

Let's GET Wellington MOVING

Appendix G - Golden Mile Cost **Estimation Report**

October 2021

Golden Mile Single Stage Business Case | Contract No. 1851



Futuregroup →



Stantec WS Jasmax MRCagney

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Project Number: 5-C3880.03

SSBC Golden Mile Cost Estimate Report

13 September 2021

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Disclaimers and Limitations

This report ('**Report**') has been prepared by WSP exclusively for Stantec NZ Ltd ('**Client**') in relation to a SSBC cost estimate for the Golden Mile project ('**Purpose**') and in accordance with the Short form Agreement with the Client dated 30 April 2020. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party with the exception of the programme partners of Let's Get Wellington Moving (Waka Kotahi NZ Transport Agency, Greater Wellington Regional Council and Wellington City Council).

In preparing the Report, WSP has relied upon data, surveys, analyses, designs, plans and other information ('**Client Data**') provided by or on behalf of the Client. Except as otherwise stated in the Report, WSP has not verified the accuracy or completeness of the Client Data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this Report are based in whole or part on the Client Data, those conclusions are contingent upon the accuracy and completeness of the Client Data. WSP will not be liable in relation to incorrect conclusions or findings in the Report should any Client Data be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.

1 Introduction

This report summarises the process, scope and key assumptions used in the preparation of the cost estimate for the Golden Mile Single Stage Business Case.

The report has been prepared by WSP New Zealand Ltd for Stantec New Zealand Ltd in support of Stantec's commission with Let's Get Wellington Moving (LGWM) of which Waka Kotahi NZ Transport Agency (Waka Kotahi) are the contracting agency.

This report and the estimate have been prepared in accordance with the guidance presented within the Waka Kotahi Cost Estimation Manual (SM014).

The purpose of this estimate is to provide a cost range to feed into the Single Stage Business Case for application for funding for the subsequent phases of the project. Subject to funding approval, the next phase will be pre-implementation (development of a detailed design).

2 Scope

The project consists of urban street-scape improvements along one of New Zealand's premier shopping and entertainment precincts. In addition, the streets along the project corridor have some of the highest pedestrian and bus demands in the country.

The proposed project includes the following changes:

- Lambton Quay
 - Removal of all private motor vehicles, including reconfiguration of the intersections at each end of the section;
 - Closure and reconfiguration of all side roads;
 - Corridor transformation to reduce the carriageway to one-lane in each direction and reallocate the redundant carriageway space to improved pedestrian space / urban realm (for movement and amenity);
 - Reconfiguration of bus stops;
 - Reconfiguration of crossings;
- Willis Street;
 - Removal of all private motor vehicles, including reconfiguration of the intersections at each end of the section;
 - Closure and reconfiguration of Mercer Street;
 - Reduce the carriageway to one-lane in each direction and reallocate the redundant carriageway space to improved pedestrian space / urban realm (for movement and amenity);
 - Reconfiguration of bus stops;
 - Reconfiguration of crossings;
- Manners Street;
 - Removal of all private motor vehicles, including reconfiguration of the intersections at each end of the section;
 - Closure and reconfiguration of Cuba Street;
 - Reconfiguration of bus stops;
- Courtenay Place;
 - Removal of all private motor vehicles, including reconfiguration of the intersections at each end of the section;
 - Closure and reconfiguration of Allen Street and Blair Streets and remove turning movements from Tory Street;
 - Corridor transformation to reduce the carriageway to one-lane in each direction and reallocate the redundant carriageway space to improved pedestrian space / urban realm (for movement and amenity);
 - Reconfiguration of bus stops; and
 - Reconfiguration of crossings.

3 Key assumptions and exclusions

The following sub-sections document the key assumptions and exclusions.

3.1 Level of design detail

A varying level of design detail has been available to inform this cost estimate. These variances in detail are discussed further in section 3.56 below.

Overall, the level of design detail is limited (which is appropriate for this stage of the business case). However, this results in uncertainty in quantities and rates, these uncertainties have been reflected in the assessment of contingency and funding risk as outlined in section 7.

3.2 Extent of streetscape improvements

Through the development of the current design, there has been considerable discussion with the Let's Get Wellington Moving (LGWM) Golden Mile Technical Advisory Group (TAG) on the extent and quality of streetscape improvements that have been included in the current design. It is expected that this will continue to be a key area of discussion as the design progresses.

As noted in section 8.2 below, changes to the extent and quality of streetscape improvements can have a significant impact on the overall cost of the project. Therefore, any significant changes to the current assumptions will impact on the cost estimate.

3.3 Services relocations

There is insufficient detail within the current design to quantify the extent and scope of service relocations that may be required as part of this project.

As-built services information from service providers has been retrieved and shows high concentrations of services both along and across the corridor for its entire length.

The proposed design is expected to include a significant number of elements which have the potential to clash with services including signal poles, lighting columns, tree pits, drainage components etc.

A provisional sum of \$7.5 million has been included in the base estimate to allow for having to deal with service relocations. Section 7 below identifies the risk and contingency that has been applied to this figure.

As the design progresses, the understanding of the extent and scope of service relocations will be improved, and trade-offs may be required to adjust the design to avoid clashes with services.

3.4 Construction methodology and duration

The construction phasing assumptions are documented in section 4 below.

3.5 Approach to identifying rates

Rates have been estimated from a variety of sources including tender costs from other projects, advice from other parties and estimates from first principles. The details of these assumptions for individual items is documented in the cost schedule (refer Appendix B).

3.6 Approach to identifying quantities

Quantities for the estimate have been estimated from a number of sources. The key sources are listed below:

- 1 Golden Mile general layout drawings (appendix to main SSBC)
- 2 Golden Mile drainage sketches (Appendix C)
- 3 Golden Mile Materiality Study (appendix to design philosophy statement
- 4 Indicative construction staging programme (Appendix D)

Table 1 below outlines the sources of quantities for each of the key sub-elements of the project. Further assumptions are documented in the cost schedule (refer Appendix B). The number references in the table below refer to the number items listed above.

Table 1: Approach to identifying quantities

Element Sub-element		Source of quantiles	
Design & project development (including client managed costs)		Based on 15% of physical works costs	
MSQA & client managed costs		Based on 12.5% of physical works costs + specific allowance for communications and advertising.	
Environmental	Erosion and sediment control measures	Based on durations outlined in (4).	
compliance	Site fencing	Based on durations outlined in (4).	
Earthworks	Site clearance / cut to waste	Based on quantities derived from (1)	
	Imported fill	Based on quantities derived from (1)	
	Manholes	Based on quantities derived from (2)	
Drainage	Sumps	Based on quantities derived from (2)	
Drainage	Culverts / leads	Based on quantities derived from (2)	
	Kerbing/edge strip	Based on quantities derived from (1) & (2)	
	Pavement	Based on quantities derived from (1)	
Pavement & surfacing	Surfacing	Based on quantities derived from (1)	
	Raised safety platforms	Based on quantities derived from (1)	
	Pavement marking	Based on estimate per m length of corridor and lump sum for side roads	
Traffic services	Road signs & supports	Based on estimate per m length of corridor and lump sum for side roads	
	Traffic signals	Component breakdown provided for each location, priced as lump-sum in main schedule	

Element Sub-element		Source of quantiles	
	Access controls	Estimate of quantities based on understanding of proposed operation	
	Lighting	Based on existing quantities derived from survey and assumptions around new streetscape areas	
	Bus stop signage	Based on number of removed and new bus stops	
Service relocations		Refer section 3.3	
	Landscaping	Based on quantities derived from (3)	
	Architecture	Based on number of removed and new bus stops	
Landscaping &	Streetscaping	Based on quantities derived from (3) and existing street furniture quantities	
urban design	Footpaths & cycleways	Based on quantities derived from (1)	
	Entranceways & vehicle crossings	Based on quantities derived from (1)	
	Dropkerbs & tactiles	Based on quantities derived from (1)	
Traffic	Temporary traffic management	Based on durations outlined in (4).	
management & temporary works	Temporary diversions	Based on durations outlined in (4).	
	Permanent diversions	Based on durations outlined in (4).	
Preliminary & general		Based on 20% of physical works costs (excluding P&G)	
Extraordinary Construction Costs		Based on a bottom-up estimate of advertising and labour costs to help manage the impacts of construction.	

3.7 Exclusions

The following items have been excluded from the project estimate:

- GST;
- Escalation beyond the time the estimate was prepared, namely 2nd Quarter 2021;
- Sunk costs, includes those costs associated with the 2021 SSBC and engagement activities; and
- Operational and maintenance costs once the project is constructed.
- Operational costs from other organisations such as Metlink / GWRC e.g. changing bus timetables, temporary diversion notifications. However, it should be noted some physical infrastructure costs have been included for bus stops including shelters, totem signs and real time information signs.

4 Construction staging and programme duration

An indicative construction staging programme has been identified for the proposed improvements which has been used to inform the preparation of the estimate. The construction staging can be found in Appendix D of this report.

The construction phasing has been broken down into five sections:

- Section 1 undertake minor signal improvements at two-three intersections affected by traffic rerouting
- Section 2 Manners Street improvements
- Section 3 Willis Street improvements
- Section 4 Lambton Quay Improvements
- Section 5 Courtenay Place Improvements

The construction phasing and programme are key inputs to the following cost items:

- Temporary traffic management
- Environmental compliance (including site fencing)

The construction phasing has also identified the need for temporary street lighting along Courtenay Place which has been included in the estimate.

The construction phasing is indicative only and does not consider potential cost efficiencies associated with construction of sections in parallel. The construction phasing also does not consider minimising or optimising bus diversions. Doing so may increase the cost of the project.

Table 2 below summarises the sections and durations.

Table 2: Summary of construction duration

Section	Sub-Sections	Duration (weeks)
Section 1 - undertake improvements at intersections affected by traffic rerouting	 Minor signal changes to: Victoria Street / Ghuznee Street intersection Taranaki Street / Wakefield Street intersection 	
Section 2 - Manners Street improvements	Close Cuba Street and reconfigure as two-way cul- de-sac	4
	Divert southbound buses from Willis Street / Manners Street via Mercer Street, Wakefield Street to Taranaki Street and make changes to Manners Street	8
	Remove diversion noted in line above	-
Section 3 - Willis Street improvements	Close Willis Street to general traffic between Manners Street and Willeston Street and make changes to Boulcott Street intersection	4
	Close Mercer Street at Willis Street and reconfigure as two-way cul-de-sac	4
	Divert southbound buses from Willis Street via Victoria Street and make changes to Willis Street	20

Section	Sub-Sections	Duration (weeks)
	and Willeston Street (removes access to Lambton Quay northbound for general traffic)	
	Remove diversion noted in line above	-
Section 4 - Lambton Quay Improvements	Divert southbound buses from Lambton Quay via Panama Street and make changes to Lambton Quay between Panama and Hunter	4
	Remove diversion noted in line above and divert northbound buses from Lambton Quay via Customhouse Quay and make changes to Lambton Quay between Hunter and Willis	4
	Close side streets that enter onto Lambton Quay (except for property access) and reconfigure as two- way cul-de-sacs (can be staged)	16
	Remove diversion noted in line above and close Lambton Quay to general traffic between Willis Street and Whitmore Street, make temporary changes to Whitmore Street intersection and reconfigure side roads that exit from Lambton Quay (except for property access) and reconfigure as two- way cul-de-sacs (can be staged)	16
	Make changes to southern carriageway (northbound direction) on Lambton Quay between Whitmore and Panama	24
	Divert southbound buses to new route and make changes to northern carriageway (southbound direction) on Lambton Quay between Whitmore and Panama	24
Section 5 - Courtenay Place	Close side streets to Courtenay Place (except for property access) and reconfigure as two-way cul-de- sacs or through access only (can be staged)	12
	Close Courtenay Place to general traffic between Cambridge Terrace and Taranaki Street, make temporary changes to Taranaki and Cambridge intersections	4
	Remove median along Courtenay Place and surface (except where trees being retained)	8
	Shift lanes to north side along Courtenay Place and make changes to southern side of Courtenay Place	24
	Diversion of northbound buses from Courtenay Place via Cambridge Terrace / Wakefield Street / Taranaki Street or stop-go to allow changes to northern side of Courtenay Place	12

5 Risks

Table 3 below identifies the key risks that could have a significant impact on the cost estimate. The full project risk register is an appendix to the Single Stage Business Case.

Table 3: Key estimate risks

Description of risk	Likelihood	Consequence
Clashes with underground services result in increased costs (e.g. service relocations) and impact on project duration (e.g. increased traffic management, overheads etc). over that allowed for.	Almost certain	Severe
Restrictions on construction methodology result in increased costs and impact on project duration over that allowed for. Potential factors include; ability for work at different times of day (e.g. night works or day works), level of disruption / diversions acceptable for public transport system and project scheduling (e.g. works conflicting with other utility operators).	Likely	Moderate
The level of design detail provided has not adequately captured the extent of works required resulting in increased quantities or rates.	Likely	Moderate
There is stakeholder pressure to increase the scope of works to replace more footpath and street-scaping areas resulting in increased quantities	Likely	Moderate

6 Base estimate

6.1 Summary

Table 4 below summarises the base estimate, Appendix A includes the estimate on the Waka Kotahi estimate form C. The estimate needs to read in conjunction with the assumptions and exclusions covered in Appendix E.

Table 4: Summary of base estimate

Element		Base estimate (\$M)
Design & project	Consultancy fees	4.8
development	Client managed cost	2.4
Construction		
Monitoring, MSQA, Client Managed Cost and Consent	Consultancy (construction monitoring) fees	3.6
Monitoring Fees	Client managed cost	5.2
Physical Works		
Environmental Compliance		\$0.4
Earthworks		\$0.5
Ground Improvements		\$0.0
Drainage		\$5.0
Pavement and Surfacing		\$2.0
Bridges		\$0.0
Retaining Walls		\$0.0
Traffic Services		\$9.7
Services Relocation		\$7.5
Landscaping and Urban Design		\$8.1
Traffic Management and temporary works		\$6.8
Preliminary and General		\$8.0
Extraordinary Construction Costs		\$1.0
Overall base cost		\$64.9

6.2 Key cost items

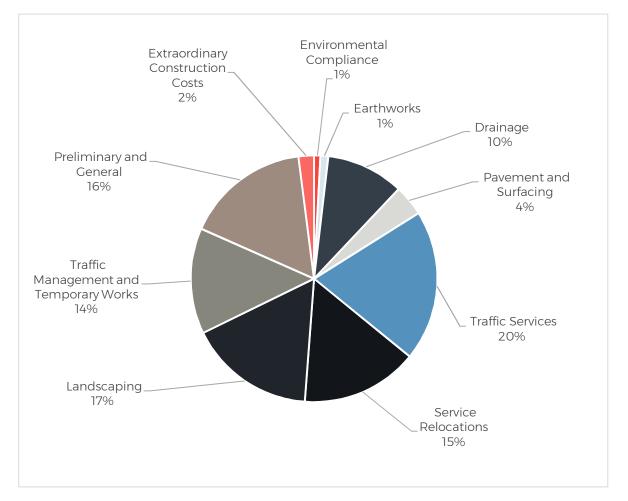


Figure 1 below summarises the breakdown of the physical works costs

Figure 1: Breakdown of physical works costs

Some of the high cost items are documented below (excluding P&G client managed costs which are a based on a proportion of physical works costs):

- **Drainage**: new strip drains to deal with drainage where footpath / street-scape areas are extended (~\$3M).
- Traffic services: new and reconfigured traffic signals (~\$4M).
- Traffic services: new and temporary street lighting (~\$4.5M).
- Services relocation: (~\$7.5M).
- Landscape and urban design: footpaths and cycleways (~\$8M).
- Traffic management and temporary works: traffic management (~\$5.5M).

7 Assessment of contingency and funding risk

The Waka Kotahi Cost Estimation Manual (SMO14) requires the contingency and funding risk to be analysed for a project of this value and stage. The assessment of contingency and funding risk has been undertaken using the Hong Kong method. The 'Hong Kong' Method (HKM) is an accepted way of preparing a risk-based estimate by assessment (without having to use a more sophisticated analysis method such as using a programme like @RISK). In this method a 'Base Estimate' is initially prepared. The 'Average' and 'Maximum' risk allowances are then determined by assessing the contingencies for each item, or each section, as a percentage of the Base Estimate. From this, the Average and '95%ile' out-turn costs for the overall project is determined. Table 5 below records the percentage average and maximum contingency (and the justification) which form the key inputs into this method.

The average and maximum contingency percentages allow for a combination of:

- Uncertainty in estimated quantities;
- Uncertainty in estimated rates; and
- Potential risks.

Table 5: Average and maximum contingency percentages (as a percentage of the Base Estimate)

Element	Average contingency percentage	Maximum contingency percentage	Justification
DESIGN & PROJECT DEVELOPMENT	30%	50%	Standard potential risk of costs being exceeded
CONSTRUCTION			
Monitoring, MSQA, Client Managed Cost and Consent Monitoring Fees	50%	100%	High potential risk of costs being exceeded if higher level or longer duration of supervision required
Physical Works			
Environmental Compliance	30%	50%	Standard potential risk of costs being exceeded
Earthworks	30%	50%	Standard risk of costs being exceeded
Ground Improvements	Not used		Not used
Drainage	50%	100%	High potential risk of costs being exceeded.
Pavement and Surfacing	30%	50%	Standard potential risk of costs being exceeded
Bridges	Not used		
Retaining Walls	Not used		

Element	Average contingency percentage	Maximum contingency percentage	Justification
Traffic Services	50%	100%	High potential risk of costs being exceeded, particularly associated with lighting and signal aspects
Services Relocation	100%	300%	Extreme potential risk of costs being exceeded, particularly given congestion of existing services and no known quantities of relocations required
Landscaping and Urban Design	50%	100%	High potential risk of costs being exceeded, both potential scope creep and higher quality finishes required
Traffic Management and temporary works	50%	100%	High potential risk of costs being exceeded if longer duration of works
Preliminary and General	50%	100%	High potential risk of costs being exceeded if longer duration of works
Extraordinary Construction Costs	30%	50%	Standard potential risk of costs being exceeded

Table 6: Summary of cost range

	Current estimate (\$M)
Base estimate	\$64.9
Expected estimate	\$98.9
95 th percentile estimate	\$116.8

8 Comparison to previous estimate

Table 7 below compares the previous estimate, prepared for the short list option assessment (May 2020), against the current estimate. However, the purpose of the previous option estimate was to allow a relative comparison of options and check against the project budget of \$40 million. It was appropriate for its purpose, which was to compare options, but was not based on design drawings and therefore are likely to have missed items and should be treated as indicative.

Table 7: Comparison to previous estimate

	Previous (option) estimate (\$M) ¹	Current estimate (\$M)
Base estimate	\$53	\$65
Expected estimate	\$68	\$99
95 th percentile Estimate	\$79	\$117

The current estimate is a more robust assessment of the potential out-turn costs and risks of the currently proposed scheme which will be used to seek funding for the next phases of the project. However, as noted in section 3, the current estimate is based on a limited amount of design.

A direct comparison of the changes at a component level has not been undertaken.

8.1 Methodology and assumptions

The previous estimate was built up from the following type of items / proportions (based on the limited information available):

- Linear items;
- Area items;
- Intermittent items;
- Proportion for services relocation;
- Proportion for temporary traffic management;
- Proportion for preliminary and general;
- Proportion for other costs (professional services and client costs); and
- Proportions for risk and contingency.

The current estimate has been undertaken using a bottom-up approach using the available design detail (as noted in section 3).

As a comparison, in the previous option estimate the new footpath / street-scaping areas were costed using a blanket rate, however, for the current estimate, this has been broken down to components (paving, lighting, street furniture, landscaping etc).

8.2 Scope and assumptions

Key assumptions from the previous estimate which have changed with the current estimate are listed below with further elaboration in the following paragraphs:

- Scope of footpath and associated street-scaping improvements;
- Carriageway alignment through Courtenay Place;
- Complexity of construction staging and impacts;

¹ Includes minor changes following a peer review, costs as at 2nd quarter 2020.

- Increases in rates; and
- Other scope changes and assumptions.

Scope of footpath and associated street-scaping improvements

The previous estimate assumed no change to the current footpath / street-scaping areas with new areas being replaced with a similar palette to the existing footpath / street-scaping areas. This same assumption has been carried through for the current estimate.

The previous estimate included an area rate for footpath / street-scaping which covered paving, landscaping, lighting and street furniture. In the current estimate these items have been separately identified. As the design has not been completed assumptions have had to be made about the quantity and rates used for these items. These assumptions are noted in Appendix B and E.

In particular, it should be noted that a rate of \$300 per m² has been used for areas of new footpath including, base preparation, supply and installation of pavers. This rate has been requested by LGWM to reflect local market rates.

Based on discussions with the project technical advisory group about the level of quality expected along this corridor, the estimate has assumed streetscaping elements are high-quality bespoke design elements in-line with other urban streetscaping improvements around the city. These elements add significant additional cost compared with off the shelf products. The streetlighting assumptions are one area where the assumption of bespoke elements add significant cost.

At the request of the client (LGWM) the following provisional sums have been included in extraordinary construction costs:

\$1M for artistic and cultural inputs to project.

Carriageway alignment through Courtenay Place.

The previous estimate assumed that the median strip through Courtenay Place would either remain as a median (or be incorporated into the footpath areas). However, in the design which has informed the current estimate the current median area is converted to carriageway (the cycle /micro-mobility facility is a key contributor to this change). The median along Courtenay Place contains a large number of trees and most of the street lighting along this section. This change has resulted in replacing the majority of existing lighting through Courtenay Place and the need to provide for temporary lighting during construction for the period between when the median is removed and the new kerbs lines are constructed.

Complexity of construction staging and impacts

As noted in section 4 an indicative construction staging programme has been identified for the proposed improvements (which can be found in Appendix D of this report). This construction staging has identified the complexities of constructing this project and what it will mean for users of the transport system and local residents and businesses. The difference stages will result in multiple changes in access arrangements and bus diversions which will require an extremely robust communications approach to ensure all parties are aware of what is happening at different times.

The impact of these complexities has been reflected in the cost estimate in a number of ways including:

• specific costs for temporary and permanent diversions (in addition to the typical traffic management requirements) and

• allowance for a communications team and advertising to manage how the changes are communicated (this is assumed to include allowance for one full time employee and \$750K of advertising per year for three years).

Increases in rates

The latest cost indexes for infrastructure from Waka Kotahi indicate that the cost index between June 2020 and March 2021 has increased by approximately 3%². However, some of the rates used for the current estimate have been based on recent contract rates which are significantly higher than those used for the previous estimate. Anecdotal evidence from current projects is that supply issues for some products and labour shortages are significantly increasing costs.

Other scope changes and assumptions

A number of other scope changes have been incorporated into the preferred option, these include:

- Changes to intersections and crossing to integrate cycle and micro-mobility access to the dedicated facilities on Lambton Quay and Courtenay Place.
- An improved understanding of the complexity associated with underground services along and across the Golden Mile.
- Allowance for access controls (ANPR cameras) to monitor vehicle access to the Golden Mile (eight cameras along the length).

8.3 Approach to risk and contingency

The approach to contingency and funding risk for the previous option estimate was to use a simple overall percentage to allow a relative comparison of options

As noted above, the current estimate has analysed the risk using the Hong Kong method to more accurately estimate the level of contingency and funding risk.

² Construction other than structures index (costs excluding bitumen) https://www.nzta.govt.nz/assets/resources/procurement-manual/docs/latest-values-for-2012infrastructure-cost-indexes.xls

9 Parallel Estimate

Waka Kotahi (LGWM) commissioned WT Infrastructure to undertake a parallel estimate. This scope of the parallel estimate included a review of both quantities and rates.

An initial meeting to discuss the parallel estimate was undertaken virtually on 3 September 2021.

Table 8 shows how the two Base Estimates varied during the reconciliation process. At the end of the process the two values for the base estimate were within 1%. The expected and 95th percentile costs varied more based on the assessment of contingency and funding risk.

However, it is worth noting that the WT report states "WSP have utilised a risk-based approach to contingency using the Hong Kong method. We agree that this is the best approach for this stage of the project. We have used the general approach and applied percentage contingencies across each of the elements. This has been provided as a comparison, utilising similar contingency allowances that have been utilised across the wider LGWM programme."

Table 8: Comparison of Base Estimates

		WSP estimate	WT estimate	Difference (%)
	Base	\$68.9M	\$64.5M	-6.5%
As at 3 September 2021	Expected	\$103.3M	\$83.8M	-18.8%
	P95	\$134.8M	\$96.4M	-28.5%
	Base	\$64.9M	\$65.5M	+0.9%
As at 13 September 2021	Expected	\$98.9M	\$85.1M	-14.0%
	P95	\$116.8M	\$100.8M	-13.7%

Table 4 below shows the percentage differences in Base Estimate on a section-by-section basis.

Eler	nent	WSP estimate (\$M)	WT estimate (\$M)	Difference (\$M)
Design & project	Consultancy fees	4.8	4.9	+0.1
development	Client managed cost	2.4	2.5	+0.1
Construction				
Monitoring, MSQA, Client Managed Cost	Consultancy (construction monitoring) fees	3.6	3.4	-0.2
and Consent Monitoring Fees	Client managed cost	5.2	5.4	+0.2

Element	WSP estimate (\$M)	WT estimate (\$M)	Difference (\$M)
Physical Works			
Environmental Compliance	0.4	0.4	0.0
Earthworks	0.5	0.4	-0.1
Ground Improvements			
Drainage	5.0	4.0	-1.0
Pavement and Surfacing	2.0	2.0	0.0
Bridges			
Retaining Walls			
Traffic Services	9.7	9.4	-0.3
Services Relocation	7.5	7.5	0.0
Landscaping and Urban Design	8.1	9.6	1.5
Traffic Management and temporary works	6.8	7.2	0.4
Preliminary and General	8.0	8.1	0.1
Extraordinary Construction Costs	1.0	0.8	-0.2
Overall base cost	64.9	65.5	0.6

As the table above shows the difference the base estimates is approximately \$0.6M.

Most of that difference is across three items:

- \$1.0M less cost for drainage costs in WT's estimate.
- \$1.5M of additional cost for landscaping and urban design cost in WT's estimate.

A copy of WT Infrastructure's report, dated 13 September 2021 is included in Appendix F.

10 LGWM approach to contingency and funding risk

LGWM reviewed the risk assessment and corresponding contingency percentages presented by WSP and noted that these have been applied using a qualitative assessment. LGWM also considered the contingency percentages applied by the independent parallel estimator WT Partnerships. LGWM assessed the recommendations of both reports and on balance, based on available information, agreed to a 30% contingency for expected estimate and 50% contingency for P95 with the exception of services relocation item, for which, LGWM agreed to a 100% contingency allowance for P95 estimate. LGWM also noted that in Pre-implementation phase, these risks can be collectively managed with consultant and contractor using flexible design approach, early contractor involvement, capturing on-site information on services and developing detailed construction methodology.³

The LGWM risk allowances discussed above are outlined below:

- contingency of 30% for all items
- 95th percentile estimate is 50% over the base for all items except for service relocations.
- 95th percentile estimate for service relocations is 100% over the base.

Table 10 below summarises the expected and 95th percentile estimates calculated using the LGWM contingency and risk assumptions with a comparison against the WSP estimate.

	WSP assessed estimates (\$M)	LGWM assessed estimates (\$M)
Base estimate	\$64.9	\$64.9
Expected estimate	\$98.9	\$84.4
95 th percentile Estimate	\$116.8	\$101.1

Table 10: Cost Estimate Comparison: Alternative Risk and Contingency Assumptions

³ Email from E. Anand to S. Blackmore on 7 September 2021

11 Maintenance costs

The following estimate of maintenance costs has not been included in the implementation cost estimate but has been presented here to inform the economic analysis for the project.

11.1 Existing costs

The existing costs for the maintenance of the Golden Mile corridor have been provided by Wellington City Council from RAMM and are summarised in Table 11 below.

	Average cost per annum	Comments
Paver replacement	\$560,000	Based on average quantities from 2016-2020 (2,500m²) using current contract rates.
Cleaning	\$130,000	Based on average costs from 2016- 2020
Dispatches ⁴	\$350,000	Based on average costs from 2016- 2020 (excluding external projects)

11.2 Paver maintenance costs

The proposed project includes the addition of significant quantities of new pavers. The current clay pavers used along the Golden Mile have a very short life and are a significant maintenance cost (as shown in Table 11 above). Table 12 below compares the expected change in annual costs associated with the project (if clay pavers or a product with a similar life-span were used) is approximately \$360,000. This is a conservative assessment and the maintenance cost would reduce with other forms of footpath surface.

Table 12: Paving replacement costs

Туре	Area⁵	Paver life	Paver replacement cost (per m²)	Area renewed (p.a.)	Average maintenance cost (p.a.)
New clay paving	11,400	7	\$220	1630	\$360,000
Net change	11,400				\$360,000

11.3 Other maintenance costs

As noted in Table 11 above, there are approximately \$480,000 of other maintenance costs per annum currently incurred along the Golden Mile.

⁴ Dispatches includes all other maintenance not mentioned above including, surfacing, street lights, seats etc.

⁵ Excludes new areas of cycleway or landscaping

An overview of the dispatch types indicates that approximately 60% of the value of dispatches are road carriageway related and that approximately 40% of the value of dispatches are footpath / streetscape related.

The proposed project reduces carriageway areas by approximately 40% and increase footpath / streetscaping areas by approximately 50%.

Applying the relative change in areas to the relative value of dispatches indicates that the overall value of dispatches is expected to remain largely unchanged (road carriageway related costs decrease by a similar amount to the increase in footpath / streetscape related costs).

As a result, no net change in other maintenance costs is expected.

11.4 Overall

The net change in maintenance costs are expected to increase by approximately \$360,000 per annum.

Appendix A - Project Estimate Summary (Form C)

Project Estimate - Form C

Golden Mile

DBE

		Det	tailed Business	Case Estimate
Item	Description	Base Estimate	Contingency	Funding Risk Contingency
Α	Nett Project Property Cost	0		
	Project Development Phase			
	- Consultancy Fees	Nil		
	- NZTA Managed Costs	Nil		
В	Total Project Development	Nil		
	Pre-implementation Phase			
	- Consultancy Fees	4789000		
	- NZTA Managed Costs	2395000		
С	Total Pre-implementation	7184000		
	Implementation Phase			
	Implementation Fees			
	- Consultancy Fees	Nil		
	- NZTA Managed Costs	5,245,000		
	- Construction Monitoring Fees	3,592,000		
	Sub Total Base Implementation Fees	8837000		
	Physical Works			
1		412,000		
2		493,000		
3		Nil		
4		4,981,000		
5		1,981,000		
6		Nil		
7		Nil		
8		9,670,000		
9		7,500,000		
10		8,101,000		
11		6,775,000		
12		7,982,000		
13	/	1,000,000		
	Sub Total Base Physical works	48895000		
D	Total for Implementation Phase	57732000		
E	Project Base Estimate (A-	64,916,000		
	Say	64,916,000		
F	Contingency (Assessed/Analysed)	(A+C+D)	33,994,000	
G	Project Expected Estimate	(E+F)	98,910,000	
		Say	98,910,000	
		% of Base		
н	Funding Risk Contingency (Assessed/Analysed)		(A+C+D)	17,894,000
	95th percentile Project Estimate		(G+H)	116,804,000
			Say	\$116,804,000
			% of Base	180%
L			/0 01 Du3C	100/0

Date of Estimate	Cost Index (Qtr/Year) 02 / 2021
Estimate prepared by	Signed
Estimate internal peer review by	Signed
Risk Analysis by:	Signed
Estimate external peer review by	Signed
Estimate accepted by Waka Kotahi	Signed

Note: (1) These estimates are exclusive of escalation and GST.

(2) Project Development Phase Estimates are set to Nil as these are now sunk costs.

Detailed Business Case Estimate

Appendix B - Cost Schedule

Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
A	Project Property Cost				0		0	No property required
A.1	Land Purchase Legal Survey Fees	sq.m LS			0			
	Legalisation Costs	LS			0 0			
	INVESTIGATION & REPORTING Consultant's fees	%			0 0		0	Sunk costs
B.2	Client managed costs (including property acquisition agent's	%			0 0			
	DESIGN & PROJECT DEVELOPMENT Consultant's design fees	%	47,894,532	10.0%	0 4,789,453	4,789,453.25	7,184,180	Aligned to curent estimate of fees
	Client managed costs (including property acquisition agent's fees)	%	47,894,532	5.0%	2,394,727	2,394,726.62		Client managed costs during detailed design and tendering
D	Construction				0 0			
D	MSQA & CLIENT MANAGED COSTS Consultant's surveillance during construction phase	%	47,894,532	7.5%	0 3,592,090	3,592,089.94	8,836,817	MSQA costs
	Client managed costs (including property acquisition agent's fees)	%	47,894,532	5.0%	2,394,727	2,394,726.62		Client managed costs during construction (excluding communications - refer extraordinary construction
D.3	Communications manager and advertising	years	3	950,000.0	2,850,000	2,850,000.00		costs) 1x FTE coms stake holder manager (senior level) \$200k pa
								Advertising (750k pa)
	Physical Works				0 0			
1 1.1	ENVIRONMENTAL COMPLIANCE ENVIRONMENTAL MANAGEMENT PLAN	LS	1	20,000	0 20,000	20,000.00	411,500	
	EROSION AND SEDIMENT CONTROL MEASURES				0	139,000.00		Assume there will be one undertake per site and each one will make up a section of the overcarching
1.2.1. 1.2.2.	Lambton Quay Willis Street	wks wks	56 24	750 750	42,000 18,000			Assume 500 per week as a base This is because the cost is assumed to be
								proportional time. The sites for this project are all reletive. If they are bigger or more complex likely to
1.2.3.	Manners Street	wks	8	750	6,000			take longer and hence cost more Assume no dewatering required. Control measures
								are to manage water runoff into or out of site. Treatment would include sediment sausages and catchpit filter bags. These would need to be cleared
								after each day of rain Larger sites assumed to cost 50% more than base
1.2.4.	Courtenay Place	wks	48	750	36,000			rate for the smaller side roads works
1.2.5. 1.2.6.	Side roads - Ballance Street Side roads - Stout Street	wks wks	4	500 500 750	2,000 2,000			
1.2.7. 1.2.8. 1.2.9.	Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street	wks wks wks	8 4	750 750 500	6,000 6,000 2,000			
1.2.10. 1.2.11.	Side roads - Panama Street Side roads - Mercer Street	wks wks	4	500 500	2,000 2,000 2,000			
1.2.12. 1.2.13.	Side roads - Willeston Street / Customhouse Quay Side roads - Boulcott Street / Willis Street (south)	wks wks	2	500 500	1,000 2,000			
1.2.14. 1.2.15.	Side roads - Cuba Street Side roads - Taranaki Street	wks wks	4	500 500	2,000			
1.2.16. 1.2.17.	Side roads - Dixon Street Side roads - Tory Street	wks wks	4 4	500 500	2,000 2,000			
1.2.18. 1.2.19.	Side roads - Allen Street Side roads - Blair Street	wks wks	4 4	500 500	2,000 2,000			
1.3	SITE FENCING				0	252,500.00		Assume 400m of site fencing per week
1.3.1. 1.3.2.	Lambton Quay Willis Street	wks wks	56 24	1,250 1,250	70,000 30,000			
1.3.3. 1.3.4.	Manners Street Courtenay Place	wks wks	8 48	1,250 1,250	10,000 60,000			
1.3.5. 1.3.6.	Side roads - Ballance Street Side roads - Stout Street	wks wks	4	1,250 1,250	5,000 5,000			
1.3.7. 1.3.8.	Side roads - Waring Taylor Street Side roads - Johnston Street	wks wks	8 8	1,250 1,250	10,000 10,000			
1.3.9. 1.3.10.	Side roads - Brandon Street Side roads - Panama Street	wks wks	4	1,250 1,250	5,000 5,000			
1.3.11. 1.3.12. 1.3.13.	Side roads - Mercer Street Side roads - Willeston Street / Customhouse Quay Side roads - Boulcott Street / Willis Street (south)	wks wks wks	4 2 4	1,250 1,250 1,250	5,000 2,500 5,000			
1.3.13. 1.3.14. 1.3.15.	Side roads - Doulout Street Side roads - Cuba Street Side roads - Taranaki Street	wks wks wks	4 4 4	1,250 1,250 1,250	5,000 5,000 5,000			
1.3.16. 1.3.17.	Side roads - Talanak Street Side roads - Dixon Street Side roads - Tory Street	wks wks wks	4 4	1,250 1,250 1,250	5,000 5,000 5,000			
1.3.18. 1.3.19.	Side roads - Allen Street Side roads - Blair Street	wks wks	4 4	1,250 1,250	5,000 5,000			
					0			
2.1	EARTHWORKS SITE CLEARANCE / CUT TO WASTE				0	482,100.00	493,202	
2.1.1. 2.1.1.1	Road converted to footpath or cycleway (100mm depth) Lambton Quay	m2	4450	25	0 111,250			This is just the cut to waste portion of the Road being converted to footpath or cycleway. Cut to waste for
								concrete paths and brick work is normally around 150-200/m3 use higher end and add 20% for the
2.1.1.2	Willis Street	m2	859	25	21,475			location and reduced productivity
2.1.1.3 2.1.1.4	Manners Street Courtenay Place	m2 m2	300 4175	25 25	7,500 104,375			
2.1.1.5 2.1.1.6	Side roads - Ballance Street Side roads - Stout Street	m2 m2	40 174	25 25	1,000 4,350			
2.1.1.7 2.1.1.8	Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Proden Street	m2 m2 m2	376 248 100	25 25 25	9,400 6,200 2,500			
2.1.1.9 2.1.1.10 2.1.1.11	Side roads - Brandon Street Side roads - Panama Street Side roads - Mercer Street	m2 m2 m2	100 300 271	25 25 25	2,500 7,500 6,775			
2.1.1.11 2.1.1.12 2.1.1.13	Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m2 m2 m2	271 0 42	25 25 25	6,775 0 1,050			
2.1.1.13 2.1.1.14 2.1.1.15	Side roads - Cuba Street Side roads - Taranaki Street Side roads - Dixon Street	m2 m2	42 219 0	25 25 25	5,475 0			
2.1.1.16 2.1.1.17	Side roads - Tory Street Side roads - Allen Street	m2 m2	0 100	25 25	0 2,500			
2.1.1.18 2.1.2.	Side roads - Blair Street Road converted to landscape (300mm depth)	m2	118	25	2,950 0			This is just the cut to waste portion of the Road being
								converted to landscape. Cut to waste for roads concrete paths and brick work is normally around 150-200/m3 use higher end and add 20% for the
								location and reduced productivity. Note this is for 300mm depth not 100mm as above
2.1.2.1	Lambton Quay	m2	90	75	6,750			i.e. 3*25
2.1.2.2	Willis Street	m2	0	75	0		I	I I

Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
2.1.2.3 2.1.2.4 2.1.3.	Manners Street Courtenay Place Footpath or landscape converted to road (300mm depth)	m2 m2	0 0	75 75	0 0 0			As above - This is just the cut to waste portion of the Road being converted to road Cut to waste for roads concrete paths and brick work is normally around 150-200/m3. Would be cheaper for landscape removal however these are merged. use higher end and add 20% for the location and reduced productivity. Note this is for 300mm depth not 100mm as above i.e. 3*25
2.1.3.1 2.1.3.2 2.1.3.3 2.1.3.4 2.1.3.5 2.1.3.6 2.1.3.7 2.1.3.8 2.1.3.9 2.1.3.10 2.1.3.11 2.1.3.12 2.1.3.13 2.1.3.14 2.1.3.15 2.1.3.16 2.1.3.17 2.1.3.18 2.1.3.18 2.1.4.	Lambton Quay Willis Street Manners Street Courtenay Place Side roads - Ballance Street Side roads - Stout Street Side roads - Waring Taylor Street Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Johnston Street Side roads - Brandon Street Side roads - Panama Street Side roads - Panama Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street Side roads - Blair Street	m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m	209 0 748 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 75 75 75 75 75 75 75 75 75 75 75 75 7	15,675 0 56,100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			As above - This is just the cut to waste portion of the Road being converted to landscape.
2.1.4.1	Lambton Quay	m2	860	75	64,500			Cut to waste for roads concrete paths and brick work is normally around 150-200/m3. Would be cheaper for landscape removal however these are merged. use higher end and add 20% for the location and reduced productivity. Note this is for 300mm depth not 100mm as above i.e. 3*25
2.1.4.2 2.1.4.3 2.1.4.4 2.1.5.	Willis Street Manners Street Courtenay Place Landscape converted to footpath / cycleway (300mm depth)	m2 m2 m2	20 0 320	75 75 75	1,500 0 24,000 0			This is just the cut to waste portion of the garden being converted to a pavement. Cut to waste for roads concrete paths and brick work is normally around 150-200/m3. Would be cheaper for clean landscape removal however these are mixed sites. use higher end and add 20% for the location and reduced productivity. Note this is for 300mm depth not 100mm as above
2.1.5.1 2.1.5.2 2.1.5.3 2.1.5.4 2.1.6. 2.1.6.1	Lambton Quay Willis Street Manners Street Courtenay Place Footpath replacement (100mm depth) Lambton Quay Willis Street	m2 m2 m2 m2 m2 m2	257 0 0 0	75 75 75 75 25 25	19,275 0 0 0 0 0			i.e. 3*25 100mm depth of cuts to waste 1m2 i.e. 1/10 of m3 rate. Cut to waste for roads concrete paths and brick work REMOVED - NO FOOTPATH REPLACEMENT
2.1.6.3 2.1.6.4	Courtenay Place Misc (balance quantities) MPORTED FILL Landscape converted to footpath (200mm depth) Lambton Quay	m2 m2 m2	257	23 25 25 43	0 0 0 0 11,102	11,102.40		Ap65 fill 120-180/m3 allow 20% additional for working in CBD
2.2.1.2 2.2.1.3 2.2.1.4 3.2 4	Willis Street Manners Street Courtenay Place GROUND IMPROVEMENTS DRAINAGE MANHOLES	m2 m2 m2	000000000000000000000000000000000000000	43 43 43	0 0 0 0 0 0 0 0 0 0	649,500.00	4,981,165	None required
4.1.1. 4.1.1.1 4.1.1.2 4.1.1.3	New manholes DN1050 Lambton Quay Willis Street Manners Street	ea ea ea	20 5 4	11,500 11,500 11,500	0 230,000 57,500 46,000			REVISED QUANTITIES WITH PLATFORMS REMOVED
$\begin{array}{c} 4.1.1.4\\ 4.1.1.5\\ 4.1.1.6\\ 4.1.1.7\\ 4.1.1.8\\ 4.1.1.9\\ 4.1.1.10\\ 4.1.1.11\\ 4.1.1.12\\ 4.1.1.13\\ 4.1.1.13\\ 4.1.1.15\\ 4.1.1.16\\ 4.1.1.17\\ 4.1.1.18\\ 4.1.2.\\ \end{array}$	Courtenay Place Side roads - Ballance Street Side roads - Stout Street Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street Side roads - Panama Street Side roads - Panama Street Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street Side roads - Taranaki Street Side roads - Tory Street Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street New manholes DN1200	ea ea ea ea ea ea ea ea ea ea ea ea ea e	16	11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500 11,500	184,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
4.1.2.1	Lambton Quay	ea	6	12,000	72,000			REVISED QUANTITIES WITH PLATFORMS REMOVED
4.1.2.2 4.1.2.3 4.1.2.4 4.1.2.5 4.1.2.6 4.1.2.7 4.1.2.8 4.1.2.9 4.1.2.10 4.1.2.11 4.1.2.12	Willis Street Manners Street Courtenay Place Side roads - Ballance Street Side roads - Stout Street Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Johnston Street Side roads - Brandon Street Side roads - Panama Street Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south)	ea ea ea ea ea ea ea ea ea	2 2 1	12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000	24,000 24,000 12,000 0 0 0 0 0 0 0 0 0 0 0 0 0			

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Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
4.1.2.13 4.1.2.14 4.1.2.15 4.1.2.16 4.1.2.17 4.1.2.18		ea ea ea ea ea ea		12,000 12,000 12,000 12,000 12,000 12,000	0 0 0 0 0 0 0 0			
	SUMPS				0	722,500.00		
4.2.1. 4.2.1.1	Sumps removed Lambton Quay	ea	9	1,500	0 13,500			REVISED QUANTITIES WITH PLATFORMS REMOVED
4.2.1.2 4.2.1.3 4.2.1.4 4.2.1.5 4.2.1.6 4.2.1.7 4.2.1.8 4.2.1.9 4.2.1.10 4.2.1.11 4.2.1.12 4.2.1.13 4.2.1.14 4.2.1.16 4.2.1.16 4.2.1.17 4.2.1.18 4.2.1.18 4.2.1.18 4.2.1.18	Willis Street Manners Street Courtenay Place Side roads - Ballance Street Side roads - Stout Street Side roads - Waring Taylor Street Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street Side roads - Panama Street Side roads - Panama Street Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street Side roads - Dixon Street Side roads - Dixon Street Side roads - Allen Street Side roads - Allen Street Side roads - Blair Street Replace sumps	ea ea ea ea ea ea ea ea ea ea ea ea	4 0 22	1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,500	6,000 0 33,000 0 0 0 0 0 0 0 0 0 0 0 0 0			Remove existing catchpit and replace with new double sump, including extending catchpit lead
4.2.2.1	Lambton Quay	ea	10	8,000	80,000			REVISED QUANTITIES WITH PLATFORMS
4.2.2.2 4.2.2.3 4.2.2.5 4.2.2.5 4.2.2.6 4.2.2.7 4.2.2.8 4.2.2.9 4.2.2.10 4.2.2.11 4.2.2.12 4.2.2.13 4.2.2.14 4.2.2.15 4.2.2.16 4.2.2.17 4.2.2.18 4.2.3.	Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street Side roads - Dixon Street Side roads - Tory Street Side roads - Allen Street	ea ea ea ea ea ea ea ea ea ea ea ea ea e	4 1 0	8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000 8,000	32,000 8,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			New double catchpit with back entry. In accordance with WCC COP
4.2.3.1	Lambton Quay	ea	27	10,000	270,000			REVISED QUANTITIES WITH PLATFORMS REMOVED
4.2.3.2 4.2.3.3 4.2.3.4 4.2.3.5 4.2.3.6 4.2.3.7 4.2.3.8 4.2.3.9 4.2.3.10 4.2.3.11 4.2.3.12 4.2.3.14 4.2.3.15 4.2.3.16 4.2.3.17 4.2.3.18		ea ea ea ea ea ea ea ea ea ea ea ea ea	4 5 19	10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000 10,000	40,000 50,000 190,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
4.3 4.3.1.	CULVERTS / LEADS DN300 lead (sumps and strip drains)				0	819,000.00		3m per new sump and 5m per strip-drain section
4.3.1.1	Lambton Quay	m	211	2,100	443,100			REVISED QUANTITIES WITH PLATFORMS REMOVED
4.3.1.2	Willis Street	m	17	2,100	35,700			
4.3.1.3 4.3.1.4 4.3.1.5 4.3.1.6 4.3.1.7 4.3.1.8 4.3.1.9 4.3.1.10 4.3.1.11 4.3.1.12 4.3.1.13 4.3.1.14 4.3.1.15 4.3.1.16 4.3.1.17 4.3.1.18	Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street Side roads - Dixon Street Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street	<pre>m m m m m m m m m m m m m m m m m m m</pre>	30 132	2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,100	63,000 277,200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
4.4 4.4.1. 4.4.1.1	KERBING/EDGE STRIP Removal of kerb and channel Lambton Quay	m	2,084	35	0 0 72,940	2,790,165.00		
4.4.1.2 4.4.1.3 4.4.1.4 4.4.1.5 4.4.1.6 4.4.1.7 4.4.1.8 4.4.1.9 4.4.1.10 4.4.1.11 4.4.1.12 4.4.1.13	Willis Street Manners Street Courtenay Place Side roads - Ballance Street Side roads - Stout Street Side roads - Stout Street Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street Side roads - Panama Street Side roads - Panama Street Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m m m m m m m m m m m m m m m m m m m	751 92 2,074 0 0 0 0 0 0 0 0 0 0 0	35 35 35 35 35 35 35 35 35 35 35 35	26,285 3,220 72,590 0 0 0 0 0 0 0 0 0 0 0 0 0			

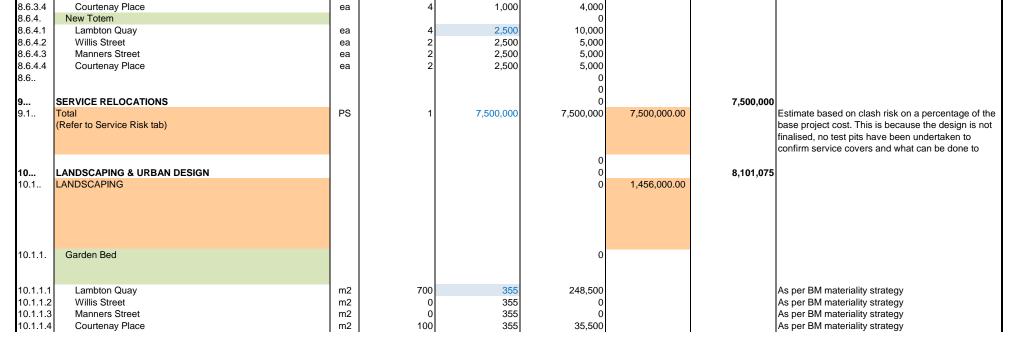
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4.4.1.14 4.4.1.15 4.4.1.16 4.4.1.17 4.4.1.18 4.4.2. 4.4.2.1 4.4.2.2 4.4.2.2 4.4.2.3	Side roads - Taranaki Street Side roads - Dixon Street Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street	m m m m	0 0 0	35 35 35	0 0 0			
4.4.1.17 4.4.1.18 4.4.2. 4.4.2.1 4.4.2.2 4.4.2.2 4.4.2.3	Side roads - Allen Street Side roads - Blair Street		Ű	35	0			
4.4.2. 4.4.2.1 4.4.2.2 4.4.2.3		m	0	35 35	0			
4.4.2.3	New Kassel Kerb Lambton Quay	m	220	365	0 80,300			Rounded bus stop lengths + 10m
	Willis Street	m	140	365	51,100			Rounded bus stop lengths + 10m
4.4.2.4 4.4.3.	Manners Street Courtenay Place New standard kerb and channel	m m	110 140	365 365	40,150 51,100			Rounded bus stop lengths + 10m Rounded bus stop lengths + 10m
1.4.3.					0			
4.4.3.1 4.4.3.2	Lambton Quay Willis Street	m m	831 614	230 230	191,130 141,220			
4.4.3.3 4.4.3.4	Manners Street Courtenay Place Side scale - Dellage Street	m m	98 786	230 230	22,540 180,780			
4.4.3.5 4.4.3.6 4.4.3.7	Side roads - Ballance Street Side roads - Stout Street Side roads - Waring Taylor Street	m m m	0 0 0	230 230 230	0 0			
4.4.3.8 4.4.3.9	Side roads - Johnston Street Side roads - Brandon Street	m m	0	230 230 230	0			
4.4.3.10 4.4.3.11	Side roads - Panama Street Side roads - Mercer Street	m m	0 0	230 230	0 0			
1.4.3.12 1.4.3.13	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m m	90 0	230 230	20,700 0			
1.4.3.14 1.4.3.15 1.4.3.16	Side roads - Taranaki Street Side roads - Dixon Street Side roads - Tory Street	m m m	80 9 68	230 230 230	18,400 2,070 15,640			
.4.3.17 .4.3.18	Side roads - Allen Street Side roads - Blair Street	m m	0	230 230 230	0			
4.4.4.	New strip drain				0			New ACO slot drain, with cycle and heel friendly grate
4.4.4.1	Lambton Quay	m	910	1,000	910,000			REVISED QUANTITIES WITH PLATFORMS REMOVED
.4.4.2	Willis Street	m	100	1,000	100,000			
.4.4.3	Manners Street Courtenay Place	m m	120 670	1,000 1,000	120,000 670,000			
.4.4.5 .4.4.6	Side roads - Ballance Street Side roads - Stout Street	m m		1,000 1,000	0 0			
.4.4.7	Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street	m m		1,000 1,000	0 0			
.4.4.9 .4.4.10 .4.4.11	Side roads - Brandon Street Side roads - Panama Street Side roads - Mercer Street	m m m		1,000 1,000 1,000	0			
.4.4.12 .4.4.13	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m m		1,000	0			
.4.4.14 .4.4.15	Side roads - Taranaki Street Side roads - Dixon Street	m m		1,000 1,000	0 0			
1.4.4.16 1.4.4.17 1.4.4.18	Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street	m m m		1,000 1,000 1,000	0 0			
5 P.	PAVEMENT & SURFACING PAVEMENT			1,000	0 0 0	252,648.00	1,981,068	
5.1.1.	New areas of road (previously footpath or landscape)				0			Includes surface preparation, sub-base, base course
.1.1.	Lambton Quay Willis Street	m2 m2	209	264 264	55,176			Excludes cut to waste to 100mm as that is include above. Assume 400mm pavement min subbase 65/m2 + BC pavement
	Wins Street	1112	0	204	0			\$100/100mm/m2+AC surfacing \$55/m2 for 50mm thick (100) + 20% for productivity losses and working
5.1.1. 5.1.1.	Manners Street Courtenay Place	m2 m2	0 748	264 264	0 197,472			
5.1.1. 5.1.1.	Side roads - Ballance Street Side roads - Stout Street	m2 m2	0 0	264 264	0 0			
.1.1. .1.1. .1.1.	Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street	m2 m2 m2	0 0	264 264 264	0 0			
.1.1.	Side roads - Panama Street Side roads - Mercer Street	m2 m2	0	264 264 264	0			
.1.1. .1.1.	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m2 m2	0 0	264 264	0 0			
.1.1.	Side roads - Taranaki Street Side roads - Dixon Street	m2 m2	0 0	264 264	0 0			
.1.1. .1.1. .1.1.	Side roads - Tory Street Side roads - Allen Street Side roads - Blair Street	m2 m2 m2	0 0	264 264 264	0			
.2 S	URFACING New areas of road (previously footpath or landscape) (50mm	1112	Ŭ	204	0	1,728,420.00		
.2.1.1	Lambton Quay	m2	209	80	16,720			Allows for 60/m2 for AC and 20/m2 for shape correction for crossfall tie in
.2.1.2 .2.1.3	Willis Street Manners Street	m2 m2 m2	0 0 748	80 80 80	0 0			
.2.1.4 .2.1.5 .2.1.6	Courtenay Place Side roads - Ballance Street Side roads - Stout Street	m2 m2 m2	748 0 0	80 80 80	59,840 0 0			
.2.1.0 .2.1.7 .2.1.8	Side roads - Stour Sireet Side roads - Waring Taylor Street Side roads - Johnston Street	m2 m2 m2	0	80 80 80	0			
.2.1.9 .2.1.10	Side roads - Brandon Street Side roads - Panama Street	m2 m2	0	80 80	0			
.2.1.11 .2.1.12	Side roads - Mercer Street Side roads - Willeston Street / Customhouse Quay Side roads - Baulatt (Willia Street (auth)	m2 m3	0 0	80 80	0 0			
.2.1.12 .2.1.13 .2.1.14	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street Side roads - Taranaki Street	m2 m2 m2	0	80 80 80	0 0			
.2.1.14 .2.1.15 .2.1.16	Side roads - Dixon Street Side roads - Dixon Street Side roads - Tory Street	m2 m2 m2	0	80 80 80	0			
.2.1.17 .2.1.18	Side roads - Allen Street Side roads - Blair Street	m2 m2	0 0	80 80	0 0			
.2.2.	Mill existing road surface Lambton Quay	m2	5,386	30	0 161,580			Removed 2063m2 as advised
.2.2.2 .2.2.3	Willis Street Manners Street	m2 m2	1,907 1,714	30 30	57,210 51,420			Removed 455+1956m2 as advised Added 1382m2 and removed 1845 + 2188 m2 as advised
.2.2.4 .2.2.5	Courtenay Place Side roads - Ballance Street	m2 m2	2,268 1,155	30 30	68,040 34,650			advised Removed 542+850m2 as advised
.2.2.6	Side roads - Stout Street Side roads - Waring Taylor Street	m2 m2	886 0	30 30 30	26,580 0			
	Side roads - Johnston Street	m2 m2	812 1,012	30 30	24,360 30,360			
.2.2.7 .2.2.8 .2.2.9	Side roads - Brandon Street							
.2.2.7 .2.2.8 .2.2.9 .2.2.10 .2.2.11 .2.2.12	Side roads - Brandon Street Side roads - Panama Street Side roads - Mercer Street Side roads - Willeston Street / Customhouse Quay	m2 m2 m3	800 524	30 30 30	24,000 15,720			

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Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
5.2.2.15 5.2.2.16	Side roads - Taranaki Street Side roads - Dixon Street	m2 m2	0 0	30 30	0			1382m2 removed
5.2.2.17 5.2.2.18	Side roads - Tory Street Side roads - Allen Street	m2 m2	0 410	30 30	0 12,300			
5.2.2.19 5.2.3.	Side roads - Blair Street Reseal existing road surface	m2	620	30	18,600 0			Based on current AC surfacing placing rates. Would
								need to have reasonable quantities. This is purely for a 30-50mm AC replacement. Milling is allowed for
5.2.3.1	Lambton Quay	m2	5,386	60	323,160			separately Derived from quantities above
5.2.3.2 5.2.3.3	Willis Street Manners Street	m2 m2	1,907 1,714	60 60	114,420 102,840			Derived from quantities above Derived from quantities above
5.2.3.4 5.2.3.5 5.2.3.6	Courtenay Place Side roads - Ballance Street Side roads - Stout Street	m2 m2 m2	2,268 1,155 886	60 60 60	136,080 69,300 53,160			Derived from quantities above Derived from quantities above Derived from quantities above
5.2.3.6 5.2.3.7 5.2.3.8	Side roads - Stour Street Side roads - Waring Taylor Street Side roads - Johnston Street	m2 m2 m2	000 0 812	60 60	53,180 0 48,720			Derived from quantities above Derived from quantities above Derived from quantities above
5.2.3.9 5.2.3.10	Side roads - Brandon Street Side roads - Panama Street	m2 m2	1,012 800	60 60	60,720 48,000			Derived from quantities above Derived from quantities above
5.2.3.11 5.2.3.12	Side roads - Mercer Street Side roads - Willeston Street / Customhouse Quay	m2 m3	524 0	60 60	31,440 0			Derived from quantities above Derived from quantities above
5.2.3.13 5.2.3.14	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	m2 m2	0 860	60 60	0 51,600			Derived from quantities above Derived from quantities above
5.2.3.15 5.2.3.16	Side roads - Taranaki Street Side roads - Dixon Street	m2 m2	0 0	60 60	0 0			Derived from quantities above Derived from quantities above
5.2.3.17 5.2.3.18	Side roads - Tory Street Side roads - Allen Street	m2 m2	0 410	60 60	0 24,600			Derived from quantities above Derived from quantities above
5.2.3.19 5.3	Side roads - Blair Street RAISED SAFETY PLATFORMS	m2	620	60	37,200 0 0			Derived from quantities above
5.3.1. 5.3.1.1	Platforms Lambton Quay - Stout Street	m2	140	0	0	-		Assume concrete
0.0.1.1			110	Ŭ	0			
5.3.1.2	Lambton Quay - Midland Park	m2	560	0	0			PLATFORMS REMOVED
5.3.1.3	Lambton Quay - Grey Street	m2	213	0	0			
5.3.1.4 5.3.1.5 5.3.1.6	Willis Street / Lambton Quay Willis Street - Mercer Street	m2 m2 m2	350 217 112	0 0	0			
5.3.1.6 5.3.1.7	Dixon Street	m2	112	0	0			
	BRIDGES RETAINING WALLS				0 0			None required None required
8	IRAFFIC SERVICES PAVEMENT MARKING				0 0	600,000.00	9,669,500	
8.1.1. 8.1.1.1	Remove existing and provide new Lambton Quay	m	820	300	246,000			Full length
8.1.1.2	Willis Street	m	340	300	102,000			Full length
8.1.1.3 8.1.1.4	Manners Street Courtenay Place	m m	100 440	300 300	30,000 132,000			20% of length Full length
8.1.1.5	Side roads - Ballance Street	LS	1	6,000	6,000			Remove existing linemarking and replace
8.1.1.6 8.1.1.7	Side roads - Stout Street Side roads - Waring Taylor Street	LS LS	1 1	6,000 6,000	6,000 6,000			
8.1.1.8 8.1.1.9	Side roads - Johnston Street Side roads - Brandon Street	LS LS	1	6,000 6,000	6,000 6,000			
8.1.1.10 8.1.1.11 8.1.1.12	Side roads - Panama Street Side roads - Mercer Street Side roads - Willeston Street / Customhouse Quay	LS LS LS	1	6,000 6,000 6,000	6,000 6,000 6,000			
8.1.1.12 8.1.1.13 8.1.1.14	Side roads - Boulcott Street / Willis Street (south) Side roads - Cuba Street	LS LS LS	1	6,000 6,000	6,000 6,000			
8.1.1.15 8.1.1.16	Side roads - Taranaki Street Side roads - Dixon Street	LS LS	1 1	6,000 6,000	6,000 6,000			
8.1.1.17 8.1.1.18	Side roads - Tory Street Side roads - Allen Street	LS LS	1 1	6,000 6,000	6,000 6,000			
8.1.1.19	Side roads - Blair Street	LS	1	6,000	6,000 0 0			
8.2 8.2.1. 8.2.1.1	ROAD SIGNS & SUPPORTS Remove existing and provide new Lambton Quay	m	820	150	123,000	450,000.00		Full length
0.2.1.1	Lambon Quay		020	100	123,000			
8.2.1.2 8.2.1.3	Willis Street Manners Street	m m	340 100	150 150	51,000 15,000			Full length 20% of length
8.2.1.4 8.2.1.5	Courtenay Place Side roads - Ballance Street	m LS	440 1	150 13,000	66,000 13,000			Full length Remove 10 signs (\$200 each) and add 10 new signs
8.2.1.6 8.2.1.7	Side roads - Stout Street Side roads - Waring Taylor Street	LS LS	1	13,000 13,000	13,000 13,000			(\$1500 each)
8.2.1.7 8.2.1.8 8.2.1.9	Side roads - Waring Taylor Street Side roads - Johnston Street Side roads - Brandon Street	LS LS LS	1 1 1	13,000 13,000 13,000	13,000 13,000 13,000			
8.2.1.10 8.2.1.11	Side roads - Panama Street Side roads - Mercer Street	LS LS	1	13,000 13,000	13,000 13,000 13,000			
8.2.1.12 8.2.1.13	Side roads - Willeston Street / Customhouse Quay Side roads - Boulcott Street / Willis Street (south)	LS LS	1 1	13,000 13,000	13,000 13,000			
8.2.1.14 8.2.1.15	Side roads - Cuba Street Side roads - Taranaki Street	LS LS	1	13,000 13,000	13,000 13,000			
8.2.1.16 8.2.1.17 8.2.1.18	Side roads - Dixon Street Side roads - Tory Street Side roads - Allen Street	LS LS LS	1	13,000 13,000 13,000	13,000 13,000 13,000			
8.2.1.18 8.2.1.19	Side roads - Allen Street	LS LS	1	13,000	13,000 13,000 0			
8.3 8.3.1.	IRAFFIC SIGNALS Reconfigure existing signalised intersection as mid-block				0 0	3,770,000.00		
8.3.1.1	crossing Stout Street	LS	1	175,000	175,000			Refer breakdown provided - ref # 3
8.3.1.2 8.3.1.3 8.3.2.	Brandon Street Mercer Street Reconfigure existing signalised mid-block crossing	LS LS	1 1	150,000 125,000	150,000 125,000 0			Refer breakdown provided - ref # 5 Refer breakdown provided - ref # 10
8.3.2. 8.3.2.1 8.3.2.2	Midland Park Grey Street	LS LS	1	225,000 115,000	0 225,000 115,000			Refer breakdown provided - ref # 4 Refer breakdown provided - ref # 7
8.3.2.3 8.3.2.4	Chews Lane Cuba Street	LS LS LS	1	75,000 125,000	75,000 125,000			Refer breakdown provided - ref # 7 Refer breakdown provided - ref # 9 Refer breakdown provided - ref # 13
8.3.2.5 8.3.2.6	St James Allen Street	LS LS	1 1	125,000 150,000	125,000 150,000			Refer breakdown provided - ref # 15 Refer breakdown provided - ref # 17
8.3.2.7 8.3.3.	Blair Street Reconfigure existing signalised intersection	LS	1	125,000	125,000 0			Refer breakdown provided - ref # 18
8.3.3.1 8.3.3.2	Bowen Street / Whitmore Street Willis Street / Lambton Quay / Willeston Street /	LS LS	1 1	100,000 225,000	100,000 225,000			Refer breakdown provided - ref # 1 Refer breakdown provided - ref # 8
8.3.3.3 8.3.3.4	Customhouse Quay Willis Street / Boulcott Street / Manners Street Manners Street / Victoria Street	LS LS	1	200,000 225,000	200,000 225,000			Refer breakdown provided - ref # 11 Refer breakdown provided - ref # 12
8.3.3.4 8.3.3.5	Manners Street / Victoria Street Manners Street / Courtenay Place / Taranaki Street / Dixon Street	LS	1	225,000 225,000	225,000			Refer breakdown provided - ref # 12 Refer breakdown provided - ref # 14
8.3.3.6 8.3.3.7	Courtenay Place / Tory Street Courtenay Place / Kent Terrace / Cambridge Terrace /	LS LS	1	150,000 100,000	150,000 100,000			Refer breakdown provided - ref # 16 Refer breakdown provided - ref # 19
8.3.3.8	Majoribanks Street Side roads - Johnston Street / Featherston Street	LS	1	10,000	10,000			Refer breakdown provided by WSP - ref # 20
- 1		. 1	. 'I	,	,			

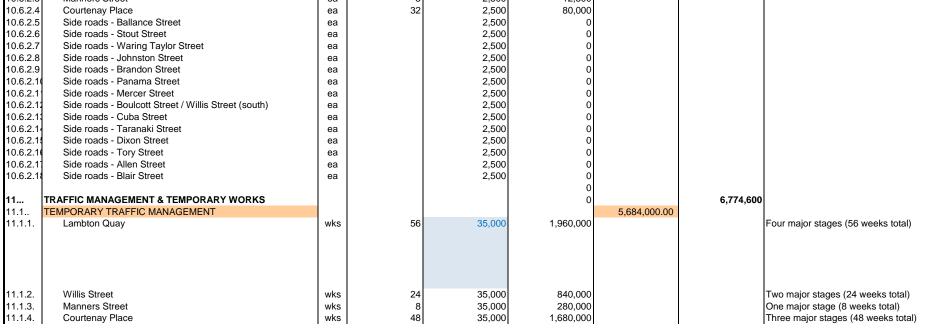
Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
8.3.3.9	Side roads - Waring Taylor Street / Featherston Street	LS	1	25,000	25,000			Refer breakdown provided by WSP - ref # 23
8.3.3.10 8.3.3.11	Side roads - Brandon Street / Featherston Street Side roads - Panama Street / Featherston Street	LS LS	1	25,000 10,000	25,000 10,000			Refer breakdown provided by WSP - ref # 24 Refer breakdown provided by WSP - ref # 21
8.3.3.12	Side roads - Mercer Street / Victoria Street	LS	1	10,000	10,000			Refer breakdown provided by WSP - ref # 22
8.3.3.13	Side roads - Cuba Street / Wakefield Street	LS	1	75,000	75,000			Refer breakdown provided by WSP - ref # 25
8.3.3.14 8.3.4.	Mitigation - Victoria Street / Ghuznee Street New mid-block signalised crossing	LS	1	25,000	25,000			Refer breakdown provided by WSP - ref # 26
8.3.4.1	Masons Lane	LS	1	175,000	175,000			Refer breakdown provided - ref # 2
8.3.4.2	Panama Street	LS	1	250,000	250,000			Refer breakdown provided - ref # 6
8.3.5.	Extra-over for temporary changes to signals during				0			Allowance for adjustments to crossings and
8.3.5.1	construction staging Stout Street	LS	1	50,000	50,000			intersections with split carriageways
8.3.5.2	Brandon Street	LS	1	50,000	50,000			
8.3.5.3	Mercer Street	LS	1	50,000	50,000			
8.3.5.4	Midland Park	LS	1	50,000	50,000			
8.3.5.5 8.3.5.6	St James Allen Street	LS LS	1	50,000 50,000	50,000 50,000			
8.3.5.7	Blair Street	LS	1	50,000	50,000			
8.3.5.8	Bowen Street / Whitmore Street	LS	1	50,000	50,000			
8.3.5.9	Willis Street / Lambton Quay / Willeston Street / Customhouse Quay	LS	1	50,000	50,000			
8.3.5.10	Manners Street / Courtenay Place / Taranaki Street /	LS	1	50,000	50,000			
	Dixon Street			,	,			
8.3.5.11	Courtenay Place / Kent Terrace / Cambridge Terrace /	LS	1	50,000	50,000			
	Majoribanks Street				0			
8.4	ACCESS CONTROLS	1			0	310,000.00		ACCESS CONTROLS REMOVED EXCEPT FOR
					Ũ			ANPR
8.4.	ANPR Cameras			00.000	0			
8.4 8.4	Lambton Quay Willis Street	ea ea	2	20,000 20,000	40,000 40,000			One at each end One at each end
8.4	Manners Street	ea	2	20,000	40,000			One at each end
8.4	Courtenay Place	ea	2	20,000	40,000			One at each end
8.4	CCTV Cameras		10	45.000	0			
8.4	Courtenay Place	ea	10	15,000	150,000			Assumes integration into existing system
8.4	Rising bollards				0			
8.4	Side roads - Ballance Street	ea	0	40,000	0			Assume access controls provided on all side roads
8.4	Side roads - Stout Street	ea	0	40,000	0			
8.4	Side roads - Waring Taylor Street	ea	0	40,000	0			
8.4	Side roads - Johnston Street	ea	0	40,000	0			
8.4 8.4	Side roads - Brandon Street Side roads - Panama Street	ea	0	40,000 40,000	0			
8.4	Side roads - Mercer Street	ea ea	0	40,000	0			
8.4	Side roads - Cuba Street	ea	0 0	40,000	0			
8.4	Side roads - Allen Street	ea	0	40,000	0			
8.4	Side roads - Blair Street	ea	0	40,000	0			
8.5	LIGHTING				0	4,438,000.00		LIGHTING SCOPE REDUCED
8.5.1.	Remove existing lighting poles				0	1,100,000.00		
8.5.1.1	Lambton Quay	ea	7	1,000	7,000			Provided - from Survey (70) - assume 10% replaced
8.5.1.2	Courtenay Place	ea	75	1,000	75,000			Provided - from Survey (83) - assume 90%
8.5.2. 8.5.2.1	Temporary lighting (relocate existing) Lambton Quay	ea	0	10,500	0			Allow 10m of ducting for each light and cabling -
0101211		°u.	Ĵ	,	Ũ			RATE REDUCED AS PER WT ESTIMATE
8.5.2.2	Courtenay Place	ea	40	10,500	420,000			Required as median removed but final kerblines not
0 5 2	Pood lighting				0			constructed, assume ~50% of existing required
8.5.3.	Road lighting				0			
8.5.3.1	Lambton Quay	ea	7	33,000	231,000			Assume 10% of existing poles replaced with new
								bespoke poles with street banners includes ducting
8.5.3.2	Courtenay Place	ea	75	33,000	2,475,000			and cabling allowance Assume 90% existing poles replaced with new
0.0.J.Z		ea	75	33,000	2,470,000			bespoke poles with street banners includes ducting
L								and cabling allowance
8.5.4.	Pedestrian lighting			00.500	0			
8.5.4.1	Lambton Quay	ea	50	20,500	1,025,000			Assume 1 every 10m (over 500m) in pedestrian / cycle area on north side of Lambton Quay between
1								Panama and Whitmore includes ducting and cabling
								allowance
8.5.4.2	Courtenay Place	ea	10	20,500	205,000			Assume 1 every 10m (over 100m) in pedestrian area
		1						in south-east corner of Courtenay Place includes ducting and cabling allowance
1					0]	g the case of the second second
	BUS STOP SIGNAGE				0	101,500.00		
8.6.1.	Relocate RTI		_	0.000	0			Real time information
8.6.1.1	Lambton Quay	ea	4	6,000	24,000			Includes removal/reinstate (2000) and relocate (5000) foundation reconnect to system (coms via
		1						cell network)
8.6.1.2	Willis Street	ea	2	6,000	12,000			
8.6.1.3	Manners Street	ea	0	6,000	0			
8.6.1.4 8.6.2.	Courtenay Place Remove RTI	ea	2	6,000	12,000			
8.6.2.1	Lambton Quay	ea	2	2,500	5,000			
8.6.2.2	Willis Street	ea	0	2,500	0			
8.6.2.3	Manners Street	ea	1	2,500	2,500			
8.6.2.4	Courtenay Place	ea	2	2,500	5,000			
8.6.3. 8.6.3.1	Remove Totem Lambton Quay	ea	7	1,000	0 7,000			Removal dispose and reinstate
8.6.3.2	Willis Street	ea	2	1,000	2,000			
8.6.3.3	Manners Street	ea	3	1,000	3,000			
8.6.3.4	Courtenay Place	ea	4	1,000	4,000		1	



Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
10.1.2.	Rain Garden				0			
10.1.2.1	Lambton Quay	m2	160	755	120,800			As per BM materiality strategy
10.1.2.2 10.1.2.3	Willis Street Manners Street	m2 m2	20 0	755 755	15,100 0			As per BM materiality strategy As per BM materiality strategy
10.1.2.4 10.1.3.	Courtenay Place Remove trees	m2	220	755	166,100 0			As per BM materiality strategy
10.1.3.1 10.1.3.2	Lambton Quay Willis Street	ea ea	10 0	5,000 5,000	50,000 0			~10 trees removed
10.1.3.3 10.1.3.4	Manners Street Courtenay Place	ea ea	0 20	5,000 5,000	0 100,000			~210 trees removed
10.1.4. 10.1.4.1	New trees Lambton Quay	ea	15	15,000	0 225,000			As per BM materiality strategy
10.1.4.2 10.1.4.3 10.1.4.4	Willis Street Manners Street Courtenay Place	ea ea ea	3 0 30	15,000 15,000 15,000	45,000 0 450,000			As per BM materiality strategy As per BM materiality strategy As per BM materiality strategy
10.2	ARCHITECTURE	cu	00	10,000		1,310,000.00		no per Divi materiality strategy
10.2.1. 10.2.1.1	Remove existing bus shelters Lambton Quay	ea	3	10,000	0 30,000	.,		Remove three shelters (all northbound)
10.2.1.2 10.2.1.3	Willis Street Manners Street	ea ea	0 3	10,000 10,000	0 30,000			Remove three shelters (all northbound)
10.2.1.4 10.2.2.	Courtenay Place Bus shelter - standard type	ea	5	10,000	50,000 0			Remove five shelters
10.2.2.1 10.2.2.2	Lambton Quay Willis Street	ea ea	4	100,000 100,000	400,000 200,000			Rate assumes two shelters @\$50K each Rate assumes two shelters @\$50K each
10.2.2.3 10.2.2.4	Manners Street Courtenay Place	ea ea	2 0	100,000 100,000	200,000 0			Rate assumes two shelters @\$50K each Rate assumes two shelters @\$50K each
10.2.3. 10.2.3.1 10.2.3.2	Bus shelter - architectural feature Lambton Quay Willis Street	ea ea	0	200,000 200,000	0			Rate assumes two shelters @\$100K each Rate assumes two shelters @\$100K each
10.2.3.2 10.2.3.3 10.2.3.4	Manners Street Courtenay Place	ea ea ea	0	200,000 200,000 200,000	0 400,000			Rate assumes two shelters @\$100K each Rate assumes two shelters @\$100K each Rate assumes two shelters @\$100K each
10.2.3.4	STREETSCAPING	ea	2	200,000	400,000 0	1,283,500.00		
10.3.1.	New art installations (and other similar large street furniture items)				0	.,_00,000.00		
10.3.1.1	Courtenay Place	ea	20	10,000	200,000			20+ feature seating (as per BM materiality strategy)
10.3.1.2 10.3.1.3	Side roads - Waring Taylor Street Side roads - Johnston Street	ea ea	10 10	10,000 10,000	100,000 100,000			10+ feature seating (as per BM materiality strategy) 10+ feature seating (as per BM materiality strategy)
10.3.1.4 10.3.2.	Side roads - Mercer Street Removal art installations (and other similar large street	ea	3	10,000	30,000 0			3+ feature seating (as per BM materiality strategy)
10.3.2.1	furniture items) Lambton Quay	ea	0	1,500	0			
10.3.2.2	Willis Street	ea	0	1,500	0			
10.3.2.3	Manners Street Courtenay Place	ea ea	0 30	1,500 1,500 1,500	0 45,000			Removal ~30 large street furniture items e.g.
10.3.3.	Removal seating (and other similar medium street furniture)			,	0			concrete planters, poster bill totems etc
10.3.3.1 10.3.3.2	Lambton Quay Willis Street	ea ea	15 0	500 500	7,500 0			Removal ~15 fencing elements
10.3.3.3 10.3.3.4	Manners Street Courtenay Place	ea ea	0 25	500 500	0 12,500			Removal ~25 seating / bike rack elements
10.3.4. 10.3.4.1	Relocation seating (and other similar medium street furniture) Lambton Quay	ea	40	2,500	0 100,000			Relocate ~40 seats and bike racks from current
10.3.4.2	Willis Street	ea	40	2,500	100,000			locations RATE INCREASED AS PER WT ESTIMATE Relocate ~40 seats and bike racks from current
10.3.4.3	Manners Street	ea	-0	2,500	0			locations
10.3.4.4 10.3.5.	Courtenay Place New seating (and other similar medium street furniture)	ea	0	2,500	0			
10.3.5.1	Lambton Quay	ea	25	6,000	150,000			25 additional seats as per BM strategy RATE INCREASED AS PER WT ESTIMATE
10.3.5.2 10.3.5.3	Willis Street Manners Street	ea ea	0 6	6,000 6,000	0 36,000			6 standard seating (as per BM materiality strategy)
10.3.5.4	Courtenay Place	ea	50	6,000	300,000			~25 new seating / bike rack elements to replace existing, + 25 additional seats as per BM strategy
10.3.6. 10.3.6.1 10.3.6.2	Removal bins (and other similar small street furniture) Lambton Quay Willis Street	ea ea	50 0	500 500	25,000			Remove ~50 bollards adjacent to parking
10.3.6.3	Manners Street Courtenay Place	ea ea	0 85	500 500	0 42,500			Remove ~85 bollards various locations
10.3.7. 10.3.7.1	Relocation bins (and other similar small street furniture) Lambton Quay	ea	10	1,000	42,000 0 10,000			Relocate ~10 bins from existing bus stop locations
10.3.7.2	Willis Street	ea	5	1,000	5,000			Relocate ~5 bins from existing bus stop locations
10.3.7.3 10.3.7.4	Manners Street Courtenay Place	ea ea	0 20	1,000 1,000	0 20,000			Relocate all existing bins ~20
10.3.8. 10.3.8.1	New bins (and other similar small street furniture) Lambton Quay	ea	0	1,500	0			
10.3.8.2 10.3.8.3	Willis Street Manners Street	ea ea	0	1,500 1,500	0			
10.3.8.4	Courtenay Place	ea ea	0	1,500	0			
10.4 10.4.1.	FOOTPATHS & CYCLEWAYS Footpath paving (based on cost estimate of existing clay				0	3,685,575.00		240/m2 Provided by WCC. Allowed additional 40/m2
10.4.1.1	pavers including preparation up to 100mm deep) Lambton Quay (new footpath areas)	m2	2181	300	654,300			for base prep Removed 72m2 as advised
10.4.1.2	Lambton Quay (replacing existing footpath areas)	m2	0	300	0			
10.4.1.3	Willis Street (new footpath areas)	m2	776	300	232,800			
10.4.1.4	Willis Street (replacing existing footpath areas)	m2	0	300	0			
10.4.1.5 10.4.1.6	Manners Street (new footpath areas) Courtenay Place (new footpath areas)	m2 m2	273 1231	300 300	81,900 369,300			
10.4.1.7	Courtenay Place (replacing existing footpath areas)	m2	0	300	0			
10.4.1.8 10.4.1.9	Side roads - Ballance Street Side roads - Stout Street	m2 m2	0 0	300 300	0			
10.4.1.10 10.4.1.1	Side roads - Waring Taylor Street Side roads - Johnston Street	m2 m2	0	300 300	0			
10.4.1.12	Side roads - Brandon Street Side roads - Panama Street	m2 m2	10 194	300 300	3,000 58,200			Removed 90m2 as advised Removed 129m2 as advised
10.4.1.1	Side roads - Mercer Street Side roads - Boulcott Street / Willis Street (south) Side roads - Cube Street	m2 m2	0 0	300 300	0			
10.4.1.1	Side roads - Cuba Street Side roads - Taranaki Street Side roada - Divos Street	m2 m2 m2	150 0	300 300 200	45,000 0			
10.4.1.18 10.4.1.19 10.4.1.20	Side roads - Dixon Street Side roads - Tory Street Side roads - Allen Street	m2 m2 m2	0 0 0	300 300 300				
10.4.1.20		1112	U	300	0	I	I	· · · · · · · · · · · · · · · · · · ·

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Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
10.4.1.2		m2	0	300	0			
10.4.2.	Footpath paving (based on cost estimate of existing clay pavers including preparation up to 100mm deep)				0			NO REPLACEMENT OF EXISTING FOOTPATH AREAS AND NO HIGHER COST FOOTPATH
10.4.2.1	Lambton Quay (new footpath areas)	m2	2563	300	768,900			TREATMENTS Added change in cycleway area
10.4.2.2	Lambton Quay (replacing existing footpath areas)	m2	0	300	0			
10.4.2.3	Willis Street (new footpath areas)	m2	321	300	96,300			
10.4.2.4		m2	0	300	0			
10.4.2.5 10.4.2.6		m2 m2	0 2418	300 300	0 725,400			Added change in cycleway area
10.4.2.0		m2	0	300	725,400 0			
10.4.2.8		m2	40	300	12,000			
10.4.2.9 10.4.2.1		m2 m2	<mark>27</mark> 670	300 300	8,100 201,000			Removed 147m2 as advised
10.4.2.1	Side roads - Johnston Street	m2	440	300	132,000			
10.4.2.1	Side roads - Brandon Street	m2	0	300	0			
10.4.2.1	Side roads - Panama Street	m2 m2	0 118	300 300	0 35,400			
10.4.2.1	Side roads - Boulcott Street / Willis Street (south)	m2	0	300	0			
10.4.2.1 10.4.2.1	Side roads - Taranaki Street	m2 m2	0	300 300	0			
10.4.2.1		m2 m2	0 0	300 300	0 0			
10.4.2.2	Side roads - Allen Street	m2 m2	32 74	300 300	9,600 22,200			Removed 59m2 as advised Removed 44m2 as advised
10.4.3.	AC Cyclepath (25mm AC, 100mm basecourse)				0			AC \$50 and basecourse 40/m2
10.4.3.1 10.4.3.2		m2 m2	1031 1061	90 90	92,813 95,513			Area reduced by 25% (4.0m to 3.0m) Area reduced by 25% (4.0m to 3.0m)
10.4.4. 10.4.4.1	Exposed aggregate separator strip (200mm x100mm) Lambton Quay	m	688	30	0 20,625			Area divided by 3.0m width (both sides)
10.4.4.2	Courtenay Place	m	708	30	21,225			Area divided by 3.0m width (both sides)
10.5	ENTRANCEWAYS & VEHICLE CROSSINGS				0	120,000.00		
10.5.1.1	Commercial Vehicular Crossing		0	6 000	0	120,000.00		
10.5.1.2		ea	0	6,000	0			
10.5.1.3 10.5.1.4		ea ea	0 0	6,000 6,000	0 0			
10.5.1.5 10.5.1.6		ea ea	0 2	6,000 6,000	0 12,000			Two per closed side road for emergency vehicle
10.5.1.7		ea	-	6,000	12,000			access Two per closed side road for emergency vehicle
			2					access
10.5.1.8		ea	2	6,000	12,000			Two per closed side road for emergency vehicle access
10.5.1.9	Side roads - Johnston Street	ea	2	6,000	12,000			Two per closed side road for emergency vehicle access
10.5.1.1	Side roads - Brandon Street	ea	2	6,000	12,000			Two per closed side road for emergency vehicle access
10.5.1.1	Side roads - Panama Street	ea	2	6,000	12,000			Two per closed side road for emergency vehicle access
10.5.1.1	Side roads - Mercer Street	ea	2	6,000	12,000			Two per closed side road for emergency vehicle
10.5.1.1		ea	0	6,000	0			
10.5.1.1		ea	2	6,000	12,000			Two per closed side road for emergency vehicle access
10.5.1.1 10.5.1.1		ea ea	0 0	6,000 6,000	0 0			
10.5.1.1 10.5.1.1		ea ea	0 2	6,000 6,000	0 12,000			Two per closed side road for emergency vehicle
10.5.1.1		ea	2	6,000	12,000			access Two per closed side road for emergency vehicle
10.0.1.1		ca	2	0,000	12,000			access
10.6	DROPKERBS & TACTILES				0	246,000.00		
10.6.1. 10.6.1.1		ea	25	500	12,500			As per new
10.6.1.2 10.6.1.3		ea ea	20 5	500 500	10,000 2,500			As per new As per new
10.6.1.4 10.6.1.5	Courtenay Place	ea	32	500 500	16,000			As per new
10.6.1.6	Side roads - Stout Street	ea ea		500	0			
10.6.1.7 10.6.1.8	Side roads - Johnston Street	ea ea		500 500	0 0			
10.6.1.9 10.6.1.1	Side roads - Brandon Street	ea ea		500 500	0			
10.6.1.1	Side roads - Mercer Street	ea		500	0			
10.6.1.1 10.6.1.1	Side roads - Cuba Street	ea ea		500 500	0 0			
10.6.1.1 10.6.1.1		ea ea		500 500	0			
10.6.1.1	Side roads - Tory Street	ea		500	0			
10.6.1.1 10.6.1.1	Side roads - Blair Street	ea ea		500 500	0 0			
10.6.2. 10.6.2.1	New drop kerbs and tactiles Lambton Quay	ea	25	2,500	0 62,500			
10.6.2.2 10.6.2.3	Willis Street	ea ea	20 5	2,500 2,500	50,000 12,500			
10.6.2.5		6a	32	2,500	80,000			

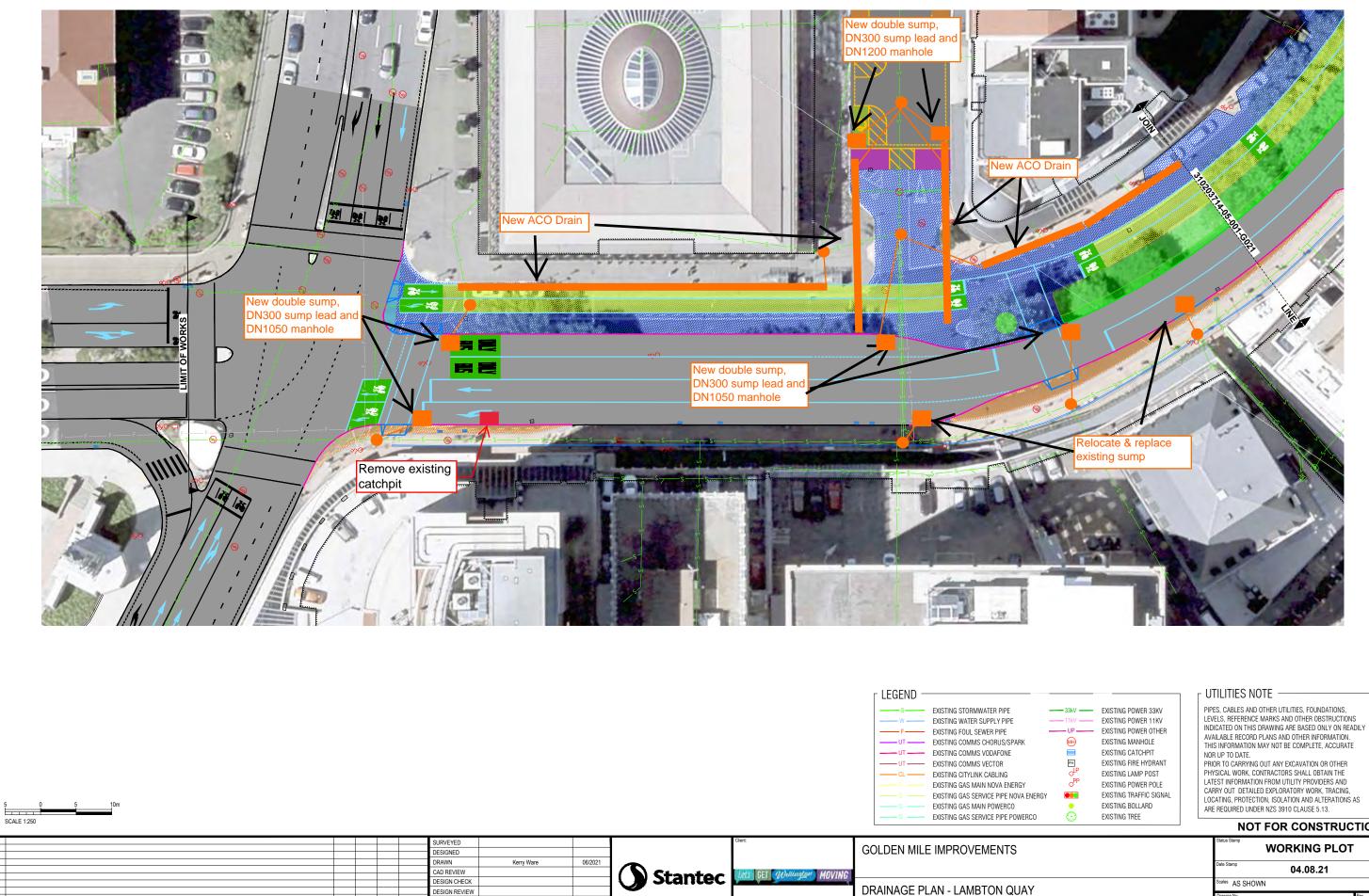


Item	Description	Unit	Quantity	Rate	Amount	Sub-subtotals	Subtotals	Comment/Assumptions
11.1.5.	Side roads - Ballance Street	wks	4	14,000	56,000			Road closures with property access retained where
								neccesary (4 weeks of road closure)
11.1.6.	Side roads - Stout Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.7.	Side roads - Waring Taylor Street	wks	8	14,000	112,000			Road closures with property access retained where neccesary (8 weeks of road closure)
11.1.8.	Side roads - Johnston Street	wks	8	14,000	112,000			Road closures with property access retained where neccesary (8 weeks of road closure)
11.1.9.	Side roads - Brandon Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.10.	Side roads - Panama Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.11.	Side roads - Mercer Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.12.	Side roads - Willeston Street / Customhouse Quay	wks	2	14,000	28,000			Road closures with property access retained where neccesary (2 weeks of road closure)
11.1.13.	Side roads - Boulcott Street / Willis Street (south)	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.14.	Side roads - Cuba Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.15.	Side roads - Taranaki Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.16.	Side roads - Dixon Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.17.	Side roads - Tory Street	wks	4	14,000	56,000			Lane closures with property access retained where neccesary (4 weeks of road closure)
11.1.18.	Side roads - Allen Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.1.19.	Side roads - Blair Street	wks	4	14,000	56,000			Road closures with property access retained where neccesary (4 weeks of road closure)
11.2	TEMPORARY DIVERSION BUS STOPS					450,000.00		\$75K per temporary stop based on advice provided
								by client: \$6K for footing, \$28K for shelter, \$4K for graphics / signage, \$9K for power, \$3K for
11.2.1.	Lambton Quay	LS	1	300,000	300,000			reinstatement, \$25K for TTM Two diversions, southbound diverion with one
								temporary bus stop (4 weeks), northbound diversion with three temporary bus stops (4 weeks)
11.2.2.	Willis Street	LS	1	75,000	75,000			One diversion with one temporary bus stop (20
11.2.3. 11.2.4.	Manners Street Courtenay Place	LS LS	1 1	75,000 0	75,000 0			One diversion with one temporary bus stop (8 No diversion assumed
11.3 11.3.1.	PERMANENT DIVERSIONS Lambton Quay	wks	6	10,900	65,400	640,600.00		Closure of Lambton to northbound traffic and closure
								of Lambton to southbound traffic (6x VMS trailer for 6 weeks)
11.3.2.	Willis Street	wks	8	13,700	109,600			Closure of Willis to northbound traffic (8x VMS trailer for 6 weeks)
11.3.3.	Courtenay Place	wks	6	13,700	82,200			Closure of Courtenay Place to traffic (8x VMS trailer for 6 weeks)
11.3.4.	Side roads - Ballance Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.5.	Side roads - Stout Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.6.	Side roads - Waring Taylor Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.7.	Side roads - Johnston Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.8.	Side roads - Brandon Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.9.	Side roads - Panama Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.10.	Side roads - Mercer Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.11.	Side roads - Cuba Street	wks	6	5,300	31,800			Convert side roads to one-way (2x VMS trailer for 6 weeks)
11.3.12. 11.3.13.	Side roads - Tory Street Side roads - Allen Street	wks wks	6 6	10,900 5,300	65,400 31,800			Restricted movements (6x VMS trailer for 6 weeks) Convert side roads to one-way (2x VMS trailer for 6
11.3.14.	Side roads - Alleri Sireet	wks	6	5,300	31,800			weeks) Convert side roads to one-way (2x VMS trailer for 6
			0	0,000	01,000			weeks)
	PRELIMINARY & GENERAL	%	39,912,110	20%	0 0 7,982,422	7,982,422.08	7,982,422	
		70	39,912,710	20%	7,902,422 0	7,902,422.08	4 000 000	
13.1	EXTRAORDINARY CONSTRUCTION COSTS Provisional sum for artistic and cultural inputs to project	PS	1	1,000,000.0	0 1,000,000	1,000,000.00	1,000,000	As advised by client
13.2					0			
Total P	roject Estimate			Say	64,915,529 64,900,000	64,915,529 64,900,000	64,915,529 64,900,000	L
				Say	64,900,000	64,900,000	64,900,000	

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Appendix C - Drainage Sketches



DESIGN REVIEW PROVED

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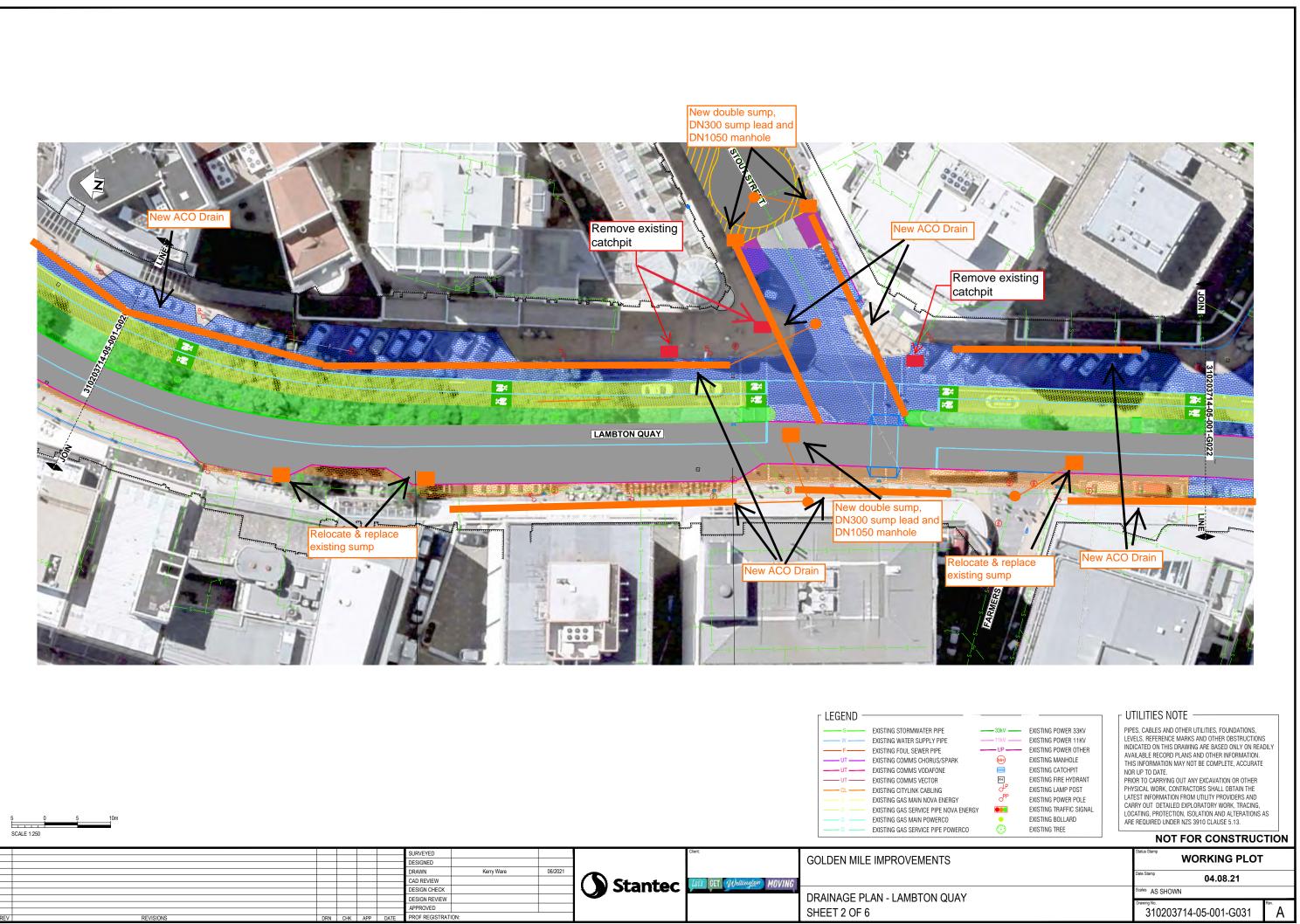
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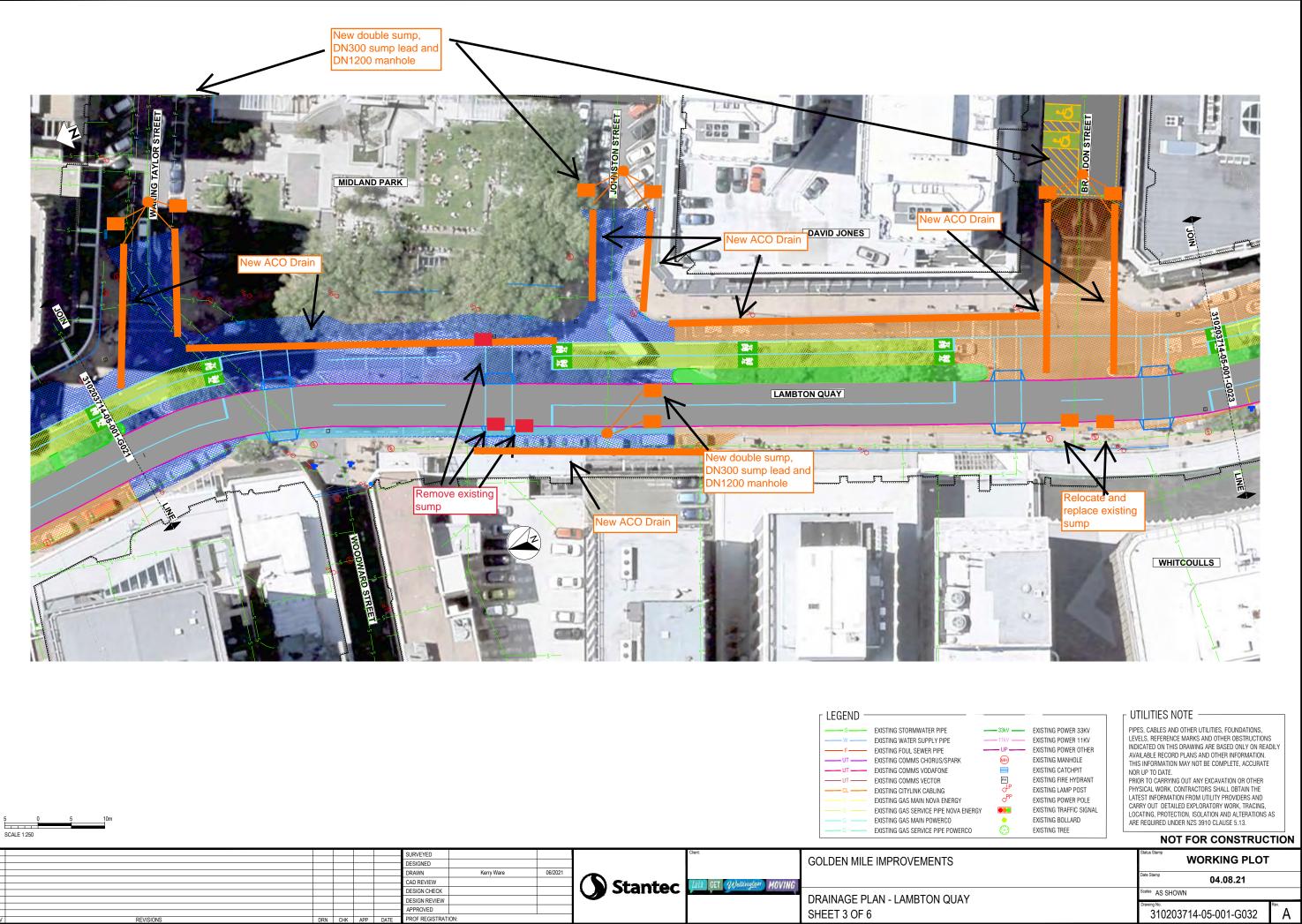
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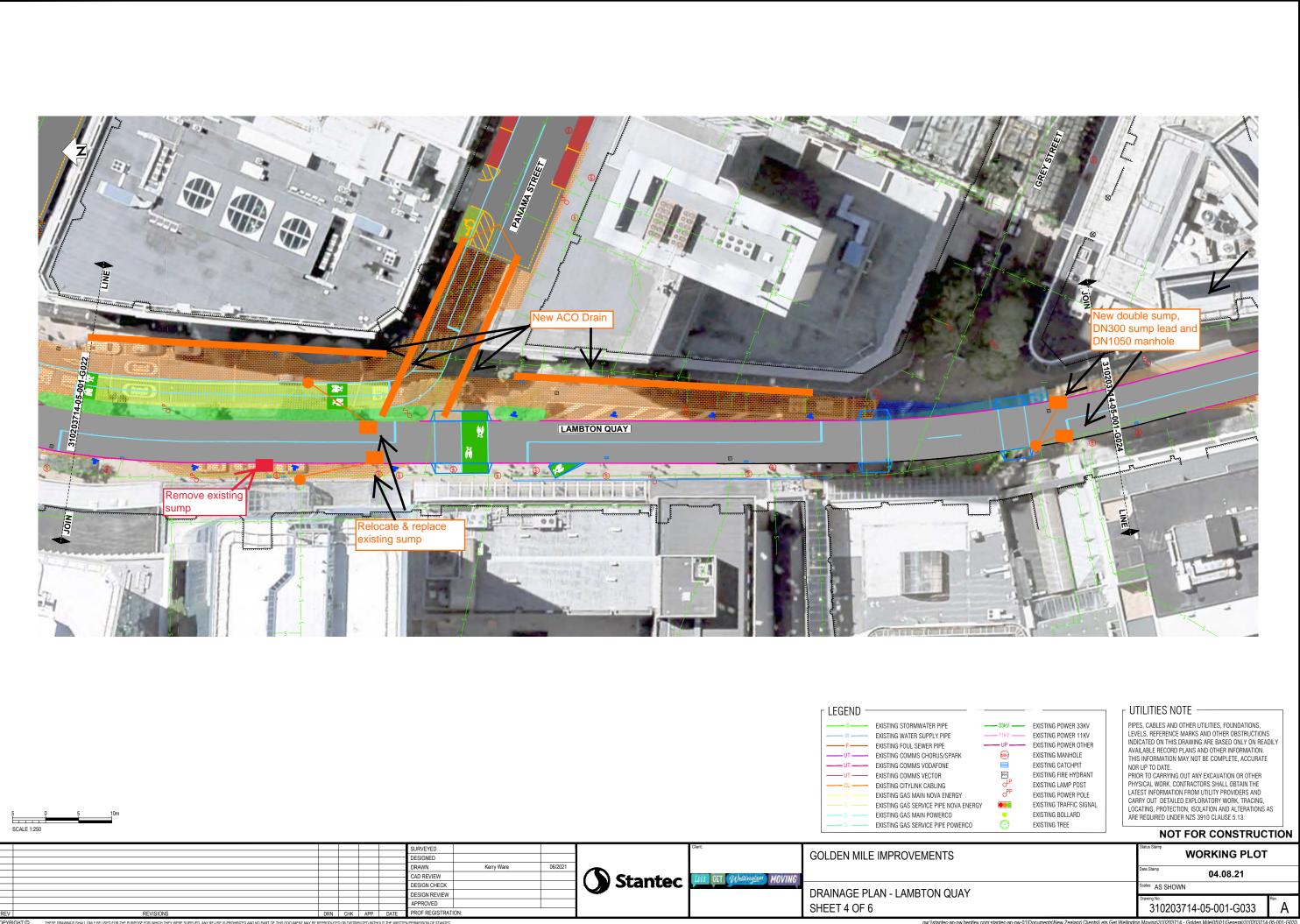
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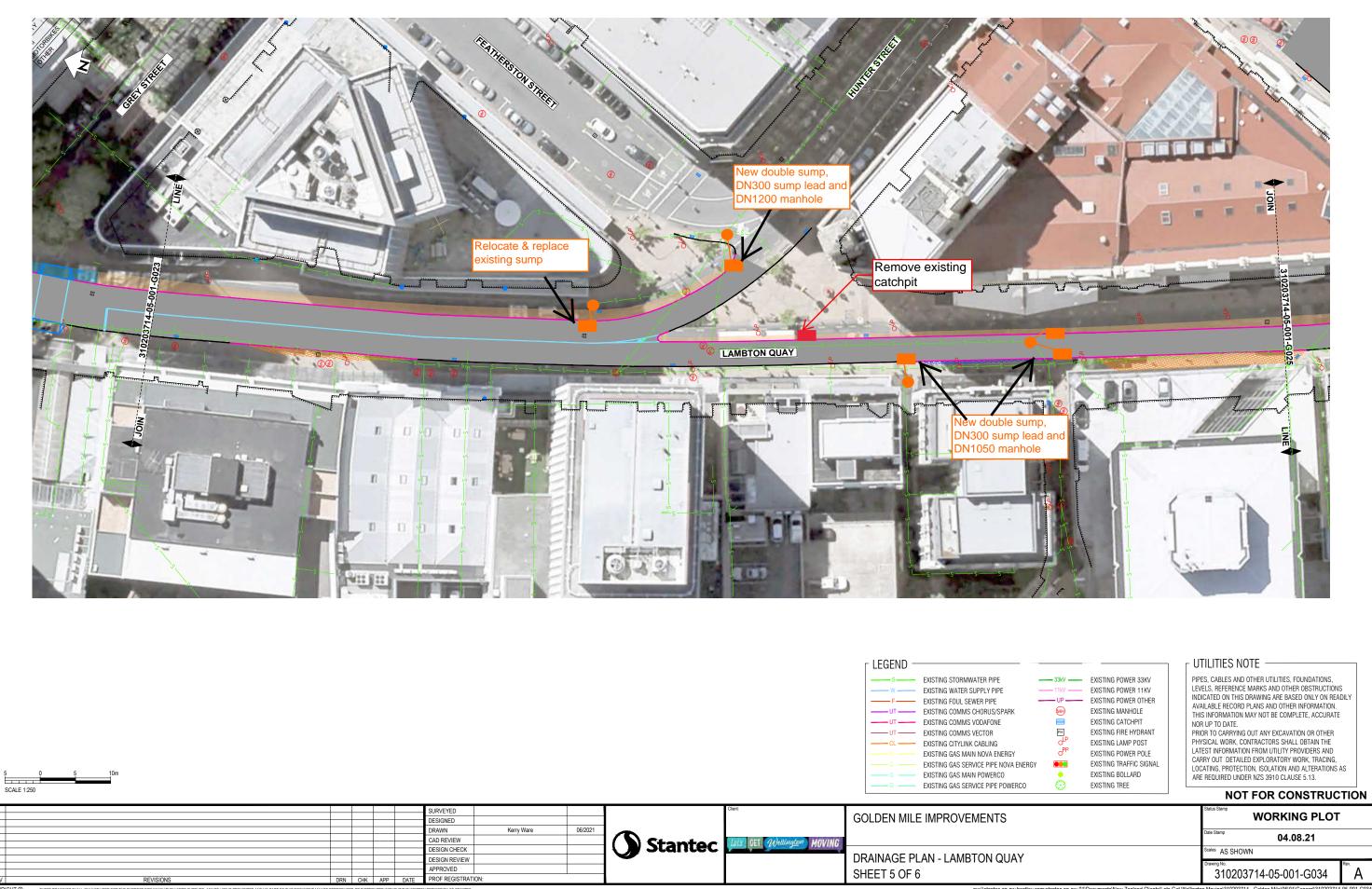
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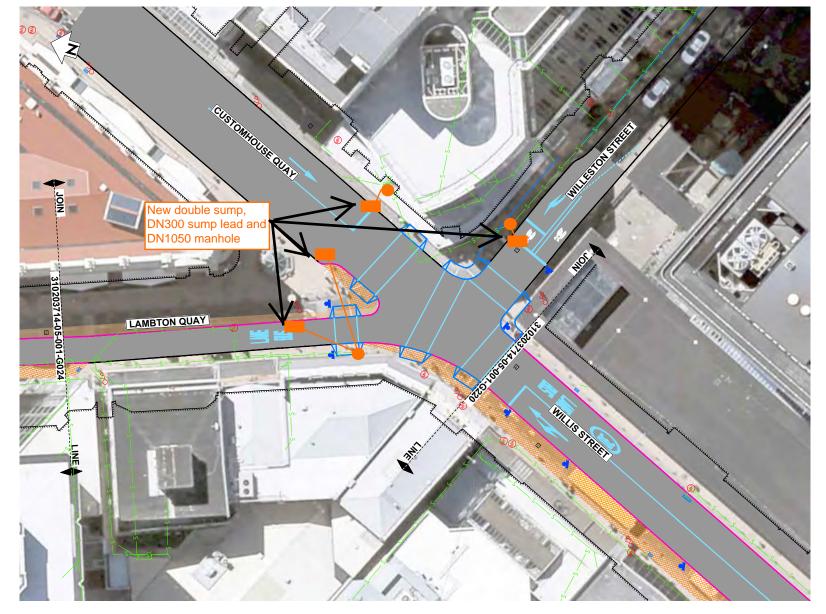


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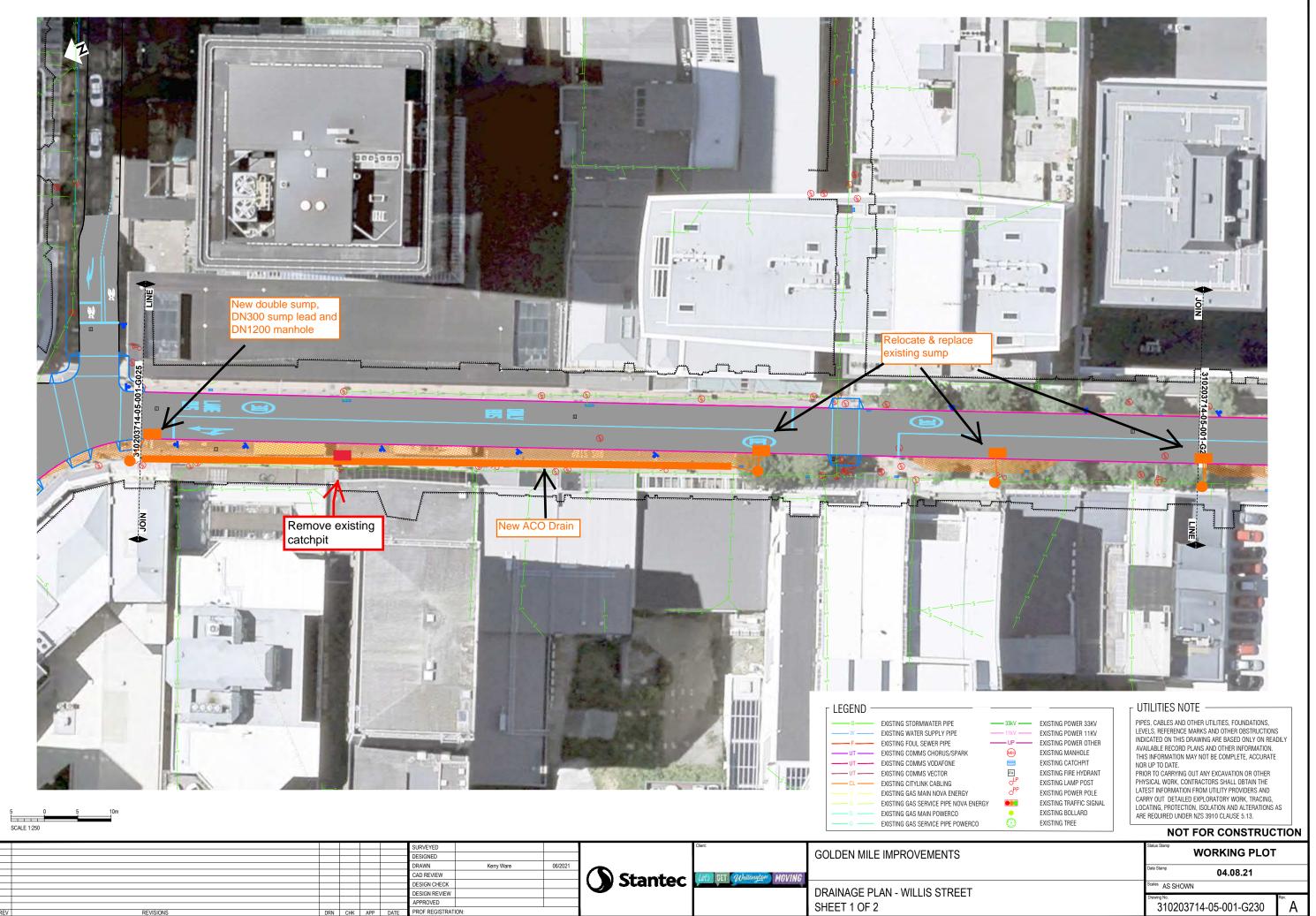
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	5 <u>0</u> 5 <u>10</u> m SCALE 1250		U	<i>\$</i>				S EXISTING STORMWATER PIPE 33kv EXISTING POWER 33kV W EXISTING WATER SUPPLY PIPE 11kv EXISTING POWER 33kV F EXISTING FOUL SEWER PIPE UP EXISTING POWER 01HER UT EXISTING COMMS CHORUS/SPARK Image: Common state of the	UTILITIES NOTE PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVALABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE NOR UP TO DATE. PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK, CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FRACTORY SHALL OBTAIN THE LATEST INFORMATION FRACTORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13. NOT FOR CONSTRUCTION
			SURVEYED				Client:	GOLDEN MILE IMPROVEMENTS	Status Stamp WORKING PLOT
			DRAWN CAD REVIEW	Kerry Ware	06/2021	() Stantas	Tate CET (Invitington MOV/INC		Date Stamp 04.08.21
			DESIGN CHECK DESIGN REVIEW				Lets GET Wellington MOVING	DRAINAGE PLAN - LAMBTON QUAY	Scales AS SHOWN
REV	REVISIONS	DRN CHK APP DATE	APPROVED PROF REGISTRATI	ON:				SHEET 6 OF 6	Drawing No. 310203714-05-001-G035

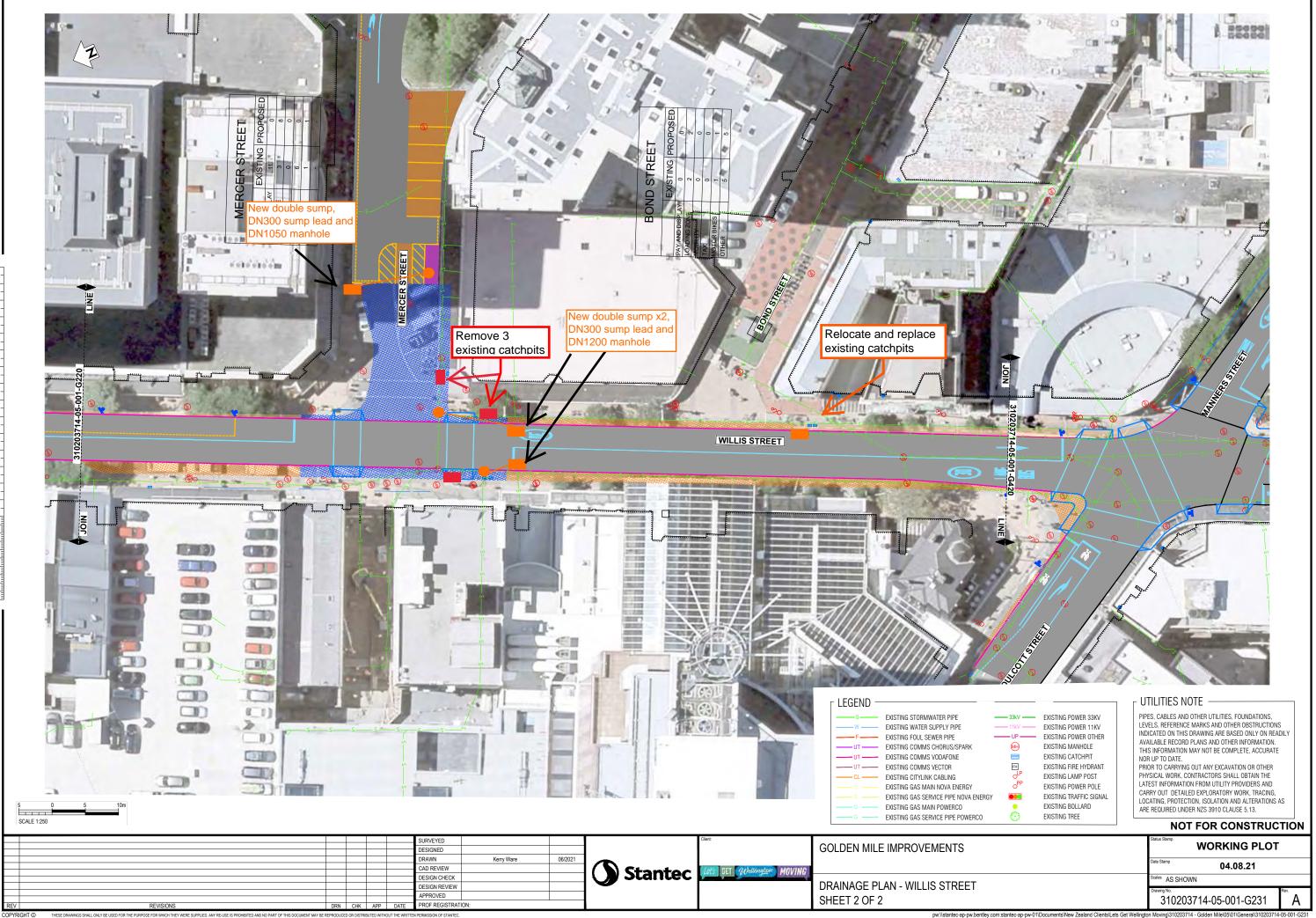
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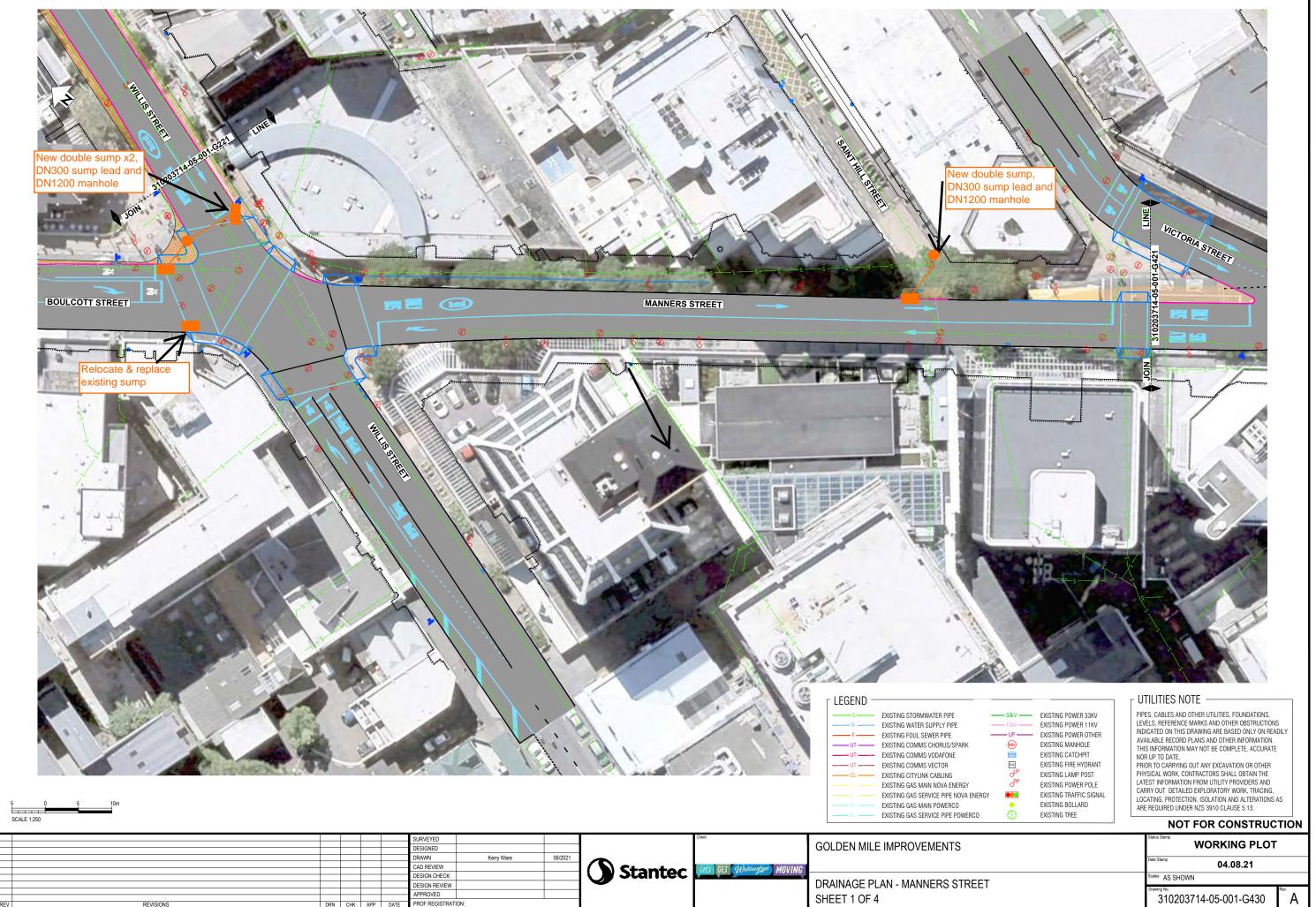
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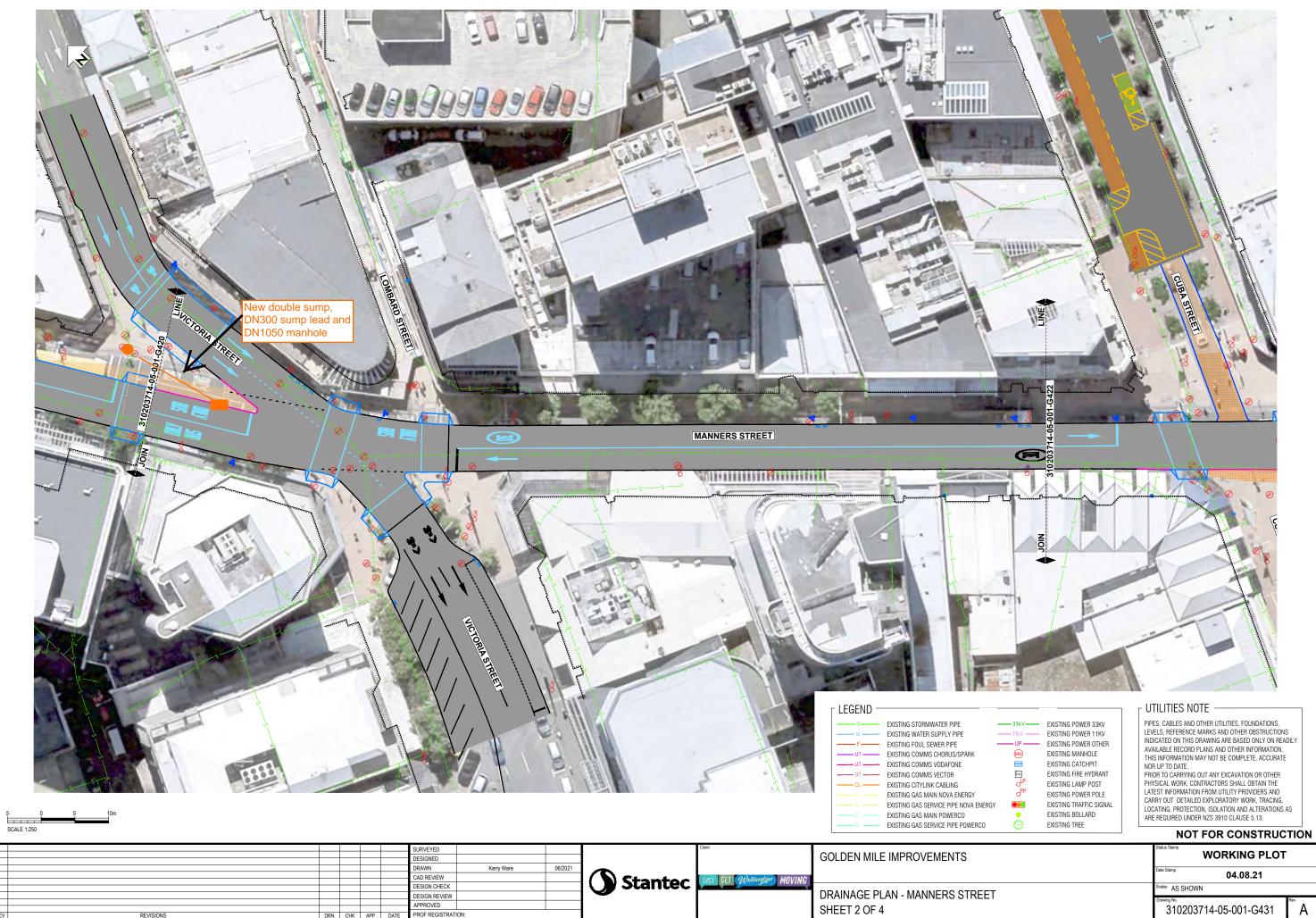
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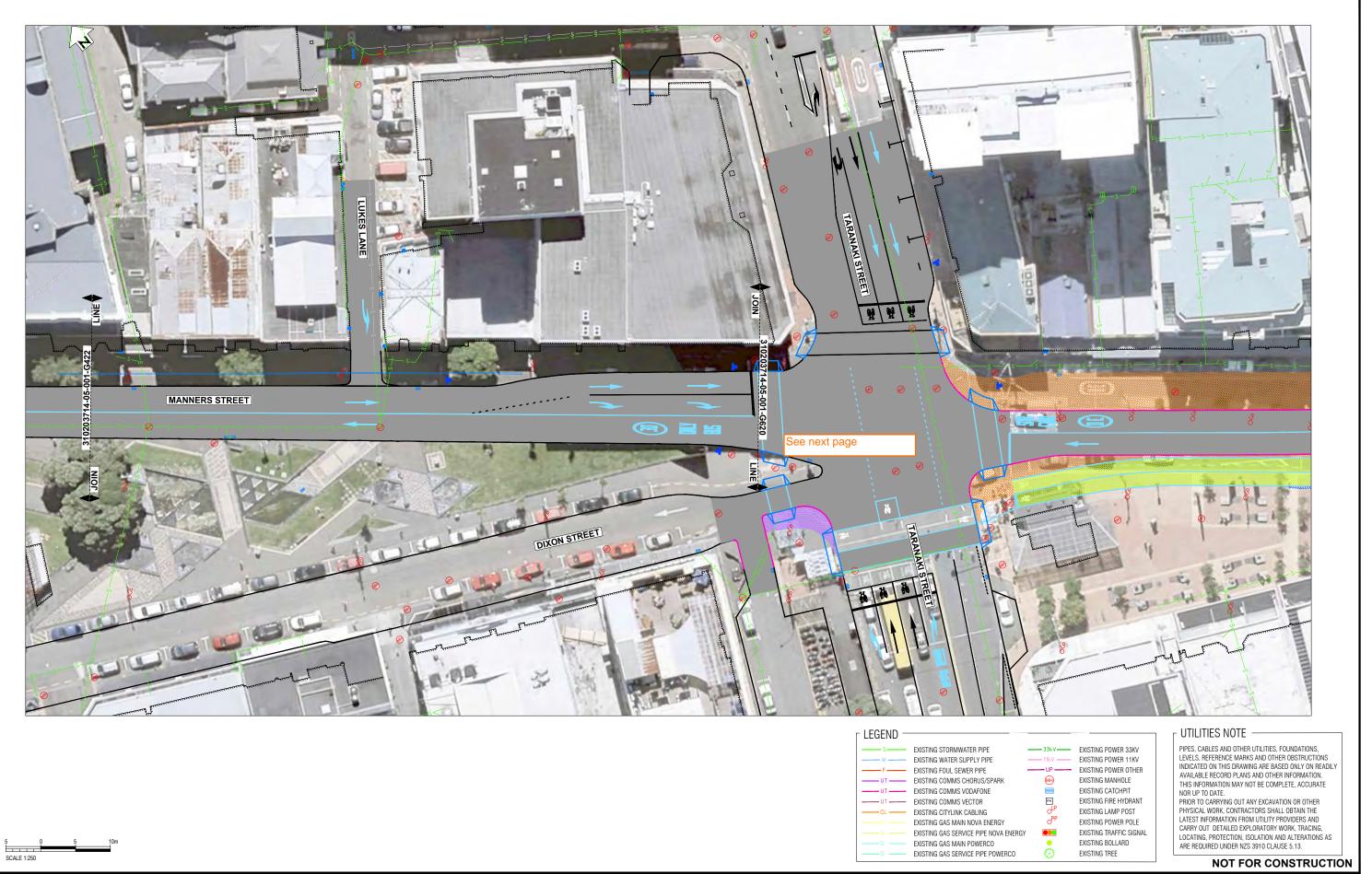
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ISSION OF STANTED



						SURVEYED				Client:	
						DESIGNED					GOLDEN MILE IMPROVEMENTS
						DRAWN	Kerry Ware	06/2021			
						CAD REVIEW			Ctontoc	Lets GET Wellington MOVING	
						DESIGN CHECK			Stantec	Lets Get Wellington MOVING	
						DESIGN REVIEW					DRAINAGE PLAN - MANNERS STREET
						APPROVED					SHEET 4 OF 4
REV	REVISIONS	DRN	СНК	APP	DATE	PROF REGISTRATIC	PROF REGISTRATION:				SHEET 4 OF 4
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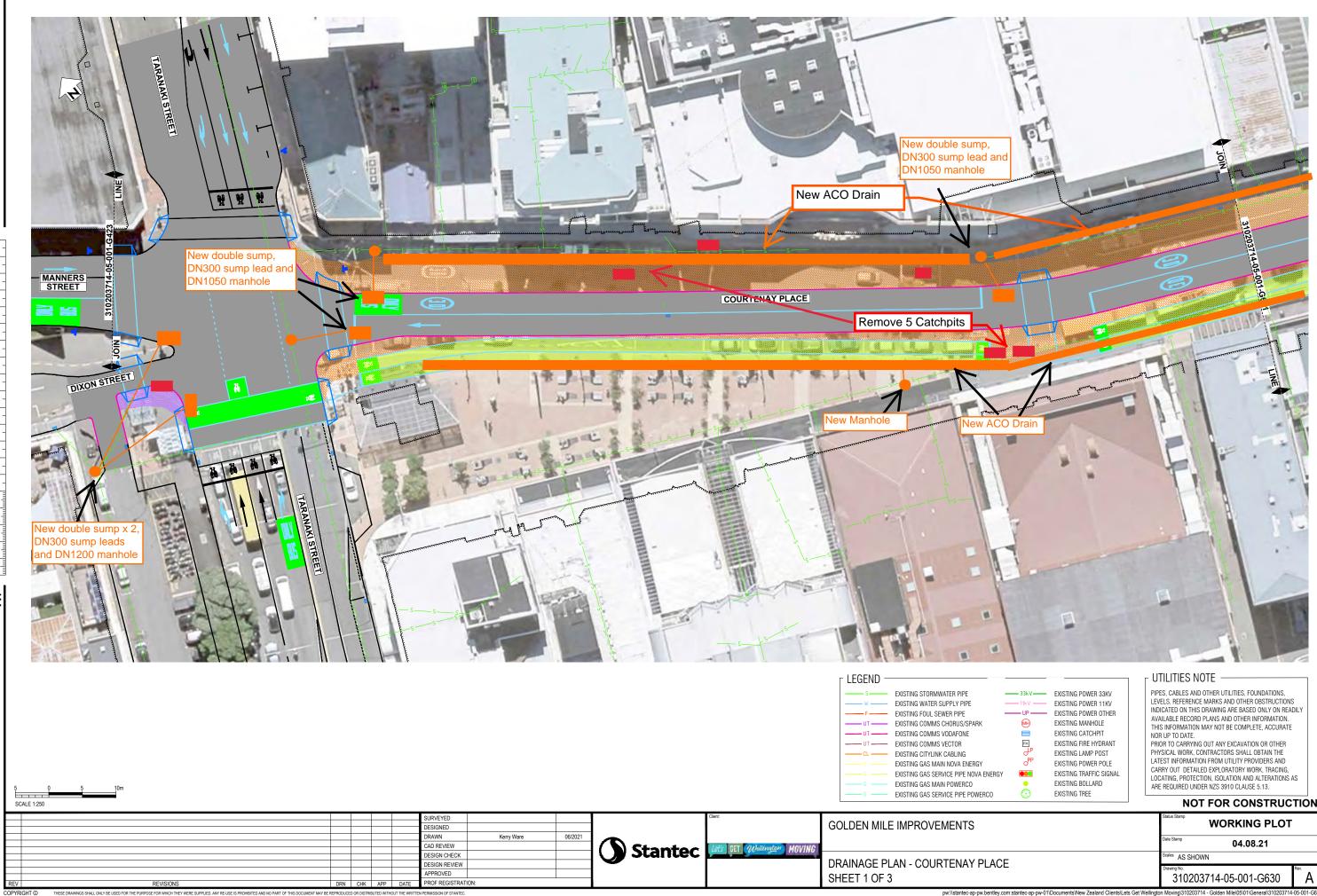
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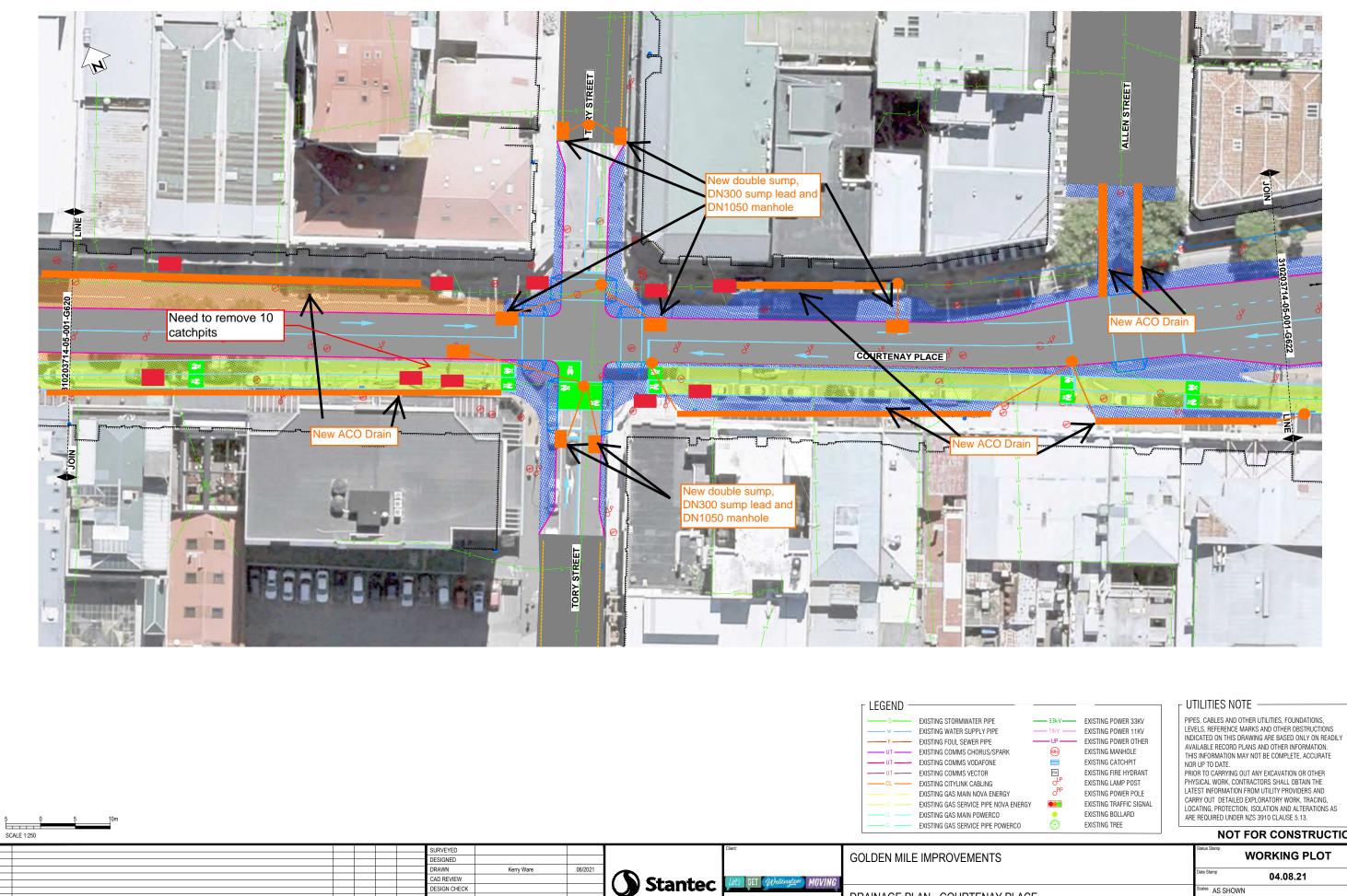
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DESIGN CHECK

DESIGN REVIEW APPROVED

PROF REGISTRATIO

DRN CHK

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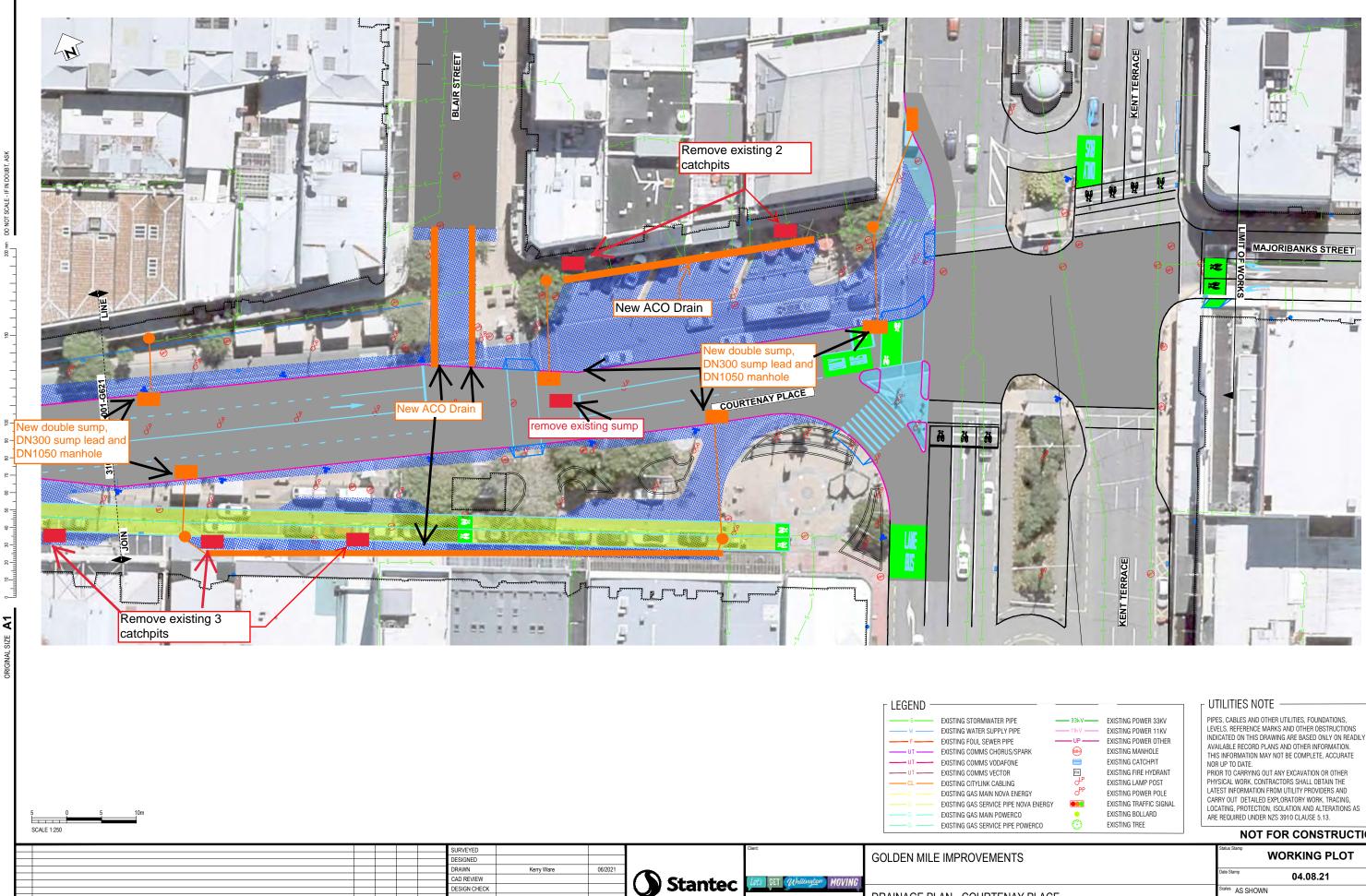
DRAINAGE PLAN - COURTENAY PLACE

SHEET 2 OF 3

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DESIGN REVIEW APPROVED

DRAINAGE PLAN - COURTENAY PLACE

SHEET 3 OF 3

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Golden Mile - Stormwater Concept Design

265 295 154

			No change	Updated	Updated	Updated	No change	Updated	Updated	Updated	No change	No change	No change	No change	Updated	No change	No change					
			Lampton Sheet 1 of 6	Lampton Sheet 2 of 6	Lampton Sheet 3 of 6	Lampton Sheet 4 of 6	Lampton Sheet 5 of 6	Lampton Sheet 6 of 6	Willis Sheet 1 of 2	Willis Sheet 2 of 2	Manners Sheet 1 of 4	Manners Sheet 2 of 4	Manners Sheet 3 of 4	Manners Sheet 4 of 4	Courtenay Sheet 1 of 3	Courtenay Sheet 2 of 3	Courtenay Sheet 3 of 3	TOTAL	Total		Fotal To	otal
Item	Description	Unit	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	TOTAL	Lambton	Willis M	aneers Court	tenary
	New double catchpit with back entry. In accordance with WCC COP	No.	6	3	8	2	4	4	1	3	3	1	1	0	5	8	6	55	27	4	5 :	19
DN300 Catchpit lead	Catchpit lead. Assume 3m per new catchpit	m	18	9	24	6	12	12	3	9	9	3	3	0	15	24	18	165	81	12	15	57
Catchpit	Remove existing catchp and replace with new double sump, including extending catchpit lead	No	2	3	2	2	1	0	3	1	1	0	0	0	0	0	0	15	10	4	1	0
Remove existing catchpit	Remove existing catchpit.	No.	1	3	3	1	1	0	1	3	0	0	0	0	6	10	6	35	9	4	0	22
ACO Drain	New ACO slot drain, wit cycle and heel friendly grate	h m	130	320	300	160	0	0	100	0	0	0	120	0	250	270	150	1800	910	100	120 6	670
DN300 ACO drain lead	ACO drain lead, Assume 5m per connection	m	20	35	45	30	0	0	5	0	0	0	15	0	20	35	20	225	130	5	15	75
DN1050 Manhole	New DN1050 Manhole to connect to existing SW system	No.	7	4	0	3	3	3	3	2	0	1	3	0	4	7	5	45	20	5	4	16
	New DN1200 Manhole to connect to existing SW system	No.	1	0	4	0	1	0	1	1	2	0	0	0	1	0	0	11	6	2	2	1

Appendix D - Indicative Construction Staging Programme



Golden Mile Construction Staging V3.0

30 July 2021







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Overview

The following slides outline the proposed construction phasing and access expectations.

Alternative approaches to construction phasing are possible and will result in different access and detour arrangements.

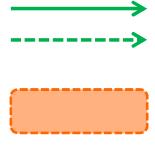


Overview

- Stage 1 undertake improvements at intersections affected by traffic rerouting
- Stage 2 Manners Street improvements
- Stage 3 Willis Street improvements
- Stage 4 Lambton Quay Improvements
- Stage 5 Courtenay Place Improvements



Key to diagrams



Work zone



Road closure





Bus route (Golden Mile)

Bus route (branch off Golden Mile)



Temporary bus stop



Traffic restriction



Stage 1

- Undertake minor signal improvements at intersections affected by traffic rerouting:
 - Victoria Street / Ghuznee Street
 - Taranaki Street / Wakefield Street



Stage 2 – Manners Street

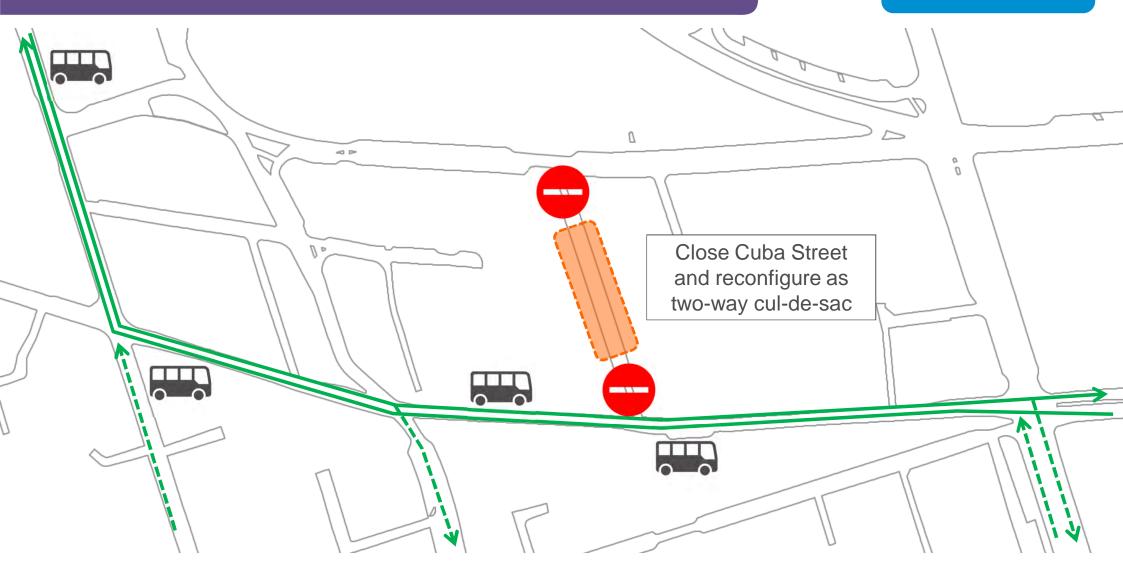
The following stages are proposed:

- A. Close Cuba Street and reconfigure as two-way cul-de-sac
- B. Divert southbound buses via Mercer Street, Wakefield Street to Taranaki Street and make changes to Manners Street
- C. Remove diversion (not shown)



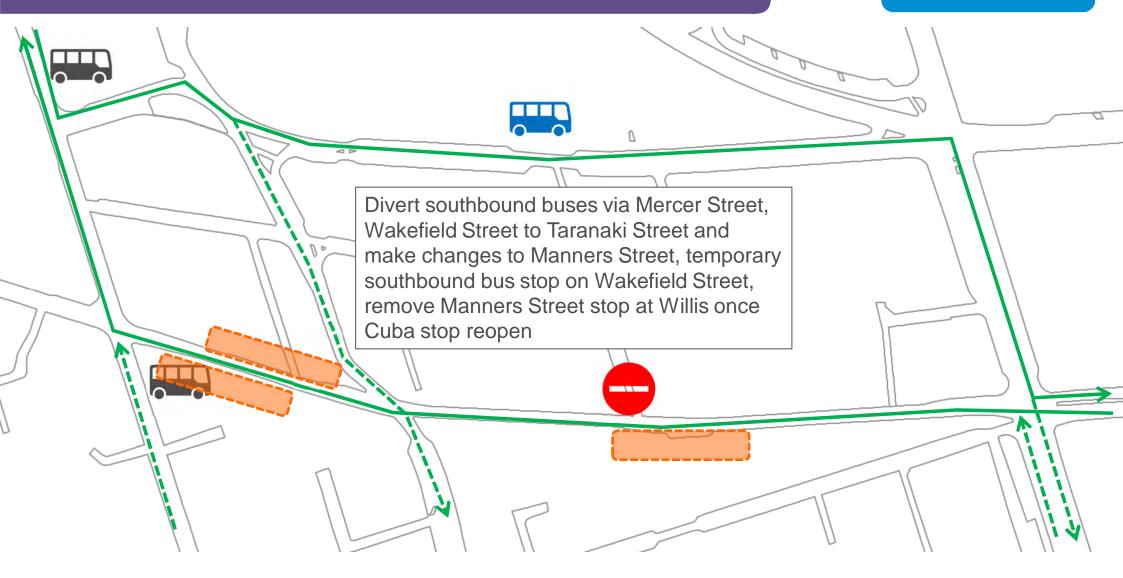
Stage 2A – Reconfigure Cuba Street





Stage 2B – Works on Manners Street





Stage 3 – Willis Street

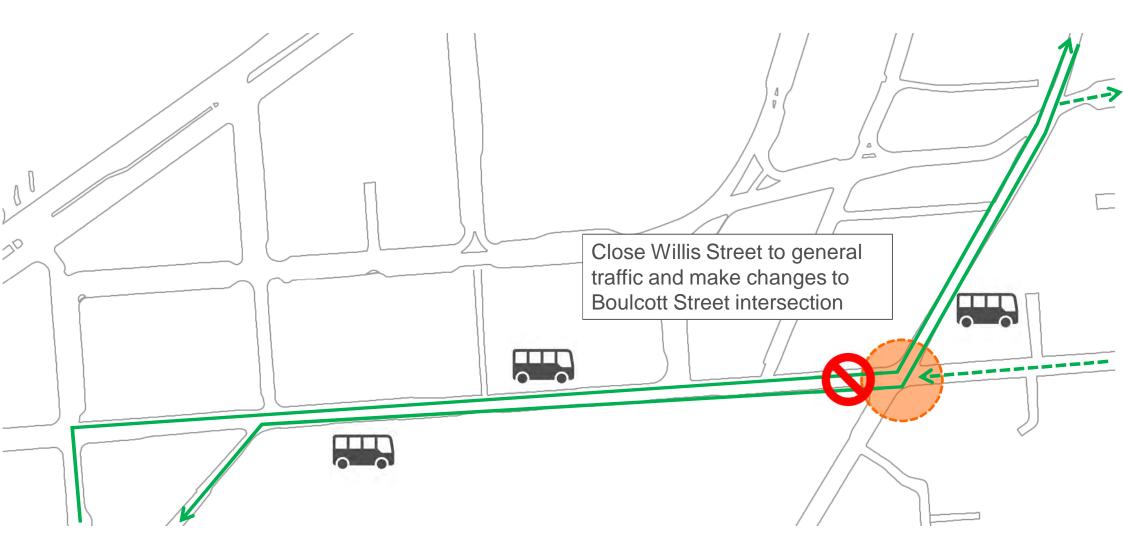
The following stages are proposed:

- A. Close Willis Street to general traffic and make changes to Boulcott Street intersection
- B. Close Mercer Street and reconfigure as two-way cul-de-sac
- C. Divert southbound buses via Victoria Street and make changes to Willis Street and Willeston Street (removes access to Lambton Quay northbound for general traffic)
- D. Remove diversion (not shown)



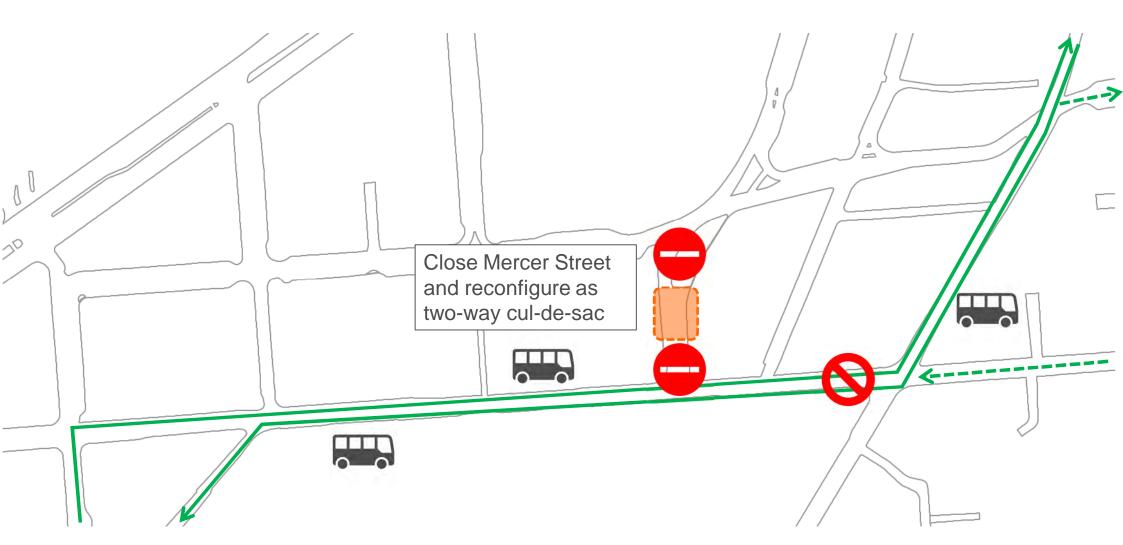
Stage 3A – Close Willis to traffic

~4 weeks



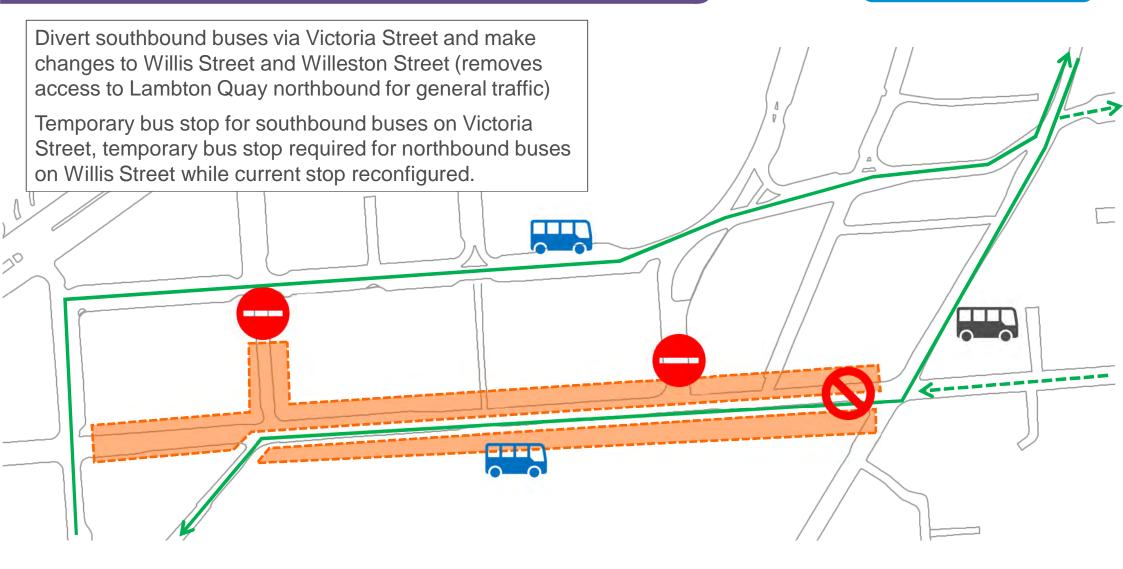
Stage 3B – Reconfigure Mercer Street





Stage 3C – Works on Willis Street

~20 weeks



Stage 4 – Lambton Quay

The following stages are proposed:

- A. Divert southbound buses via Panama Street and make changes to Lambton Quay between Panama and Hunter
- B. Divert northbound buses via Customhouse Quay and make changes to Lambton Quay between Hunter and Willis
- C. Close side streets that enter onto Lambton Quay (except for property access) and reconfigure as twoway cul-de-sacs (can be staged)
- D. Close Lambton Quay to general traffic, make temporary changes to Whitmore Street intersection and reconfigure side roads that exit from Lambton Quay (except for property access) and reconfigure as two-way cul-de-sacs (can be staged)
- E. Make changes to southern carriageway (northbound direction) on Lambton Quay between Whitmore and Panama
- F. Divert southbound buses to new route and make changes to northern carriageway (southbound direction) on Lambton Quay between Whitmore and Panama



Stage 4A – Changes Panama to Hunter

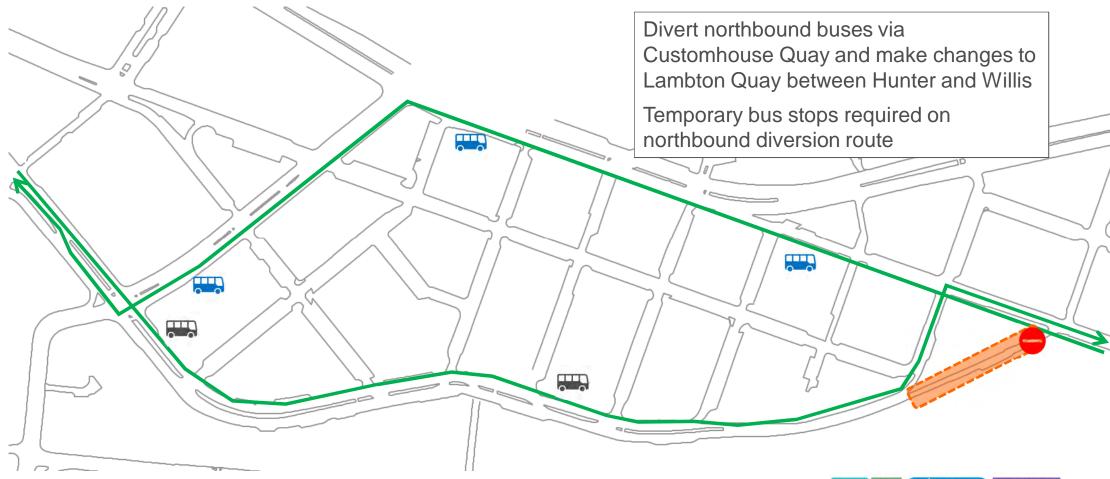
Divert southbound buses via Panama Street and make changes to Lambton Quay between Panama and Hunter Potential for temporary southbound bus stop on Featherston Street



~4 weeks

Stage 4B – Changes Willis to Hunter

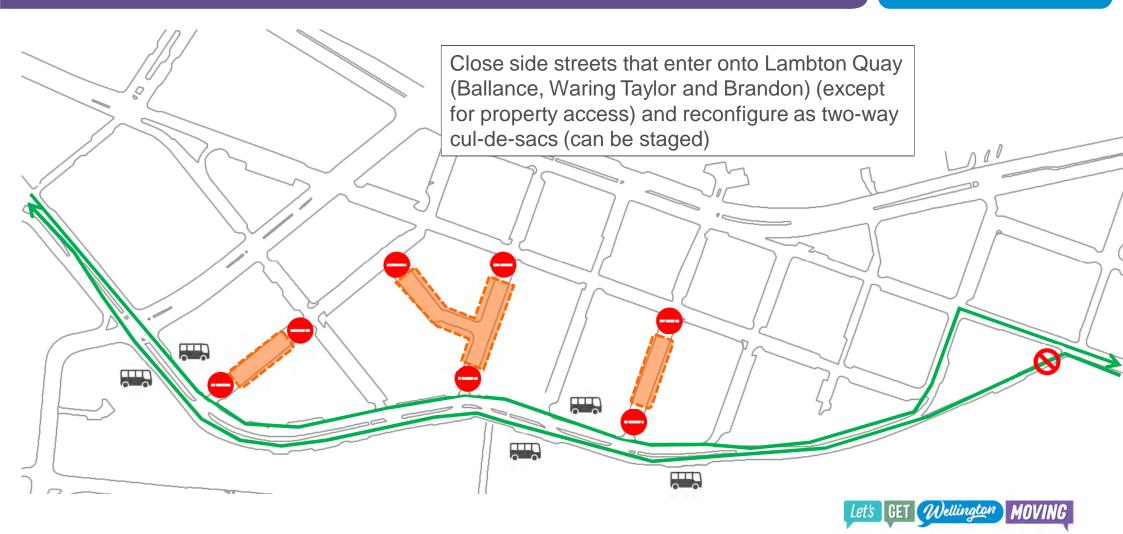
~4 weeks





Stage 4C – Reconfigure entry side streets

~16 weeks



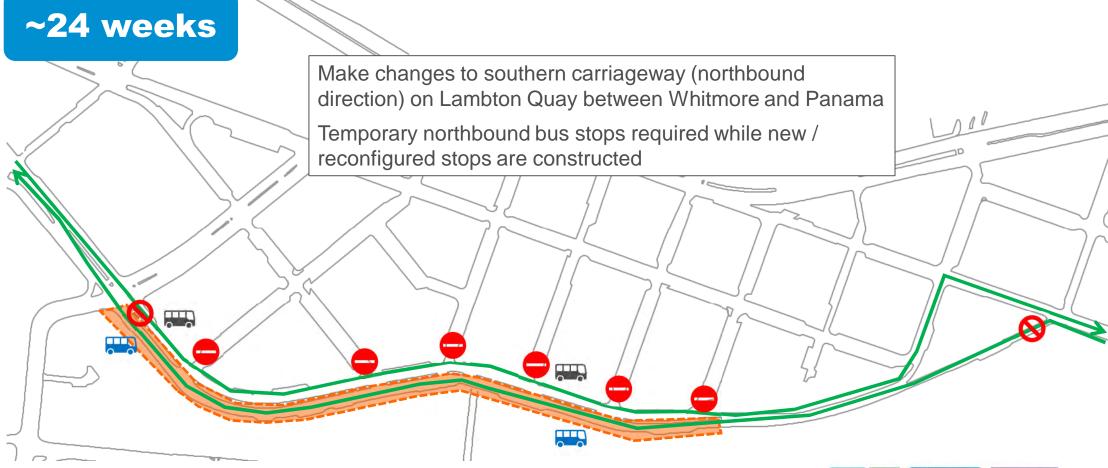
Stage 4D – Reconfigure exit side streets

~16 weeks

Close Lambton Quay to general traffic, make temporary changes to Whitmore Street intersection and reconfigure side roads that exit from Lambton Quay (Stout, Johnston and Panama) (except for property access) and reconfigure as two-way cul-de-sacs (can be staged)

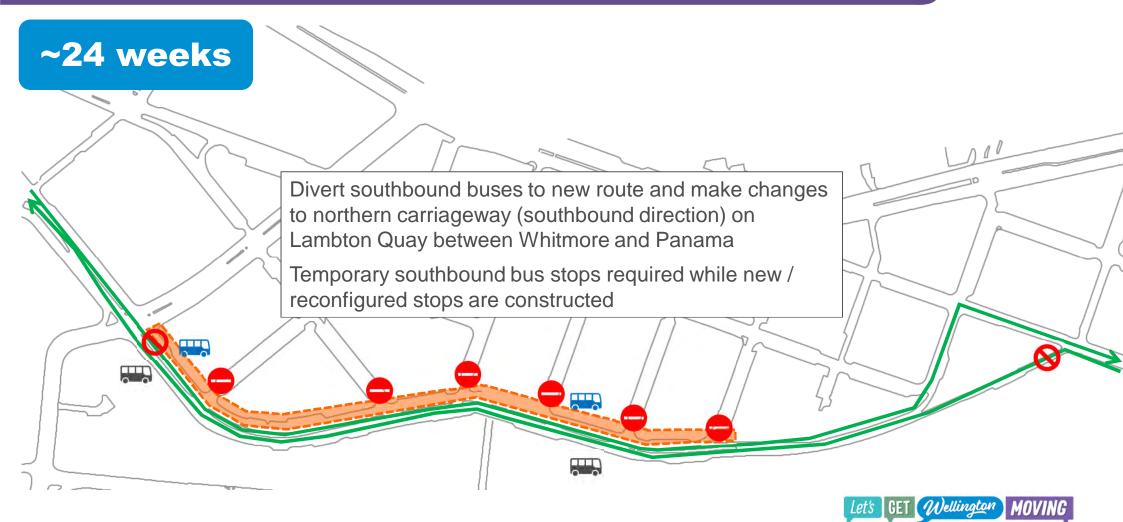


Stage 4E – Reconfigure southern carriageway





Stage 4F – Reconfigure northern carriageway



Stage 5 – Courtenay Place

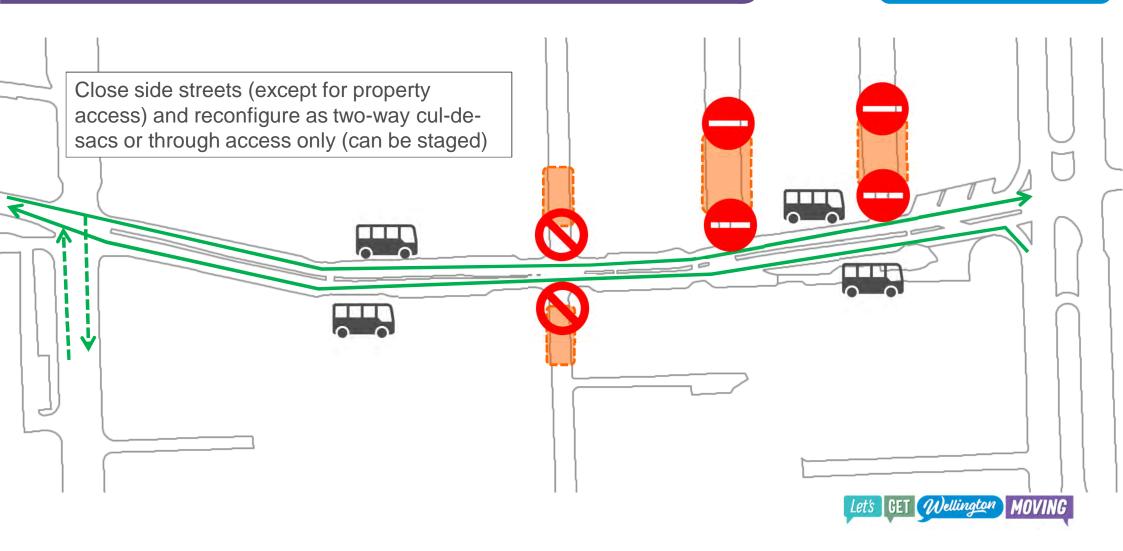
The following stages are proposed:

- A. Close side streets (except for property access) and reconfigure as two-way cul-de-sacs or through access only (can be staged)
- B. Close Courtenay Place to general traffic, make temporary changes to Taranaki and Cambridge intersections
- C. Remove median and surface (except where trees being retained)
- D. Shift lanes to north side and make changes to southern side of Courtenay Place
- E. Shift southbound lanes to south side, divert northbound lanes via Wakefield Street and make changes to northern side of Courtenay Place

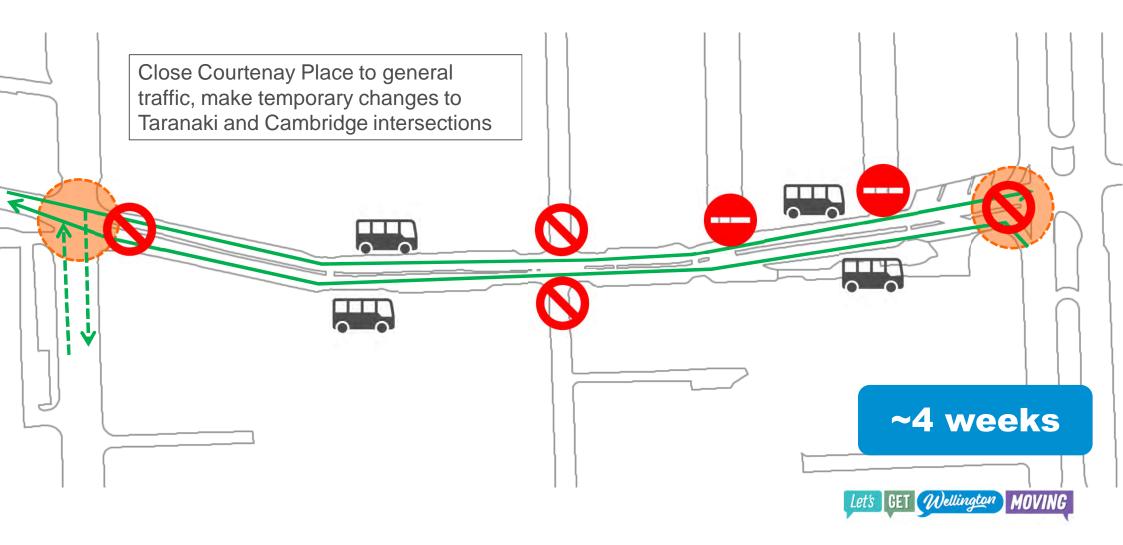


Stage 5A – Reconfigure side streets

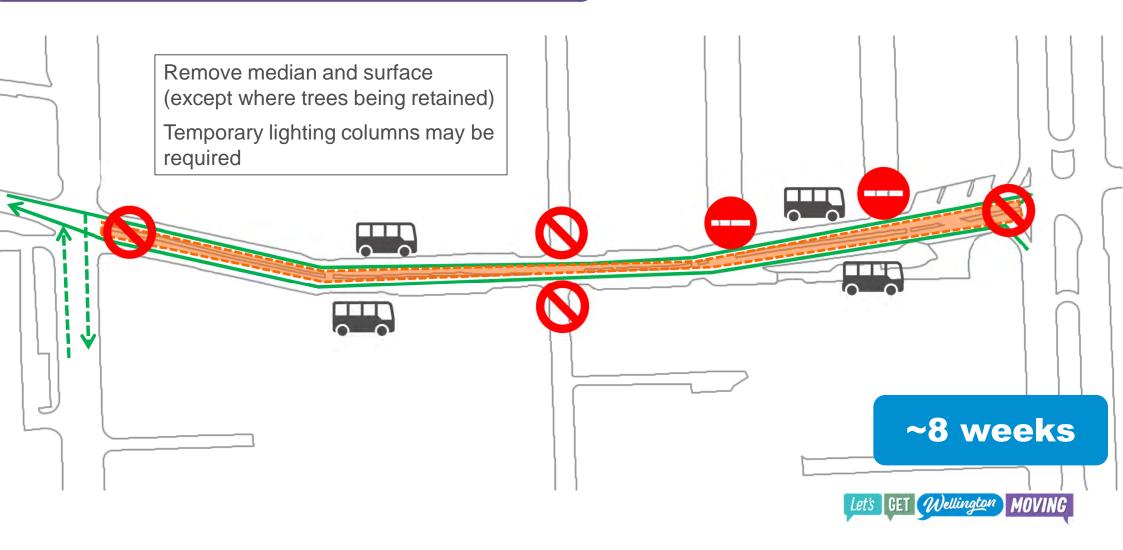
~12 weeks



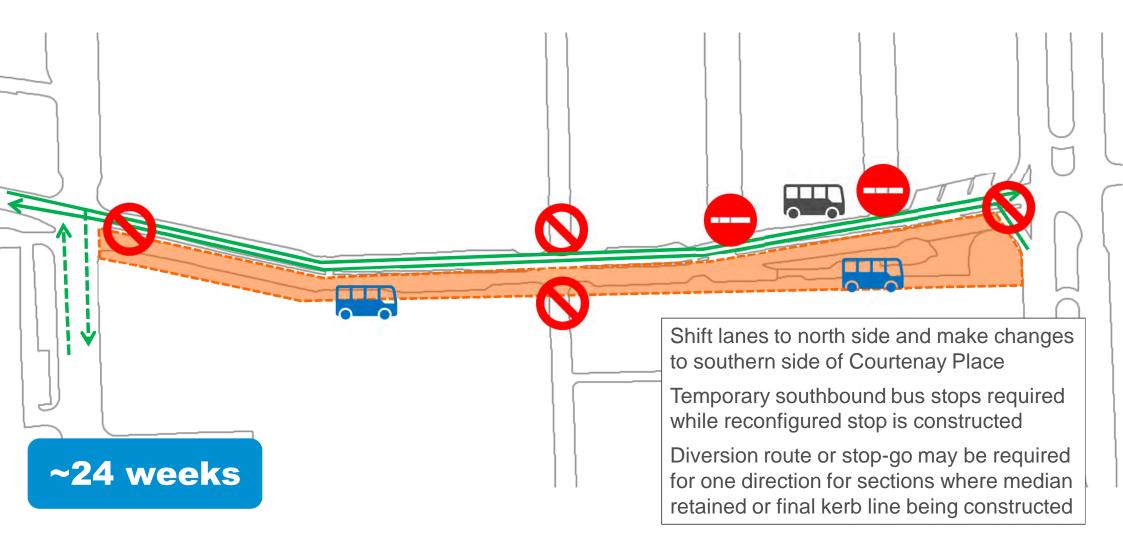
Stage 5B – Close Courtenay Place to traffic



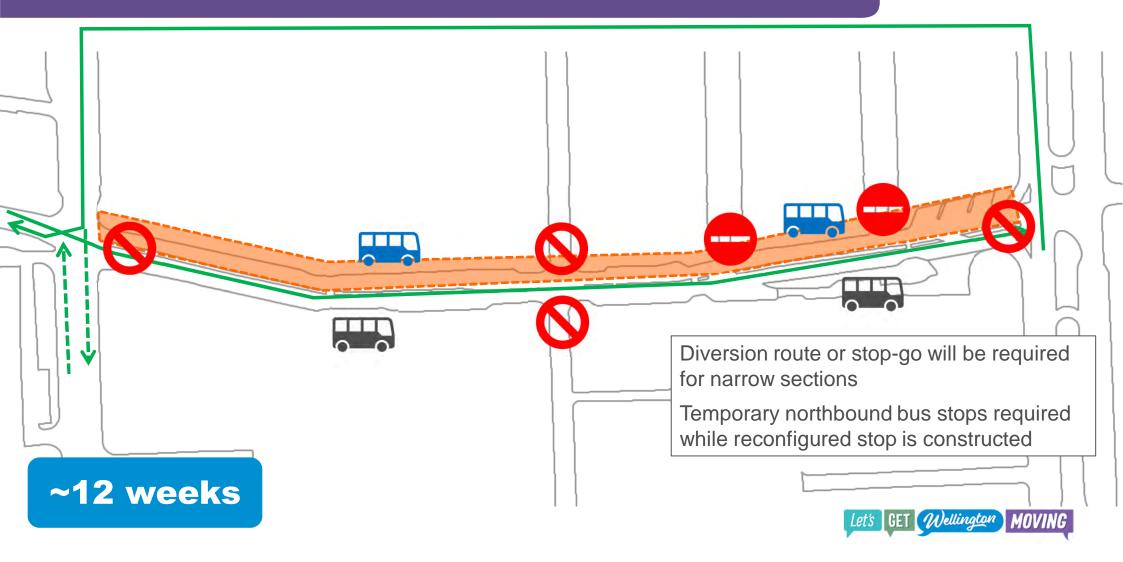
Stage 5C – Remove median



Stage 5D – Make changes to southern side



Stage 5E – Make changes to northern side







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Appendix E - Assumptions and exclusions

Golden Mile: Key Assumptions Register (as of 13 September 2021)

Ref #	Category	Source	Date	Feature	Challengeable (Yes/No)	Key Assumption	Reasons
1	Communications			Stake holder manager and building	Yes	1x FTE coms stake holder manager (senior level) Advertising (750k pa). Assume this allows for all the communications required on this project. This would support service provider management and implication for power and internet outages, bus stop relocation. Assume this is required for a 3 year project duration (duration reduced at request of LGWM)	
2	Physical works			EROSION AND SEDIMENT CONTROL MEASURES	Yes	Assume 500 per week as a base This is because the cost is assumed to be proportional time. The sites for this project are all relative. If they are bigger or more complex likely to take longer and hence cost more Assume no dewatering required. Control measures are to manage water runoff into or out of site. Treatment would include sediment sausages and catch pit filter bags. These would need to be cleared after each day of rain Larger sites assumed to cost 50% more than base rate for the smaller side roads works	
3	Physical works			Cut to waste	No	For the first 100mm unless stated otherwise. Cut to waste for concrete paths and brick work is normally around 150-200/m3 use higher end and add 20% for the location and reduced productivity	
4	Physical works			Drainage	No	Rates and comparable projects referred to for these rates, Refer to estimate and the comments.	
5	Physical works			Drainage	Yes	Assuming drainage works are in the depth range of 1 - 2.5m and no dewatering is required. Basic shoring is what is expected if over 1.5m but under 2.5m	
6	Physical works			Leads		Rates based on experience at Wakefield St	
7	Physical works			Kerbing - Strip drains		Rate revised from 500/m to 1000/m based on cost at Ambulance drive. Large risks around this item due to uncertainty on the type proposed. This affects installation methods, depth (which affects services) and material cost and availability.	
8	Physical works			Surfacing - AC		Based on current AC surfacing placing rates. Would need to have reasonable quantities. This is purely for a 30-50mm AC replacement. Milling is allowed for separately	
9	Physical works			Marking removal		Assume sandblaster work would be broken into smaller pieces due to the nature of the sites. This would reduce efficiency. This rate is based on the full width of the corridor works out at 6-10m of the corridor per night	
10	Physical works			Signs		A sign would cost 100 to remove and approx. 500 to install. This allows for approx. 1 sign every 4m for both sides of the road	
11	Physical works			ANPR Cameras		Allow 15k per camera and 5k for the system and installation. Does not include ongoing operation costs of the system	
12	Physical works			CCTV Cameras		Allow for Camera and power. Connection organized by police or TOC This is for the camera, assumed on a simple pole or fixed to a building. Allows for power but connection to coms to TOC or similar	
13	Physical works			Temporary lighting (relocate existing)		Allow 10m of ducting for each light and cabling	
	Physical works			Road lighting		Expensive but based on the WCC example project - Lombard	
15	Physical works			Pedestrian lighting		Assume 1 every 10m (over 500m) in pedestrian / cycle area on north side of Lambton Quay between Panama and Whitmore includes ducting and cabling allowance Smaller than a standard street light but likely to be a feature item if based on Lombard example	
16	Physical works			Services relocation		The service relocation and service clash risk is based on a percentage of the base project cost. This is because the design is not finalised, no test pits have been undertaken to confirm service covers and what can be done to avoid them.	

Status	Notes / Actions

Golden Mile: Key Assumptions Register (as of 13 September 2021)

Ref #	Category	Source	Date	Feature	Challengeable (Yes/No)	Key Assumption	Reasons	Status	Notes / Actions
17	Physical works			Garden Bed		Assume back filled with suitable topsoil and a basic retaining edging as the paved surface will form the main edging planed at 3 small flax like plants per 1m2. topsoil rate including supply and placement 350/m3			
18	Physical works			Rain Garden		See imagine of option in estimate - Topsoil 350/10*3 Kerb assume front kerb in k&c rate back kerb same rate subsoil 150/m and connection drainage material 100/m2 Planting 4 plants 50 each			
19	Physical works			Seating		Feature seating can be very costly due to bespoke design and manufacturing allow minimum 10k per seat this has to cover manufacture and installation and foundation			
20	Physical works			Cobbling and paving		These rates are based on WCC current rates for cobble and paving replacement. Sum added to allow for base preparation not in the rate provided by WCC			
21	Physical works			Traffic management		\$10K per day 7 days per week for main streets and a fraction less for side roads Note a basic TM set up on a street in Porirua for a shoulder closure is approx. 2500 per day. Then note the location and the number of side roads required to work on these CBD routes Allows for VMS boards hire, signage, assume motorway VMS are free. Comms included in community engagement			
22	Physical works			TM - Diversions		\$75K per temporary stop based on advice provided by client: \$6K for footing, \$28K for shelter, \$4K for graphics / signage, \$9K for power, \$3K for reinstatement, \$25K for TTM			

Appendix F - Parallel Estimate Report



LET'S GET WELLINGTON MOVING: GOLDEN MILE OPTION V3A

PARALLEL ESTIMATE

13th September 2022



CONTENTS

CONTACT

- 1 INTRODUCTION
- 2 SCOPE OF REVIEW
- 3 FINANCIAL SUMMARY
- 4 KEY VARIANCES
- 5 RISK AND CONTINGENCY

APPENDICES

APPENDIX A - ESTIMATE BREAKDOWN

2

2

3

CONTACT

DETAIL	DESCRIPTION
Name of Company/Trading Name	WTP NZ Infrastructure Limited
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DOCUMENT STATUS	NAME	DATE
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REVIEWED BY	Luke Donnelly	13.09.21
E-SIGNATURE APPROVED	Luke Donnelly	13.09.21

REVISION NO.	REVISION DATE	DRAFT.FINAL
00	13.09.21	FINAL

1 INTRODUCTION

WT Infrastructure (WT) have been commissioned by Waka Kotahi to provide a Parallel Estimate for the Detailed Business Case Estimate (DBE) produced for the Golden Mile workstream as part of the wider Let's Get Wellington Moving project.

The estimates being reviewed have been produced by WSP and we were provided with the following documents:

- SSBC Golden Mile, Cost Estimate Report by WSP dated 6th August 2021
- General Road Layout Plans by WSP
- Side Road General Layout Plans by WSP
- Let's Get Wellington Moving, Materiality Strategy, by Boffa Miskell dated 5th August 2021

2 SCOPE OF REVIEW

The cost estimate report produced by WSP included a quantified breakdown of the estimate, which we have used as the basis for our estimate.

We undertook a review of the quantities provided by WSP and generally found that they aligned with our measurements. We have used the scope of works described within the estimate by WSP as the basis for developing our own rates.

Where we have considered it appropriate, we have added new items into the main estimate.

We have included a breakdown of these estimate in Appendix A of this report and have noted any key variances or concerns in Section 4.

3 FINANCIAL SUMMARY

ITEM	DESCRIPTION	WSP ESTIMATE	WT ESTIMATE	VARIANCE
3.1	Base Estimate	64,916,000	65,452,607	536,607
3.2	Expected Estimate	98,910,000	85,088,389	(13,821,611)
3.3	95 th Percentile Estimate	116,804,000	100,815,775	(15,988,225)

The following table provides a summary of WSP and our estimate totals:

The variances between each report are discussed in further detail in Section 4 of this report. The above table represents our assessment of the project costs based upon the scope of works shown on the drawings and included within the WSP estimate.

We note that in the WSP estimate breakdown that there is a comment in the paving section against item 10.4.2 which reads '*No replacement of existing footpath areas and no higher cost footpath treatments*'. As there is no inclusion in the estimate for works to the existing pavements or for stone pavement, we assume that none has been included by WSP. We believe that this represents a significant risk to the project, which is discussed further in Section 5 of this report.

4 KEY VARIANCES

We note that generally the base estimates are well aligned and that the main variances between the two estimates are in the contingency allowances. We have noted below some of the more significant variances between elements in the estimate.

4.1 QUANTITIES

We undertook a measure of our own quantities, which broadly aligned with the WSP quantities. We note that if there were discrepancies, we were generally slightly lower than WSP and we have therefore used their measurements.

4.2 DRAINAGE (-\$1M)

Generally, we believe the drainage rates used by WSP are high and we have utilised lower rates, particularly for sumps and reticulation. It appears that the WSP rates include for reinstatement and the like which will not be required in all scenarios as the works fall within an area of pavement to be upgraded.

4.3 LANDSCAPING (+\$1.5M)

We have increased the rate for architectural bus shelters. The WSP notes indicate that the allowance needs to include for two shelters. We have allowed \$150k per shelter, although we note that this could easily be exceeded depending upon the extent of architectural enhancements.

Our rates for rain gardens are higher than those allowed by WSP on the basis that these will be constructed adjacent to carriageways and are likely to require structural walls or soil cells, as well as being constructed in and around existing utilities.

We have added an allowance of \$750k for *'Cultural and artistic inputs'*. This is to allow for integration of artwork and other features within the overall project (standalone artworks, etchings, paving patterns, etc.). Again, we note that it is easy to exceed an allowance like this for these types of projects and this should be considered

We have increased the allowances for general street furniture and relocation of street furniture, assuming allowance for a range of different furniture types.

5 RISK AND CONTINGENCY

WSP have utilised a risk-based approach to contingency using the Hong Kong method. We agree that this is the best approach for this stage of the project.

We have used the general approach and applied percentage contingencies across each of the elements. This has been provided as a comparison, utilising similar contingency allowances that have been utilised across the wider LGWM programme.

The allowances we have made are summarised in the table below:

ltem	Description	Expected	95th Percentile
1	Consultancy Fees	30%	20%
2	Direct Costs	30%	20%
3	Environmental Compliance	30%	15%
4	Earthworks	30%	15%
5	Drainage	30%	15%
6	Pavement and Surfacing	30%	15%
7	Traffic Services	30%	15%
8	Service Relocations	30%	25%
9	Landscaping	30%	15%
10	Traffic Management and Temporary Works	30%	25%
11	Preliminary and General	30%	15%
12	Extraordinary Construction Costs	30%	15%

Whilst there is a significant variance between the contingency allowances, our contingency allowance only relates to the scope included within the estimate and excludes any further scope change. We have concerns over the scope included within the base estimate, which is discussed in more detail below. We believe that this concern needs to be resolved prior to reconciling the contingency allowances.

5.1 SCOPE

We believe that there is a significant risk relating to the scope of this project, which could be split into two categories: extent and quality.

The extent of scope is a concern because there is the assumption within the pricing that significant areas of pavement and carriageway will either be left as they are, or resurfaced in their current arrangement. Carriageways in particular have significant areas to be milled and re-sealed. We have found with past projects that this can be difficult to achieve when kerb lines are being amended which impacts crossfalls, cambers and overland flow paths. Often the road needs to be reconstructed to allow adequate falls and storage.

The quality is linked to the extent in that the assumption of retaining materials in place, particularly clay pavers will likely have an impact on the finished product, with different age and colours of pavers being alongside each other. It is also assumed that the new pavements will be concrete pavers, although these will be adjoining existing areas of clay pavers. The current base estimate does not allow for a uniformly finished streetscape.

The other quality related scope risk is the overall look and feel of the finished streets. The Boffa Miskell materiality report includes several images of high specification public realm, including stone pavers, steel edgings and the like. No allowance is included for these uplifts in the current base estimate. This coupled with the concerns around the extent raise concerns that there may not be enough value in the estimate to provide the level of finish that may be anticipated for these streets.

A good quality streetscape will cost between \$1,500 and \$2,500+ per square meter for construction. It is important to note that these rates are applicable to the overall street area, including any asphalt carriageway, gardens beds, etc. and cannot be applied to just the pavement areas. Based upon an

approximate take-off, we have around 60,000m2 of streets meaning that this range should be between \$90-\$150m, plus fees and contingency.

We would recommend that this is reviewed further and if necessary, the scope clarified, as the scale of this project, alongside the uncertainty of quality of finish mean that the budget may need to be significantly higher. We understand that there may be further discussions between the funding partners about who is paying for these works and therefore certain scope, such as existing footpaths, is excluded. If this is the case, then it needs to be made very clear that this estimate does not represent a full upgrade to the streets in question.

This scope risk is excluded from our estimate/contingency.

5.2 SERVICES RELOCATION

There is an allowance of \$7.5m for services relocation included in the estimate, which we agree is a reasonable allowance. WSP have highlighted this as a significant risk, indicating a potential upper bound estimate of 300% higher than this allowance. We agree that this poses a significant risk to the project and note that this risk would also increase if our concerns around scope extents noted above are correct.

5.3 TRAFFIC MANAGEMENT

There is a risk that the traffic management requirements become significantly more complex than anticipated due to public and political pressure requiring the project to have less impacts on business owners and the general public. However, there may also be an opportunity to plan the works in such a way as to allow reasonably significant areas to be opened up at once to reduce TM costs and allow greater efficiencies.

5.4 CONTAMINATED GROUND

We note that the estimate currently includes no allowance for the disposal of contaminated material currently. It is unknown if this should be expected within the areas that we will be excavating, particularly for rain gardens and tree pits, etc.



APPENDIX A

Peer Review Breakdown

Project Estimate - Form C

LGWM - Golden Mile - OPTION V3A

DBE

Detailed Business Case Estimate

			etaneu business	Case Estimate
ltem	Description	Base Estimate	Contingency	Funding Risk Contingency
Α	Nett Project Property Cost			
	Project Development Phase			
	- Consultancy Fees	Nil		
	- NZTA Managed Costs	Nil		
В	Total Project Development	0	0	0
	Pre-Implementation Phase			
	- Consultancy Fees	4,929,464	1,478,839	1,281,661
	- NZTA Managed Costs	2,464,732	739,420	640,830
С	Total Pre-implementation	7,394,196	2,218,259	1,922,491
	Implementation Phase			
	Implementation Fees			
	- Consultancy Fees	3,370,682	1,011,205	876,377
	- NZTA Managed Costs	5,393,091	1,617,927	1,402,204
	- Consent Monitoring Fees	Excluded		
	Sub Total Base Implementation Fees	8,763,773	2,629,132	2,278,581
	Physical Works			
1		411,500	123,450	80,243
2		381,911	114,573	74,473
3		Nil	Nil	Nil
4		3,956,095	1,186,828	771,438
5	5	1,963,872	589,162	382,955
6	5	Nil	Nil	Nil
7		Nil	Nil	Nil
8		9,361,760	2,808,528	1,825,543
9		7,500,000	2,250,000	2,437,500
10	1 5	9,633,728	2,890,118	1,878,577
11	5 1 7	7,222,000	2,166,600	2,347,150
12		8,086,173	2,425,852	1,576,804
13	Extraordinary Construction Costs Sub Total Base Physical Works	777,600	233,280 14,788,391	151,632 11,526,314
	-	49,294,638		
D	Total for Implementation Phase	58,058,411	17,417,523	13,804,895
E	Project Base Estimate (A+B+C+D)	65,452,607		
F	Contingency (Assessed/Analysed)	(A+B+C+D)	19,635,782	
G	Project Expected Estimate	(E+F)	85,088,389	
Nett Pro	Jject Property Cost Expected Estimate		Excluded	
Project I	Development Phase Expected Estimate		0	
	lementation phase Expected Estimate		9,612,454	
	entation Phase Expected Estimate		75,475,935	
. <u> </u>				
н	Funding Risk Contingency (Assessed/Analysed)		(A+B+C+D)	15,727,386
I	95th percentile Project Estimate		(G+H)	100,815,775
Nett Pro	ject Property Cost 95th percentile Estimate		(3.11)	0
	Development Phase 95th percentile Estimate			0
	lementation Phase 95th percentile Estimate			11,534,945
	entation Phase 95th percentile Estimate			89,280,830
mpleme	entation mase sour percentile Estimate			09,200,030

Golden N		WT Estimate			
Ref	Description	Unit	Qty	Rate	Total
A	PROJECT PROPERTY COST				
A.1	Land Purchase	m2			
A.2	Legal Survey Fees	LS			
A.3	Legalisation Costs	LS			
В	INVESTIGATION AND REPORTING				
B.1	Consultants design Fees @ 1%	%			
B.2	Client managed costs (including property acquisition	%			
	agents)				
с					
C.1	DESIGN AND PROJECT DEVELOPMENT	0/	40 204 628	0.10	4 0 2 0 4 6
	Consultant's design fees	%	49,294,638	0.10	4,929,46
C.2	Client managed costs (including property acquisition	%	49,294,638	0.05	2,464,73
	agent's fees)				7 204 10
D	CONSTRUCTION	1			7,394,19
	CONSTRUCTION MSQA and Client Managed Costs				
	-	0/	40 204 628	0.00	2 0 4 2 5 7
D.1	Consultant's surveillance during construction phase	%	49,294,638	0.08	3,943,57
D.2	Client managed costs (including property acquisition	%	49,294,638	0.05	2,464,73
	agent's fees)	,-	,,,,		_,,.
					6,408,303
1	PHYSICAL WORKS				
	Environmental Compliance				
1.1	Environmental management plan	LS	1	20,000	20,00
1.2	Erosion and Sediment Control Measures				
1.2.1	Lambton Quay	wks	56	750	42,00
1.2.2	Willis Street	wks	24	750	18,00
1.2.3	Manners Street	wks	8	750	6,00
1.2.3	Courtenay Place	wks	48	750	36,00
1.2.4	Side roads - Ballance Street			500	
		wks	4		2,00
1.2.6	Side roads - Stout Street	wks	4	500	2,00
1.2.7	Side roads - Waring Taylor Street	wks	8	750	6,00
1.2.8	Side roads - Johnston Street	wks	8	750	6,00
1.2.9	Side roads - Brandon Street	wks	4	500	2,00
1.2.10	Side roads - Panama Street	wks	4	500	2,00
1.2.11	Side roads - Mercer Street	wks	4	500	2,00
1.2.12	Side roads - Willeston Street / Customhouse Quay	wks	2	500	1,00
1.2.13	Side roads - Boulcott Street / Willis Street (south)	wks	4	500	2,000
1.2.14	Side roads - Cuba Street	wks	4	500	2,00
1.2.15	Side roads - Taranaki Street	wks	4	500	2,00
1.2.15	Side roads - Dixon Street	wks	4	500	2,00
1.2.17	Side roads - Tory Street	wks	4	500	2,00
1.2.17	Side roads - Allen Street	wks	4	500	2,00
1.2.10	Side roads - Blair Street	wks	4	500	2,00
					,
1.3	Site Fencing				
1.3.1	Lambton Quay	wks	56	1,250	70,00
1.3.2	Willis Street	wks	24	1,250	30,00
1.3.3	Manners Street	wks	8	1,250	10,000
1.3.4	Courtenay Place	wks	48	1,250	60,00

Golden M			WT Estimate			
Ref	Description	Unit	Qty	Rate	Total	
1.3.5	Side roads - Ballance Street	wks	4	1,250	5,000	
1.3.6	Side roads - Stout Street	wks	4	1,250	5,000	
1.3.7	Side roads - Waring Taylor Street	wks	8	1,250	10,000	
1.3.8	Side roads - Johnston Street	wks	8	1,250	10,000	
1.3.9	Side roads - Brandon Street	wks	4	1,250	5,000	
1.3.10	Side roads - Panama Street	wks	4	1,250	5,000	
1.3.11	Side roads - Mercer Street	wks	4	1,250	5,000	
1.3.12	Side roads - Willeston Street / Customhouse Quay	wks	2	1,250	2,500	
1.3.13	Side roads - Boulcott Street / Willis Street (south)	wks	4	1,250	5,000	
1.3.14	Side roads - Cuba Street	wks	4	1,250	5,000	
1.3.15	Side roads - Taranaki Street	wks	4	1,250	5,000	
1.3.16	Side roads - Dixon Street	wks	4	1,250	5,000	
1.3.17	Side roads - Tory Street	wks	4	1,250	5,000	
1.3.18	Side roads - Allen Street	wks	4	1,250	5,000	
1.3.19	Side roads - Blair Street	wks	4	1,250	5,000	
2	EARTHWORKS				411,500	
2.1	Site Clearance/Cut to Waste					
2.1.1	Road converted to footpath or cycleway (100mm depth)					
2.1.1.1	Lambton Quay	m2	4,450	25	111,250	
2.1.1.2	Willis Street	m2	859	25	21,475	
2.1.1.3	Manners Street	m2	300	25	7,500	
2.1.1.4	Courtenay Place	m2	4,175	25	104,375	
2.1.1.5	Side roads - Ballance Street	m2	40	25	1,000	
2.1.1.6	Side roads - Stout Street	m2	174	25	4,350	
2.1.1.7	Side roads - Waring Taylor Street	m2	376	25	9,400	
2.1.1.8	Side roads - Johnston Street	m2	248	25	6,200	
2.1.1.9	Side roads - Brandon Street	m2	100	25	2,500	
2.1.1.10	Side roads - Panama Street	m2	300	25	7,500	
2.1.1.11	Side roads - Mercer Street	m2	271	25	, 6,775	
2.1.1.12	Side roads - Boulcott Street / Willis Street (south)	m2	-	25	-	
2.1.1.13	Side roads - Cuba Street	m2	42	25	1,050	
2.1.1.14	Side roads - Taranaki Street	m2	219	25	5,475	
2.1.1.15	Side roads - Dixon Street	m2	-	25	-	
2.1.1.16	Side roads - Tory Street	m2	-	25	-	
2.1.1.17	Side roads - Allen Street	m2	100	25	2,500	
2.1.1.18	Side roads - Blair Street	m2	118	25	2,950	
2.1.2	Road converted to landscape (300mm depth)					
2.1.2.1	Lambton Quay	m2	90	32	2,898	
2.1.2.2	Willis Street	m2	50	32	_,000	
2.1.2.3	Manners Street	m2		32	_	
2.1.2.4	Courtenay Place	m2		32	-	
2.1.3	Footpath or Landscape converted to road (300mm depth)					
2.1.3.1	Lambton Quay	m2	209	32	6,731	
2.1.3.1	Willis Street	m2	209	32	0,731	
2.1.3.2	WIND SUCCI		-	52	-	

		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
2.1.3.3	Manners Street	m2	-	32		
2.1.3.4	Courtenay Place	m2	748	32	24,089	
2.1.3.5	Side roads - Ballance Street	m2	-	32		
2.1.3.6	Side roads - Stout Street	m2	-	32		
2.1.3.7	Side roads - Waring Taylor Street	m2	-	32		
2.1.3.8	Side roads - Johnston Street	m2	-	32		
2.1.3.9	Side roads - Brandon Street	m2	-	32		
2.1.3.10	Side roads - Panama Street	m2	-	32		
2.1.3.11	Side roads - Mercer Street	m2	-	32		
2.1.3.12	Side roads - Boulcott Street / Willis Street (south)	m2	-	32		
2.1.3.13	Side roads - Cuba Street	m2	-	32		
2.1.3.14	Side roads - Taranaki Street	m2	-	32		
2.1.3.15	Side roads - Dixon Street	m2	-	32		
2.1.3.16	Side roads - Tory Street	m2	-	32		
2.1.3.17	Side roads - Allen Street	m2	-	32		
2.1.3.18	Side roads - Blair Street	m2	-	32		
2.1.4	Footpath converted to landscape (300mm depth)					
2.1.4.1	Lambton Quay	m2	860	32	27,696	
2.1.4.2	Willis Street	m2	20	32	644	
2.1.4.3	Manners Street	m2	-	32		
2.1.4.4	Courtenay Place	m2	320	32	10,306	
2.1.5	Landscape converted to footpath/cycleway (300mm_ depth)					
2.1.5.1	Lambton Quay	m2	257	32	8,277	
2.1.5.2	Willis Street	m2	-	32	,	
2.1.5.3	Manners Street	m2	-	32		
2.1.5.4	Courtenay Place	m2	-	32		
2.1.6	Footpath replacement (100mm depth)					
2.1.6.1	Lambton Quay	m2	-	25		
2.1.6.2	Willis Street	m2	-	25		
2.1.6.3	Courtenay Place	m2	-	25		
2.1.6.4	Misc (balance quantities)	m2	-	25		
2.2	Imported Fill					
2.2.1	Landscape converted to footpath (200mm depth)					
2.2.1.1	Lambton Quay	m2	257	27	6,970	
2.2.1.2	Willis Street	m2	-	27		
2.2.1.3	Manners Street	m2	-	27		
2.2.1.4	Courtenay Place	m2	-	27	801 01	
4	DRAINAGE				381,91 1	
4.1	Manholes					
4.1.1	New Manholes DN1050					

		WT Estimate			
Ref	Description	Unit	Qty	Rate	Total
4.1.1.1	Lambton Quay	ea	20	10,000	200,000
			_	40.000	
4.1.1.2	Willis Street	ea	5	10,000	50,000
4.1.1.3	Manners Street	ea	4	10,000	40,000
4.1.1.4	Courtenay Place	ea	16	10,000	160,000
4.1.1.5	Side roads - Ballance Street	ea	-	10,000	-
4.1.1.6	Side roads - Stout Street	ea	-	10,000	-
4.1.1.7	Side roads - Waring Taylor Street	ea	-	10,000	-
4.1.1.8	Side roads - Johnston Street	ea	-	10,000	-
4.1.1.9	Side roads - Brandon Street	ea	-	10,000	-
4.1.1.10	Side roads - Panama Street	ea	-	10,000	-
4.1.1.11	Side roads - Mercer Street	ea	-	10,000	-
4.1.1.12	Side roads - Boulcott Street / Willis Street (south)	ea	-	10,000	-
4.1.1.13	Side roads - Cuba Street	ea	-	10,000	-
4.1.1.14	Side roads - Taranaki Street	ea	-	10,000	-
4.1.1.15	Side roads - Dixon Street	ea	-	10,000	-
4.1.1.16	Side roads - Tory Street	ea	-	10,000	-
4.1.1.17	Side roads - Allen Street	ea	-	10,000	-
4.1.1.18	Side roads - Blair Street	ea	-	10,000	-
4.1.2	New Manholes DN1200				
4.1.2.1	Lambton Quay	ea	6	12,000	72,000
4.1.2.2	Willis Street	ea	2	12,000	24,000
4.1.2.3	Manners Street	ea	2	12,000	24,000
4.1.2.4	Courtenay Place	ea	1	12,000	12,000
4.1.2.5	Side roads - Ballance Street	ea	-	12,000	-
4.1.2.6	Side roads - Stout Street	ea	-	12,000	-
4.1.2.7	Side roads - Waring Taylor Street	ea	-	12,000	-
4.1.2.8	Side roads - Johnston Street	ea	-	12,000	-
4.1.2.9	Side roads - Brandon Street	ea	-	12,000	-
4.1.2.10	Side roads - Panama Street	ea	-	12,000	-
4.1.2.11	Side roads - Mercer Street	ea	-	12,000	_
4.1.2.12	Side roads - Boulcott Street / Willis Street (south)	ea	-	12,000	-
4.1.2.13	Side roads - Cuba Street	ea	-	12,000	-
4.1.2.14	Side roads - Taranaki Street	ea	-	12,000	-
4.1.2.15	Side roads - Dixon Street	ea	-	12,000	-
4.1.2.16	Side roads - Tory Street	ea	-	12,000	_
4.1.2.17	Side roads - Allen Street	ea	-	12,000	_
4.1.2.18	Side roads - Blair Street	ea	-	12,000	-
4.2	Sumps				
4.2.1	Sumps removed				
4.2.1.1	Lambton Quay	ea	9	568	5,108
4.2.1.2	Willis Street	ea	4	568	2,270
4.2.1.3	Manners Street	ea	-	568	-
4.2.1.4	Courtenay Place	ea	22	568	12,485
4.2.1.5	Side roads - Ballance Street	ea	-	568	,
4.2.1.6	Side roads - Stout Street	ea	-	568	-
4.2.1.7	Side roads - Waring Taylor Street	ea	-	568	-
4.2.1.8	Side roads - Johnston Street	ea	-	568	_

D-f	Description	11. *		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total			
4.2.1.9	Side roads - Brandon Street	ea	-	568				
4.2.1.10	Side roads - Panama Street	ea	-	568				
4.2.1.11	Side roads - Mercer Street	ea	-	568				
4.2.1.12	Side roads - Boulcott Street / Willis Street (south)	ea	-	568				
4.2.1.13	Side roads - Cuba Street	ea	-	568				
4.2.1.14	Side roads - Taranaki Street	ea	-	568				
4.2.1.15	Side roads - Dixon Street	ea	-	568				
4.2.1.16	Side roads - Tory Street	ea		568				
4.2.1.17	Side roads - Allen Street	ea	-	568				
4.2.1.18	Side roads - Blair Street	ea	-	568				
4.2.2	Replace sumps							
4.2.2.1	Lambton Quay	ea	10	5,675	56,75			
4.2.2.2	Willis Street	ea	4	5,675	22,700			
4.2.2.3	Manners Street	ea	1	5,675	5,67			
4.2.2.4	Courtenay Place	ea	-					
4.2.2.5	Side roads - Ballance Street	ea	-					
4.2.2.6	Side roads - Stout Street	ea	-					
4.2.2.7	Side roads - Waring Taylor Street	ea	-					
4.2.2.8	Side roads - Johnston Street	ea	-					
4.2.2.9	Side roads - Brandon Street	ea	-					
4.2.2.10	Side roads - Panama Street	ea	-					
4.2.2.11	Side roads - Mercer Street	ea	-					
4.2.2.12	Side roads - Boulcott Street / Willis Street (south)	ea	-					
4.2.2.13	Side roads - Cuba Street	ea	-					
4.2.2.14	Side roads - Taranaki Street	ea	-					
4.2.2.15	Side roads - Dixon Street	ea	-					
4.2.2.16	Side roads - Tory Street	ea	-					
4.2.2.17	Side roads - Allen Street	ea	-					
4.2.2.18	Side roads - Blair Street	ea	-					
4.2.3	<u>New sumps</u>							
4.2.3.1	Lambton Quay	ea	27	4,803	129,668			
4.2.3.2	Willis Street	ea		4,803				
4.2.3.3	Manners Street	ea		4,803				
4.2.3.4	Courtenay Place	ea	19	4,803	91,24			
4.2.3.5	Side roads - Ballance Street	ea		4,803				
4.2.3.6	Side roads - Stout Street	ea		4,803				
4.2.3.7	Side roads - Waring Taylor Street	ea		4,803				
4.2.3.8	Side roads - Johnston Street	ea		4,803				
4.2.3.9	Side roads - Brandon Street	ea		4,803				
4.2.3.10	Side roads - Panama Street	ea		4,803				
4.2.3.11	Side roads - Mercer Street	ea		4,803				
4.2.3.12	Side roads - Boulcott Street / Willis Street (south)	ea		4,803				
4.2.3.13	Side roads - Cuba Street	ea		4,803				
4.2.3.14	Side roads - Taranaki Street	ea		4,803				
4.2.3.15	Side roads - Dixon Street	ea		4,803				
4.2.3.16	Side roads - Tory Street	ea		4,803				
4.2.3.17	Side roads - Allen Street	ea		4,803				

		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
4.3	Culvert/Leads					
4.3.1	DN300 lead (sumps and strip drains)					
4.3.1.1	Lambton Quay	m	284	904	256,736	
					,	
4.3.1.2	Willis Street	m	39	904	35,250	
4.3.1.3	Manners Street	m	47	904	42,488	
4.3.1.4	Courtenay Place	m	219	904	197,970	
4.3.1.5	Side roads - Ballance Street	m	-	904		
4.3.1.6	Side roads - Stout Street	m	-	904		
4.3.1.7	Side roads - Waring Taylor Street	m	-	904		
4.3.1.8	Side roads - Johnston Street	m	-	904		
4.3.1.9	Side roads - Brandon Street	m	-	904		
4.3.1.10	Side roads - Panama Street	m	-	904		
4.3.1.11	Side roads - Mercer Street	m	-	904		
4.3.1.12	Side roads - Boulcott Street / Willis Street (south)	m	-	904		
4.3.1.13	Side roads - Cuba Street	m	-	904		
4.3.1.14	Side roads - Taranaki Street	m	-	904		
4.3.1.15	Side roads - Dixon Street	m	-	904		
4.3.1.16	Side roads - Tory Street	m	-	904		
4.3.1.17	Side roads - Allen Street	m	-	904		
4.3.1.18	Side roads - Blair Street	m	-	904		
4.4	Kerbing / Edge Strip					
4.4.1	Removal of kerb and channel					
4.4.1.1	Lambton Quay	m	2,084	28	58,873	
4.4.1.2	Willis Street	m	751	28	21,216	
4.4.1.3	Manners Street	m	92	28	2,599	
4.4.1.4	Courtenay Place	m	2,074	28	58,593	
4.4.1.5	Side roads - Ballance Street	m	-	28		
4.4.1.6	Side roads - Stout Street	m	-	28		
4.4.1.7	Side roads - Waring Taylor Street	m	-	28		
4.4.1.8	Side roads - Johnston Street	m	-	28		
4.4.1.9	Side roads - Brandon Street	m	-	28		
4.4.1.10	Side roads - Panama Street	m	-	28		
4.4.1.11	Side roads - Mercer Street	m	-	28		
4.4.1.12	Side roads - Boulcott Street / Willis Street (south)	m	-	28		
4.4.1.13	Side roads - Cuba Street	m	-	28		
4.4.1.14	Side roads - Taranaki Street	m	-	28		
4.4.1.15	Side roads - Dixon Street	m	-	28		
4.4.1.16	Side roads - Tory Street	m	-	28		
4.4.1.17	Side roads - Allen Street	m	-	28		
4.4.1.18	Side roads - Blair Street	m	-	28		
4.4.2	New Kassel Kerb					
4.4.2.1	Lambton Quay	m	220	365	80,300	
4.4.2.2	Willis Street	m	140	365	51,100	
4.4.2.3	Manners Street	m	110	365	40,150	

		WT Estimate			
Ref	Description	Unit	Qty	Rate	Total
4.4.2.4	Courtenay Place	m	140	365	51,100
4.4.3	New standard kerb and channel				
4.4.3.1	Lambton Quay	m	831	208	172,848
4.4.3.2	Willis Street	m	614	208	127,712
4.4.3.3 4.4.3.4	Manners Street Courtenay Place	m m	98 786	208 208	20,384 163,488
4.4.3.5	Side roads - Ballance Street	m	-	208	-
4.4.3.6	Side roads - Stout Street	m	-	208	-
4.4.3.7	Side roads - Waring Taylor Street	m	-	208	-
4.4.3.8 4.4.3.9	Side roads - Johnston Street Side roads - Brandon Street	m	-	208 208	-
4.4.3.9 4.4.3.10	Side roads - Brandon Street Side roads - Panama Street	m	-	208	-
4.4.3.10	Side roads - Mercer Street	m m	-	208	-
4.4.3.12	Side roads - Boulcott Street / Willis Street (south)	m	90	208	18,720
4.4.3.13	Side roads - Cuba Street	m	-	208	-
4.4.3.14	Side roads - Taranaki Street	m	80	208	16,640
4.4.3.15	Side roads - Dixon Street	m	9	208	1,872
4.4.3.16	Side roads - Tory Street	m	68	208	14,144
4.4.3.17 4.4.3.18	Side roads - Allen Street Side roads - Blair Street	m m	-	208 208	-
4.4.4	<u>New strip drain</u>				
4.4.4.1	Lambton Quay	m	816	1,000	816,000
4.4.4.2	Willis Street	m	88	1,000	88,000
4.4.4.3	Manners Street	m	74	1,000	74,000
4.4.4.4	Courtenay Place	m	638	1,000	638,000
4.4.4.5	Side roads - Ballance Street	m	-	1,000	-
4.4.4.6	Side roads - Stout Street	m	-	1,000	-
4.4.4.7	Side roads - Waring Taylor Street	m	-	1,000	-
4.4.4.8	Side roads - Johnston Street	m	-	1,000	-
4.4.4.9	Side roads - Brandon Street	m	-	1,000	-
4.4.4.10	Side roads - Panama Street	m	-	1,000	-
4.4.4.11	Side roads - Mercer Street	m	-	1,000	-
4.4.4.12	Side roads - Boulcott Street / Willis Street (south)	m	-	1,000	-
4.4.4.13	Side roads - Cuba Street	m	-	1,000	-
4.4.4.14	Side roads - Taranaki Street	m	-	1,000	-
4.4.4.15	Side roads - Dixon Street	m	-	1,000	-
4.4.4.16	Side roads - Tory Street	m	-	1,000	-
4.4.4.17	Side roads - Allen Street	m	-	1,000	-
4.4.4.18	Side roads - Blair Street	m	-	1,000	-
5	PAVEMENT AND SURFACING				3,956,095
5.1	Pavement				

Def	Description	WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
5.1.1	New areas of road (previously footpath or landscape)					
5.1.1.1	Lambton Quay	m2	209	130	27,170	
F 1 1 3	Millie Chroat			120		
5.1.1.2	Willis Street	m2	-	130		
5.1.1.3	Manners Street Courtenay Place	m2 m2	- 748	130 130	97,24	
5.1.1.4 5.1.1.5	Side roads - Ballance Street	m2	748	130	97,24	
5.1.1.6	Side roads - Stout Street	m2		130		
5.1.1.7	Side roads - Stout Street	m2	-	130		
5.1.1.7	Side roads - Johnston Street	m2	-	130		
5.1.1.8 5.1.1.9	Side roads - Brandon Street	m2		130		
5.1.1.10	Side roads - Panama Street	m2		130		
5.1.1.10	Side roads - Mercer Street	m2		130		
5.1.1.12	Side roads - Boulcott Street / Willis Street (south)	m2	-	130		
J.I.I.IZ	שיוווא או איז	1112	-	120		
5.1.1.13	Side roads - Cuba Street	m2	-	130		
5.1.1.14	Side roads - Taranaki Street	m2	-	130		
5.1.1.15	Side roads - Dixon Street	m2	-	130		
5.1.1.16	Side roads - Tory Street	m2	-	130		
5.1.1.17	Side roads - Allen Street	m2	-	130		
5.1.1.18	Side roads - Blair Street	m2	-	130		
5.2	Surfacing					
5.2.1	New areas of road (previously footpath or landscape)					
	(50mm AC)					
5.2.1.1	Lambton Quay	m2	209	80	16,720	
5.2.1.2	Willis Street	m2	-	80		
5.2.1.3	Manners Street	m2	-	80		
5.2.1.4	Courtenay Place	m2	748	80	59,840	
5.2.1.5	Side roads - Ballance Street	m2	-	80		
5.2.1.6	Side roads - Stout Street	m2	-	80		
5.2.1.7	Side roads - Waring Taylor Street	m2	-	80		
5.2.1.8	Side roads - Johnston Street	m2	-	80		
5.2.1.9	Side roads - Brandon Street	m2	-	80		
5.2.1.10	Side roads - Panama Street	m2	-	80		
5.2.1.11	Side roads - Mercer Street	m2	-	80		
5.2.1.12	Side roads - Willeston Street / Customhouse Quay	m2	-	80		
5.2.1.13	Side roads - Boulcott Street / Willis Street (south)	m2	-	80		
5.2.1.14	Side roads - Cuba Street	m2	-	80		
5.2.1.15	Side roads - Taranaki Street	m2	-	80		
5.2.1.16	Side roads - Dixon Street	m2	-	80		
5.2.1.17	Side roads - Tory Street	m2	-	80		
5.2.1.18	Side roads - Allen Street	m2	-	80		
5.2.1.19	Side roads - Blair Street	m2	-	80		
5.2.2	Mill existing road surface					
	Lambton Quay	m2	5,386	40	213,010	
5.2.2.1						

	Description	WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
5.2.2.3	Manners Street	m2	1,714	40	67,789	
5.2.2.4	Courtenay Place	m2	2,268	40	89,699	
5.2.2.5	Side roads - Ballance Street	m2	1,155	40	45,680	
5.2.2.6	Side roads - Stout Street	m2	886	40	35,041	
5.2.2.7	Side roads - Waring Taylor Street	m2	-	40	-	
5.2.2.8	Side roads - Johnston Street	m2	812	40	32,115	
5.2.2.9	Side roads - Brandon Street	m2	1,012	40	40,025	
5.2.2.10	Side roads - Panama Street	m2	800	40	31,640	
5.2.2.11	Side roads - Mercer Street	m2	524	40	20,724	
5.2.2.12	Side roads - Willeston Street / Customhouse Quay	m2	-	40	-	
5.2.2.13	Side roads - Boulcott Street / Willis Street (south)	m2	-	40	-	
5.2.2.14	Side roads - Cuba Street	m2	860	40	34,013	
5.2.2.15	Side roads - Taranaki Street	m2	-	40	-	
5.2.2.16	Side roads - Dixon Street	m2	-	40	-	
5.2.2.17	Side roads - Tory Street	m2	-	40	-	
5.2.2.18	Side roads - Allen Street	m2	410	40	16,216	
5.2.2.19	Side roads - Blair Street	m2	620	40	24,521	
5.2.3	Reseal existing road surface					
5.2.2.1	Lambton Quay	m2	5,386	57	304,309	
5.2.2.2	Willis Street	m2	1,907	57	107,746	
5.2.2.3	Manners Street	m2	1,714	57	96,841	
5.2.2.4	Courtenay Place	m2	2,268	57	128,142	
5.2.2.5	Side roads - Ballance Street	m2	1,155	57	65,258	
5.2.2.6	Side roads - Stout Street	m2	886	57	50,059	
5.2.2.7	Side roads - Waring Taylor Street	m2	-	57	-	
5.2.2.8	Side roads - Johnston Street	m2	812	57	45,878	
5.2.2.9	Side roads - Brandon Street	m2	1,012	57	57,178	
5.2.2.10	Side roads - Panama Street	m2	800	57	45,200	
5.2.2.11	Side roads - Mercer Street	m2	524	57	29,606	
5.2.2.12	Side roads - Willeston Street / Customhouse Quay	m2	-	57	-	
5.2.2.13	Side roads - Boulcott Street / Willis Street (south)	m2	-	57	-	
5.2.2.14	Side roads - Cuba Street	m2	860	57	48,590	
5.2.2.15	Side roads - Taranaki Street	m2	-	57	-	
5.2.2.16	Side roads - Dixon Street	m2	-	57	-	
5.2.2.17	Side roads - Tory Street	m2	-	57	-	
5.2.2.18	Side roads - Allen Street	m2	410	57	23,165	
5.2.2.19	Side roads - Blair Street	m2	620	57	35,030	
5.3	Raised Safety Platforms					
5.3.1	Platforms					
5.3.1.1	Lambton Quay - Stout Street	m2	140		-	
5.3.1.2	Lambton Quay - Midland Street	m2	560		-	
5.3.1.3	Lambton Quay - Grey Street	m2	213		-	
5.3.1.4	Willis Street / Lambton Quay	m2	350		-	
5.3.1.5	Willis Street / Mercer Street	m2	217		-	
5.3.1.6	Dixon Street	m2	112		-	
8					1,963,872	
8	TRAFFIC SERVICES					

D.4	Description	WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
8.1	Pavement Marking					
8.1.1	Remove existing and provide new					
8.1.1.1	Lambton Quay	m	820	260	213,200	
8.1.1.2	Willis Street	m	340	260	88,40	
8.1.1.3	Manners Street	m	100	260	26,00	
8.1.1.4	Courtenay Place	m	440	260	114,40	
8.1.1.5	Side roads - Ballance Street	LS	1	6,000	6,00	
8.1.1.6	Side roads - Stout Street	LS	1	6,000	6,00	
8.1.1.7	Side roads - Waring Taylor Street	LS	1	6,000	6,00	
8.1.1.8	Side roads - Johnston Street	LS	1	6,000	6,00	
8.1.1.9	Side roads - Brandon Street	LS	1	6,000	6,00	
8.1.1.10	Side roads - Panama Street	LS	1	6,000	6,00	
8.1.1.11	Side roads - Mercer Street	LS	1	6,000	6,00	
8.1.1.12	Side roads - Willeston Street / Customhouse Quay	LS	1	6,000	6,00	
			-	0,000	0,000	
8.1.1.13	Side roads - Boulcott Street / Willis Street (south)	LS	1	6,000	6,00	
8.1.1.14	Side roads - Cuba Street	LS	1	6,000	6,00	
8.1.1.15	Side roads - Taranaki Street	LS	1	6,000	6,00	
8.1.1.16	Side roads - Dixon Street	LS	1	6,000	6,00	
8.1.1.17	Side roads - Tory Street	LS	1	6,000	6,00	
8.1.1.18	Side roads - Allen Street	LS	1	6,000	6,00	
8.1.1.19	Side roads - Blair Street	LS	1	6,000	6,00	
8.2	Road Signs and Supports					
8.2.1	Remove existing and provide new					
8.2.1.1	Lambton Quay	m	820	68	55,59	
8.2.1.2	Willis Street	m	340	68	23,05	
8.2.1.3	Manners Street	m	100	68	6,78	
8.2.1.4	Courtenay Place	m	440	68	29,83	
8.2.1.5	Side roads - Ballance Street	LS	1	5,000	5,00	
8.2.1.6	Side roads - Stout Street	LS	1	5,000	5,00	
8.2.1.7	Side roads - Waring Taylor Street	LS	1	5,000	5,00	
8.2.1.8	Side roads - Johnston Street	LS	1	5,000	5,00	
8.2.1.9	Side roads - Brandon Street	LS	1	5,000	5,00	
8.2.1.10	Side roads - Panama Street	LS	1	5,000	5,00	
8.2.1.11	Side roads - Mercer Street	LS	1	5,000	5,00	
8.2.1.12	Side roads - Willeston Street / Customhouse Quay	LS	1	5,000	5,00	
8.2.1.13	Side roads - Boulcott Street / Willis Street (south)	LS	1	5,000	5,00	
8.2.1.14	Side roads - Cuba Street	LS	1	5,000	5,00	
8.2.1.15	Side roads - Taranaki Street	LS	1	5,000	5,00	
8.2.1.16	Side roads - Dixon Street	LS	1	5,000	5,00	
8.2.1.17	Side roads - Tory Street	LS	1	5,000	5,00	
8.2.1.18	Side roads - Allen Street	LS	1	5,000	5,00	
8.2.1.19	Side roads - Blair Street	LS	1	5,000	5,00	
8.3	Traffic Signals					

Dof	Description	11		T Estimate	Tetel
Ref	Description	Unit	Qty	Rate	Total
8.3.1	Reconfigure existing signalised intersection as mid-				
	block crossing				
8.3.1.1	Stout Street	LS	1	. 175,000	175,00
8.3.1.2	Brandon Street	LS	1	150,000	150,00
8.3.1.3	Mercer Street	LS	1		125,00
8.3.2	Reconfigure existing signalised mid-block crossing				
8.3.2.1	Midland Park	LS	1	225,000	225,00
8.3.2.2	Grey Street	LS	1		115,00
8.3.2.3	Chews Lane	LS	1		75,00
8.3.2.4	Cuba Street	LS	1		125,00
8.3.2.5		LS	1	,	125,00
	St james			,	
8.3.2.6	Allen Street	LS	1	,	150,00
8.3.2.7	Blair Street	LS	1	125,000	125,00
8.3.3	Reconfigure existing signalised intersection				
8.3.3.1	Bowen Street / Whitmore Street	LS	1	. 100,000	100,00
8.3.3.2	Willis Street / Lambton Quay / Willeston Street / Customhouse Quay	LS	1	. 225,000	225,00
8.3.3.3	Willis Street / Boulcott Street / Manners Street	LS	1	200,000	200,00
8.3.3.4	Manners Street / Victoria Street	LS	1	225,000	225,00
8.3.3.5	Manners Street / Courtenay Place / Taranaki Street / Dixon Street	LS	1		225,00
8.3.3.6	Courtenay Place / Tory Street	LS	1	150,000	150,00
8.3.3.7	Courtenay Place / Kent Terrace / Cambridge Terrace / Majoribanks Street	LS	1		100,00
8.3.3.8	Side roads - Johnston Street / Featherston Street	LS	1	10,000	10,00
8.3.3.9	Side roads - Waring Taylor Street / Featherston Street	LS	1	. 25,000	25,00
8.3.3.10	Side roads - Brandon Street / Featherston Street	LS	1	25,000	25,00
8.3.3.11	Side roads - Panama Street / Featherston Street	LS	1	10,000	10,00
8.3.3.12	Side roads - Mercer Street / Victoria Street	LS	1	10,000	10,00
8.3.3.12	Side roads - Cuba Street / Wakefield Street	LS	1		75,00
8.3.3.14	Mitigation - Victoria Street / Ghuznee Street	LS	1		25,00
8.3.4	New Mid-Block signalised crossing				
8.3.4.1	Masons Lane	LS	1	. 175,000	175,00
8.3.4.2	Panama Street	LS	1	,	250,00
8.3.5	Extra-over for temporary changes to signals during				
	construction staging				
8.3.5.1	Stout Street	LS	1	50,000	50,00
8.3.5.2	Brandon Street	LS	1		50,00
8.3.5.3	Mercer Street	LS	1		50,00
8.3.5.4	Midland Park	LS	1		50,00
8.3.5.5	St James	LS	1	. 50,000	50,00

Pof	Description	Unit		Estimate Pato			
Ref	Description	Unit	Qty	Rate	Total		
8.3.5.6	Allen Street	LS	1	50,000	50,000		
8.3.5.7	Blair Street	LS	1	50,000	50,000		
8.3.5.8	Bowen Street / Whitmore Street	LS	1	50,000	50,000		
8.3.5.9	Willis Street / Lambton Quay / Willeston Street /	LS	1	50,000	50,000		
	Customhouse Quay						
8.3.5.10	Manners Street / Courtenay Place / Taranaki Street /	LS	1	50,000	50,000		
	Dixon Street						
8.3.5.11	Courtenay Place / Kent Terrace / Cambridge Terrace /	LS	1	50,000	50,000		
	Majoribanks Street	-		,			
8.4	Access Controls						
8.4.1	ANPR Cameras						
8.4.1.1	Lambton Quay	ea	8	25,000	200,000		
8.4.1.2	Willis Street	ea					
8.4.1.3	Manners Street	ea					
8.4.1.4	Courtenay Place	ea					
8.4.2	CCTV Cameras						
8.4.2.1	Courtenay Place	еа	10	12,500	125,000		
8.4.3	Rising Bollards						
8.4.3.1	Side roads - Balance Street	ea					
8.4.3.2	Side roads - Stout Street	ea					
8.4.3.3	Side roads - Waring Taylor Street	ea					
8.4.3.4	Side roads - Johnston Street	ea					
8.4.3.5	Side roads - Brandon Street	ea					
8.4.3.6	Side roads - Panama Street	ea					
8.4.3.7	Side roads - Mercer Street	ea					
8.4.3.8	Side roads - Cuba Street	ea					
8.4.3.9	Side roads - Allen Street	ea					
8.4.3.10	Side roads - Blair Street	ea					
8.5	Lighting						
8.5.1	Remove existing lighting poles						
8.5.1.1	Lambton Quay	ea	7	1,000	7,000		
8.5.1.2	Courtenay Place	ea	75	1,000	75,000		
8.5.2	Temporary lighting (relocate existing)						
8.5.2.1	Lambton Quay		-	10,000			
8.5.2.2	Courtenay Place	еа	40	10,000	400,000		
0 5 2	Dead lichtige						
8.5.3	Road lighting		_				
8.5.3.1	Lambton Quay	ea	7	33,000	231,000		
8.5.3.2	Courtenay Place	ea	75	33,000	2,475,000		
8.5.4	Pedestrian lighting						
8.5.4.1	Lambton Quay	еа	50	20,500	1,025,000		
8.5.4.2	Courtenay Place	ea	10	20,500	205,000		

		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
8.6	Bust Stop Signage					
8.6.1	Relocate RTI					
8.6.1.1	Lambton Quay	ea	4	6,000	24,000	
8.6.1.2	Willis Street	ea	2	6,000	12,000	
8.6.1.3	Manners Street	ea	-	6,000		
8.6.1.4	Courtenay Place	ea	2	6,000	12,000	
8.6.2	<u>Remove RTI</u>					
8.6.2.1	Lambton Quay	ea	2	2,500	5,000	
8.6.2.2	Willis Street	ea	-	2,500	-	
8.6.2.3	Manners Street	ea	1	2,500	2,500	
8.6.2.4	Courtenay Place	ea	2	2,500	5,000	
8.6.3	Remove Totem					
8.6.3.1	Lambton Quay	ea	7	1,000	7,000	
8.6.3.2	Willis Street	ea	2	1,000	2,000	
8.6.3.3	Manners Street	ea	3	1,000	3,000	
8.6.3.4	Courtenay Place	ea	4	1,000	4,000	
8.6.4	<u>New Totem</u>					
8.6.4.1	Lambton Quay	ea	4	5,000	20,000	
8.6.4.2	Willis Street	ea	2	5,000	10,000	
8.6.4.3	Manners Street	ea	2	5,000	10,000	
8.6.4.4	Courtenay Place	ea	2	5,000	10,000	
					9,361,760	
9	SERVICE RELOCATIONS					
9.1	Total (Refer to risk tab)	PS	1	7,500,000	7,500,000	
					7,500,000	
10	LANDSCAPING AND URBAN DESIGN					
10.1	Landscaping					
10.1.1	<u>Garden Bed</u>					
10.1.1.1	Lambton Quay	m2	700	355	248,500	
10.1.1.2	Willis Street	m2	-	355	, -	
10.1.1.3	Manners Street	m2	-	355	-	
10.1.1.4	Courtenay Place	m2	100	355	35,500	
10.1.2	Rain Garden					
10.1.2.1	Lambton Quay	m2	160	1,500	240,000	
10.1.2.2	Willis Street	m2	20	1,500	30,000	
10.1.2.3	Manners Street	m2	-	1,500	-	
10.1.2.4	Courtenay Place	m2	220	1,500	330,000	
10.1.3	Remove Trees					
10.1.3.1	Lambton Quay	ea	10	2,000	20,000	

		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
10.1.3.2	Willis Street	еа	-	2,000	-	
10.1.3.3	Manners Street	ea	-	2,000	-	
10.1.3.4	Courtenay Place	еа	20	2,000	40,000	
10.1.4	New Trees					
10.1.4.1	Lambton Quay	ea	15	15,000	225,000	
10.1.4.2	Willis Street	ea	3	15,000	45,000	
10.1.4.3	Manners Street	ea	-	15,000	-	
10.1.4.4	Courtenay Place	ea	30	15,000	450,000	
10.2	Architecture					
10.2.1	Remove existing bus shelters					
10.2.1.1	Lambton Quay	ea	3	10,000	30,000	
10.2.1.2	Willis Street	ea	-	10,000	-	
10.2.1.3	Manners Street	ea	3	10,000	30,000	
10.2.1.4	Courtenay Place	ea	5	10,000	50,000	
10.2.2	Bus shelter - standard type					
10.2.2.1	Lambton Quay	ea	4	100,000	400,000	
10.2.2.2	Willis Street	ea	2	100,000	200,000	
10.2.2.3	Manners Street	ea	2	100,000	200,000	
10.2.2.4	Courtenay Place	ea	-	100,000	-	
10.2.3	Bus shelter - architectural feature					
10.2.3.1	Lambton Quay	ea	-	300,000	-	
10.2.3.2	Willis Street	ea	-	300,000	-	
10.2.3.3	Manners Street	ea	-	300,000	-	
10.2.3.4	Courtenay Place	ea	2	300,000	600,000	
10.3	Streetscaping					
10.3.1	New art installations (and other similar large street					
	<u>furniture items)</u>					
10.3.1.1	Courtenay Place	ea	20	10,000	200,000	
10.3.1.2	Side roads - waring Taylor Street	ea	10	10,000	100,000	
10.3.1.3	Side roads - Johnston Street	ea	10	10,000	100,000	
10.3.1.4	Side roads - Mercer Street	ea	3	10,000	30,000	
NEW	Allowance for cultural and artistic inputs	item	1	750,000	750,000	
10.3.2	<u>Removal art installations (and other similar large</u>					
	street furniture items)					
10.3.2.1	Lambton Quay	ea	-	1,500	-	
10.3.2.2	Willis Street	ea	-	1,500	-	
10.3.2.3	Manners Street	ea	-	1,500	-	
10.3.2.4	Courtenay Place	ea	30	1,500	45,000	
10.3.3	<u>Removal seating (and other similar medium street</u> <u>furniture)</u>					

Dof	Description	Unit	Total		
Ref	Description	Unit	Qty	Rate	Total
10.3.3.1	Lambton Quay	ea	15	500	7,500
10.3.3.2	Willis Street	ea	-	500	
10.3.3.3	Manners Street	ea	-	500	
10.3.3.4	Courtenay Place	еа	25	500	12,500
10.3.4	Relocation seating (and other similar medium street function function function function function function function function for the strength of the strength o				
10.3.4.1	Lambton Quay	ea	40	2,500	100,000
10.3.4.2	Willis Street	ea	40	2,500	100,000
10.3.4.3	Manners Street	ea	-	2,500	
10.3.4.4	Courtenay Place	ea	-	2,500	
10.3.5	New seating (and other similar medium street				
	<u>furniture)</u>				
10.3.5.1	Lambton Quay	ea	-	6,000	
10.3.5.2	Willis Street	ea	-	6,000	
10.3.5.3	Manners Street	ea	6	6,000	36,000
10.3.5.4	Courtenay Place	ea	25	6,000	150,000
10.3.6	Removal bins (and other similar small street furniture)				
10.3.6.1	Lambton Quay	еа	50	500	25,000
10.3.6.2	Willis Street	ea	-	500	
10.3.6.3	Manners Street	ea	-	500	
10.3.6.4	Courtenay Place	ea	85	500	42,500
10.3.7	<u>Relocation seating (and other similar medium street</u> furniture)				
10.3.7.1	Lambton Quay	ea	10	2,500	25,000
10.3.7.2	Willis Street	ea	5	2,500	12,500
10.3.7.2	Manners Street		J	2,500	12,500
10.3.7.3	Courtenay Place	ea ea	20	2,500	50,000
10.3.8	Relocation seating (and other similar medium street				
10.5.0	furniture)				
10.3.8.1	Lambton Quay	ea	-	1,500	
10.3.8.2	Willis Street	ea	-	1,500	
10.3.8.3	Manners Street	ea	-	1,500	
10.3.8.4	Courtenay Place	ea	-	1,500	
10.4	Footpaths and Cycleways				
10.4.1	Clay Pavers				
10.4.1.1	Lambton Quay (new footpath areas)	m2	2,253	300	675,900
10.4.1.2	Lambton Quay (replacing existing footpath areas)	m2	-	300	
10 / 1 2	Willis Street (new footpath areas)	m2	776	200	יחס רכך
10.4.1.3 10.4.1.4	Willis Street (replacing existing footpath areas)	m2 m2		300 300	232,800
10.4.1.5	Manners Street (new footpath areas)	m2	273	300	81,900

-				timate	
Ref	Description	Unit	Qty	Rate	Total
10.4.1.6	Courtenay Place (new footpath areas)	m2	1,231	300	369,300
10.4.1.7	Courtenay Place (replacing existing footpath areas)	m2	-	300	-
10.4.1.8	Side roads - Ballance Street	m2	-	300	-
10.4.1.9	Side roads - Stout Street	m2	-	300	-
10.4.1.10	Side roads - Waring Taylor Street	m2	-	300	-
10.4.1.11	Side roads - Johnston Street	m2	-	300	-
10.4.1.12	Side roads - Brandon Street	m2	100	300	30,000
10.4.1.13	Side roads - Panama Street	m2	323	300	96,900
10.4.1.14	Side roads - Mercer Street	m2	-	300	-
10.4.1.15	Side roads - Boulcott Street / Willis Street (south)	m2	-	300	-
10.4.1.16	Side roads - Cuba Street	m2	150	300	45,000
10.4.1.17	Side roads - Taranaki Street	m2	-	300	-
10.4.1.18	Side roads - Dixon Street	m2	-	300	-
10.4.1.19	Side roads - Tory Street	m2	-	300	-
10.4.1.20	Side roads - Allen Street	m2	-	300	-
10.4.1.21	Side roads - Blair Street	m2	-	300	-
10.4.2	Clay Pavers (including preperation up to 100mm deep)				
10.4.2.1	Lambton Quay (new footpath areas)	m2	2,219	300	665,700
10.4.2.2	Lambton Quay (replacing existing footpath areas)	m2	-	300	-
10.4.2.3	Willis Street (new footpath areas)	m2	321	300	96,300
10.4.2.4	Willis Street (replacing existing footpath areas)	m2	-	300	-
10.4.2.5	Manners Street (new footpath areas)	m2	-	300	-
10.4.2.6	Courtenay Place (new footpath areas)	m2	2,064	300	619,200
10.4.2.7	Courtenay Place (replacing existing footpath areas)	m2	-	300	-
10.4.2.8	Side roads - Ballance Street	m2	40	300	12,000
10.4.2.9	Side roads - Stout Street	m2	174	300	52,200
10.4.2.10	Side roads - Waring Taylor Street	m2	670	300	201,000
10.4.2.11	Side roads - Johnston Street	m2	440	300	132,000
10.4.2.12	Side roads - Brandon Street	m2	-	300	-
10.4.2.13	Side roads - Panama Street	m2	-	300	-
10.4.2.14	Side roads - Mercer Street	m2	118	300	35,400
10.4.2.15	Side roads - Boulcott Street / Willis Street (south)	m2	-	300	
10.4.2.16	Side roads - Cuba Street	m2	-	300	
10.4.2.17	Side roads - Taranaki Street	m2	-	300	-
10.4.2.18	Side roads - Dixon Street	m2	-	300	-
10.4.2.19	Side roads - Tory Street	m2	-	300	-
10.4.2.20	Side roads - Allen Street	m2	91	300	27,300
10.4.2.21	Side roads - Blair Street	m2	118	300	35,400
	Make Good Existing Clay Pavers				

Ref	Description	WT Estimate			
Ret	Description	Unit	Qty	Rate	Total
NEW	Allow to clean and make good existing clay pavers where retained in place.	m2	10,000	50	500,000
10.4.3	AC Cyclepath (25mm AC, 100mm basecourse)				
10.4.3.1	Lambton Quay	m2	1,375	90	123,750
10.4.3.2	Courtenay Place	m2	1,415	90	127,350
10.4.4	Exposed Aggregate Seoerator Strip (200mm x 100mm)				
10.4.4.1	Lambton Quay	m	917	80	73,12
10.4.4.2	Courtenay Place	m	943	80	75,200
10.5	Entranceways and Vehicle Crossings				
10.5.1.1	Commercial Vehicular Crossing				
10.5.1.2	Lambton Quay	ea	-	6,000	
10.5.1.3	Willis Street	ea	-	6,000	
10.5.1.4	Manners Street	ea	-	6,000	
10.5.1.5	Courtenay Place	ea	-	6,000	
10.5.1.6	Side roads - Ballance Street	ea	2	6,000	12,000
10.5.1.7	Side roads - Stout Street	ea	2	6,000	12,00
10.5.1.8	Side roads - Waring Taylor Street	ea	2	6,000	12,00
10.5.1.9	Side roads - Johnston Street	ea	2	6,000	12,00
10.5.1.10	Side roads - Brandon Street	ea	2	6,000	12,00
10.5.1.11	Side roads - Panama Street	ea	2	6,000	12,00
10.5.1.12	Side roads - Mercer Street	ea	2	6,000	12,00
10.5.1.13	Side roads - Boulcott Street / Willis Street (south)	ea	-	6,000	
10.5.1.14	Side roads - Cuba Street	ea	2	6,000	12,00
10.5.1.15	Side roads - Taranaki Street	ea	-	6,000	
10.5.1.16	Side roads - Dixon Street	ea	-	6,000	
10.5.1.17	Side roads - Tory Street	ea	-	6,000	
10.5.1.18	Side roads - Allen Street	ea	2	6,000	12,00
10.5.1.19	Side roads - Blair Street	ea	2	6,000	12,00
10.6	Dropkerbs and Tactiles				
10.6.1	Remove drop kerbs				
10.6.1.1	Lambton Quay	ea	25	500	12,50
10.6.1.2	Willis Street	ea	20	500	10,00
10.6.1.3	Manners Street	ea	5	500	2,50
10.6.1.4	Courtenay Place	ea	32	500	16,00
10.6.1.5	Side roads - Ballance Street	ea	-	500	
10.6.1.6	Side roads - Stout Street	ea	-	500	
10.6.1.7	Side roads - Waring Taylor Street	ea	-	500	
10.6.1.8	Side roads - Johnston Street	ea	-	500	

Ref	Description	WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
10.6.1.9	Side roads - Brandon Street	ea	-	500		
10.6.1.10	Side roads - Panama Street	ea	-	500		
10.6.1.11	Side roads - Mercer Street	ea	-	500		
10.6.1.12	Side roads - Boulcott Street / Willis Street (south)	ea	-	500		
10.6.1.13	Side roads - Cuba Street	ea	-	500		
10.6.1.14	Side roads - Taranaki Street	ea	-	500		
10.6.1.15	Side roads - Dixon Street	ea	-	500		
10.6.1.16	Side roads - Tory Street	ea	-	500		
10.6.1.17	Side roads - Allen Street	ea	-	500		
10.6.1.18	Side roads - Blair Street	ea	-	500		
10.6.2	New drop kerbs and tactiles					
10.6.2.1	Lambton Quay	ea	25	2,500	62,50	
10.6.2.2	Willis Street	ea	20	2,500	50,000	
10.6.2.3	Manners Street	ea	5	2,500	12,50	
10.6.2.4	Courtenay Place	ea	32	2,500	80,00	
10.6.2.5	Side roads - Ballance Street	ea	-	2,500	,	
10.6.2.6	Side roads - Stout Street	ea	-	2,500		
10.6.2.7	Side roads - Waring Taylor Street	ea	-	2,500		
10.6.2.8	Side roads - Johnston Street	ea	-	2,500		
10.6.2.9	Side roads - Brandon Street	ea	-	2,500		
10.6.2.10	Side roads - Panama Street	ea	-	2,500		
10.6.2.11	Side roads - Mercer Street	ea	-	2,500		
10.6.2.12	Side roads - Boulcott Street / Willis Street (south)	ea	-	2,500		
10.6.2.13	Side roads - Cuba Street	ea	-	2,500		
10.6.2.14	Side roads - Taranaki Street	ea	-	2,500		
10.6.2.15	Side roads - Dixon Street	ea	-	2,500		
10.6.2.16	Side roads - Tory Street	ea	-	2,500		
10.6.2.17	Side roads - Allen Street	ea	-	2,500		
10.6.2.18	Side roads - Blair Street	ea	-	2,500		
				,	9,633,72	
11	TRAFFIC MANAGEMENT AND TEMPORARY WORKS					
11.1	Temporary Traffic Management					
11.1.1	Lambton Quay	item	1	7,222,000	7,222,000	
11.1.2	Willis Street	wks			Include	
11.1.3	Manners Street	wks			Include	
11.1.4	Courtenay Place	wks			Include	
11.1.5	Side roads - Ballance Street	wks			Include	
11.1.6	Side roads - Stout Street	wks			Include	
11.1.7	Side roads - Waring Taylor Street	wks			Include	
11.1.8	Side roads - Johnston Street	wks			Include	
11.1.9	Side roads - Brandon Street	wks			Include	
	Side roads - Panama Street	wks			Include	
11.1.10	Side roads - Parlama Street	VV K3			include	

		WT Estimate				
Ref	Description	Unit	Qty	Rate	Total	
11.1.12	Side roads - Willeston Street / Customhouse Quay	wks			Included	
11.1.13	Side roads - Boulcott Street / Willis Street (south)	wks			Included	
11.1.14	Side roads - Cuba Street	wks			Included	
11.1.15	Side roads - Taranaki Street	wks			Included	
11.1.16	Side roads - Dixon Street	wks			Included	
11.1.17	Side roads - Tory Street	wks			Included	
11.1.18	Side roads - Allen Street	wks			Included	
11.1.19	Side roads - Blair Street	wks			Included	
11.2	Temporary Diversions					
11.2.1	Lambton Quay	wks			Included	
11.2.2	Willis Street	wks			Included	
11.2.3	Manners Street	wks			Included	
11.2.4	Courtenay Place	wks			Included	
11.3	Permanent Diversions					
11.3.1	Lambton Quay	wks			Included	
11.3.2	Willis Street	wks			Included	
11.3.3	Courtenay Place	wks			Included	
11.3.4	Side roads - Ballance Street	wks			Included	
11.3.5	Side roads - Stout Street	wks			Included	
11.3.6	Side roads - Waring Taylor Street	wks			Included	
11.3.7	Side roads - Johnston Street	wks			Included	
11.3.8	Side roads - Brandon Street	wks			Included	
11.3.9	Side roads - Panama Street	wks			Included	
11.3.10	Side roads - Mercer Street	wks			Included	
11.3.11	Side roads - Cuba Street	wks			Included	
11.3.12	Side roads - Tory Street	wks			Included	
11.3.13	Side roads - Allen Street	wks			Included	
11.3.14	Side roads - Blair Street	wks			Included	
12	PRELIMINARY AND GENERAL				7,222,000	
12.1	Preliminary and general	%	40,430,865	20%	8,086,173	
					8,086,173	
13	EXTRA ORDINARY CONSTRUCTION COSTS					
13.1	Communications team, advertising and central project hub.	yrs	3	259,200	777,600	
					777,600	
l	TOTAL PROJECT COST ESTIMATE				63,097,137	

wsp.com/nz





Contact

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Futuregroup →

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