

Better transport infrastructure – William Hovell Drive duplication (TCCS C01)

The table below reflects the agreement by Cabinet and published figures in the 23-24 Budget, Budget Outlook publication.

(these figures may differ from the below business case due to a Cabinet decision (ie a reduction in scope, or varied funding, etc)

Better transport infrastructure – William Hovell Drive duplication (TCCS C01)

	2023-24 \$'000	2024-25 \$'000	2025-26 \$'000	2026-27 \$'000	Total \$'000
Capital	1,000	15,000	14,000	14,000	44,000
Net capital	1,000	15,000	14,000	14,000	44,000

The Government is delivering a safe and efficient east-west transport corridor by duplicating the remaining section of William Hovell Drive, from Drake Brockman Drive to John Gorton Drive. The project will include on-road cycle lanes, a three-metre-wide off-road asphalt shared path and the removal and signalisation of the existing roundabout at the Drake Brockman Drive intersection.

This initiative builds on previous Government investment in this area through the 2021-22 Budget initiative *Connected and sustainable Canberra – Constructing the William Hovell Drive duplication*.

The project is being partially funded through previous announcements from the Commonwealth Government's National Partnership Agreement on Land Transport Infrastructure program.

This initiative contributes to the wellbeing domains of Access and connectivity and Economy.

Key Points

- This initiative contributes to the completion of the ACT Labor election commitment to duplicate this road in both 2016 and 2020 elections (EC LAB058).
- The additional \$44m is required to complete the full 4.9km duplication and 3m wide shared path, as well as the five architecturally designed retaining walls, demolition and removal of the existing roundabout at the intersection with Drake Brockman Drive and upgrade to a new signalised intersection, significant watermain augmentation and utility services relocations, stormwater drainage and substantial landscaping works.
- This section of road has a demonstrated crash history with there being 82 incidents in the past five years. There is also data clearly identifying that the road is congested and operating over capacity for its current design standard. This has been highlighted by a number of crashes occurring within the first months of 2023, including the Territory's first road fatality for 2023.
- The construction cost increase is as a result of a number of factors, including global instability causing higher costs and demand for raw construction materials, global demand on international freight, particularly on materials and goods to and from China

which has reduced output during the post-pandemic market and the high level of post-pandemic construction work being undertaken nationally and globally to progress a backlog of infrastructure works.


ACT
Government

Single Assessment Framework (SAF)

Supplementary Business Case

Tier 1 Greater than \$50 million

Project Name:	TCCS C0001 Constructing the William Hovell Drive duplication – additional funds
Total Project Value (estimated):	\$107.25 million
Capital Appropriation Requested:	\$44.0 million
Project Stage:	Design and Construct
Project Value:	\$107.25 million
Risk Assessment (high/med/low):	Medium
Proposed Delivery Model:	Design and Construction, Open Tender via MPC
Requesting Directorate:	TCCS
Requesting Minister:	Chris Steel (Minister for Transport and City Services and Minister for Roads)
Business Case Advisors:	NIL

NOTE: This template should be completed using the accompanying SAF Business Case Guidance Notes.

Contact Officers

Contact Officer, Requesting Directorate

Darren Smith – Senior Director
Jeremy Smith – Executive Branch Manager

Reviewing Officer, Infrastructure Finance and Reform, Treasury (IFR):

TBC

Reviewing Officer, Major Projects Canberra (MPC)

TBC

Reviewing Officer, Finance and Budget Group, Treasury (FABG):

TBC

Sign Offs

TCCS Directorate

Requesting Directorate:

Document in order to proceed

IFR

CABINET-IN-CONFIDENCE (after first entry)

MPC:

FABG:

Document in order to proceed -- CMTEDD Sign-offs complete

Contents

<u>1. Executive Summary</u>	6
<u>1.1 Statement of Need</u>	7
<u>1.2 Delivery Model</u>	7
<u>1.3 Funding Approval Sought</u>	8
<u>1.3.1. Type of funding sought</u>	Error! Bookmark not defined.
<u>1.3.2. Cost Estimate</u>	Error! Bookmark not defined.
<u>1.3.3. Payment Stream (PPP/DCMO only)</u>	9
<u>1.3.4. Incremental Procurement/Transaction Costs</u>	9
<u>1.3.5. Contingencies Included</u>	9
<u>1.4 Treasury Budget Summary</u>	10
<u>2. Project Outline</u>	11
<u>2.1 Description of the Project</u>	11
<u>2.1.1. Overview</u>	11
<u>2.1.2. Scope of works</u>	12
<u>2.1.3. Scope of services</u>	12
<u>2.1.4. Project Assumptions and Dependencies</u>	12
<u>2.2 Review 1 (MPC): Status of Functional Brief/Output Specification</u>	13
<u>3. Needs Analysis</u>	14
<u>3.1 Problem</u>	14
<u>3.2 Benefits</u>	14
<u>3.2.1. Benefits to be delivered</u>	15
<u>3.2.2. Importance of the benefits for Government</u>	15
<u>3.3 Options Analysis</u>	15
<u>3.3.1. Strategic Solutions Analysis</u>	15
<u>3.3.2. Recommended Strategic Solution</u>	15
<u>3.3.3. Project Solutions Analysis</u>	15
<u>3.3.4. Base Case</u>	15
<u>3.3.5. Recommended Project Solution</u>	15
<u>3.4 Review 2 (FABG): Needs Analysis</u>	15
<u>4. Cost & Contingency</u>	17
<u>4.1 Preliminary Cost Estimate</u>	18
<u>4.2 Contingency</u>	18

4.2.1.	<u>Project Contingency</u>	18
4.2.2.	<u>Delivery Model Contingency</u>	18
4.3	<u>Whole of Life</u>	18
4.4	<u>Budget / Funding Strategy</u>	18
5.	<u>Economic Analysis</u>	19
5.1	<u>Cost Benefit Analysis (or 5.3 Cost Effectiveness Analysis)</u>	19
5.2	<u>Wider Economic Benefits</u>	19
6.	<u>Delivery Model Analysis</u>	Error! Bookmark not defined.
6.1	<u>Outline of Key Risks</u>	20
6.2	<u>Commercial Principles</u>	20
6.3	<u>Delivery Model Assessment</u>	20
6.4	<u>Recommended Delivery Model</u>	20
6.5	<u>Review 3 (MPC): Delivery Model Selection</u>	21
7.	<u>Financial Analysis (PPP and DCMO only)</u>	22
7.1	<u>Financing Assumptions</u>	22
7.2	<u>PPP/DCMO Payment Stream</u>	22
7.3	<u>Incremental Procurement/Transaction Costs</u>	22
7.4	<u>Public Sector Comparator</u>	22
	<u>Not applicable</u>	22
7.5	<u>Review 4 (IFR): Financial (PPP/DCMO only)</u>	22
8.	<u>Project Governance</u>	22
9.	<u>Stakeholder Engagement Plan</u>	23
9.1	<u>Stakeholder Identification</u>	23
9.2	<u>Stakeholder Involvement & Interest</u>	23
9.3	<u>Stakeholder Engagement Plan</u>	23
10.	<u>Advisor Engagement Plan</u>	24
10.1	<u>Proposed Advisors Roles</u>	24
10.1.1.	<u>Legal</u>	24
10.1.2.	<u>Commercial Procurement</u>	24
10.1.3.	<u>Commercial Financial</u>	24
10.1.4.	<u>Technical Design & Engineering</u>	24
10.1.5.	<u>Other Specialists</u>	24
10.1.6.	<u>Stakeholder Management and Communication</u>	24

10.1.7.	<u>Project Management</u>	24
11.	<u>Timeline</u>	25
11.1	<u>Project Timetable</u>	25
11.1.1.	<u>Outline</u>	25
11.1.2.	<u>Proposed float</u>	25
11.1.3.	<u>Project constraints and/or deadlines</u>	25
11.1.4.	<u>Project decision points</u>	25
12.	<u>Appendices</u>	26

1. Executive Summary

This supplementary business case is to request additional capital works project funding of \$44.00 million for the William Hovell Drive Duplication Project (the Project). The original 2020/2021 business case is relied upon for background information for this supplementary business case and is appended at Appendix A.

The Project comprises a 4.9km section of William Hovell Drive (WHD) to be duplicated between Drake Brockman Drive (DBD) and John Gorton Drive (JGD), including a new three metre wide off-road asphalt shared path, five architecturally designed retaining walls, demolition and removal of the existing roundabout at the intersection with DBD and upgrade to a new signalised intersection, significant watermain augmentation and utility services relocations, stormwater drainage and substantial landscaping works.

\$63.25 million in capital works funding was allocated for the Project in the 2021/2022 ACT Budget. This comprised \$36.25 million in ACT Government capital works funding and \$26.5 million in Australian Government capital works funding. The Australian Government capital works funding was provided under the National Partnership Agreement (NPA) on Land Transport Infrastructure Projects. The ACT Government has sought a commitment from the Australian Government to meet half of the costs of the additional capital works funding (\$22.00 million) using the reasoning detailed throughout this supplementary business case. However, the additional \$44 million currently being sought will initially need to be funded by the ACT Government to meet the timeline for delivery of these works. A delay in funding will delay commencement and completion of the Project. Any unspent capital works funding, from the ACT Government component, would be returned to Treasury upon Project completion.

Through the Preliminary Design Plan (PSP) phase of the design, a revised cost estimate was undertaken. Upon completion of the revised cost estimate, it became evident that the current capital works funding allocation for the Project is insufficient. This supplementary business case, if successful, will cover this shortfall and specifically fund the capital works costs for technical supervision, contract management, project escalation costs (in line with the Producer Price Index) and potential project variations (as a contingency) during the Project delivery.

There is a degree of urgency for this supplementary business case due to significant existing safety concerns along this section of road. This has been highlighted by a number of crashes occurring within the first month of 2023, including the Territory's first road fatality for 2023. With community expectations mounting, the provision of these funds is essential so that these works can be tendered and a suitable contractor engaged to undertake the works.

There are other significant drivers for this Project, being the expected increase in traffic and potential for more congestion with the ongoing development of Whitlam to the south and Ginninderry and Parkwood in the west. As the detailed design phase of the Project is virtually complete with tender documentation currently being prepared and final approvals being sought, the Territory anticipates a tender to be released to market almost immediately after receiving sufficient funding. This will meet the current public timeframe commitment to commence construction in 2023 and have the upgraded road open by December 2026. The Territory will be unable to tender the works currently, without this additional capital works funding being confirmed and available prior to tendering.

The Project is completing an important link in the Territory's multimodal transport network. It will provide a significant link for the active travel network and ease congestion and improve road safety between West Belconnen, Ginninderry, Molonglo and the City.

1.1 Statement of Need

Along with the overarching benefits mentioned in the Executive Summary, the primary statement of need the Project will address remains the provision of safe, reliable and high-quality multimodal transport infrastructure to service the link between the Belconnen suburbs, the rapidly growing population of the Molonglo Valley, and surrounding suburbs and improved connectivity into the City and south via the duplicated WHD.

The section of WHD between JGD and DBD is the remaining section of arterial road that is not duplicated. With increasing traffic from the ongoing development of Ginninderry and West Belconnen, this section of road is congested where it narrows to single lanes, particularly during the AM and PM peaks. This congestion directly contributes to the current crash history along this section of road, mainly rear-end and side-swipe crashes. In the past five years there have been 82 crashes with these types of incidents, which is a direct indication that the road is congested and running over capacity.

The detail design is currently being delivered and will include active travel infrastructure with both on-road cycle lanes and off-road shared path infrastructure for the full 4.5km length of new duplicated works. These will provide a key east west active travel corridor which will integrate with existing shared path infrastructure in Whitlam, Higgins and Hawker. The current design of the off-road shared path is also being extended from JGD through to Bindubi Street, with construction being the final stage of the Project and will see this important multimodal network corridor fully developed.

Further justification and potential benefits from these works have been assessed, including against the ACT Wellbeing Framework. This assessment is appended at [Appendix B](#).

The government has recognised the importance of this transport project and made an election commitment in 2016, and reaffirmed in 2020, to duplicate the road (election commitment ECLAB058). The allocation of construction funding and delivery of these works will fulfil this commitment.

A revised cost estimate identified that the current capital works funding allocation for the Project is insufficient. Efforts have been made to consider possible areas of descoping, however, no feasible options were identified. All aspects of the Project are considered to be essential in order to deliver the intended outcomes, consistent with public commitments made and community expectations. Consideration was given to possibly removing the shared path from the Project scope. However, it was determined that this would be inconsistent with the ACT Transport Strategy and would produce a negative outcome, noting the government's general commitment to sustainable active travel infrastructure. As such, in order to meet the Project timelines and commitments and for the Project to proceed, this supplementary business case is required to request additional capital works project funding of \$44.00 million for the Project.

Delivery Model

The Project will be a traditional delivery model. A feasibility study was completed in 2018 and the detail design is currently being delivered through to Design Readiness as the next phase of the Project.

Construction is the final stage of the Project and, if funded, work will commence late-2023 and be complete late-2026. This is the lowest risk delivery model for a project of this size and complexity, especially with regard to construction being undertaken while managing live traffic. By giving a clear scope of works, with the necessary approvals in place, the risk associated with delivery of the works

is reduced. Potential tenderers will be able to reduce contingency and the best value for money can be achieved. This is particularly important considering the volatility of the market at this time.

The base construction cost is [REDACTED] (P50/P90) and construction is expected to take 3 years to complete (without allowing for any significant lost time due to wet weather, latent conditions, etc.). The project brief for the construction contract will specifically require tenderers to provide methods on how to reduce the construction timeframe to minimise impacts on residents and motorists. The timeframes outlined through the business case reflect this expedited delivery and it is expected that a 3-year construction timeframe is feasible and achievable.

The construction phase of the Project will be delivered through an open tender process, facilitated by Infrastructure Delivery Partners (IDP) Group and advertised on the TendersACT website in Major Projects Canberra (MPC).

1.2 Funding Approval Sought

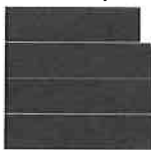
1.2.1. Type of funding sought

This funding proposal is for construction.

1.2.2. Cost Estimate

The base cost estimate for construction related activities is [REDACTED] with the following estimated expenditure profile over four years (with construction realistically taking 3 years):

- 2022-23
- 2023-24
- 2024-25
- 2025-26



This [REDACTED] figure does not include procurement, insurance, project management, site supervision and contract management costs, or provisions for DA/EIS approval conditions. This is expected to be a further cost of [REDACTED] which makes the total Capital Appropriation request \$107.25 million. Details of how this figure is determined is presented in Section 4.

Capital appropriation for the total expenditure over four years is proposed as follows:

- 2023-24 \$2.2 million
- 2024-25 \$35.0 million
- 2025-26 \$35.0 million
- 2026-27 \$35.0 million

The scope of works has increased from earlier feasibility study designs to include a shared path. This is consistent with the ACT Transport Strategy to incorporate active travel improvements as a part of all road projects, where feasible. This path is necessary to fill in a key missing link in the active travel network to cater for the future demand in the growing suburbs of West Belconnen and Molonglo Valley and will provide an attractive and viable option for walking and cycling. The path will be 3 metres wide, 4.5km in length and be lit in accordance with appropriate design standards. There is a 1.6km section of WHD where the road has a 40-metre vertical rise, which makes the shared path delivery quite complicated. To remain compliant with the *Disability Discrimination Act* (DDA) there will be a number of retaining walls and other design measures, including regular landings, to keep the shared path grade in accordance with the Australian Standard and be at 7% grade.

The PSP design has also identified that a Bulk Supply Water Main (BSWM) augmentation is required at the intersection of DBD. These additional utility deliveries and active travel provisions have led to an overall price increase from earlier feasibility study cost estimates.

The detailed P50/P90 cost estimate report is attached at Appendix C.

In order to meet the Project timelines and commitments, the full cost of the additional capital works funding is being sought in this supplementary business case. It should be noted that the additional \$44 million currently being sought will initially need to be funded by the ACT Government to meet the timeline for delivery of these works. However, the ACT Government has sought additional funding from the Australian Government to meet half of these additional costs. Details of the additional capital works funding is presented in Section 4.

1.2.3. Payment Stream (PPP/DCMO only)

Not applicable.

1.2.4. Incremental Procurement/Transaction Costs

Not applicable.

1.2.5. Contingencies Included

This supplementary business case provides an overall Project contingency of [REDACTED]. This allows for possible routine project variations during delivery, which are more likely than usual given the current national and global infrastructure delivery environment. Examples of contingencies are provided in Section 4 – Cost & Contingency. [REDACTED]

[REDACTED] It should also be understood that this contingency will negate the need to request any further supplementary capital works funding, which could significantly delay the Project. If the construction market stabilises and the current post-COVID industry costs reduce in the future, any savings will be returned to Treasury.

1.3 Treasury Budget Summary

Funding Category: Design and Construction – Supplementary Capital Works Funding

Preliminary Financial Impacts Summary

Financial Impact	2023-24 \$m	2024-25 \$m	2025-26 \$m	2026-27 \$m
Requested Funding				
- Recurrent (GPO / EBT)	0.000	0.000	0.000	0.000
- Supplementary Funds	1.0	15.00	14.00	14.00
- Full Capital Injection (if approved)	2.200	35.000	35.000	35.000
Other Recurrent Impact (not funded)				
- Repairs and maintenance ²	0.000	0.000	0.000	0.000
- Depreciation ¹	0.000	0.000	0.000	0.000

* Although feasibility studies may be funded through the Capital Works Program, they are expensed in accordance with ACT Treasury's Accounting Policy guideline for capital works. Therefore appropriation for feasibility studies is provided as GPO. For further information: <http://www.treasury.act.gov.au/accounting/html/accounting.htm>.

¹ Depreciation expense commences from 2026-27 and is estimated using a useful life of 75 years (\$0.587m p.a).

² Repairs and maintenance is estimated at \$1.0m in 2027-28 and \$2.0m from 2028-29 (ongoing – with supplementary funding approval).

Staffing Impacts Summary

Impact	2022-23	2023-24	2024-25	2025-26
Total Additional FTEs	Nil	Nil	Nil	Nil

2. Project Outline

2.1 Description of the Project

2.1.1. Overview

This business case is for \$44.00 million supplementary capital works funding to deliver construction for the WHD Duplication project. The supplementary capital works funding allocation will increase the total Project budget from \$63.25 million to \$107.25 million.

This Project is for the construction of 4.9km of duplicated road on WHD, from the intersection of JGD in the east to DBD in the northwest. This is the last section of WHD to be duplicated, which is 4.5 km of new duplicated pavement. The road is currently congested, particularly during the AM and PM peaks and this will be exacerbated as Ginninderry, West Belconnen and the new suburbs of Strathnairn and Macnamara continue to develop. This section of road has a demonstrated crash history with there being 82 incidents in the past five years. The main type of crashes are rear-end and side-swipe incidents which is a firm indication that the road is congested and operating over capacity for its current design standard. This has been highlighted by a number of crashes occurring within the first month of 2023, including the Territory's first road fatality for 2023.

The completed road duplication will cater for sustainable transport options including active travel infrastructure such as on-road cycling and an off-road shared path. The road will also cater for public transport to support adjacent urban development if it occurs in the future. The current design of the WHD off-road shared path is also being extended from JGD through to Bindubi Street, enabling a future shared path connection from West Belconnen all the way through to the city, connecting to the existing path network. There may be an opportunity to deliver this additional section of shared path as part of the multimodal network upgrade project, depending on the pricing of tender submissions and available funds and an investigation of the environmental approvals required.

The Project will consider construction staging whereby the section directly north of Whitlam (from JGD to Kama Nature Reserve) can be undertaken as the first stage to minimise roadwork impacts and activities on new residents. The first land sales in Stage 1 of Whitlam are well underway with a number of residents having already moved into their new homes.

The Project will include:

- Duplication of 4.9km of unduplicated road
- Active travel infrastructure in the form of on-road cycle lanes and a dedicated off-road three-metre-wide shared path
- A signalised intersection of WHD and DBD
- Five architecturally designed retaining walls
- Significant watermain and sewer augmentation
- Retention and upgrade works of three existing underpasses
- Ancillary works such as batters, drainage and safety barriers
- Streetlighting median works and other road furniture
- Upgrade of access to the Weetangera Cemetery
- Upgrade of vehicular access for rangers to Kama Nature Reserve
- Improving and enhancing the Bicentennial National Trail underpass

The Project will also interface with the Pinnacle and Kama Nature Reserves either side of WHD.

The draft DA/EIS for the Project was lodged on 14 May 2021 and passed completeness check on 7 June 2021. Following the DA/EIS public notification period, the revised DA/EIS was lodged on 15

April 2022. A substantial number of comments have been received and are currently being worked through in order to formally respond. Approval is anticipated for March 2023. Once approved, the consent conditions from the development approval will be incorporated into the construction tender documents. Further community consultation was undertaken throughout October to December 2021 in various forms. There was strong community support for the proposed shared path to be further away from Hawker residences to the western side of WHD, due to noise and privacy concerns. This change has been adopted by the Project.

2.1.2. Scope of works

The scope of works will be for all construction activities required to deliver the additional traffic lanes, pavement widening, vertical and horizontal realignment and the delivery of all road related infrastructure, such as stormwater drainage, service utilities, signage, safety barriers and traffic control devices. The upgraded WHD multimodal corridor will include on-road cycling lanes and a dedicated off-road shared path with appropriate lighting.

As mentioned in 2.1.1. construction may be staged to coordinate with residential development in Whitlam so as to not detract from the amenity for new residents as they move into their new homes. An important project deliverable will be to keep the road open to traffic at all times and minimise disruption, particularly during the AM and PM peak. It is anticipated that specific safety measures, to protect the general public and the construction workers, incorporated into the design documentation will enable the minimum traffic speed to be 60km/h during construction, for peak hour travel. Subject to final development and funding approval, it is anticipated that construction will commence in late-2023 and be completed by late-2026.

2.1.3. Scope of services

The scope of services will be to engage a suitably experienced, appropriately resourced and prequalified construction contractor to provide a value for money delivery through an open tender process. The successful construction contractor will undertake the works outlined in a detailed project brief and Request for Tender (RFT) documents delivered by IDP Group. An outline of client requirements is in the Functional Brief as attached at Appendix A in the Original Business Case.

The Project will also include the engagement of a PAP consultancy as a separate engagement. This will undertake day-to-day construction supervision and contract administration services. Both the construction contract and PAP consultancy will be procured by IDP through a competitive open tender process that will be advertised on the TendersACT website.

Further details can be found in Section 2.1.3 of the original 2021/2022 business case which is appended at [Appendix A](#).

2.1.4. Project Assumptions and Dependencies

The Project assumptions and dependencies were described in detail in the original 2021/2022 business case and remain current. These are found in Section 2.1.4. of the original 2021/2022 business case which is appended at [Appendix A](#).

There is a project dependency relating to the relocation and augmentation of BSWMs which cross WHD and DBD. These works would have to occur during periods of low water demand and will require design approvals from ICON Water. The current design consultant is aware of this risk and is in close contact with ICON Water to obtain design approvals before the Project goes to tender.

Another dependency is interfacing construction works with the residential development of Whitlam, along with considerations regarding the nearby Riverview development in Ginninderry. The Project

will consider construction staging whereby the section of WHD between JGD and Kama Nature Reserve could be constructed as a priority to reduce the impacts to the new residents of Whitlam. TCCS and the WHD design consultant are liaising with the SLA and their estate development consultant.

The final dependency is the construction of the nearby JGD and Molonglo River Bridge project (JGD3C). This will put pressure on this area to the south of the Belconnen town centre with construction of both significant works occurring concurrently, causing the road network to become more congested.

It is intended that there will be regular coordination between the projects, as well as governance processes, that will involve scheduled meetings between TCCS, MPC and the SLA to assist in managing and communicating any project issues and resolve these through a collaborative and consultative governance approach. There will be a need to manage construction activities on both projects to ensure progress is maintained on both projects simultaneously and that both projects can be delivered in a coordinated and consistent manner.

2.2 Review 1 (MPC): Status of Functional Brief/Output Specification

Sign off that the functional brief/output specifications are sufficiently progressed in order to go to market under the delivery model selected and within the procurement timeline outlined in the original business case. Attach the Functional Brief at **Appendix A** of the original business case.

Review 1 (MPC) Officer Name: _____

Signature: _____

Date: _____

- *This is the first review point for MPC and is an assessment of the status of the functional brief/output specification.*
- *Sign off should only occur if the MPC officer is confident that the functional brief/output specifications are sufficiently progressed in order to go to market under the delivery model selected, and within the procurement timeline outlined in the business case.*
- *Risk workshops and quantification of project risks is mandatory for Tier 1 and 2 projects.*

Disclaimer: This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.

3. Needs Analysis

3.1 Problem

An Investment Logic Workshop (ILW) was undertaken and confirmed the 'problem' while outlining the benefits to Government and the community by addressing these. An Investment Logic Map (ILM) was also produced from this process and is attached at Appendix B of the original business case appended at [Appendix A](#). The ILM identified that the current traffic, combined with existing land releases from Ginninderry and West Belconnen are significantly increasing traffic volumes, congestion and therefore motor vehicle accidents on this unduplicated 4.5km section of WHD. The ongoing urban development of Ginninderry includes the new suburbs of Strathnairn and Macnamara and will release a total of 11,500 blocks onto the market in a staged release. The ILM also identified WHD as an important east west transport corridor and the current congestion is reducing its capacity to meet this objective. Traffic counts for WHD between JGD and DBD confirm that over 20,000 vehicles per day use this section of road. This is well above the Austroads Guidelines for a single carriageway roadway. The Canberra Strategic Transport Model also shows the road is currently over its design capacity, particularly during the AM peak.

As also identified in the ILM, the traffic congestion and the merge movements into single carriageways both east and westbound is directly contributing to the crash history of this section of road. The current crash history has 82 crashes occurring in five years. This significant crash history is approximately four times the national crash average for both urban and rural roads. The two primary crash events documented are rear-end and side-swipe incidents. The rear-end crashes are directly attributable to the road being congested and the stop / start nature of the traffic. The side-swipes are mostly caused from two lanes merging into one. These are all indications that the road is operating over capacity and is congested. As mentioned earlier, this has been highlighted by a number of crashes occurring within the first month of 2023, including the Territory's first road fatality for 2023. Duplicating the road is expected to largely eliminate these crash incidents, to better prevent tragic loss of life on our roads, improve traffic flow and reduce commuter stress levels.

The specific problem being addressed by this supplementary business case is the shortfall in capital works funding to meet the full cost of the Project, including the increase in scope for BSWM and active travel enhancements. The increased capital works cost of the Project is demonstrated in a number of recent tender submission prices received and the additional capital works costs associated with the Project (as detailed in Section 4 of this supplementary business case).

The overarching and existing problems which required addressing are detailed in Section 3.1 of the 2021/2022 original business case which is appended at [Appendix A](#).

3.2 Benefits

The specific benefit in providing the supplementary capital works funding for the Project include:

- Ensuring the financial viability of the Project;
- Allowing the Territory to enter into contract with the preferred construction tender in late 2023;
- Providing financial stability for the Project over its three-year construction period; and
- Meeting the Government's public commitment to approach the market in 2023 and have the new duplicated road open by late 2026.

The Project specific benefits are provided in detail in Section 3.2 of the original business case which is appended at [Appendix A](#).

3.2.1. Benefits to be delivered

The benefits to be delivered are provided in detail in Section 3.2.1 of the original business case which is appended at Appendix A.

3.2.2. Importance of the benefits for Government

The importance of the benefits for Government are high and remain the same and are provided in detail in Section 3.2.2 of the original business case which is appended at Appendix A.

3.3 Options Analysis

3.3.1. Strategic Solutions Analysis

The strategic solution was analysed in detail in Section 3.3.1. of the original business case which is appended at Appendix A.

3.3.2. Recommended Strategic Solution

The recommended strategic solution was detailed in Section 3.3.2. of the original business case which is appended at Appendix A.

3.3.3. Project Solutions Analysis

The project solution analysis was provided in detail in Section 3.3.3. of the original business case which is appended at Appendix A.

3.3.4. Base Case

The base case was detailed in Section 3.3.4. of the original business case which is appended at Appendix A.

3.3.5. Recommended Project Solution

The recommended project solution remains the same and details are provided in Section 3.3.5 of the original business case which is appended at Appendix A.

3.4 Review 2 (FABG): Needs Analysis

Treasury directorate to sign off that a case for the project is present in the business case.

Review 2 (FABG) Officer Name: _____

Signature: _____

Date: _____

- *This is the first review point for Treasury and is assessment of the needs analysis.*
- *Sign off should only occur if the Treasury officer is confident that the needs analysis is robust, is based on evidence and an Investment Logic Workshop (ILW) has been undertaken (if applicable).*
- *Note that Tier 1 business cases anticipate review and signoff by the Under Treasurer.*

Disclaimer: This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.

4. Cost & Contingency

The requested supplementary business case capital works funding request of \$44.0 million includes [REDACTED] in direct Project costs and [REDACTED] for contingencies to address any Project variations during the delivery. An approach has been made to the Australian Government to meet half the costs of the additional capital works funding (\$22.0 million). However, in order to meet the project timelines and commitments and avoid delay in commencement of works, the full \$44 million is being sought in this supplementary business case. As detailed in Section 1.3.2 of this supplementary business case, any unspent ACT Government capital works funding will be returned to Treasury.

The \$44.00 million capital works funding request was discussed with Major Projects Canberra who confirmed the Project component costs. These include:

- [REDACTED] capital works contingency to cover project variations. Examples of contingency expenditure could include:
 - Further unexpected escalation costs;
 - Changes in infrastructure delivery and / or safety specifications;
 - Latent conditions, such as unexpected geotechnical findings;
 - Unexpected environmental, heritage or contamination issues;
 - Unexpected consent conditions through the EIS/DA approval
 - Meeting reasonable additional community and political delivery requests; and
 - Meeting reasonable interface delivery requirements with the Molonglo River Bridge project, adjacent urban development areas or other inter-Directorate requests/impacts.
- The higher market costs, including the cost of labour and construction materials;
- TCCS Project Management costs (5% - [REDACTED]);
- Major Projects Canberra procurement cost (4% - [REDACTED]);
- Project insurance (1% [REDACTED]);
- Training Levy (0.5% - [REDACTED]);
- [REDACTED] million provision for approval conditions associated with DA, EIS and environmental offset requirements;
- Technical supervision (via the engagement of a Principals Authorised Person (PAP)) and GC21 contract administration (estimated at [REDACTED]); and
- Project escalation costs commensurate with the current Producer Price Index.

The timber shortage and demands for steel and construction materials have had a negative impact on the construction industry as well as rising construction material costs, and increased interest rates. Queensland is reporting the following extraordinary escalation in construction costs from 2020 to 2022 on average:

- gravel increased by 28 per cent;
- bitumen increased by 36 per cent;
- asphalt increased by 14 per cent;
- concrete increased by nine per cent;
- precast bridge deck units increased by 10 per cent;
- fuel increased by 53 per cent; and
- steel reinforcing increased by 67 per cent.

The ACT is reflecting similar increases, which has affected the overall cost of the Project. These issues have been ongoing and are projected to continue.

The cost of the project has also been impacted by the significant demand for transport infrastructure in NSW, particularly around greater Sydney, higher labour costs, international instability and global demand on international freight.

4.1 Preliminary Cost Estimate

As detailed previously, the capital works funding request is based on the current market rates received. The project escalation costs are well understood and are quantified in the P50/P90 construction cost estimate at [Appendix C](#).

4.2 Contingency

4.2.1. Project Contingency

The [REDACTED] capital works contingency request has been recommended by Major Projects Canberra. Although not specifically quantifiable, it is expected to negate the need to request any further supplementary capital works funding, which could significantly delay the Project and have commercial implications for the Government. Examples of contingency expenditure could include:

- Further unexpected escalation costs;
- Changes in infrastructure delivery and / or safety specifications;
- Latent conditions, such as unexpected geotechnical findings;
- Unexpected environmental, heritage or contamination issues, including provision of [REDACTED] for environmental off sets and DA/EIS conditions;
- Meeting reasonable additional community and political delivery requests; and
- Meeting reasonable interface delivery requirements with the Molonglo River Bridge project, adjacent urban development areas or other inter-Directorate requests/impacts.

Also as mentioned, any unspent capital works funding will be returned to Treasury at the completion of the Project.

4.2.2. Delivery Model Contingency

A delivery model contingency is not required.

4.3 Whole of Life

Whole of Life commentary and detail was provided in Section 4.3 of the original business case which is appended at [Appendix A](#).

4.4 Budget / Funding Strategy

The Project funding history and current Project costs are detailed in the following tables (excluding GST).

The Project as a whole has the following known and estimated costs:

Description	Cost \$million	Supplementary Funding Requested \$million	Funding notes
<u>Construction Phase</u>			
P90 Cost Estimate	[REDACTED]	[REDACTED]	[REDACTED]

Description	Cost \$million	Supplementary Funding Requested \$million	Funding notes
IDP Group management fee (4%)			Mandatory fee
Project Management (5%)			Mandatory fee
Insurance (1%)			Mandatory fee
PAP services and contract administration			Administer and supervise GC21 contract for 3 years
Training Levy Insurance (0.5%)			Mandatory fee
DA/EIS/Offset			Anticipated value of approval conditions
TOTAL ESTIMATED PROJECT COST	\$107.25 million	\$44.00 million	Unable to proceed without additional funding

Current Project Costs:

Description	Cost \$'000	Funding notes
William Hovell Drive Construction (ACT Capital Works Allocation)	\$36.75	2021/22 ACT budget allocation
William Hovell Drive Construction (Australian Government Capital Works Allocation)	\$26.50	October 2022 – Federal budget 2021/22 ACT budget allocation
Supplementary Capital Works Funding Request	\$44.00	This Supplementary Business Case
Total Current Costs	\$107.25	

5. Economic Analysis

5.1 Cost Benefit Analysis (or 5.3 Cost Effectiveness Analysis)

The costs and benefits of the Project have been documented previously in the original 2021/2022 business case which is appended for reference at [Appendix A](#).

In addition to the original business case, a rapid economic appraisal was prepared in December 2022 (taking into account the updated cost estimate), concluding that the Project is still economically viable. The rapid economic appraisal is appended for reference at [Appendix D](#).

5.2 Wider Economic Benefits

In the context of the Project stage and level of available information, the economic appraisal has been undertaken as a rapid evaluation. The ATAP Guidelines identify a rapid economic appraisal as a cost-effective way of gauging whether an initiative is likely to pass a detailed appraisal. The rapid appraisal measures the primary costs and benefits of a project and excludes considerations that are likely to have minimal impact on the economic metrics. As such, Wider Economic Benefits (WEB) have not been included in the rapid appraisal. The results of the economic modelling for the WHD

duplication project indicate that the Project is economically viable with positive Net Present Values (NPV) and Benefit Cost Ratios (BCR) above 1. The economic modelling indicates that the duplication will provide a good return on investment and in addition to the quantified economic benefits, the project will improve transport network resilience and travel time reliability. Further commentary regarding the economic benefits can be found at [Appendix D](#).

5.3 Outline of Key Risks

Construction delivery for the Project has some medium risks. These are being addressed and mitigated in the current detail design phase.

The three key risks identified are as follows:

- [REDACTED]
- [REDACTED]
- [REDACTED]

A detail design risk register was undertaken as part of an inter-directorate Safety in Design (SID) Workshop the PSP stage. This investigated risks related to the design, safety, construction, staging and other project related risks. This SID register will be further updated upon completion of the detail design. The SID Register is appended at [Appendix E](#).

The project risk register is a live document and will be monitored and updated during the detail design delivery and into the construction phase.

Commentary and detail on risks was provided in Section 6.1 of the original business case which is appended at [Appendix A](#).

5.4 Commercial Principles

Commentary on commercial principles was provided in Section 6.2 of the original business case which is appended at [Appendix A](#).

5.5 Delivery Model Assessment

The delivery model assessment has been undertaken. Details on this can be found in Section 6.3 of the original business case which is appended at [Appendix A](#).

5.6 Recommended Delivery Model

The recommended delivery model has been determined and there is no reason to believe this has changed due to the higher market costs expected when the market approach is undertaken. This is reflected in the advice from SMEC as our design partner. Details on this can be found in Section 6.4 of the original business case which is appended at [Appendix A](#).

By giving a clear scope of works, with the necessary approvals in place, the risk associated with construction of the works is reduced. Potential tenderers will be able to reduce contingency and the best value for money can be achieved. This is particularly important considering the volatility of the market at this time

5.7 Review 3 (MPC): Delivery Model Selection

MPC to sign off that the delivery model selected is appropriate for the project risk profile and value.	
Review 3 (MPC) Officer's Name:	_____
Signature:	_____
Date:	_____

- *This is the second review point for MPC and is an assessment of the delivery model analysis.*
- *Sign off should only occur if the MPC officer is confident that the delivery model selected is the most suitable to the project requirements and level of risk.*

Disclaimer: *This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

6. Financial Analysis (PPP and DCMO only)

6.1 Financing Assumptions

Not applicable

6.2 PPP/DCMO Payment Stream

Not applicable

6.3 Incremental Procurement/Transaction Costs

Not applicable

6.4 Public Sector Comparator

Not applicable

6.5 Review 4 (IFR): Financial (PPP/DCMO only)

Not applicable

Treasury to sign off that the financial analysis has been prepared by an appropriately skilled advisor (IFR Panel) and that there are no unacceptable assumptions in the analysis (only applicable for PPP/DCMO delivery models).

Review 4 (IFR) Officer Name: _____

Signature: _____

Date: _____

- *This is the second review point for Treasury and is an assessment of the financial estimate calculations for PPP and DCMO models.*

Disclaimer: *This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

7. Project Governance

Project Governance details can be found in Section 8 of the original business case which is appended at **Appendix A**.

8. Stakeholder Engagement Plan

8.1 Stakeholder Identification

The Project Control Group has been established for the Project. It includes specialised advice from a number of ACT Government Directorates including:

- EPSDD (including SLA) regarding the requirements for land release in the Molonglo Valley and West Belconnen;
- TCCS Traffic Management and Safety regarding higher proportion of crashes at this location and to assist in managing traffic during construction.

Liaison and engagement with businesses, community and interest groups who are involved in activities adjacent to the Project site and public engagement will be part of the on-going delivery of this Project. This will need to occur again once tenders have been advertised, at construction commencement and throughout the construction phase. The TCCS Communications Team will coordinate and manage all stakeholder engagement activities.

8.2 Stakeholder Involvement & Interest

There has been significant community interest and engagement with the Project to date, with a number of face to face and community sessions held in 2021.

A number of these stakeholders have taken the opportunity to comment on the Project via the Development Approval process during the public notification period. Multiple drop-in sessions have been held with the local Belconnen community. A report of the Project's stakeholder consultation is appended at Appendix F.

The TCCS Communications Team will continue to coordinate and manage all stakeholder engagement activities. There is ongoing support from the community to commence work urgently, particularly in light of the recent fatality, several major motor vehicle accidents over the past year, and ongoing concerns about traffic congestion in the area. This is even more pertinent following the progress of related projects in the immediate area, including the John Gorton Drive and Molonglo Bridge contract signing and the recently announced Molonglo Group Centre.

8.3 Stakeholder Engagement Plan

The TCCS Communications Team will prepare a Communications Strategy for the construction phase of the Project, incorporating the comments and results from the earlier consultation sessions and the DA public notification. This document will include identifying stakeholders, key messages, risks and sensitivities, as well as an action plan which outlines all communications activities, budget and responsibilities.

9. Advisor Engagement Plan

9.1 Proposed Advisors Roles

9.1.1. Legal

The Project will engage a dedicated external Probity Advisor which is to provide regular advice and guidance. There is also close liaison with ACT Government Solicitors regarding commercial and contractual arrangements, when and where required.

9.1.2. Commercial Procurement

Not required, the Project will utilise the standard ACT Government commercial procurement framework which has been assessed as suitable for this project. There are no non-standard commercial principles that would need to be considered for this project and related procurement.

9.1.3. Commercial Financial

Not required, the Project will utilise the standard ACT Government commercial financial framework which has been assessed as suitable for this project. There are no non-standard commercial financial principles that would need to be considered for this project, it's related procurement or contract outputs.

9.1.4. Technical Design & Engineering

The Project has engaged SMEC as our design team and contract administration and surveillance partner from industry who, along with Major Projects Canberra, provides technical, contractual and engineering expertise and advice. Further information on other technical and engineering roles can be found in Section 10.1.4. of the original business case which is appended at [Appendix A](#).

9.1.5. Other Specialists

Not applicable

9.1.6. Stakeholder Management and Communication

The Project will have a full stakeholder management plan in place to communicate and advise on the progress of the Project through the TCCS Communications team, with support from TCCS Infrastructure Delivery and MPC. There will also be regular Project Control Group meetings to ensure that most up to date information is available at all times, with regular project updates to be provided to the community and other key stakeholders.

9.1.7. Project Management

The Project is being managed by TCCS with contract management and procurement support being delivered by Infrastructure Delivery Partners within Major Projects Canberra, with support and input from TCCS.

10. Timeline

10.1 Project Timetable

10.1.1. Outline

The Project delivery schedule is as follows:

Milestones	Date to be completed
Confirm funding availability and finalise tender documents	October 2023
Release public construction Tender	October 2023
Award Contract	December 2023
Pre-construction and Possession of Site	December 2023
Construction completion	December 2026

10.1.2. Proposed float

The timeline for this Project at 10.1.1 identifies the Project timeframes and have elements of float identified within as there are a number of critical path items that need resolution prior to the next step's with one example being approval of the EIS, as we are unable to progress until we receive this. This float reflects approximately 10% of the overall program and considers time risk and material supply chain risks. These confirm that the timings outlined above in Section 10.1.1. are achievable and further float is not required.

10.1.3. Project constraints and/or deadlines

There is an urgency to complete the Project.

The completed Project will significantly reduce both minor and major vehicle crashes along this section of road, will provide more confidence to the Whitlam and Riverview residents, along with providing Belconnen and Molonglo Valley residents with safe, reliable and high quality transport infrastructure.

The Project completion would also coincide with commercial land releases programmed for the Molonglo Group Centre, the construction of the new JGD and Molonglo River Bridge, the new Deep Creek dam and the 132KV relocation being constructed and managed by SLA, as well as the new Whitlam School due for construction at a similar time and this activity may provide some significant commercial opportunities to attract Tier 1 contractors to the Project. There are likely to be constraints with the amount of construction work occurring in and around the Molonglo River and surrounding area, although it is likely to be able to better coordinate the works to minimise the community disruptions.

10.1.4. Project decision points

The key decision point for the Project is the additional funding to allow TCCS via Major Projects Canberra to approach the market and confirm the cost to engage a contractor and proceed. This will

provide more certainty to potential residents of Whitlam and the ever growing Riverview development and will deliver a duplicated carriageway that will support less congestion, more efficient travel and more opportunities for active travel and servicing of public transport.

11. Appendices

Appendix A – Original 2021/2022 Business Case

Appendix B – ACT Wellbeing Framework Assessment

Appendix C – Updated Cost Estimate

Appendix D – Rapid Economic Cost Appraisal

Appendix E – Safety in Design Risk Register (SID)

Appendix F – Stakeholder Consultation Report



ACT
Government

Single Assessment Framework (SAF)

Business Case

Project Name:	TCCS CW02 - William Hovell Drive Duplication – Construction
Total Project Value (estimated):	\$65.55million
Capital Appropriation Requested:	\$63.25million
Project Stage:	Construction
Project Value:	\$63.25million
Risk Assessment (high/med/low):	Medium
Proposed Delivery Model:	Open Tender IDP Group / MPC
Requesting Directorate:	TCCS
Requesting Minister:	Chris Steel
Business Case Advisors:	Nil

NOTE: This template should be completed using the accompanying SAF Business Case Guidance Notes.

Contact Officers

Contact Officer, Requesting Directorate

Gerard Coffey TCCS

Michael McGrath LRI / TCCS

Reviewing Officer, Infrastructure Delivery Partners (IDP) Group:

Darren Smith IDP Group / MPC

Reviewing Officer, Treasury:

Sign Offs

Requesting Directorate:

Document in order to proceed

IDP Group:

Document in order to proceed – IDP Group Sign-offs complete

Treasury:

Document in order to proceed – CMTEDD Sign-offs complete

Contents

1. Executive Summary	4
1.1 Statement of Need.....	5
1.2 Delivery Model.....	6
1.3 Funding Approval Sought.....	6
1.3.1. Type of funding sought	6
1.3.2. Cost Estimate	6
1.3.3. Payment Stream (PPP/DCMO only)	7
1.3.4. Incremental Procurement/Transaction Costs.....	7
1.3.5. Contingencies Included	7
1.4 Treasury Budget Summary.....	7
2. Project Outline	8
2.1 Description of the Project	8
2.1.1. Overview	8
2.1.2. Scope of works	9
2.1.3. Scope of services.....	9
2.1.4. Project Assumptions and Dependencies	9
2.2 Review 1 (IDP Group): Status of Functional Brief/Output Specification.....	10
3. Needs Analysis	11
3.1 Problem.....	11
3.2 Benefits	11
3.2.1. Benefits to be delivered.....	11
3.2.2. Importance of the benefits for Government	12
3.3 Options Analysis.....	13
3.3.1. Strategic Solutions Analysis	13
3.3.2. Recommended Strategic Solution.....	13
3.3.3. Project Solutions Analysis	13
3.3.4. Base Case.....	13
3.3.5. Recommended Project Solution	14
3.4 Review 2 (Treasury): Needs Analysis	14
4. Cost & Contingency.....	15
4.1 Preliminary Cost Estimate.....	15
4.2 Contingency	15
Single Assessment Framework – Business Case Template (All Tiers)	2

4.2.1.	Project Contingency	15
4.2.2.	Delivery Model Contingency	15
4.3	Whole of Life	15
4.4	Budget / Funding Strategy	16
5.	Economic Analysis.....	16
5.1	Cost Benefit Analysis.....	16
5.2	Not Required	16
6.	Delivery Model Analysis	16
6.1	Outline of Key Risks.....	16
6.2	Commercial Principles.....	17
6.3	Delivery Model Assessment.....	17
6.4	Recommended Delivery Model	17
6.5	Review 3 (IDP Group): Delivery Model Selection.....	17
7.	Not Required	18
8.	Project Governance.....	18
9.	Not Required	18
10.	Not Required	18
11.	Timeline.....	18
11.1	Project Timetable.....	18
11.1.1.	Outline.....	18
11.1.2.	Proposed float.....	18
11.1.3.	Project constraints and/or deadlines.....	18
11.1.4.	Project decision points.....	19
12.	Appendices.....	19
	Appendix A – Functional Brief/Output Specification.....	19
	Appendix B – Investment Logic Map	19
	Appendix C – Cost Estimate	19
	Appendix D – Project Risk Register	19
	Appendix E – Project Program	19
	Appendix F – ACT Wellbeing Assessment Framework.....	19

1. Executive Summary

The Molonglo Valley is a significant greenfield development area of the Territory. South of the Molonglo River the suburbs of North Wright and Coombs (Molonglo 1) are mostly developed and the last stages are currently being released. Molonglo 2 is currently being rolled out with stages of Denman Prospect currently being released to the market. The Molonglo Group Centre (MGC) site is currently being planned to inform a variation to the Territory Plan. The MGC is on the land release program for 2022-23 and will ultimately be delivered by the Suburban Land Agency (SLA). Molonglo 3 is north of the Molonglo River, west of The National Arboretum Canberra, south of William Hovell Drive (WHD) and east of Kama Nature Reserve. West of John Gorton Drive (JGD), the planning and release of the suburb of Whitlam is well advanced. There is also master planning underway for the area to the east of JGD, which is known as Molonglo 3 East.

The other significant development front in the area is the estate of Ginninderry in West Belconnen and the new suburbs of Strathnairn and Macnamara. These new suburbs and the estate developments is estimated to yield a total of 11,500 blocks. The Ginninderry estate development project is a joint venture between ACT Government (SLA/EPSSD) and Riverview Developments with a 60/40 respective return split. WHD connects directly onto Drake Brockman Drive (DBD) which is the main southern arterial road connection into Ginninderry. The Government funded a roads feasibility study in 2016 to duplicate DBD and this will be delivered by the joint venture in the next five to seven years.

WHD is a major arterial road from DBD in the northwest to Glenloch Interchange in the east. The road is the primary transport link from Holt, Higgins, Scullin, Hawker, Ginninderry, West Belconnen and Whitlam to the City. The duplicated WHD is required to support land release and will include on-road cycling lanes and a dedicated off-road shared path. The current design of the off-road shared path is being extended from JGD through to Bindubi Street and is at final PSP stage. There will also be a significant grade separated intersection with Bindubi Street when Molonglo 3 East is developed. This will also be the light rail route to Belconnen in the future.

The total length of WHD is 7.6km and the 4.5km section of WHD from DBD to JGD is mostly two lanes northbound (in the form of an overtaking lane) and a single southbound carriageway. This 4.5km length is the only section of WHD which remains unduplicated and is the subject of this construction business case.

This unduplicated section of WHD received funding in 2017-18 for a feasibility study (*Building a Better City – William Hovell Drive upgrade – early planning*). The study was delivered in 2018 by EPSSD and investigated four duplication alignment options via a multi criteria analysis (MCA). The MCA process assessed project cost, environmental impacts, constructability, geotechnical conditions and service utilities which were all incorporated as weighted criteria. This MCA process recommended a preferred duplication design option which was adopted by an inter-Directorate circulation. This feasibility study is currently being progressed in the detail design to have the project ready for construction. The detail design is at final PSP stage and is progressing to Document Ready (DR).

The roads feasibility study highlighted the significant crash history of WHD with the road experiencing approximately four times the national crash average for both urban and rural roads. The most common incidents documented are rear-end and side-swipe crashes. This indicates that the road is congested and operating over capacity.

The detail design for the unduplicated section of WHD was funded in 2019-20 as part of *Planning Better Roads for Our Growing City*. This detail design project is currently underway and will inform the construction project with tender phase documentation through to for construction drawings. The revised total capital appropriation of \$63.25million requested is based on the revised P90 Single Assessment Framework – Business Case Template (All Tiers)

costing delivered as part of the PSP design delivery. This figure also included procurement, insurance, project management, site supervision and contract management costs.

The development approvals for the project are complex with a referral required under the Federal EPBC Act, and an EIS to support an Impact Track development application. These approvals have increased the overall design delivery timeframe. At this stage construction should be tender ready in February 2022.

The duplication of this section of road is quite complex with a number of constraints such as two Bulk Water Supply Mains (BSWM) crossings, an off-road shared path and construction undertaken under traffic. The final PSP design also identified water main augmentation works required to accommodate a signalised intersection with DBD. These risks are being addressed as part of the detail design. However, with these risk also comes an opportunity to deliver these utility augmentations as early works.

The Transport Canberra Light Rail team have confirmed that the road corridor will not be used for light rail in the future. However, the upgraded and duplicated road will be able to accommodate buses for public transport in the event there is land development adjacent to the road corridor.

There are environmental enhancement opportunities with the duplication project, particularly with regard to remnant roadside vegetation and providing fauna connectivity between The Pinnacle and Kama Nature Reserves. These opportunities are being investigated and explored as part of a current Environmental Impact Statement (EIS) delivery as required for an Impact Track development approval.

Building on the feasibility study with the current detail design to deliver this construction phase, is a proven, lower risk delivery method for a complex project such as this.

A Federal Government infrastructure funding contribution from the Department of Infrastructure, Transport, Cities and Regional Development is also being investigated. An application for this has been submitted and is currently being assessed by the Federal Government.

This project is an election commitment (ECLAB058).

1.1 Statement of Need

The section of WHD between JGD and DBD is the remaining section of arterial road that is not duplicated. With increasing traffic from the ongoing development of Ginninderry and West Belconnen this section of road is congested where it narrows to single lanes, particularly during the AM and PM peaks. This congestion directly contributes to the current crash history along this section of road, mainly rear-end and side-swipe crashes. In the past five years there have been 82 crashes with these types of incidents which is a direct indication that the road is congested and running over capacity.

The detail design is currently being delivered and will include provision for active travel with both on-road cycle lanes and off-road shared path infrastructure for the full 4.5km length. These will provide a key east west active travel corridor which will integrate with existing shared path infrastructure in Whitlam, Higgins and Hawker. The current design of the off-road shared path is also being extended from JGD through to Bindubi Street.

The current detail design is being delivered through to DR and will include tender phase and construction drawings to have the project ready for construction. Construction is the final stage of the project and will see this important road corridor fully developed.

The statement of need is enhanced by the requirements from the ACT Wellbeing Framework. These have been assessed and the ACT Wellbeing Framework assessment is included at attachment Appendix F.

The government has recognised the importance of this transport project and made an election commitment in 2016 and confirmed in 2020 to duplicate the road (election commitment ECLAB058). The allocation of construction funding will complete this commitment.

1.2 Delivery Model

The project will be a traditional delivery model. A feasibility study was completed in 2018 and the detail design is currently being delivered through to DR as the next phase of the project.

Construction is the final stage of the project and, if funded, work will commence mid-2022 and be complete mid-2025. This is the lowest risk delivery model for a project of this size and complexity, especially with regard to construction being under traffic.

The base construction cost is [REDACTED] and construction is expected to take 3 years to complete (without allowing for any significant lost time due to wet weather, etc.). The project brief for the construction contract will specifically require tenderers to provide methods on how to reduce the construction timeframe to minimise impacts on residents and motorists. The timeframes outlined through the business case reflect this expedited delivery and it is expected that a 3 year construction timeframe is feasible.

The construction phase of the project will be delivered through an open tender process facilitated by Infrastructure Delivery Partners (IDP) Group and advertised on the TendersACT website in Major Projects Canberra (MPC).

1.3 Funding Approval Sought

1.3.1. Type of funding sought

This funding proposal is for construction.

1.3.2. Cost Estimate

The cost estimate for construction related activities is [REDACTED] with the following estimated expenditure profile over four years (with construction realistically taking 3 years):

- 2021-22
- 2022-23
- 2023-24
- 2024-25

The [REDACTED] expenditure in 2021-22 reflects the opportunity to deliver utility augmentations as an early works package.

This [REDACTED] figure does not include procurement, insurance, project management, site supervision and contract management costs. This is expected to be a further cost of [REDACTED] which makes the total Capital Appropriation request \$63.25million. Details of how this figure is determined is presented in Section 4.1.

Capital appropriation for the total expenditure over four years is as follows:

- 2021-22 \$3.25million
- 2022-23 \$20.0million
- 2023-24 \$20.0million
- 2024-25 \$20.0million

The scope of works has increased from earlier feasibility study designs to include a shared path. The path will be 3 metres wide, 4.5km in length and be lit in accordance with appropriate design standards. There is a 1.6km section of WHD where the road has a 40 metre vertical rise which makes the shared path delivery quite complicated. To remain compliant with the Disability Discrimination Act (DDA Act) there will be a number of retaining walls and other design measures to keep the shared path grade in accordance with the Australian Standard and be at 7%.

Finally, the final PSP design investigations indicate that the relocation and augmentation of the two BSWMs which cross WHD will likely be required. The PSP design has also identified that a BSWM augmentation is required at the intersection of DBD. These additional utility deliveries have led to an overall price increase from earlier feasibility study cost estimates.

The detailed P50/P90 cost estimate report is attached at [Appendix C](#).

An opportunity to access Federal Government infrastructure funding through the Department of Infrastructure, Transport, Cities and Regional Development is being investigated. The submission is currently being assessed by the Federal Government.

1.3.3. Payment Stream (PPP/DCMO only)

Not applicable.

1.3.4. Incremental Procurement/Transaction Costs

Not applicable.

1.3.5. Contingencies Included

The detail design delivery undertook a P50/P90 financial risk workshop at the draft PSP stage. The P50/P90 has a contingency built into each construction delivery line item. As such, an overall contingency is built into the P90 cost estimate.

This excludes the mandatory project administration and management costs as outlined in Section 1.3.2 and detailed in Section 4.1. Consistent with previous project deliveries, a nominal [REDACTED] has been included to cover these mandatory overhead deliverables.

1.4 Treasury Budget Summary

Funding Category: Construction

Preliminary Financial Impacts Summary

Financial Impact	2021-22	2022-23 \$m	2023-24 \$m	2024-25 \$m
Requested Funding				
- Recurrent (GPO / EBT)				
- Capital Injection	3.25	12.0	24.0	24.0
Other Recurrent Impact (not funded)	Nil	Nil	Nil	Nil
- Depreciation#				
- Maintenance*				

Staffing Impacts Summary

Impact	2021-22	2022-23	2023-24	2024-25
Total Additional FTEs	Nil	Nil	Nil	Nil

Depreciation based on a useful life of 75 years at 1.3% per year will begin in 2025-26

* Maintenance costs will commence in 2026-27 at 1% and then continue from 2027-28 at 2%

2. Project Outline

2.1 Description of the Project

2.1.1. Overview

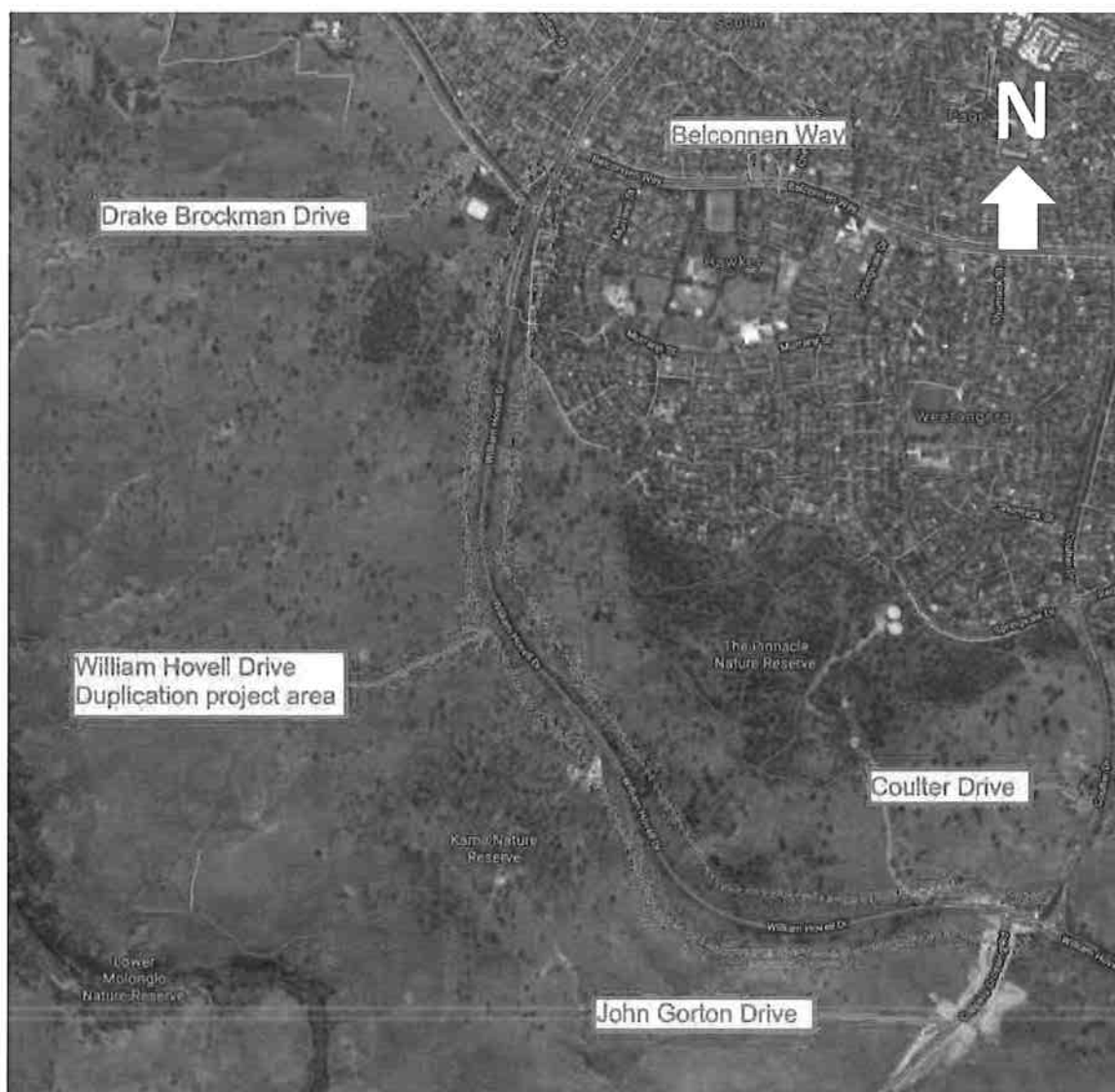


Figure 1 – Locality Plan

This project is for the construction of 4.5km of WHD, from the intersection of JGD in the east to DBD to the northwest. This is the last section of WHD to be duplicated. The road is currently congested, particularly during the AM and PM peaks and this will be exacerbated as Ginninderry, West Belconnen and the new suburbs of Strathnairn and Macnamara continue to develop. This section of road has a demonstrated crash history with there being 82 incidents in the past five years. The main type of crashes are rear-end and side-swipe incidents which is a firm indication that the road is congested and operating over capacity for its current design standard. The construction project will

be informed by the preferred option identified in the 2018 road feasibility study and being optimised by the detail design that is currently underway.

The completed road duplication will cater for sustainable transport options including active travel infrastructure such as on-road cycling and an off-road shared path. The road will also cater for public transport to support adjacent urban development if it occurs in the future. The current design of the WHD off-road shared path is also being extended from JGD through to Bindubi Street. There may be an opportunity to deliver this additional section of shared path as part of the duplication project, depending on the pricing of tender submissions and available funds and an investigation of the environmental approvals required.

The detail design will provide for a construction staging whereby the section directly north of Whitlam can be undertaken as the first stage. The first land sales in Stage 1 of Whitlam are well underway with residents moving into their new homes mid to late 2021. If funding is successful, the section from JGD to the Kama Nature Reserve will be prioritised as the first construction stage to minimise roadwork impacts and activities on new residents.

2.1.2. Scope of works

The scope of works will be for all construction activities required to deliver the additional traffic lanes, pavement widening, vertical and horizontal realignment and the delivery of all road related infrastructure, such as stormwater drainage, service utilities, signage, safety barriers and traffic control devices. The duplicated WHD will include on-road cycling lanes and a dedicated off-road shared path with appropriate lighting.

As mentioned in 2.1.1. construction will be staged to coordinate with residential development in Whitlam so as to not detract from the amenity for new residents when they move into their new homes. An important project deliverable will be to keep the road open to traffic at all times and minimise disruption, particularly during the AM and PM peak. It is anticipated that the minimum traffic speed will be at 60km/h during construction. Subject to final development and funding approval, it is anticipated that construction will commence in mid-2022 and be completed by mid-2025.

2.1.3. Scope of services

The scope of service will be to engage a suitably experienced, appropriately resourced and prequalified construction contractor to provide a value for money delivery through an open tender process. The successful construction contractor will undertake the works outlined in a detailed project brief and Request for Tender (RFT) documents delivered by IPD Group. An outline of client requirements is in the Functional Brief as attached at [Appendix A](#).

The project will also include the engagement of a PAP consultancy as a separate engagement. This will undertake day-to-day construction supervision and contract administration services. Both the construction contract and PAP consultancy will be procured by IDP Group through an open tender process that will be advertised on the TendersACT website.

2.1.4. Project Assumptions and Dependencies

There is a project dependency relating to the relocation and augmentation of BSWMs which cross WHD and DBD. These works would have to occur during periods of low water demand and will require design approvals from ICON Water. The current design consultant is aware of this risk and is in close contact with ICON Water to obtain design approvals before the project goes to tender. This also provides an opportunity to deliver utility augmentations as an early works package under the Utilities Act. These works could be undertaken by the utility authority and would significantly reduce the risk for construction delivery and asset acceptance. There would also be a reduction in the overall delivery time.

Another dependency is interfacing construction works with the residential development of Whitlam. It is intended for the first section of WHD between JGD and Kama Nature Reserve to be constructed as a priority and before many residents move into the early release stages of Whitlam. TCCS and the design consultant are liaising with the SLA and their estate development consultant to facilitate this.

The final dependency is the construction of the nearby John Gorton Drive and Molonglo River Bridge project (JGD3C). There will be a need to manage construction activities on both projects to ensure market capacity is maintained and that both projects can be delivered in a coordinated manner.

2.2 Review 1 (IDP Group): Status of Functional Brief/Output Specification

Sign off that the functional brief/output specifications are sufficiently progressed in order to go to market under the delivery model selected and within the procurement timeline outlined in the business case. Attach the Functional Brief at Appendix A.

Review 1 (IDP Group) Officer Name: _____

Signature: _____

Date: _____

- *This is the first review point for IDP Group and is an assessment of the status of the functional brief/output specification.*
- *Sign off should only occur if the IDP Group officer is confident that the functional brief/output specifications are sufficiently progressed in order to go to market under the delivery model selected, and within the procurement timeline outlined in the business case.*
- *Risk workshops and quantification of project risks is mandatory for Tier 1 and 2 projects.*

Disclaimer: *This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

3. Needs Analysis

3.1 Problem

An Investment Logic Workshop (ILW) was undertaken and confirmed the 'problem' while outlining the benefits to Government and the community by addressing these. An Investment Logic Map (ILM) was also produced from this process and is attached at [Appendix B](#). The ILM identified that the current traffic, combined with existing land releases from Ginninderry and West Belconnen are significantly increasing traffic volumes, congestion and therefore motor vehicle accidents on this unduplicated 4.5km section of WHD. The ongoing urban development of Ginninderry includes the new suburbs of Strathnairn and Macnamara and will release a total of 11,500 blocks onto the market in a staged release. The ILM also identified WHD as an important east west transport corridor and the current congestion is reducing its capacity to meet this objective. Traffic counts for WHD between JGD and DBD confirm that over 20,000 vehicles per day use this section of road. This is well above the Austroads Guidelines for a single carriageway roadway. The Canberra Strategic Transport Model also shows the road is currently over its design capacity, particularly during the AM peak.

As also identified in the ILM the traffic congestion, and the merge movements into single carriageways both east and westbound is directly contributing to the crash history of this section of road. The current crash history has 82 crashes occurring in five years. This significant crash history is approximately four times the national crash average for both urban and rural roads. The two primary crash events documented are rear-end and side-swipe incidents. The rear-end crashes are directly attributable to the road being congested and the stop / start nature of the traffic. The side-swipes are mostly caused from two lanes merging into one. These are all indications that the road is operating over capacity and is congested. Duplicating the road will largely eliminate these crash incidents, improve traffic flow and reduce commuter stress levels.

Duplicating WHD will also address other problems while supporting the land release program. The duplicated road will support and encourage sustainable transport options such as active travel and possibly public transport in the future. The design includes both on-road cycle paths and an off-road shared path for less confident cyclists and pedestrians. Having designated cycle lanes and an off-road shared path option will reduce conflict between cyclist and motorists.

The Transport Canberra Light Rail team have confirmed that the road corridor will not be used for light rail in the future. Access to the Belconnen Town Centre will be via Bindubi Street, at this stage.

The project is also an election commitment (ECLAB058).

3.2 Benefits

3.2.1. Benefits to be delivered

The benefits that address the current problem outlined, by duplicating this section of WHD, are numerous. These include:

- The Government will be meeting election commitment ECLAB058.
- A dual carriageway road corridor for the entire length of WHD will improve capacity and traffic flow, particularly during the AM and PM peaks.
- This more efficient traffic flow will reduce greenhouse gas emissions and help meet the Territory's sustainability targets.
- An upgraded road will address the current crash history by significantly reducing or eliminating crashes.
- Upgrading this section of road will meet government policy commitments of providing high quality transport infrastructure to support land release.

- The duplicated WHD will support sustainable transport options such as active travel and public transport if required.
- The duplicated WHD will include on-road cycling lanes and a dedicated off-road shared path.
- The upgraded road will be consistent with the Moving Canberra Integrated Transport Strategy (2019-2045) vision for Canberra's future transport experience that is modern, sustainable and integrated.
- The delivered transport solution will provide a better connected City for all active travel and road users.
- The project will see the continuation of the arterial road network improvements within the Molonglo Valley, particularly between Molonglo and West Belconnen.
- The completed duplication will result in WHD being a dual carriageway road for its entire length.
- The Project will include the provision of a formal access road and small parking area for Old Weetangera Cemetery.
- The project will improve approaches to the equestrian underpass for the Bicentennial National Trail (BNT).

The duplication of WHD will directly address criteria in the ACT Wellbeing Framework and specifically address the following:

- Access and connectivity;
- Economy;
- Environment and climate;
- Governance and institutions;
- Health;
- Housing and home;
- Safety;
- Social connection; and
- Time.

The ACT Wellbeing Framework assessment is attached at [Appendix F](#).

The benefit of duplicating the road is considered as being high value to the ACT Government as it supports the policy position of providing high quality transport infrastructure to support land release while also providing sustainable transport options such as active travel and ability to cater for public transport if required in the future. The ILW also highlighted the economic efficiencies of removing traffic congestion from this important transport corridor along with the additional benefit of improving road safety.

There would be a wider economic benefit relating to the financial stimulus from the construction activity generated by this significant project. This would not only be for the construction contractor, but also a wide range of consultants and subcontractors.

The final benefit is that the Government would be meeting its election commitment ECLAB058.

3.2.2. Importance of the benefits for Government

The WHD duplication project specifically aligns with important ACT Government strategic objectives, policies and priorities. These include:

- The provision of high quality transport infrastructure for a growing City.
- Promote the potential of public transport to deliver sustainable transport options when required in the future.

- Promote active travel with better cycling connections, including on-road cycle lanes and an off-road shared path.
- Provision of safe and efficient arterial road network to support the land release program.
- Delivering a fast, safe and efficient transport corridor between West Belconnen and the City thus making Canberra a more liveable city.

There are other important / non-policy deliverables which will be facilitated by this project, such as:

- Providing a formal access and parking area for the Old Weetangera Cemetery.
- Improving underpass approaches for equestrians using the BNT.
- Delivering a safe access into the Kama Nature Reserve for ACT Parks and Conservation Service and other authorised users.
- Facilitating an ecological corridor between the Pinnacle and Kama Nature Reserves.

3.3 Options Analysis

3.3.1. Strategic Solutions Analysis

A 'do nothing' approach would result in this 4.5km section of WHD remaining unduplicated. This would not meet the Government's election commitment. Leaving the current detail design 'on the shelf' and not undertaking the construction phase would introduce risk. These include possible legislative and design specification changes to environmental, planning, design and development approvals.

A 'do minimum' approach might be to undertake the first stage of construction between JGD and Kama Nature Reserve early in the residential development of Whitlam. Delivering this short section of road (1.6km) would be a poor value for money outcome for the Government as the tender documents, contract administration, supervision, and construction establishment costs would all be similar to the full duplication costs for the project. As such this delivery would provide a reduced / poor return on investment. There would also be negative publicity for the Government in not completing the whole project once a construction site had been established.

3.3.2. Recommended Strategic Solution

The recommended solution is to utilise the earlier feasibility study and the current detail design to inform and facilitate the construction delivery. The detail design includes all development approvals, tender phase services, GC21 contract documents, RFT documents, Bills of Materials, Schedule of Rates and the for tender drawings to inform the construction phase. This solution will demonstrate the Government's undertaking to meet its election commitment ECLAB058.

3.3.3. Project Solutions Analysis

The project solution recommended is lower risk and has demonstrated success in the Territory's history of capital works delivery. This solution is particularly applicable for more complex construction projects such as this as it will address issues such as the off-road shared path design, likely BSWM augmentations and construction staging to complete this unduplicated section of WHD with minimal traffic disruption. This three phase delivery method also provides the best value for money the Territory by identifying and addressing project risks early in the delivery.

3.3.4. Base Case

As outlined, a 'do nothing' option is not possible as the road will not be duplicated and election commitment ECLAB058 will not be met.

A 'do minimum' approach such as duplicating only a section of the road would be a poor value for money option and not deliver the associated active travel infrastructure. The Government would also be open to criticism for not meeting its election commitment.

3.3.5. Recommended Project Solution

The recommended project solution is to complete a traditional delivery methodology and use the well progressed detailed design to inform the construction phase. The construction will be an open GC21 tender and contract coordinated by IDP Group and advertised on the TendersACT website.

Construction supervision and contract management will be delivered as a separate PAP and contract administration services consultancy. This will also be an open tender to prequalified engineering firms advertised on the TendersACT website.

3.4 Review 2 (Treasury): Needs Analysis

Treasury directorate to sign off that a case for the project is present in the business case.

Review 2 (Treasury) Officer Name: _____

Signature: _____

Date: _____

- *This is the first review point for Treasury and is assessment of the needs analysis.*
- *Sign off should only occur if the Treasury officer is confident that the needs analysis is robust, is based on evidence and an Investment Logic Workshop (ILW) has been undertaken (if applicable).*
- *Note that Tier 1 business cases anticipate review and signoff by the Under Treasurer.*

Disclaimer: *This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

4. Cost & Contingency

4.1 Preliminary Cost Estimate

The cost estimate for construction, supervision support services, procurement, insurance and TCCS project management costs is \$63.25million. With the detail design (\$2million funded in 2019/20) and the earlier feasibility study (\$0.3million funded in 2017/18) the total project cost is \$65.55million.

Construction is anticipated to commence mid-2022 and take approximately 3 years to complete and be complete mid-2025. The base construction cost estimate is [REDACTED], with the remaining [REDACTED] required to cover the following project overheads:

- Construction supervision and contract administration services via a PAP consultancy engagement (cost will be market driven but will be approximately [REDACTED] of construction costs);
- IDP Group project procurement and management costs (4%);
- Project insurance (1%); and
- TCCS project management (varies%) and training levy costs (5%).

To cover these project supervision, procurement, insurance and project management costs a nominal [REDACTED] has been added to the construction cost estimate. This is consistent with the overhead costs of other major capital works projects that have been delivered.

A P50/P90 estimate was undertaken for the Project. This includes an escalation cost which has subsequently been increased due to the length of time being taken for development approvals. The estimated P90 cost is [REDACTED] which has been rounded up to [REDACTED] to reflect the delayed commencement costs and is currently being used for cost estimation purposes. The cost estimate for the construction is attached at Appendix C.

4.2 Contingency

4.2.1. Project Contingency

The detail design P50/P90 financial risk analysis undertaken to determine the most probable costs of the project has contingencies built into each construction task activity. The P50/P90 cost estimate incorporates line item contingencies into each task which is reflected in the line items risk profile. Ultimately the P90 cost was used for as this provides the most accurate project construction cost estimate.

4.2.2. Delivery Model Contingency

With this traditional three phase delivery model (feasibility study, detail design and construction delivery) the risk associated with this final construction stage is usually lower, but has been identified as medium for this project. This is due to the uncertainties associated with the BSWM augmentations. As mentioned, actions are underway to address these risk as part of the detail design delivery. As such, the construction project does not have a specific % delivery model contingency.

4.3 Whole of Life

The completed road construction project will have an economic life of 75 years and therefore be depreciated at 1.3%. Depreciation is calculated on the base construction costs only. This general increase in economic life reflects improved technologies and road construction methods. Depreciation will start in the first full financial year after practical completion.

In the first year after completion the project is in a defects and warranty period, as such no allowance is made for routine maintenance during this time. In the second year a nominal 1% allowance is made and after that an allowance of 2% is made for routine maintenance. This is accordance with current guidelines and is to support funding for road maintenance activities of TCCS. Realistically, however, a newly constructed road such as this will not require \$1.1million worth of maintenance while it is new.

The built road and related infrastructure will be a TCCS asset managed by Roads ACT.

4.4 Budget / Funding Strategy

The project as a whole has the following known and estimated costs:

Description	Cost \$million	Funding notes
<u>Design Phase</u>		
WHD Roads Feasibility Study	\$0.30	2017-18 budget allocation – Building a Better City
Detail Design and Planning Approvals through to Document Readiness	\$2.00	2019-20 budget allocation – Planning Better Roads for our Growing City
<u>Construction Phase</u>		
Road duplication construction cost		This business case
PAP services and contract administration		Administer and supervise GC21 contract for 3 years
IDP Group management fee (4%)		Mandatory fee
Insurance (1%)		Mandatory fee
Project Management / Supervision		TCCS Project Management and Training Levy
TOTAL ESTIMATED PROJECT COST		

5. Economic Analysis

5.1 Cost Benefit Analysis

A cost benefit analysis for the project has been undertaken using the latest costings for the expense and land sale benefit the Government will receive from the Ginninderry joint venture.

The project in its entirety currently requires a nominal 10% of the total benefit to deliver a net present value (NPV) of 1.14 at 7%. This is consistent with other trunk infrastructure spends in Molonglo Valley. NPVs were also determined at 5%, 7% and 9%.

5.2 Not Required

6. Delivery Model Analysis

6.1 Outline of Key Risks

Construction delivery for the project has some medium risks. These are being addressed and mitigated in the current detail design phase.

The two key risks identified are as follows:

- [REDACTED]

A detail design risk register was undertaken as part of an inter-Directorate Safety in Design Workshop. This investigated risks related to the design, safety, construction, staging and other project related risks. The Project Risk Register is attached at Appendix D.

The project risk register is a live document and will be monitored and updated during the detail design delivery and into the construction phase.

6.2 Commercial Principles

The engagement of the construction contractor and PAP supervision and contract management consultancy will be by an open tender process facilitated by IDP Group.

The construction phase delivery will be the subject of a TCCS Project Plan.

It is anticipated that the RFT for construction will be advertised in February 2022, be awarded by April / May 2022 to have construction commence late in June 2022. Construction is anticipated to take approximately 3 years to complete with the road being fully duplicated and the associated shared path being operational by July 2025. There is an opportunity to undertake the BSWM augmentations as early works under the Utilities Act.

6.3 Delivery Model Assessment

The delivery model for the construction contract will be via the GC21 suite of contract documents (as modified for the ACT – Edition 2), including technical exception clauses and all contractual requirements. The RFT and associated documents will be delivered by the detailed design consultant and approved by IDP Group before being advertised on the TendersACT website.

The PAP and contract administration services procurement will also be facilitated by IDP Group and advertised through TendersACT. Both of these external consultancy services will be fully funded by this business case.

6.4 Recommended Delivery Model

The recommended delivery model for the construction contract and PAP consultancy engagement is an open tender advertise on TendersACT and facilitated by IDP Group.

6.5 Review 3 (IDP Group): Delivery Model Selection

IDP Group directorate to sign off that the delivery model selected is appropriate for the project risk profile and value.

Review 3 (IDP Group) Officer Name: _____

Signature: _____

Date: _____

- *This is the second review point for IDP Group and is an assessment of the delivery model analysis.*
- *Sign off should only occur if the IDP Group office is confident that the delivery model selected is the most suitable to the project requirements and level of risk.*

***Disclaimer:** This review does not represent an endorsement or agreement by the signing officer as to the contents of the section or a certification that the work was correctly performed.*

7. Not Required

8. Project Governance

The WHD construction delivery for will have a Project Control Group (PCG) with TCCS members, the IDP Group project officer, PAP (including resident engineer and works supervision personnel as required) and the construction contractor project manager. The PCG will meet on a fortnightly basis on site and manage all aspects of construction delivery. The PAP consultancy will also provide weekly email progress reports and be proactive as well as responsive with their contact.

Public engagement would be managed by the TCCS Communications Team throughout the project. This will include media releases for traffic changes, general project updates and delivery of key project milestones.

9. Not Required

10. Not Required

11. Timeline

11.1 Project Timetable

11.1.1. Outline

A project program is attached at Appendix E.

11.1.2. Proposed float

There is no specific float for the construction delivery. Construction will occur expeditiously to minimise traffic disruption and so the government can meet its election commitment (ECLAB058).

11.1.3. Project constraints and/or deadlines

There are time constraints in having this project underway and the first construction stage underway before the significant residential settlement of Whitlam.

There is also the ongoing imperative of having the road duplication in place prior to the to the full development and land release of Ginninderry.

The construction contractor will detail timeframes and how milestones will be met as part of their tender submission.

11.1.4. Project decision points

Key project decision points are:

Task	Date
Request for Tender advertisement	February 2022
Tender closed and assessment	March - April 2022
Award Tender	April - May 2022
Construction commence	June 2022
Construction completion	June 2025
Defects / Warranty period	June 2026

12. Appendices

Appendix A – Functional Brief/Output Specification

Appendix B – Investment Logic Map

Appendix C – Cost Estimate

Appendix D – Project Risk Register

Appendix E – Project Program

Appendix F – ACT Wellbeing Framework



ACT
Government
Transport Canberra
and City Services

Appendix A

FUNCTIONAL BRIEF

William Hovell Drive duplication

Construction

Transport Canberra and City Services (TCCS)

Project Officer: Gerard Coffey

8 March 2021

CONTENTS

1. Introduction.....	3
2. Project Background	3
3. Objective	4
4. Site of Works	4
5. Scope of Services.....	4
6. Reference Documents.....	4
7. Standards.....	4
8. Timing.....	5
9. Funding.....	5
10. Consultation	5
11. Project Acceptance.....	5
12. Liaison and Reporting.....	5
13. Communication	5

1. Introduction

The Transport Canberra and City Services Directorate (TCCS) of the ACT Government has the vision to make Canberra attractive, safe and easy to move around, with a mission to have connected services for the people of Canberra. The strategic objectives are to deliver customer centric outcomes, improvements in safety and delivery and to have good governance and rewarding careers. The Directorate facilitates the implementation of government priorities in the areas of transport and city services and drives many new initiatives.

The Land Release Infrastructure (LRI) is a section of TCCS and is responsible for the planning and capital works project delivery for infrastructure projects that support the delivery of the ACT Government's land release program. These projects are time critical and must be delivered in accordance with the agreed program to avoid delays to land sales. LRI focuses on the delivery of trunk urban infrastructure and manages projects ranging from early design studies through to detail designs, document ready, tender phase and ultimately construction delivery. The infrastructure projects delivered include arterial roads, intersections, bridges, water supply, sewerage, water quality control ponds and major stormwater upgrades.

- 1.1 In delivering these projects LRI works closely with the Suburban Land Agency and other areas in the Environment, Planning and Sustainable Development Directorate (EPSDD) to ensure a holistic and integrated design particularly at the interfaces between capital works and land development projects.
- 1.2 This Functional Brief outlines general requirements which are specific to this project, and is to be read in conjunction with the Basic Brief for Engineering Projects (*Basic Brief*). The Basic Brief details the general requirements of feasibility, design, construction and superintendence services. The list of Reference Documents provides guidance on deliverables and technical matters
- 1.3 This project is for the William Hovell Drive (WHD) duplication construction. The project will deliver a dual carriageway arterial road between John Gorton Drive (JGD) and Drake Brockman Drive (DBD) and be guided by the detail design and tender phase documents currently being delivered. The project also includes the engagement of a Principals Authorised Person (PAP) for project supervision and contract administration services. The construction phase of the project will:
 - Use the tender phase documents, bill of quantities and request for tender documents to call construction tenders.
 - Assess tender submissions and engage suitably qualified, experience and competent construction contractor under a GC21 contract.
 - Utilise the for construction drawings generated from the detail design phase to construct the duplication.
 - Augment and relocate bulk supply water mains (BSWM) crossings as required.
 - Construct an off road shared path to the appropriate standards and specifications.
 - Engage a PAP to undertake project supervision and contract management services.

2. Project Background

- 2.1 This project is for the duplication construction of 4.5km of William Hovell Drive, from the intersection of John Gorton Drive in the east to Drake Brockman Drive to the northwest.
- 2.2 Construction will also include an off road shared path for the length and augmentation of BSWMs as required.

- 2.3 Construction funding will also deliver PAP and contract management services.
- 2.4 The construction phase is informed by a detail design project currently being delivered.

3. Objective

- 3.1 The objective of this functional brief is to engage IDP Group to procure, and project manage a construction contractor and PAP services to deliver this project.

The objectives of the 4.5km duplication are to:

- Deliver pavement widening to have this section of WHD a dual carriageway arterial between JGD and DBD .
- Undertaking all road related construction including activities such as bulk earthworks, placement pavement layers, installation of traffic control devices and other road related assets.
- Include dedicated on-road cycle lanes in each direction.
- Construct a 3 metre wide off-road shared path adjacent to the duplication project.
- Augment and relocate BSWM as required.
- Undertake landscaping works.

4. Site of Works

- 4.1 The site of works covered under this brief, including location plan is included in Attachment A.

5. Scope of Services

- 5.1 The service will be provided via a significant construction contract which will deliver the road duplication and shared path as outlined in section 3.1.
- 5.2 The PAP and contract administration engagement will be delivered as a separate services agreement consultancy.

6. Reference Documents

- 6.1 Documents referenced as part of this brief include:
- Detail Design and tender phase documents, including technical exception clauses and BSWM infrastructure design.

7. Standards

- 7.1 Works are to be undertaken in accordance with the latest versions of the following or other appropriate standards and guidelines:
- GC21 form of contract.
 - Roads ACT construction guidelines, specifically Trunk Road Infrastructure and Technical Specifications (TRITS).
 - Appropriate Austroads and RMS construction specifications.
 - Development approval conditions detailed in the Notice of Decision.
 - EPBC approval conditions requirements.

8. Timing

8.1 The following milestone dates apply to this project:

STAGE	TIMING
Request for Tender advertised	February 2022
Tender closed and assessment	March to April 2022
Construction Commence	April - May 2022
Construction Complete	June 2025
Defects Warranty period	June 2026

8.2 The successful consultant will provide a detailed program which will achieve the above timeline, including other relevant key project milestones within two weeks of the inception meeting.

9. Funding

9.1 Funding to a total value of \$63.25m (excl GST) is being provided for this project over 4 years commencing from the 2021/22 budget. This includes the funding for PAP and Contract management, insurance, project management and internal ACT Government costs such as procurement.

10. Consultation

10.1 TCCS Communications will be heavily involved with public messaging during the project delivery. This will include providing details of project milestones such as traffic switches and carriageway openings.

11. Project Acceptance

11.1 It is expected that TCCS will accept the final road and road related assets on behalf of Government. This will be at the conclusion of the defects and warranty period.

12. Liaison and Reporting

12.1 The first point of contact for this project will be with the Project Officer: Gerard Coffey, who can be contacted on 6207 2471 or by email at gerard.coffey@act.gov.au.

12.2 The successful PAP shall provide the IDP Group Project Officer a monthly progress of the project including current construction tasks, project risks and projected works.

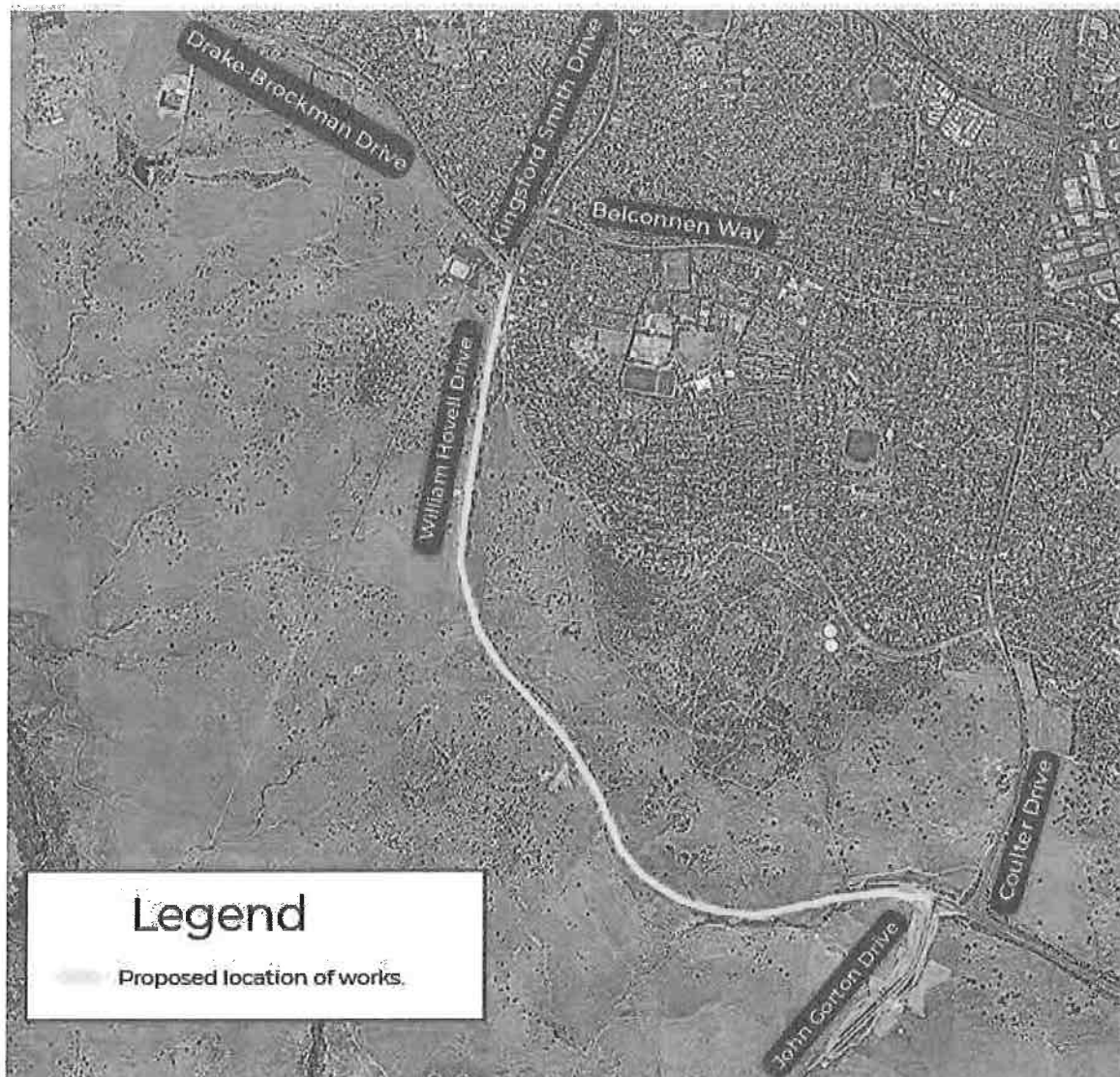
13. Communication

13.1 LRI will be responsible for responding to ministerials, correspondence and requests that are of a policy nature. The IDPG Project Officer shall provide the Client with assistance and information on specific issues.

13.2 LRI will manage any media associated with the project and the IDPG Project Officer shall provide information and supporting material when requested.

13.3 All media and public consultation activities will be managed via the TCCS Communications Team.

Attachment A - Location Plan

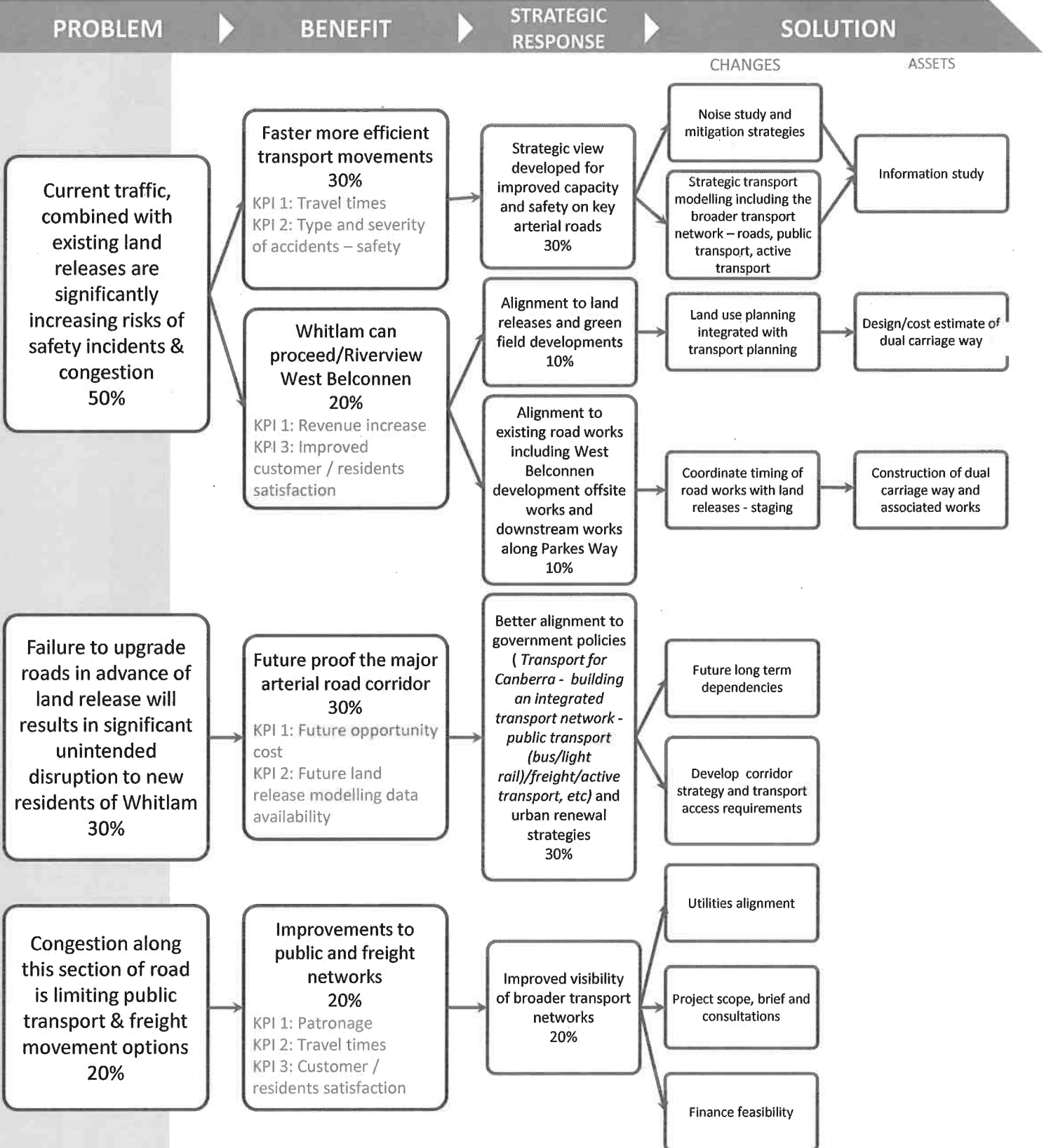


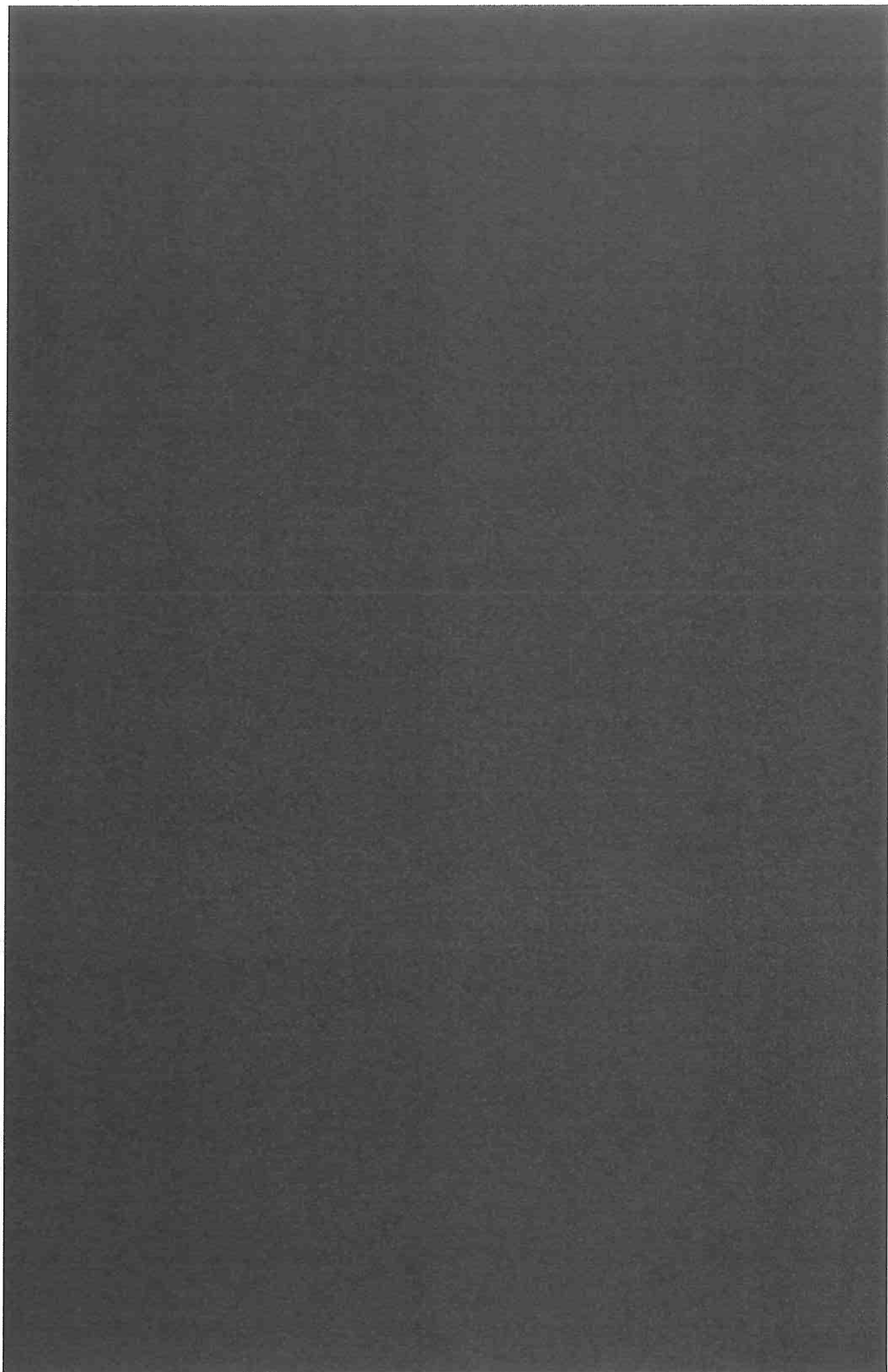
William Hovell Drive Road Duplication

Feasibility Study

INVESTMENT LOGIC MAP

Initiative







C

C

