very long-term requirement – identified as a 2048+ requirement. It would be challenging to justify a 20+ year lapse date in light of the above.
- **Sections 1a, 1b, and Croskery Road** do not require route protection as no third-party land is required.

Figure 3-1 shows these recommendations spatially.

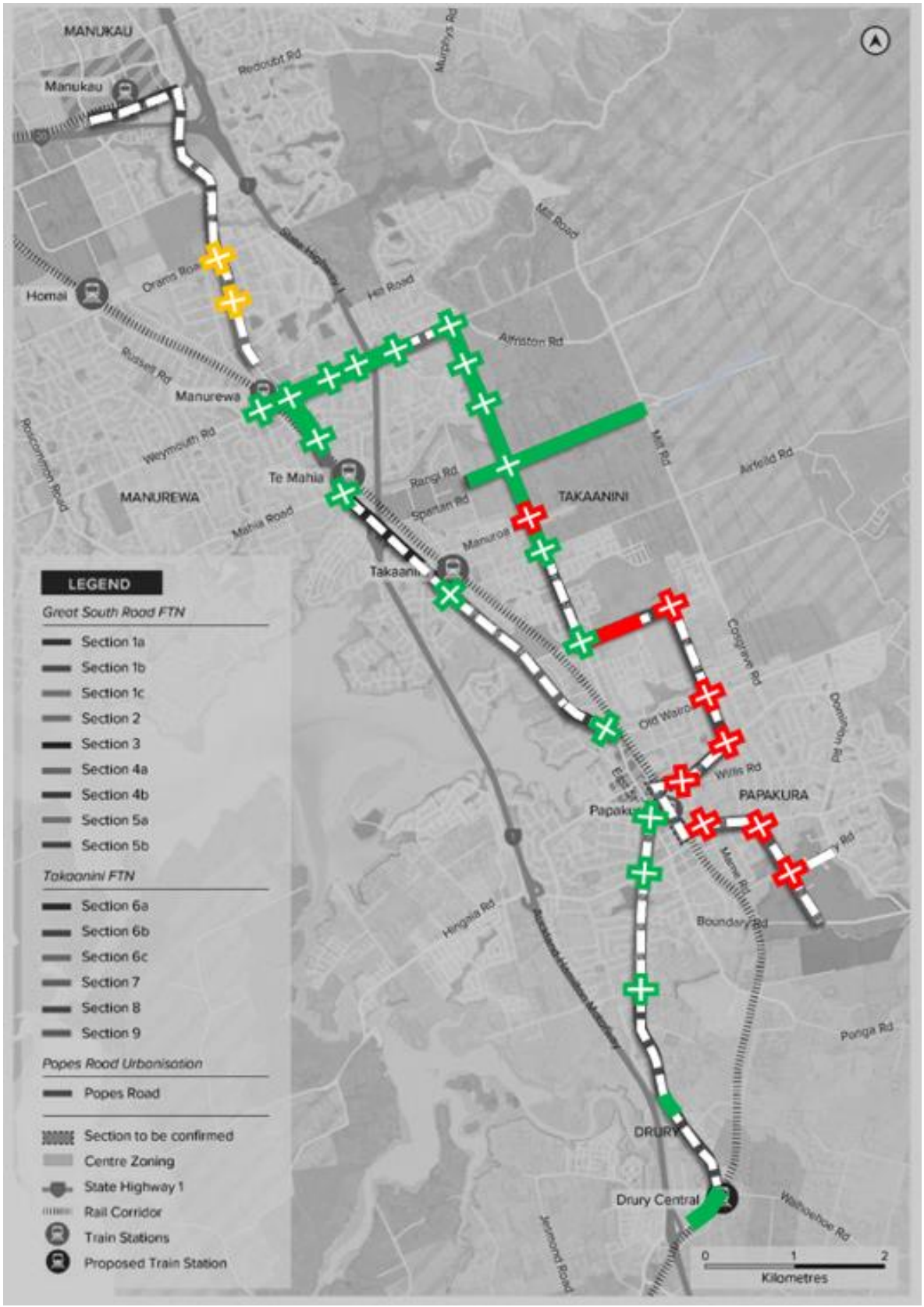


Figure 3-1 – Route protection recommendations – green extent denotes locations where route protection is recommended; orange where it is tentatively recommended; and red where it is not recommended.

4 The recommended form of route protection

4.1 Context

The recommendations set out in this section assume that the owners wish to proceed with route protection for the extent recommended in section 2 (see Figure 3-1). The actual extent of route protection ultimately undertaken may deviate from these recommendations depending on the owners' evaluation of the strategic merits assessment [redacted] Accordingly, sections 3 and 4 should be read in conjunction.

4.2 Options for route protection methods

An assessment of the suitability of various route protection methods for the Project has been undertaken with a view to meeting the Resource Management Act 1991 (RMA) requirement to assess the alternative methods for undertaking the work as set out in section 171(1)(b) of the Act.

The possible mechanisms for achieving route protection for the South FTN Project assessed in this section are:

- Designations;
- Resource consents;
- Plan Changes/Precincts; and
- Landowner/developer agreements.

The comparative strengths, weaknesses of these mechanisms have been assessed and summarised below in Table 4-1.

Table 4-1 – Strengths and weaknesses of route protection mechanism options

Route Protection Mechanism	Summary of strengths and weaknesses within local context
Designation	• This provides longer term protection and maintains design flexibility. Typically, designations provide less detail upfront but as a consequence usually require additional assessment and design be provided prior to any works commencing as a condition of the designation. A secondary process, typically through provision of an Outline Plan of Works (**OPW**) to the territorial authority, is usually required. • Provides certainty to affected landowners and the ability to request early buy-out from the requiring authority. • Prevents development that would preclude/hinder the proposed works within the designation boundaries. • Additional areas required for construction can be rolled-back after works are completed. • Has interim effect from the time of lodgement. • Requiring authority retains decision making power. • Negates need for land use consents to implement works otherwise authorised by s9(3) of the RMA). • High level of information required to support.

Route Protection Mechanism	Summary of strengths and weaknesses within local context
	• Exposure to contingent liability and ultimately requires requiring authority to purchase land within footprint under the Public Works Act 1981 (PWA) – i.e. designation does not resolve property acquisition aspects of route protection. • Planning 'blight'.
Resource Consents	• Not a route protection mechanism unless land is already under the ownership of the infrastructure provider – i.e. resource consents do not resolve the property acquisition aspects of route protection. • Not included in a District Plan and not able to utilise the OPW process.
AUP OIP 'corridor overlay'	• As per resource consents, this process would not resolve the property acquisition aspects of route protection.
Third-Party Input to Plan Changes	• Plan Changes do not authorise land acquisition and so individual negotiations would still be required. While provisions within Precincts such as road frontage setbacks and indicative roads can be negotiated as an 'interim' route protection measure (as was negotiated for operative Plan Changes 52 and 58), these are unlikely to be practical at a corridor-wide scale given the scale of the Project and the level of urbanisation/land ownership fragmentation. • Aside from the intensification streamlined planning process (i.e. Plan Change 78) there are no substantial new plan changes anticipated in these corridors beyond those already operative.
Developer negotiations / Infrastructure Funding Agreements	• As above – while interim route protection measures can be negotiated with developers, ownership within the corridors is fragmented and so developer negotiations would be impractical for the Project at large given the number of parties involved.

4.3 Recommended mechanism

Having considered the relative strengths and weaknesses of the various route protection mechanisms outlined in Table 4-1, **designations** were identified as the preferred route protection method for the Project. Designations were considered the most logical and effective method to protect the route in an evolving environment for the following reasons:

- Provides certainty to all parties including the community, affected land owners, and developers;
- Well recognised and understood tool for route protection which links with future land acquisition processes through the PWA;
- Maximises flexibility for future implementation – provides for progression of detailed design and implementation at the appropriate time;
- Negates the need for additional land use consents to implement works otherwise authorised under section 9(3) of the RMA; and
- Reduces future cost risk in cases where route protection and associated land purchase can be undertaken prior to upzoning and/or development which induces a land value increment.

Balanced against the above benefits are costs. As noted in Table 4-1, these include exposure to contingent liability and costs associated with land purchase, the high level (and therefore application cost) of information required to be lodged with Notices of Requirement (**NoRs**), and the reputational risks associated with planning 'blight'. The process of reducing the footprint of the Project (see section 2.2) has reduced these risks.

4.4 Designation packaging and particulars

4.4.1 Packaging criteria

Having established the preference for designations as the route protection mechanism, this section elaborates on the recommended packaging and particulars of designations for the Project. The following criteria have been considered in determining the optimal packaging and particulars of designations:

- **Project context and transport outcomes –** A shared contextual basis (e.g. similar business case foundations, investment objectives, requiring authority, geographic context and project drivers) allows for efficiencies in base information which will be provided to support the NoR package / bundle;
- **Planning risk –** e.g. notification risk, likelihood of appeal, complexity of planning approval requirements. Splitting projects according to the level of planning risk limits the likelihood that projects are unnecessarily exposed to delays and added planning complexity, noting projects also need to be credible and be able to stand alone if required;
- **Phasing/ timing –** Similar programme timing (including design, assessment, project drivers) provides consistency in the urgency of route protection, the provision of information, key deadlines and delivery targets. The interconnectedness of the corridors also mean that the necessity of each project hangs on the completion of the other;
- **Project complexity –** A similar level of project complexity (such as design complexity and project scale) provides consistency in provision of information requirements and limits the likelihood that projects are unnecessarily exposed to added complexity;
- **Project interdependencies / logic –** Components of the Project with significant interdependencies (e.g. perpendicular corridors meeting at intersections) are generally grouped together; and
- **Ability to disaggregate/split out Project components** – there is benefit in being able to disaggregate the Project where the strategic context changes. The most obvious instance in the context of the South FTN Project is the potential implications of the draft FDS for the need to route protect the Popes and Porchester Road corridors.

4.4.2 Recommendations

The recommendations resulting from applying the above criteria are summarised in Table 4-2 and shown in Figure 4-1 below.

Table 4-2 – Recommended packaging and particulars for South FTN designations

NoR	Extent	Requiring authority	Probable lapse period	Rationale
1	Alfriston Road (section 6) west of Magic Way; and Great South Road (section 2) north of Myers Road.	AT	20 years	• Highest transport benefits / strategic significance. • Interdependencies between GSR and Alfriston where they form an intersection south of Manurewa – logical grouping. • The most significant property requirements are in these sections – elevated risk. • Requiring authority – falls within AT's remit. • Lapse period – 20 years provides for likely implementation timeframe.
2	Porchester Road (section 7) and Popes Road.	AT	20 years	• Largely residential/greenfield surroundings – lower sensitivity than other locations, relatively localised property risks. • Both Porchester and Popes a response to urbanisation of same Takaanini FUZ. In the event that the Takaanini FUZ is downzoned in response to the FDS, this NoR may not need to proceed and could be easily split out from the remainder of the Project and abandoned / surrendered as appropriate. • Notwithstanding the above, the Popes Road urbanisation may still have a future interaction with the Mill Road corridor irrespective of the outcome of the Takaanini FUZ downzoning. Interdependencies between Porchester and Alfriston where they form an intersection – logical grouping. • Requiring authority – falls within AT's remit. • Lapse period – 20 years provides for likely implementation timeframe, recognising very long-term/uncertain nature of Takaanini FUZ.
3	Great South Road intersections and Otūwairoa / Slippery Creek Bridge (sections 1c, 3, 4, 5).	AT	20 years	• Relatively localised/small-scale property requirements. • Intersections in their totality deliver cumulative improvements to the GSR route – equally, there is potential to implement them in stages (meaning implementing one gives effect to designation for all). • Requiring authority – falls within AT's remit. • Lapse period – 20 years provides for likely implementation timeframe.

NoR	Extent	Requiring authority	Probable lapse period	Rationale
4	Great South Road (Drury)	AT	20 years	• A standalone designation recognises that there are different drivers for this section of GSR to the remainder – namely the opportunity to integrate with three adjoining/concurrently planned NZUP projects – Drury Central Station, SH1 Drury Interchange, and Waihoehoe Road urbanisation.

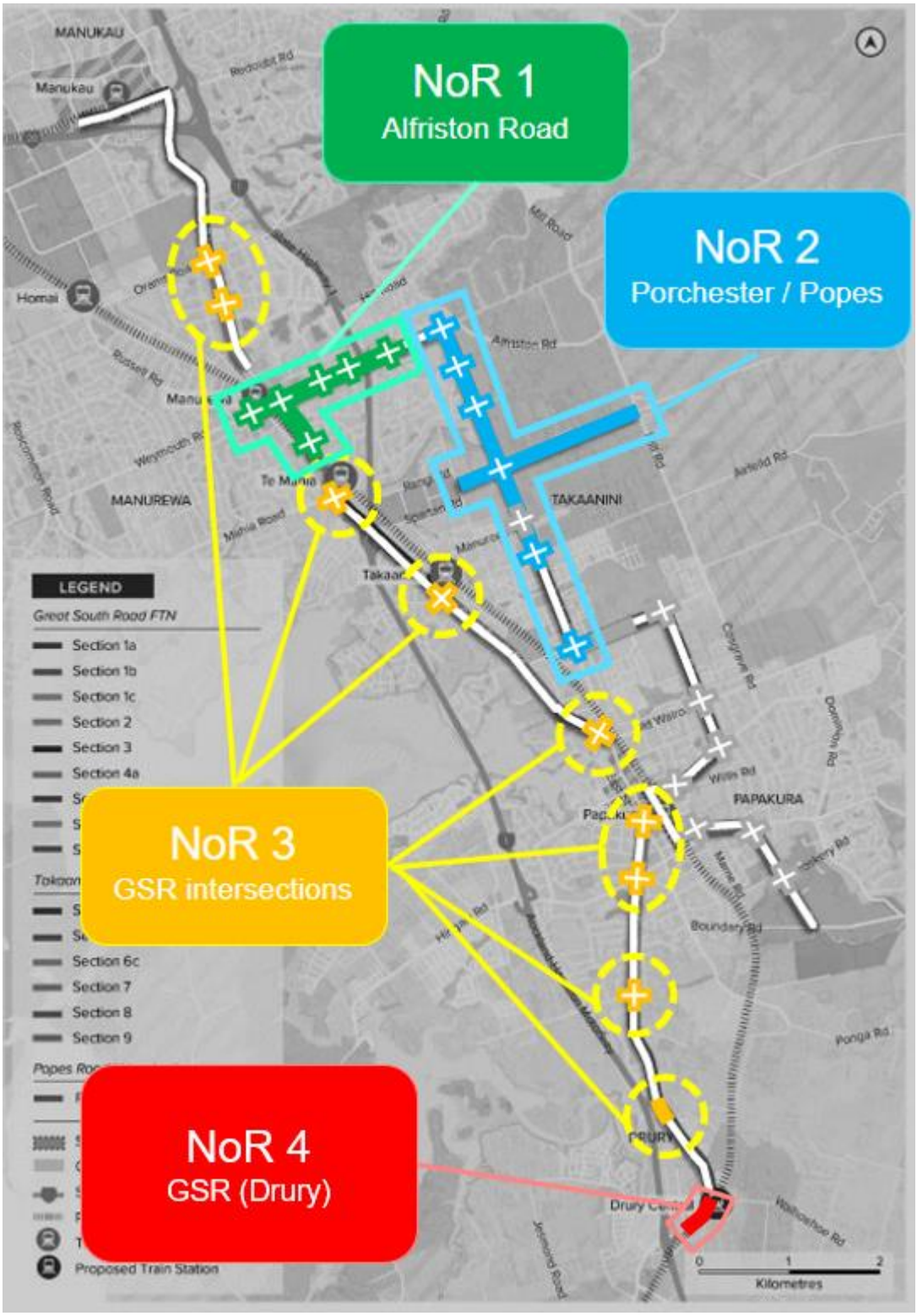


Figure 4-1 – Route protection packaging recommendations