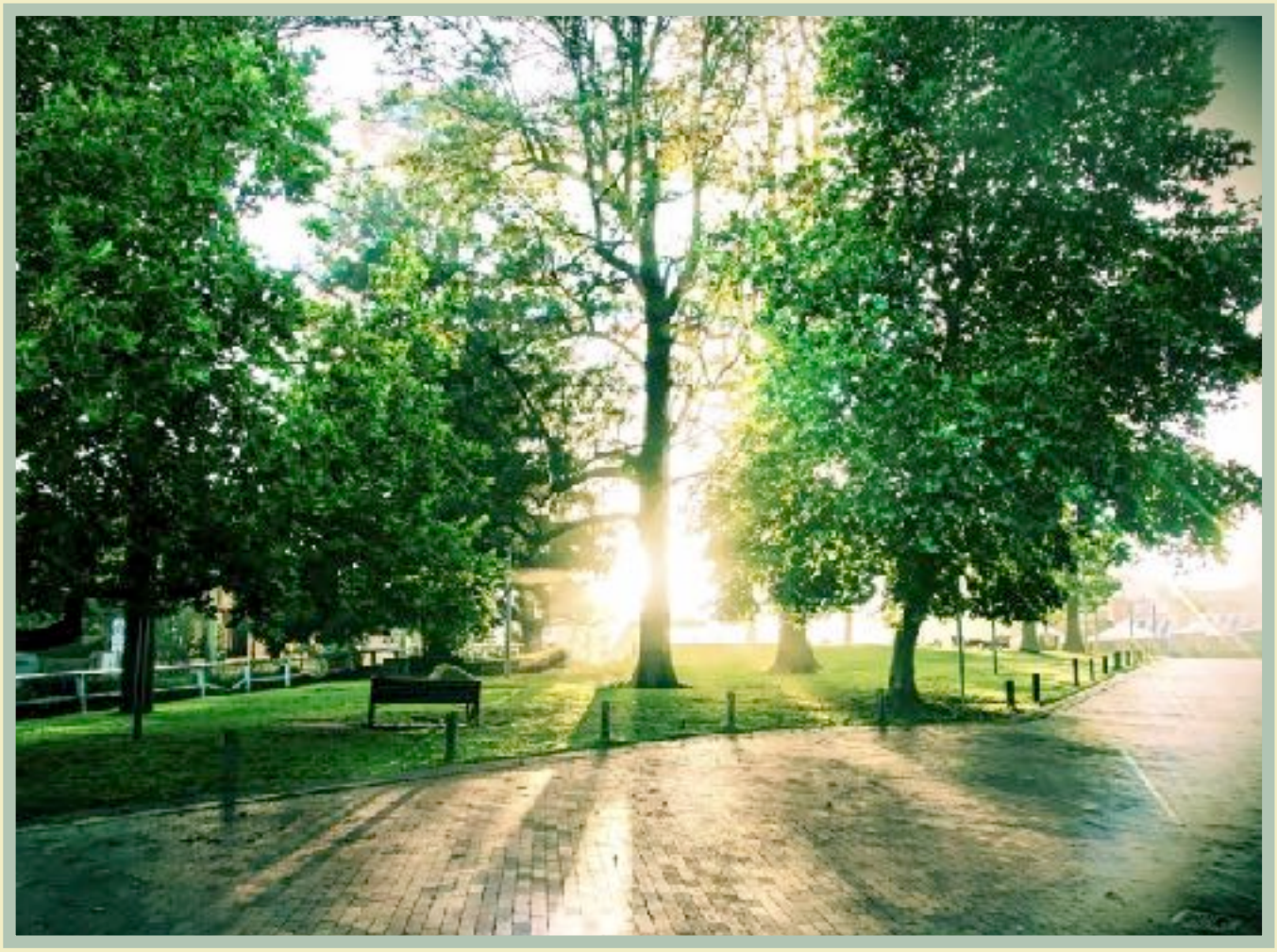
COMMUNITY ACTION FOR WINDSOR BRIDGE



Submission in response to the

Windsor Bridge Replacement project
Environmental Assessment Modification

November 2019

Application Number 20191011001551

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Position

Community Action for Windsor Bridge (CAWB) objects in the strongest possible terms to the current proposal to modify the Windsor Bridge project, as approved by the former Minister for Planning and Infrastructure (SSI-4951).

Executive Summary

- This submission is presented by Community Action for Windsor Bridge (CAWB), an action group created to fight for the best outcomes for Thompson Square and Windsor Bridge stakeholders. From 21 July 2013 to 3 April 2019 CAWB occupied Thompson Square for twenty-four hours per day, seven days per week, among other advocacy activities.

- Windsor Bridge is a State listed heritage item that is currently facing demolition. In 2011, changes to NSW planning legislation effectively 'switched off' previous State and Local Heritage protections associated with the Bridge.

- No meaningful consideration was been given to a bypass option for Windsor, which would have been a more appropriate upgrade to such an important arterial route. A bypass which diverts heavy vehicles and through traffic away from the historic town centre and the Thompson Square precinct still remains the only adequate solution that will provide for future traffic needs.

- The RMS's community consultation processes and practices have arguably done more to alienate the community than any other aspect of the Windsor Bridge Project. The RMS has consistently chosen to ignore widespread public opposition to the Project, preferring to massage response data, or in the case of local politicians, attribute such opposition to a vocal minority or a fringe group.

- The Hawkesbury is in desperate need of another crossing of the Hawkesbury River and increased road network capacity. Car and Heavy Vehicle volumes across Windsor Bridge and through Thompson Square exceed traffic volumes which have been used to justify bypasses of towns such as Berry, Kempsey, Moree, Macksville and other towns. Despite insistence by the Government and Option One proponents that heavy vehicle use is not increasing, traffic counts by the RMS and others show the opposite is the case.

- Despite admitting that more than 70% of Windsor Bridge traffic is "through traffic" and does not stop in Windsor, the Project funnels an increasing volumes of cars and Heavy Vehicles into a known bottleneck. The Macquarie/Bridge Street intersection is acknowledged to be the main bottleneck, and is outside the scope of this project.

- The modification proposal is an admission by the RMS the WBRP has failed to address the traffic issues in Thompson Square.

- As the oldest Town Square in Australia, Thompson Square deserves the highest levels of professional competence and probity, to say nothing of protection. A government agency and their consultants, charged with acting on behalf of the community, are delivering the exact opposite.

- The RMS has consistently been warned that the Windsor Bridge replacement project EIS was completely inadequate in its treatment of heritage.

- Thompson Square is rightly referred to as ‘The Birthplace of the Fair Go’. In naming the Square for Andrew Thompson, a convict made good, Governor Macquarie took a bold step — contrary to instructions — that created an idea which would ring down throughout our Nation’s history.

- There can be no doubt the heritage impacts of Option 1 have so far been devastating to Thompson Square. The modification proposal exacerbates these impacts.

- Yet the community has been forced to watch, helplessly, as heavy machinery has ground colonial artefacts to dust, each day increasing the area of destruction.

- The project assessment process has been a charade, in that the NSW Government was always going to proceed with the Option 1 Windsor Bridge, regardless of any heritage impacts or failure to address traffic issues. Indeed there is evidence of direct political interference in the assessment process on the part of some individuals. The modification proposal appears to continue this behaviour.

- The lack of time travel savings now admitted by the RMS would alter the cost benefit assessment provided to the Upper House Inquiry, yet despite documents indicating the RMS knew of these traffic issues at the time of the Inquiry, these failings were not relayed to the committee.

- Significant economic and non-economic costs have been left out of the calculation of the Benefit Cost Ratio, and specifically, no cost value is attached to adverse heritage impacts. Methods for quantifying the economic costs and benefits of heritage and cultural assets exist and could have been used but weren't.

- The Arcadis Windsor Bridge Replacement Project Traffic Counts Data Comparison Between 2017 and 2019 was not made public until the deadline for submissions thus making the included information available only to the last minute submissions. The community therefore was not given adequate time to provide a considered response.

- Considerable and significant information was not made publicly available.

- The reports on air quality, noise and heritage impacts lack basic credibility and are not supported by the most recent traffic counts.

- There has been consistent questions regarding the 'usable space' argument proffered by the RMS. The claimed 160 square metre for the slip/zip lane is further evidence of this and needs validation.

- Questions have now been raised as to the integrity of an organisation who appears to have misled an Upper House Inquiry and Budget Estimates.

Cumulative Impacts

This is a project that abounds in, indeed is, in some ways, defined by its accumulated impacts. The scale and range of those impacts will be judged by history, but they far exceed anything contemplated in the current literature and they certainly contribute to the increasing community anger regarding an ill-conceived, destructive project.

Originally “cumulative impacts” referred to cumulative environmental impacts.

In their paper, ‘A Screening Method for Assessing Cumulative Impacts’, George V. Alexeeff, John B. Faust, Laura Meehan August, Carmen Milanes, Karen Randles, Lauren Zeise and Joan Denton say the working definition of cumulative impacts adopted by Cal/EPA is: “Cumulative impacts means exposures, public health or environmental effects from the combined emissions and discharges in a geographic area, including environmental pollution from all sources, whether single or multi-media, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available. (from: https://www.mdpi.com/1660-4601/9/2/648

However, “New Directions in Social Impact Assessment: Conceptual and Methodological Advances”**,** edited by Frank Vanclay and Ana Maria Esteves defines cumulative impacts as resulting, “...from the aggregation and interaction of the impacts on a receiving environment. They may be experienced by society, the economy or the environment, and may result from one or more past, present for potential future activities. Whilst in most cases cumulative impacts rise as a result of multiple activities and projects, a single activity can produce impacts with the potential to accumulate (e.g. the cumulative health impacts generated from the bioaccumulation of contaminants over time from an individual industrial plant).”

This definition has significant implications for the proposed Modification 1. Furthermore, Vanclay and Esteves make the point that, whilst cumulative social impacts may not be adequately covered by relevant legislation, there are still compelling reasons for them to be properly addressed. Vanclay and Esteves say cumulative impacts may aggregate linearly, exponentially, or reach “tipping points”, after which major changes in social, economic and environmental systems may follow, citing a range of authors published between 1985 and 2008.

They also point out, “In a generic sense, the term ‘cumulative impacts’ encompasses social, economic, political and environmental analyses. Social groups, however, may be impacted by changes to each of these systems such that analysis of cumulative social impacts must consider sociocultural, socio-economic and socio-environmental issues and so on...”

Three types of impact are identified: spatial, temporal and linked.
A spatial extent impact results in a greater area of effect. Special intensity impacts result in a great concentration of impact within an affected area.

Temporal impacts accumulate over time. Simple temporal impacts have a specific time of commencement and a measurable form over time. Offset temporal impacts occur when multiple simple temporal impacts are superimposed upon one another over time.

Linked impacts involve more complex interactions such as where one impact triggers another or where a single activity has multiple affects. Linked triggered impacts are those that occur when one impact, either by its occurrence or by reaching a social level, causes another impact that would not otherwise have occurred. The second impact is the triggered impact.

According to Lance N. McCold and James W. Saulsbury in, “Including past and present impacts in cumulative impact assessments” [https://link.springer.com/article/10.1007/BF01204147], in the USA, the President's Council on Environmental Quality (CEQ) defines cumulative impact to include the impacts of “past, present and reasonably foreseeable future actions” regardless of who undertakes the action. Court decisions have helped clarify the distinction between reasonably foreseeable future actions and other possible future actions.

Significantly for the current proposal, the definition of cumulative impacts implies that cumulative impact analyses should include the effects of all past and present actions on a particular resource.

McCold and Saulsbury say including past and present impacts in cumulative impact assessments increases the likelihood of identifying significant impacts.

Cumulative Impact Assessments in NSW

CAWB contends a proper cumulative impact assessment of any project modification is required and would be consistent with demonstrated practice in NSW, by reference to the Planning Secretary's Environmental Assessment Requirements (SEARs) for the Clarrie Hall Dam Raising at Doon Doon, Tweed Local Government Area.
(Application Number: SSI 9458; Proponent: Tweed Shire Council; Date of Issue: 23 April 2019).
[https://www.yoursaytweed.com.au/31677/documents/104705]

It is noted the SEARs require the proposal to be "described in sufficient detail to enable clear understanding that the proposal has been developed through an iterative process of impact identification and assessment and proposal refinement to avoid, minimise or offset impacts so the proposal, on balance, has the least adverse environmental, social and economic impact, including its cumulative impacts. [emphasis added]

1. The EIS must include, but not necessarily be limited to, the following:

(h) a concise description of the general biophysical and socio-economic environment that is likely to be impacted by the proposal (including offsite impacts)...

(i) a demonstration of how the proposal design has been developed to avoid or minimise likely adverse impacts.

(m) consideration of the interactions between measures proposed to avoid or minimise impact(s),between impacts themselves and between measures and impacts.

(n) assessment of the cumulative impacts of the proposal ...

(p) a chapter that synthesises the environmental impact assessment and provides:

- a succinct but full description of the proposal for which approval is sought
- a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these will be resolved
- a compilation of the impacts of the proposal that have not been avoided
- a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction and operation) or offset these impacts
- a compilation of the outcome(s) the proponent will achieve
- the reasons justifying carrying out the proposal as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts
- relevant proposal plans, drawings, diagrams in PDF and electronic format that enables integration with mapping and other technical software.

2. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.

(c) identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), and the cumulative impacts

1. The Proponent must identify and assess any direct and/or indirect impacts (including cumulative impacts) to the heritage significance of:

    (a) Aboriginal places and objects, as defined under the National Parks and Wildlife Act 1974 and in accordance with the principles and methods of assessment identified in the current guidelines

    (b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan

    (c) environmental heritage, as defined under the Heritage Act 1977

Legal Considerations

The NSW Land and Environment Court recently refused development consent for an open cut coal mine in Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7. Gloucester Resources Limited (GRL) lodged a development application under the Environmental Planning and Assessment Act 1979 (the EP&A Act) for consent to carry out the Rocky Hill Coal Project (Project) in 2012. The Project proposed to extract 2.5 million tonnes per year of run-of-mine (ROM) coal from a new open cut mine located in Gloucester, and construction of a coal handling and preparation plant and overland conveyor to transport coal to the Port of Newcastle.

The Planning and Assessment Commission (PAC), as the delegate for the Minister for Planning, refused consent to the Project in 2017. These proceedings were an appeal by GRL against the Minister's refusal of consent. The Minister for Planning, and an intervening community group, defended the decision of the PAC.

An article titled, “Australia: A New Tipping Point For When Cumulative Impacts Of A Proposed Coalmine Will Warrant Refusal”
(last updated: 7 March 2019), by Jacinta Studdert and Kristyn Glanville, Clyde & Co, analyses this decision . [http://www.mondaq.com/australia/x/786490/Climate+Change/A+new+tipping+point+for+when+cumulative+impacts+of+a+proposed+coal mine+will+warrant+refusal]

Studdert and Glanville say that, “Whilst the decision in the NSW Land and Environment Court explored considerations involved in determining approval for a proposed coal mine such as the emissions of greenhouse gases and the effect that has on climate change; the impacts on existing, approved and likely preferred uses of land in the vicinity and the social implications it would

have on the nearby towns and the Aboriginal community were also considered

Key Findings of the Court included:

- The Court was critical of assessing impacts on the basis that they might potentially be mitigated, regardless of whether they actually are mitigated or remedied. A rational consent authority cannot approve a development application on the theoretical possibility that an impact might be mitigated or offset by some unspecified or uncertain action.

- Although a coal mine may comply with development standards concerning noise or dust, this does not preclude consideration of the social impacts caused by that noise or dust, and whether the social impacts of the Project may warrant refusal…..

- Notwithstanding that a natural resource may exist in a particular location, this does not mean that it must be exploited regardless of the impacts. Not all natural resources must be exploited.

Fundamentally, the Court concluded that the exploitation of the coal resource in the Gloucester Valley would not be a sustainable use of the land, and would cause substantial environmental and social harm. Given the context of climate change and need to reduce greenhouse gas emissions, the Court characterised the Project as being "in the wrong place at the wrong time".

While media commentary has focused on the Court's comments concerning climate change, it is worth noting the Court also considered the Project ought to be refused on a number of other grounds, including social impacts on the community due to noise and dust, and impacts on Aboriginal heritage and culture. The Court observed that the benefits of the mine would largely

accrue outside the Gloucester area, whereas all the impacts would be felt by people in Gloucester.

1. The Court said,

   A consent authority cannot rationally approve a development that is likely to have some identified environmental impact on the theoretical possibility that the environmental impact will be mitigated or offset by some unspecified and uncertain action at some unspecified and uncertain time in the future. This is not a case where the applicant for development consent commits to taking specific and certain action to mitigate and offset the environmental impact of the proposed development.

The Court also held that the Rocky Hill Coal Project was incompatible with the existing, approved and likely preferred uses in the vicinity due to its visual, amenity and social impacts,

Preston CJ considered the positive and negative social impacts of the coal mine, and found that adverse social impacts were "major" and "likely". The Court considered the various drivers of these social impacts, including noise, dust, likelihood of revegetation, and impacts on Aboriginal people and cultural heritage. In considering the drivers of these social impacts, the Court found that the Project complied with the development standards dealing with noise and dust required by the SEPP Mining. While the Court is unable to impose a more onerous development standard (per cl 12AB of the SEPP Mining), it found that the noise and dust impacts would still be perceptible and contribute to the social impacts of the development on nearby residents.

The Court did not accept the approach taken by GRL's expert to assess visual impacts as low because they might be mitigated or remedied, regardless of whether they are actually mitigated or remedied. The Court

noted "Only the actuality and not the potentiality of mitigation of the... effects can reduce the level of... effect".

The Court also observed how the project created distributive inequity, insofar as the benefits were likely to accrue outside Gloucester (eg royalties or profits), however most of the impacts would be accrued by people in Gloucester (eg social impact, dust, etc). Further, that the benefits of coal mining would be realised in the short term over 20 years, but the negative impacts would continue to exist into the long term (eg permanent loss of Aboriginal heritage, permanent changes to topography).

The Court also found that the claimed economic benefits of the proposed coal mine, such as employment and wage benefits to the community were largely overstated. The Court considered the relevant analysis to be:

1. Are the benefits outweighed by the other environmental and social costs of the Project?
2. Are the benefits outweighed by the potential benefits of alternative land uses?

The Court concluded that the worker and supplier benefits in the area were small, whereas there were high environmental, social and transport costs. While the project had a net positive economic impact, this did not necessarily mean that it was in the public interest. When balanced against the other impacts, and considering distributing inequity, the Court considered the economic benefit did not warrant approval. Other uses would also yield net economic benefit, although these were not able to be quantified.

Studdert and Glanville say this decision is significant for developers of coal mines and other fossil fuels projects, as it affirms that climate change implications of a project can influence whether it will be approved. Given the

rise of climate change litigation, and increasing scrutiny of development applications by activist community groups, this case emphasises the need to fully address the principles of ecologically sustainable development in proposals. Management and mitigation strategies may need to be set out in greater detail during the assessment stage of SSD applications, which will likewise lead to even further scrutiny by community groups.

CAWB would further argue the significance of climate change needs to be considered in the development of public infrastructure predicated on relatively cheap, easily accessible, non-renewable fossil fuels.

Studdert and Glanville also say the decision has broader relevance to assessment of other developments.

- This decision recognises that an individual development may warrant refusal because of its relatively modest contribution to a larger problem. Environmental assessments can often poorly grapple with cumulative impacts of a proposed development with existing nearby development, eg cumulative traffic impacts, and this decision may embolden future courts to likewise give greater emphasis to cumulative impacts.

- It is not acceptable to assess some identified environmental impact on the theoretical possibility that the environmental impact will be mitigated or offset by some unspecified and uncertain action at some unspecified and uncertain time in the future.

Future Consequences: Four Lanes

This section relates to the very real fear the current application to modify the original and arguably inappropriate approval is a precursor to a far more catastrophic plan. It is based on information obtained via a GIPA request. A copy of the relevant document is attached at Tab A. Below is a screenshot of the coversheet:

Project Options

REPLACEMENT OF BRIDGE OVER
HAWKESBURY RIVER AT WINDSOR

SYDNEY REGION
ASSET MANAGEMENT SECTION
BRIDGE PLANNING UNIT
May 2008

Bridge No: 11
File No: M1849
Pr
AM Contact: Jasmina McIlter
Phone: (02) 8814 2858

Interestingly, whilst this document is dated 2008, it is copyrighted as 2004.

The document claims the project came about because Council raised concerns with the Minister for Roads about the substandard width of the existing bridge and the alignment of the road approaches.

The council also apparently pointed out a sight distance problem related to the vertical alignment; creating a claimed potential for "rear end collisions".

However, the so-called “substandard” width, the alignment of road approaches and the vertical alignments do not appear, according to accident reports, to have had any measurable deleterious effect upon traffic safety. Furthermore the document conclusions indicate other, less acceptable reasons for initiating the project (see 6.3.3 below)

Interestingly research reveals the following:

2002

29/8/02: Level 2 bridge inspection carried out by Mark Inskip.
All Bridge elements rated fair, good or as built. Next proposed inspection is Jan 2003. (DoPI website) https://majorprojects.affinitylive.com/public/efec65296df7defe1f4939c919cc4f34/Item 008 AttachmentA Routine_ Maintenance Windsor Bridge.pdf (Tab B)

2003

14/1/03: Level 2 bridge inspection carried out by Mark Inskip.
States “Asset bridge planner notified that Level 3 inspection needed on this structure because of integrity concerns of concrete throughout structure. However, all Bridge components again rated as ‘Fair’, ‘Good’ or ‘As New’ and the next proposed inspection is January 2005. (DoPI website) https://

majorprojects.affinitylive.com/public/efec65296df7defe1f4939c919cc4f34/Item 008 Attachment A Routine_ Maintenance Windsor Bridge.pdf (Tab B)

August 2003: Structural Inspection and Assessment carried out by GHD. (DoPI website) https://majorprojects.affinitylive.com/public/329c3ab44b9a88556ebe154fc96d667f/Item 004 Vol 1_Item 4 b_2003 _ 10 October _ GHD __ Durability Condition Assessment.pdf (Tab C)

The attached report is badged as being prepared by the Bridge Evaluation and Assessment, Bridge Section, RTA Operations. However it is the only document identified so far from the designated period. In a GHD Report dated February 2005 GHD says they "undertook a condition assessment of the bridge in late 2003 (GHD Report No. 21/12181/96116). An internet search using this report number produced two documents, both prepared by GHD, in 2005 and 2009. It is therefore assumed the original 2003 report is not publicly available, with the report written by the Bridge Section being published in lieu of the GHD report.

The GHD report of December 2009 says,

GHD Pty Ltd (GHD) and RTA bridge section undertook previous condition investigations of the bridge in circa 2004 and both the studies concluded that the bridge has suffered from reinforcement corrosion & structural damage and requires repair to enable continual operation of the bridge. Replacement of the bridge was also recommended as an option by a previous RTA study. GHD provided RTA with a repair cost estimate in around 2004.

RTA is considering maintaining the bridge and using it as a "pedestrian" bridge. Since the repair cost estimate provided by GHD is ~ 5 years old, the estimate requires updating. GHD was retained by RTA to provide an updated cost estimate.

This report provides an updated cost estimate for the repair works for two scenarios:

- A short-term solution that comprises repairs needed to operate the bridge for five years.
- A long term solution to operate the bridge for more than 25 years. RTA requires a life cycle cost analysis for this scenario with various feasible repair options.

9 September 2003: Field Testing and Assessment of Windsor Bridge carried out by The Centre for Built Infrastructure Research, UTS. (DoPI website) https://majorprojects.affinitylive.com/public/5d66093725107d0067dc90e95270e203/Item 004 Vol 1_Item 4 a_2003 _ 09 Sept _ UTS _ Field_ Testing and Assessment.pdf

The objective of document (Copy attached, Tab D) is, rather than a report on Windsor Bridge, to report on the development of "an analytical approach to determine individual girder stiffness, rather than global deck stiffness." As such, the report admits some teething issues with this experimental approach.

According to the report prepared for Department of Planning by independent consultant, Peter Stewart:

In October 2003 GHD recommended re-alkalisation (a process used to arrest carbonisation) as it was deemed the most technically appropriate repair and the most cost effective repair option over the future service life of 25 years. (see page 12)

RMS Inspection & Assessment Report Dec 2003 [B4V1.3] stated "The structure assessed to be in poor condition" and "The recommendation of the report was to replace the bridge within 5 years" based on the extensive repairs identified in the inspection & durability reports.

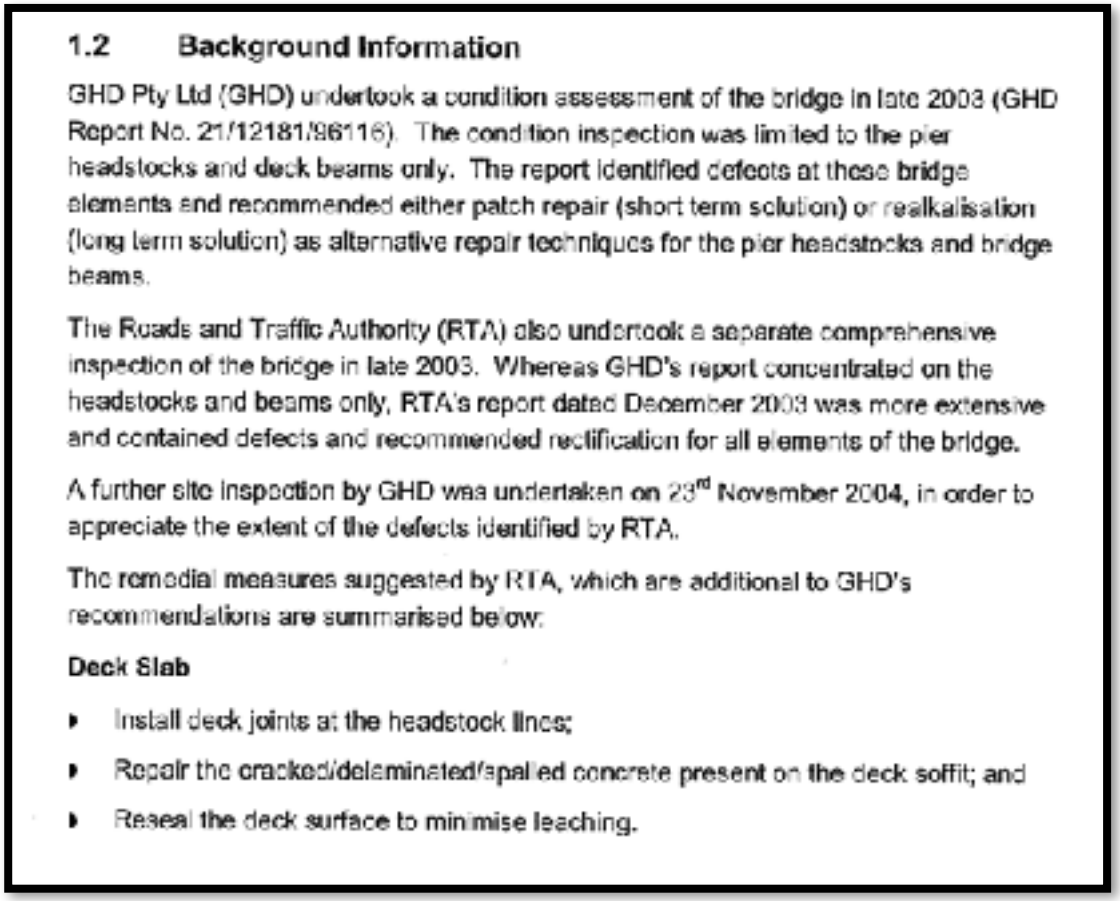
GHD provided "an estimate of cost to re-alkalise the total exposed area of 2360m2 which included the soffit and sides of the beams & headstocks (but not the abutments) of $2.75m in Dec 2009" [B4V2.9]."

To date, the RMS has not undertaken this work.

On page 6 of the Options Report it is advised, “a level two inspection of the bridge indicated defects in various elements including significant spalling on the cover concrete in the longitudinal concrete beams. In 2003 Bridge Branch carried out a detailed level three in inspection and analytical assessment of the bridge. As part of this work a durability condition investigation of the bridge was undertaken by GHD Pty Ltd.”

The inference that GHD believed the bridge had to be demolished is not supported in a review of other GHD Documents.

GHD’s position is clarified somewhat in the following quote taken from their February 2005 Report:



1.2 Background Information

GHD Pty Ltd (GHD) undertook a condition assessment of the bridge in late 2003 (GHD Report No. 21/12181/96116). The condition inspection was limited to the pier headstocks and deck beams only. The report identified defects at these bridge elements and recommended either patch repair (short term solution) or realkalisation (long term solution) as alternative repair techniques for the pier headstocks and bridge beams.

The Roads and Traffic Authority (RTA) also undertook a separate comprehensive inspection of the bridge in late 2003. Whereas GHD's report concentrated on the headstocks and beams only, RTA's report dated December 2003 was more extensive and contained defects and recommended rectification for all elements of the bridge.

A further site inspection by GHD was undertaken on 23rd November 2004, in order to appreciate the extent of the defects identified by RTA.

The remedial measures suggested by RTA, which are additional to GHD's recommendations are summarised below:

Deck Slab

- Install deck joints at the headstock lines;
- Repair the cracked/delaminated/spalled concrete present on the deck soffit; and
- Reseal the deck surface to minimise leaching.

Additionally, the executive summary in a 2005 report by GHD says, *"To assess the current condition and expected future life of the bridge, a condition investigation work was undertaken recently by GHD Pty Ltd (GHD) and RTA's Bridge Section. It was concluded by both the studies that the Bridge has suffered from reinforcement corrosion and structural damage and requires repair to enable operation of the bridge. Replacement of the bridge was also recommended as an option by RTA Study."*

The maintenance issues associated with the historic Windsor Bridge are comprehensively dealt with in other CAWB submissions.

As can be seen from the above analysis, possibly as early as 2003-4 the then RTA was aggressively prosecuting the case for removal of Windsor's historic bridge.

However it is on page 13 of this Options document that an even more serious issue becomes apparent, initially through an edit, deleting a reference to "a four lane bridge".

Four paragraphs later the reader is advised, "having designed the vertical alignment the horizontal alignment was developed to suit the options for constructing a four lane bridge now or building a two lane bridge now with provision for future widening."

Another paragraph later the document says, "A 3.0m shared path is provided on the upstream side of the crossing so that the deck does not have to be re-configured if the deck is widened."

In 2012 at a meeting with CAWB representatives, Project Director, Iain MacLeod, acknowledged the bridge, as tendered for Baulderstone to construct, was engineered to take "four B-doubles abreast." This appears consistent with the current design.

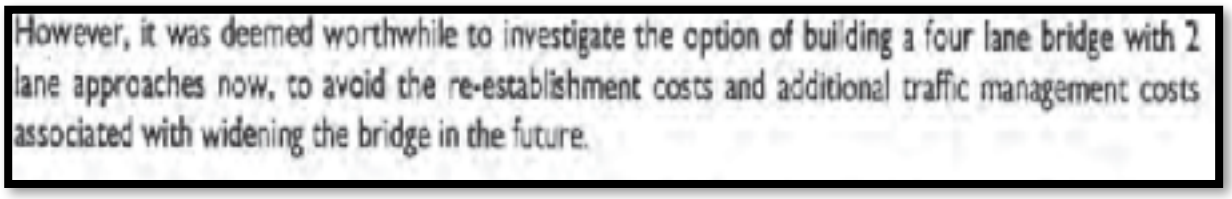
On page 15 two replacement schemes are considered:

- A two lane bridge convertible to three lanes (with a potential for future widening to four lanes).
- A four lane bridge

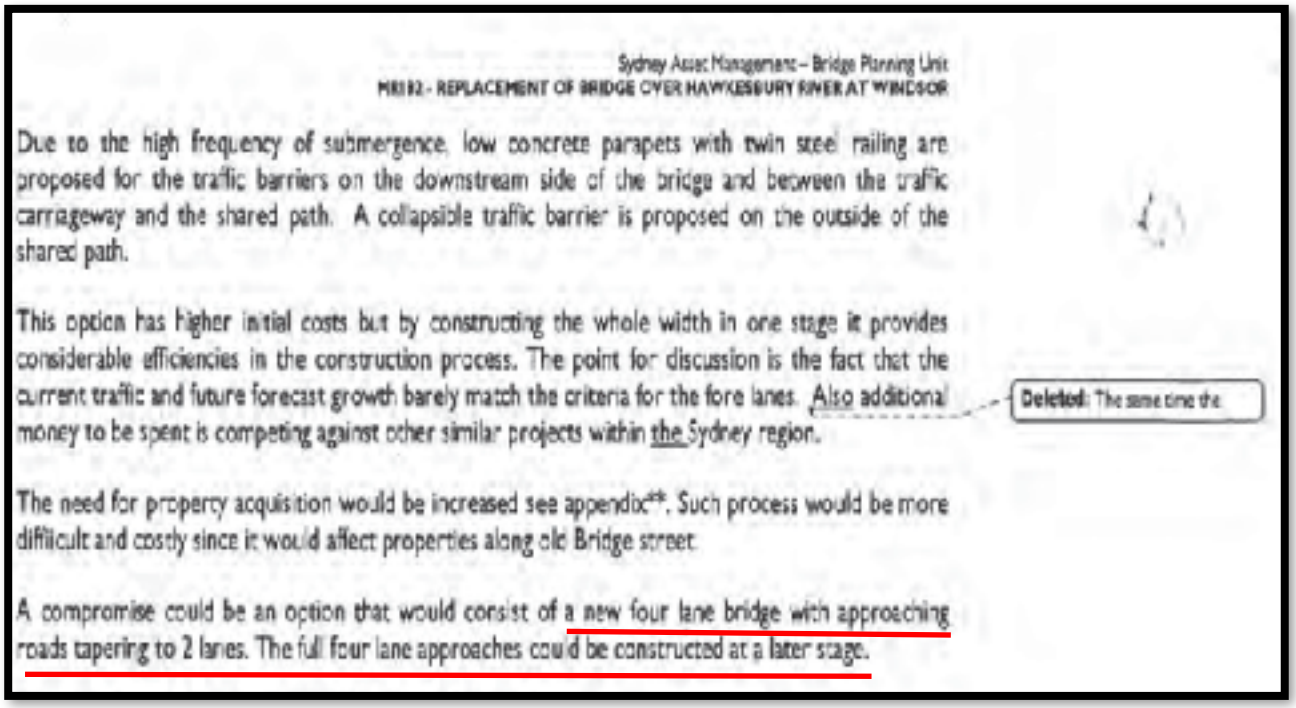
The Report goes on to discuss different span lengths (16.2m vs 26.4m). Of the 26.4m span it says “This span was selected to be double the existing , span length”. At this point document tracking indicates the words “This is a better option in case the old bridge cannot be demolished.” have been deleted.

Regardless of whether the Options Report was drafted in 2004 or 2008, on page 17 it says, in a discussion regarding Option 2B, “...the fact that this form of superstructure is not amenable to widening, this option is no longer considered viable.” (Underlined in original text).

Further down on page 17 the Options Report says:


However, it was deemed worthwhile to investigate the option of building a four lane bridge with 2 lane approaches now, to avoid the re-establishment costs and additional traffic management costs associated with widening the bridge in the future.

And at the top of page 18:



Sydney Asset Management – Bridge Planning Unit
MR182 - REPLACEMENT OF BRIDGE OVER HAWKESBURY RIVER AT WINDSOR

Due to the high frequency of submergence, low concrete parapets with twin steel railing are proposed for the traffic barriers on the downstream side of the bridge and between the traffic carriageway and the shared path. A collapsible traffic barrier is proposed on the outside of the shared path.

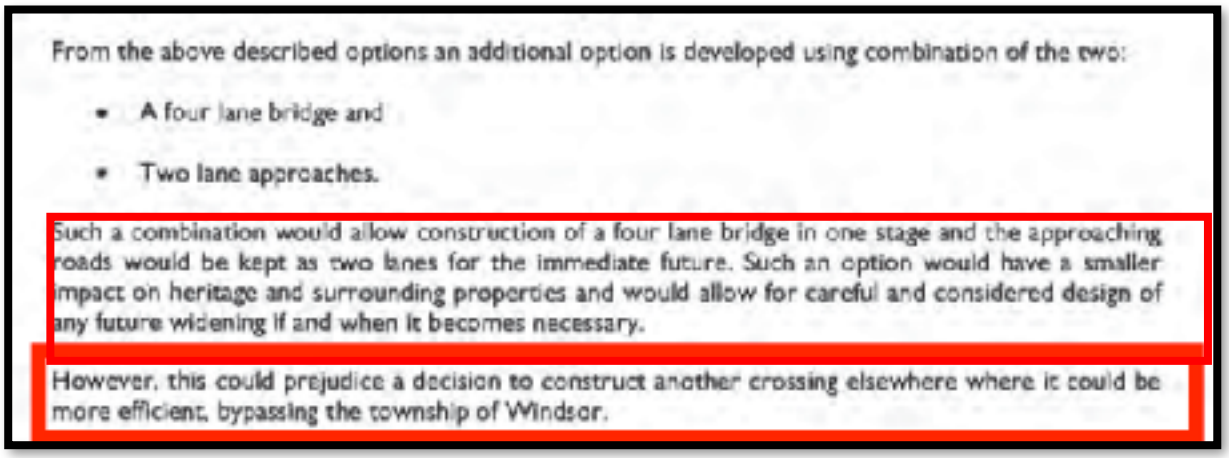
This option has higher initial costs but by constructing the whole width in one stage it provides considerable efficiencies in the construction process. The point for discussion is the fact that the current traffic and future forecast growth barely match the criteria for the fore lanes. Also additional money to be spent is competing against other similar projects within the Sydney region.

Deleted: The same time the

The need for property acquisition would be increased see appendix**. Such process would be more difficult and costly since it would affect properties along old Bridge street.

A compromise could be an option that would consist of a new four lane bridge with approaching roads tapering to 2 lanes. The full four lane approaches could be constructed at a later stage.

...and again on page 18:



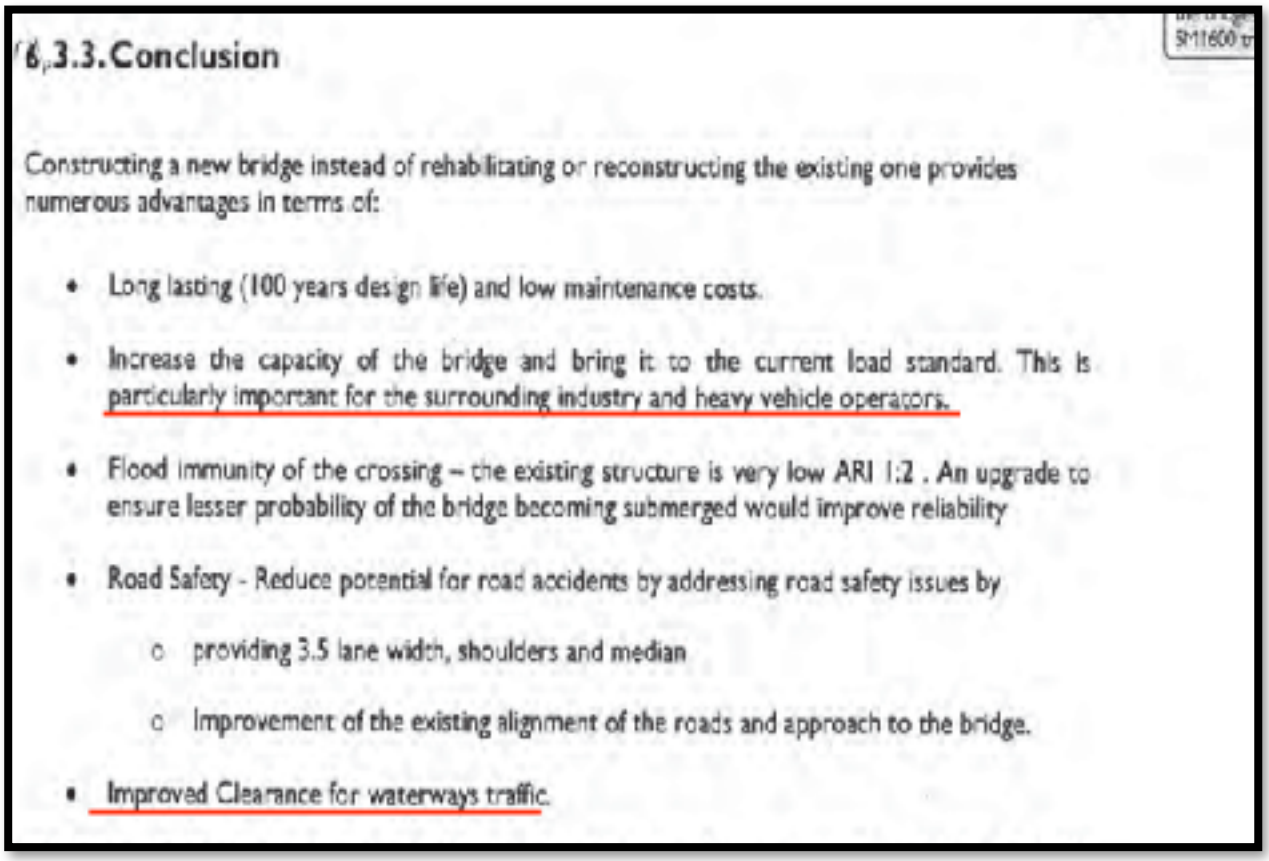
From the above described options an additional option is developed using combination of the two:

- A four lane bridge and
- Two lane approaches.

Such a combination would allow construction of a four lane bridge in one stage and the approaching roads would be kept as two lanes for the immediate future. Such an option would have a smaller impact on heritage and surrounding properties and would allow for careful and considered design of any future widening if and when it becomes necessary.

However, this could prejudice a decision to construct another crossing elsewhere where it could be more efficient, bypassing the township of Windsor.

The Conclusion, page 19 is also enlightening:

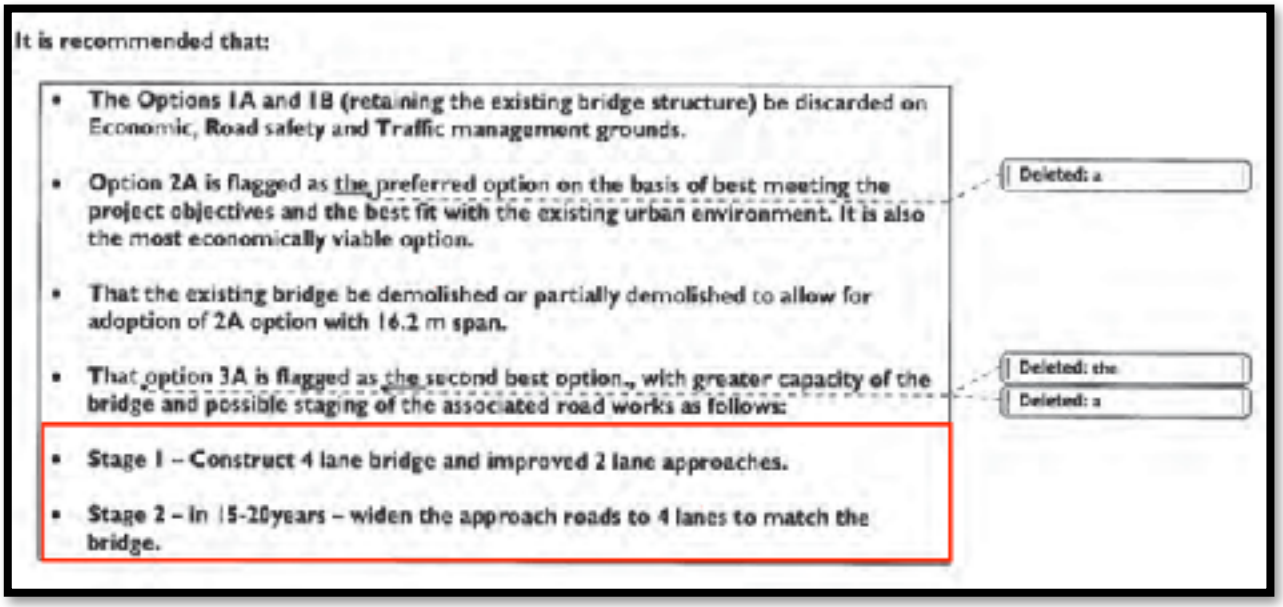


6.3.3. Conclusion

Constructing a new bridge instead of rehabilitating or reconstructing the existing one provides numerous advantages in terms of:

- Long lasting (100 years design life) and low maintenance costs.
- Increase the capacity of the bridge and bring it to the current load standard. This is particularly important for the surrounding industry and heavy vehicle operators.
- Flood immunity of the crossing – the existing structure is very low ARI 1:2 . An upgrade to ensure lesser probability of the bridge becoming submerged would improve reliability
- Road Safety - Reduce potential for road accidents by addressing road safety issues by
    - providing 3.5 lane width, shoulders and median
    - Improvement of the existing alignment of the roads and approach to the bridge.
- Improved Clearance for waterways traffic.

Then, the recommendations:



It is recommended that:

- The Options 1A and 1B (retaining the existing bridge structure) be discarded on Economic, Road safety and Traffic management grounds.
- Option 2A is flagged as the preferred option on the basis of best meeting the project objectives and the best fit with the existing urban environment. It is also the most economically viable option.
- That the existing bridge be demolished or partially demolished to allow for adoption of 2A option with 16.2 m span.
- That option 3A is flagged as the second best option., with greater capacity of the bridge and possible staging of the associated road works as follows:
- Stage 1 – Construct 4 lane bridge and improved 2 lane approaches.
- Stage 2 – In 15-20years – widen the approach roads to 4 lanes to match the bridge.

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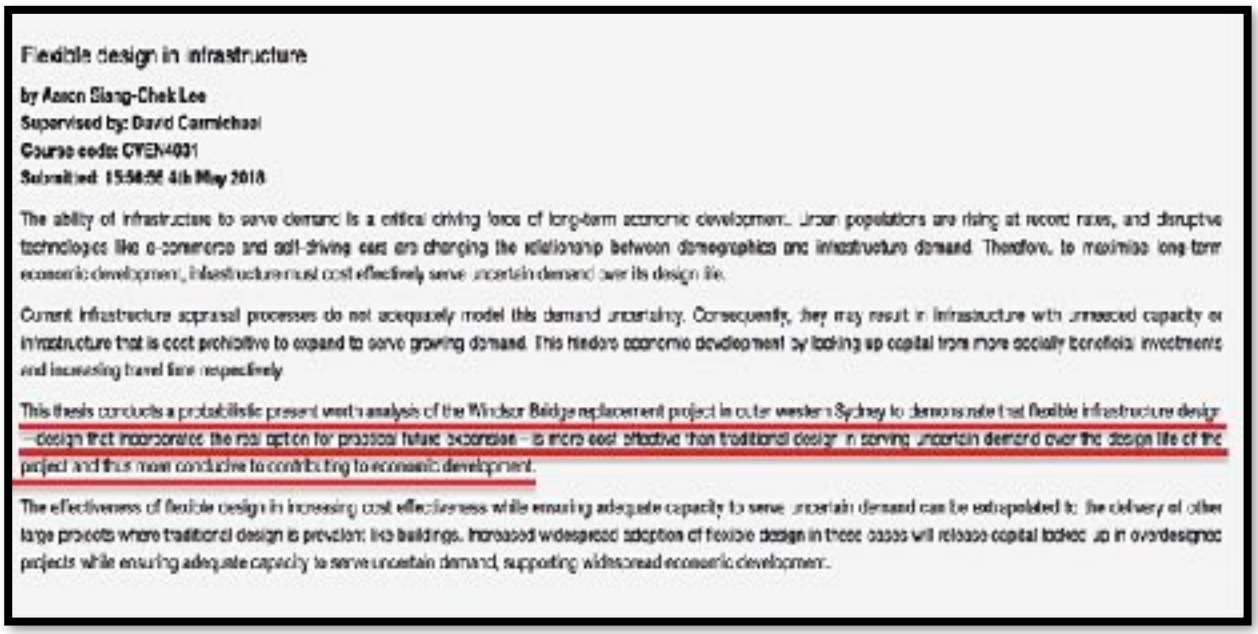
Finally, if we were not already justified in believing the community has been comprehensively lied to about the intentions of this project, we discovered the following, bringing the 2008 story right up to 2018:

Screenshot from: http://vm.civeng.unsw.edu.au/courseprofiles/Abstract.php



Flexible design in infrastructure

by Aaron Siang-Chek Lee
Supervised by: David Carmichael
Course code: CVEN4031
Submitted: 15:58:56 4th May 2018

The ability of infrastructure to serve demand is a critical driving force of long-term economic development. Urban populations are rising at record rates, and disruptive technologies like e-commerce and self-driving cars are changing the relationship between demographics and infrastructure demand. Therefore, to maximise long term economic development, infrastructure must cost effectively serve uncertain demand over its design life.

Current infrastructure appraisal processes do not adequately model this demand uncertainty. Consequently, they may result in infrastructure with unneeded capacity or infrastructure that is cost prohibitive to expand to serve growing demand. This hinders economic development by locking up capital from more socially beneficial investments and increasing travel time respectively.

This thesis conducts a probabilistic present worth analysis of the Windsor Bridge replacement project in outer western Sydney to demonstrate that flexible infrastructure design – design that incorporates the real option for practical future expansion – is more cost effective than traditional design in serving uncertain demand over the design life of the project and thus more conducive to contributing to economic development.

The effectiveness of flexible design in increasing cost effectiveness while ensuring adequate capacity to serve uncertain demand can be extrapolated to the delivery of other large projects where traditional design is prevalent like buildings. Increased widespread adoption of flexible design in these cases will release capital locked up in overdesigned projects while ensuring adequate capacity to serve uncertain demand, supporting widespread economic development.

Property Acquisitions

There is a "Land Reservation Acquisition"(LRA) on the State Heritage listed property at 10 Bridge Street in Thompson Square. The area of acquisition impacts on the building structure itself.

On pages 17 and 18 of the Options Report it says, *"The need for property acquisition would be increased see appendix**. Such process would be more difficult and costly since it would affect properties along old Bridge street."*

On page 18 the option of constructing a four lane bridge with two lane approaches is discussed. The report says,

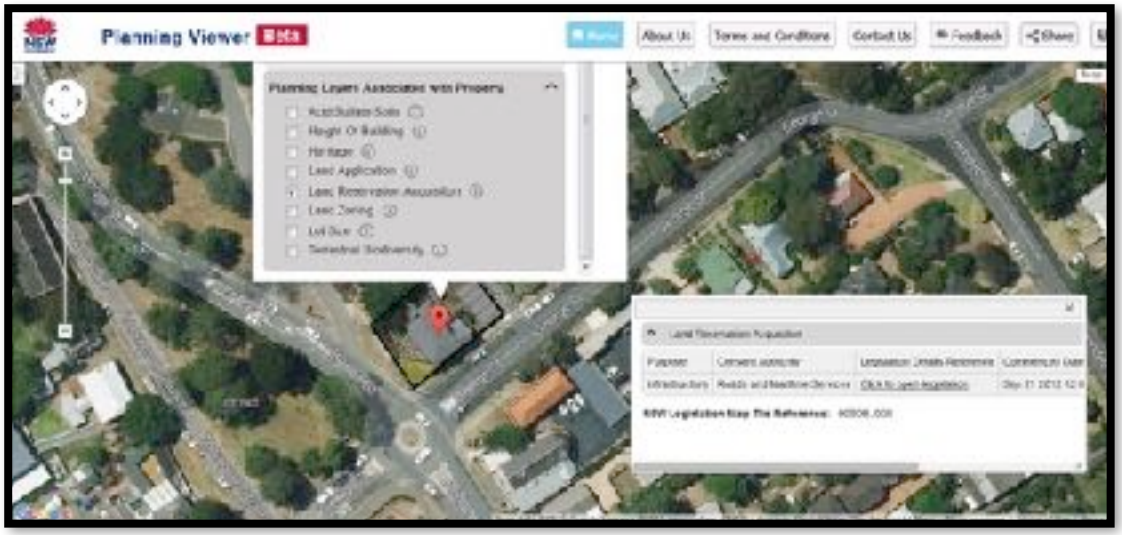
> Such a combination would allow construction of a four lane bridge in one stage and the approaching roads would be kept as two lanes for the immediate future. Such an option would have a smaller impact on heritage and surrounding properties and would allow for careful and considered design of any future widening if and when it becomes necessary.

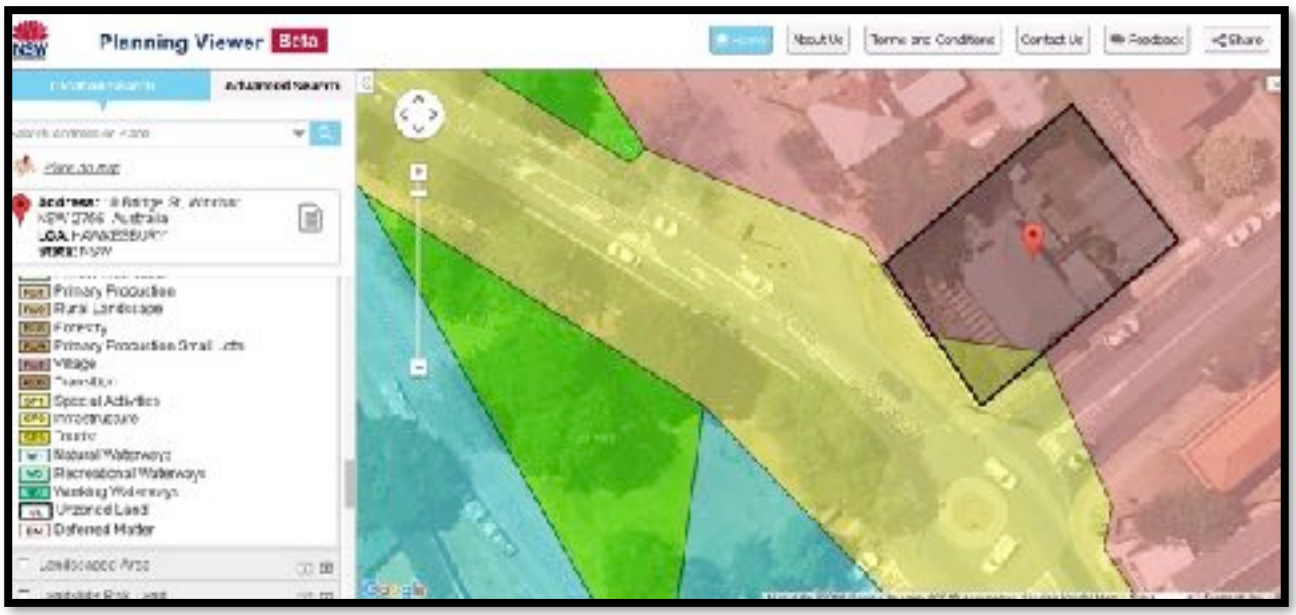
The LRA on 10 Bridge Street appears to support the contention the RMS is clandestinely pursuing the construction of a four lane bridge, with a view to expanding feeder roads at a future date.

The Section 149 Planning Certificate for 10 Bridge Street is dated August 2007. The Certificate states there was no Land Reservation Acquisition on the property at that time.

The RMS was able to place a LRA on a State Heritage Listed property because it is located within the area of a State Significant Infrastructure Project. However, while the 2012 EIS lists properties to be acquired for the project, 10 Bridge Street is not on the list.

Below are screenshots of the original, somewhat clearer images than are currently available from the Department of Planning website.





Index of References to land acquisition

There are scant references to land acquisition and none that directly reference 10 Bridge Street in Evidence Book 1 (Land and Environment Court, Administrative Appeal). The following quotes are provided for context

Evidence Book 1

Page 10 refers to “intersection adjustments” at the intersection of George and Bridge Streets in Figure 1.2

Page 15 (bullet point 11) again refers to “adjustments and modifications to the existing George Street/Bridge Street intersection

Page 18 “...changes to the existing road arrangements within the State heritage-listed square…”

Page 18, first bullet point,
“Direct and indirect impacts to items of local heritage significance
The project would require the construction of the new road alignment....a new intersection and changes to the existing road arrangements close to items of local heritage significance. These activities may impact both the structural integrity of the heritage building, would alter the heritage vistas to and from the heritage buildings and impact on the historical character of the area…”

Page 26, eighth bullet point
“Property acquisition would be required, including partial acquisition of the turf farm on the northern bank of the river and land (public and potentially private) within Thompson Square.

Page 32,
5.2.3 Proposed further assessments

Further assessment and development of the traffic movements and access arrangements would be undertaken. This would investigate, but not be limited to, the following...

- ....Intersection arrangements and turning facilities at
    - The George Street/ Bridge Street intersection..."

Page 52 (DG's requirements)
Land Use, Property and Socio-economic/ Including But Not Limited to:
- impacts on directly affected properties and land uses, including impacts related to access, land use, property acquisition and amenity related changes...

Page 67 (EIS main report Executive Summary)
What is Proposed?
Roads and Maritime Services NSW (RMS) is proposing to replace the existing bridge over the river at Windsor. The proposal for bridge replacement includes the following key elements: ...

- ...Construction of new approach roads and intersections to connect the new bridge to existing road network.
- Modifications to local roads and access arrangements...

Page 74 Figure 1-2 Key project elements
The sections on this map marked in orange are "Works subject to further Council and stakeholder consultation." Whilst the rest of the parklands are included, the area of parkland where the CAWB tent was located is excluded. This is RMS land, part of the road reserve.

Pages 127, 128 and 131 all show the George Street boundary of #10 as the side wall of the building. (See notes at LRAs and Property Acquisition Map, below)

Page 161 table 5-6 Additional design objectives for the approach roads'
Northern approach road: Avoid impacts on the local heritage listed building "Bridgeview" (No reference to impacts on any other building).

Page 240 Table 7-7
Potential heritage impacts on sites within the study area.
For #10 the fields "Potential or known impact on curtilage" and "Potential or known visual impact" have been left blank.

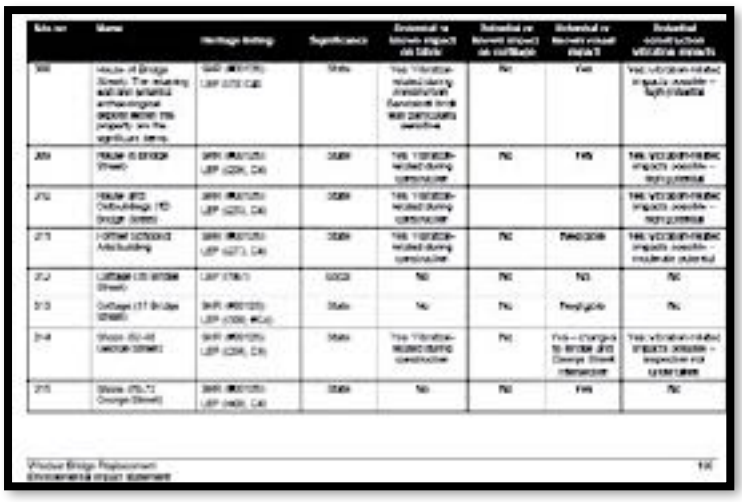


Table 7-7 Potential heritage impacts on sites within the study area.
EIS Page 190

NB In a list of 32 heritage items, each with 7 fields to fill (224 fields in total) #10 is the only item with incomplete data.

Page 343 Impact assessment and mitigation
Potential benefits for and impacts on local and regional landuse, property and the socio-economic environment were identified and evaluated. This included an assessment of direct and indirect impacts associated with the project's design, construction and operation, including: Property impacts, such as impacts of property acquisition and changes to access....

Page 352 details land acquisition requirements and makes reference to the Land Acquisition (Just Terms Compensation) Act 1991. No reference to #10.

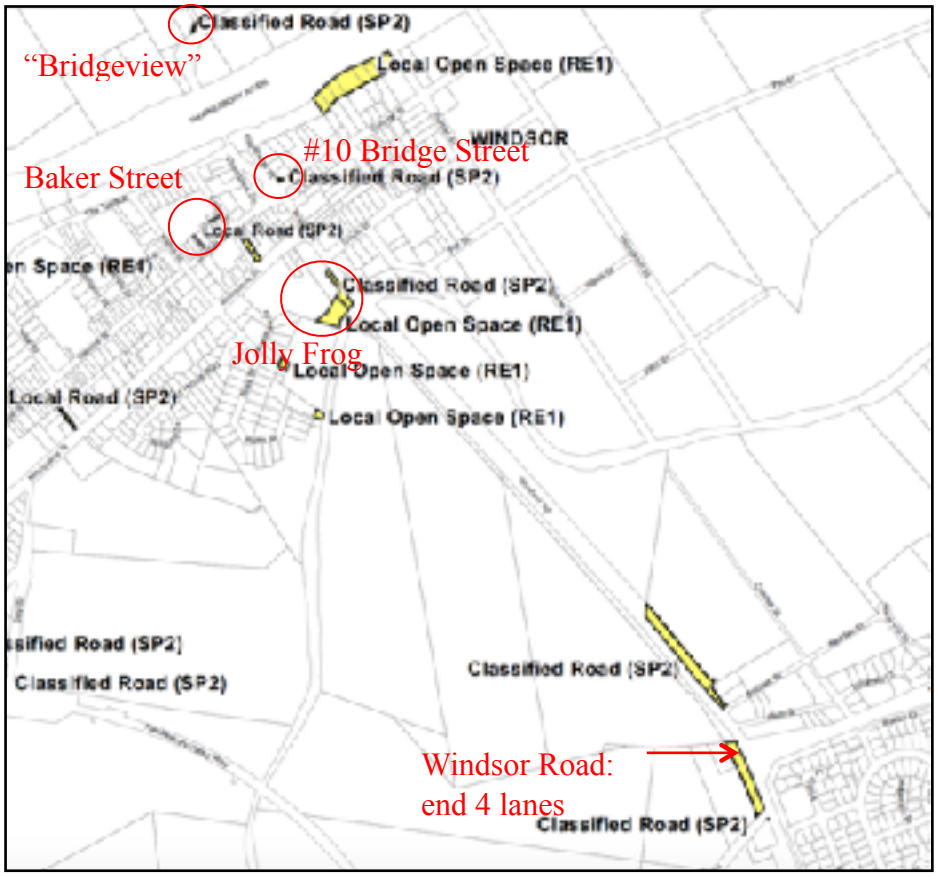
Page 356

There would also be minor changes in access to at least three other properties however, there would be no actual loss of access to these properties.

It is noted the Options Report, page 13 says. “Old Bridge Road will be closed off at the George Street end. Access to properties facing Old Bridge Road shall be via The Terrace and Baker Street,” There are three properties facing “Old Bridge Road”. #10 is one of them.

Other LRAs

In addition to the LRA at #10 there are a number of other LRAs, which, whilst outside the ‘project zone’ are arguably associated with future plans.



Significance

The majority of the identified locations are designated “Classified Road (SP2)”, although one appears to be part of a cluster of three “Local Roads (SP2)”.

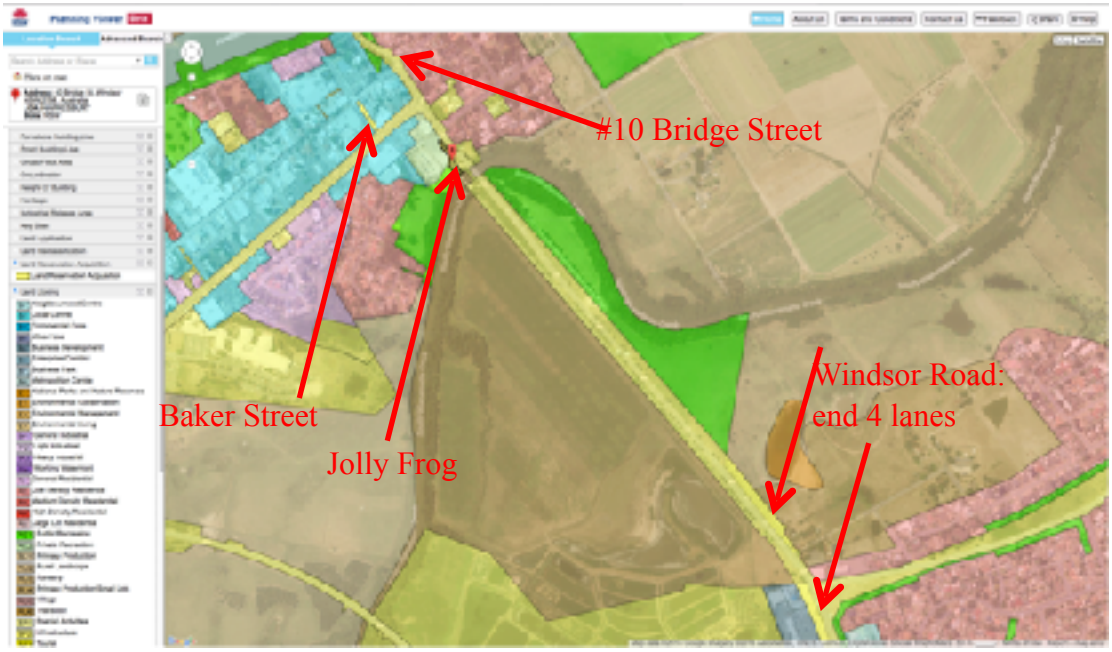
Notwithstanding the inclusion of local roads, it would appear the RMS has major plans for the remaining section of Windsor Road, beyond the intersection of Windsor Road and Pitt Town Road. This part of Windsor Road remains predominantly two lanes. The upgrade of Windsor Road up to that point is described in the RTA’s 2006 Annual Report as, “the largest urban arterial road project undertaken by any State government.”

The Windsor Road upgrade was a program to upgrade Windsor Road and Old Windsor Road to a minimum of four lanes. It was badged “All the Way to Windsor”, yet Windsor Road only achieved the four-lane standard as far as Pitt Town Road at McGraths Hill.

Scrutiny of the Planning Department’s zoning maps indicates the potential to take four lanes all the way to Windsor, despite the project being declared completed just short of achieving this goal.

Three of the LRA’s contribute directly to this and feed directly into Thompson Square.

The image below, along with the one after it illustrate the zonings around the LRAs.

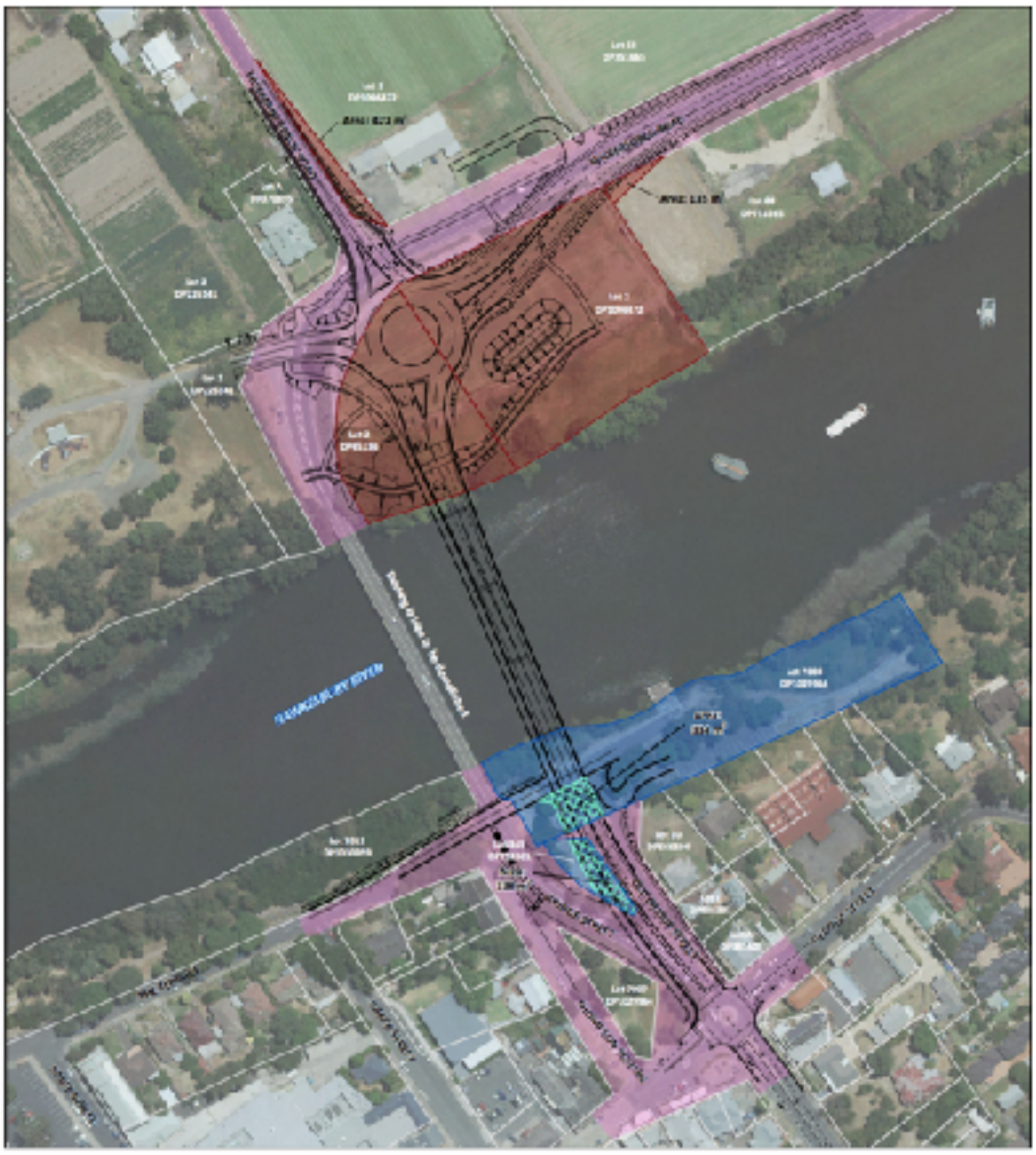


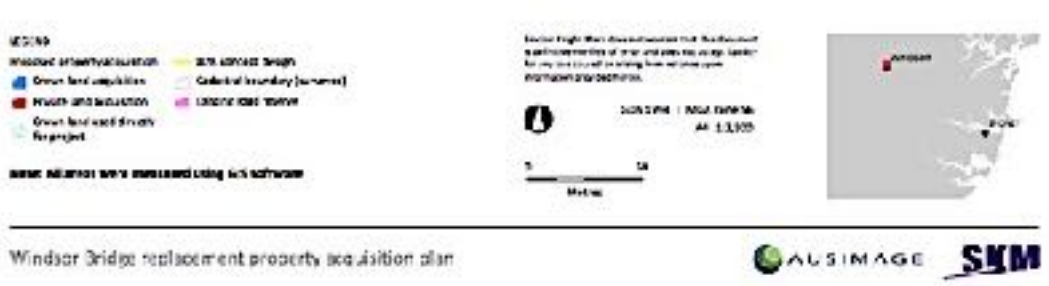
Property Acquisition Map:

The image below indicates proposed property acquisitions. It came from:
Windsor Bridge Replacement - Concept Design & EIS
Volume 1 - 100% Concept Design Report November 2012

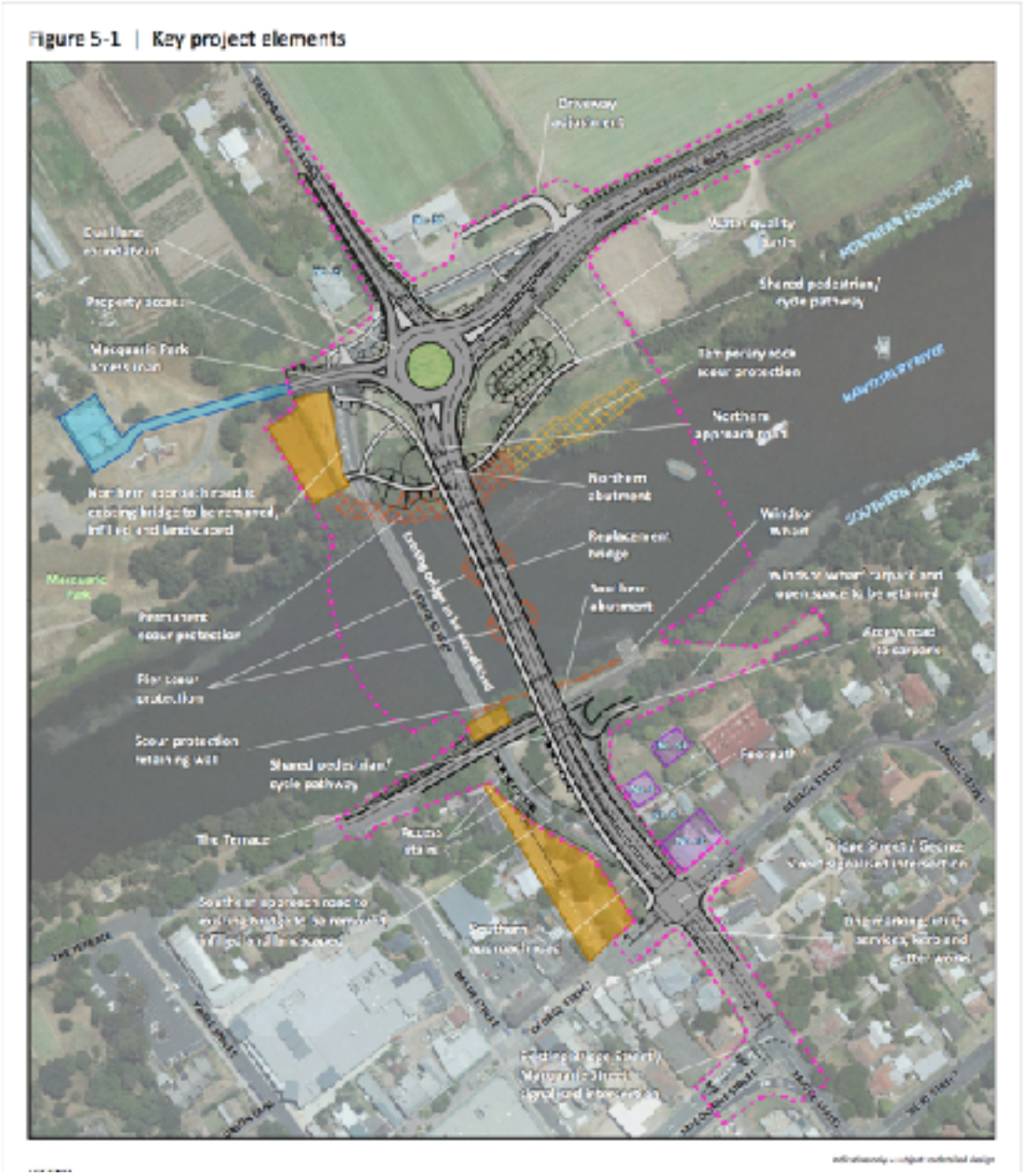
RMS ownership of Lots 1 & 2, mentioned in *Historical Situation – previous LRAs* (below) is not acknowledged in this diagram.

Proposed property acquisition



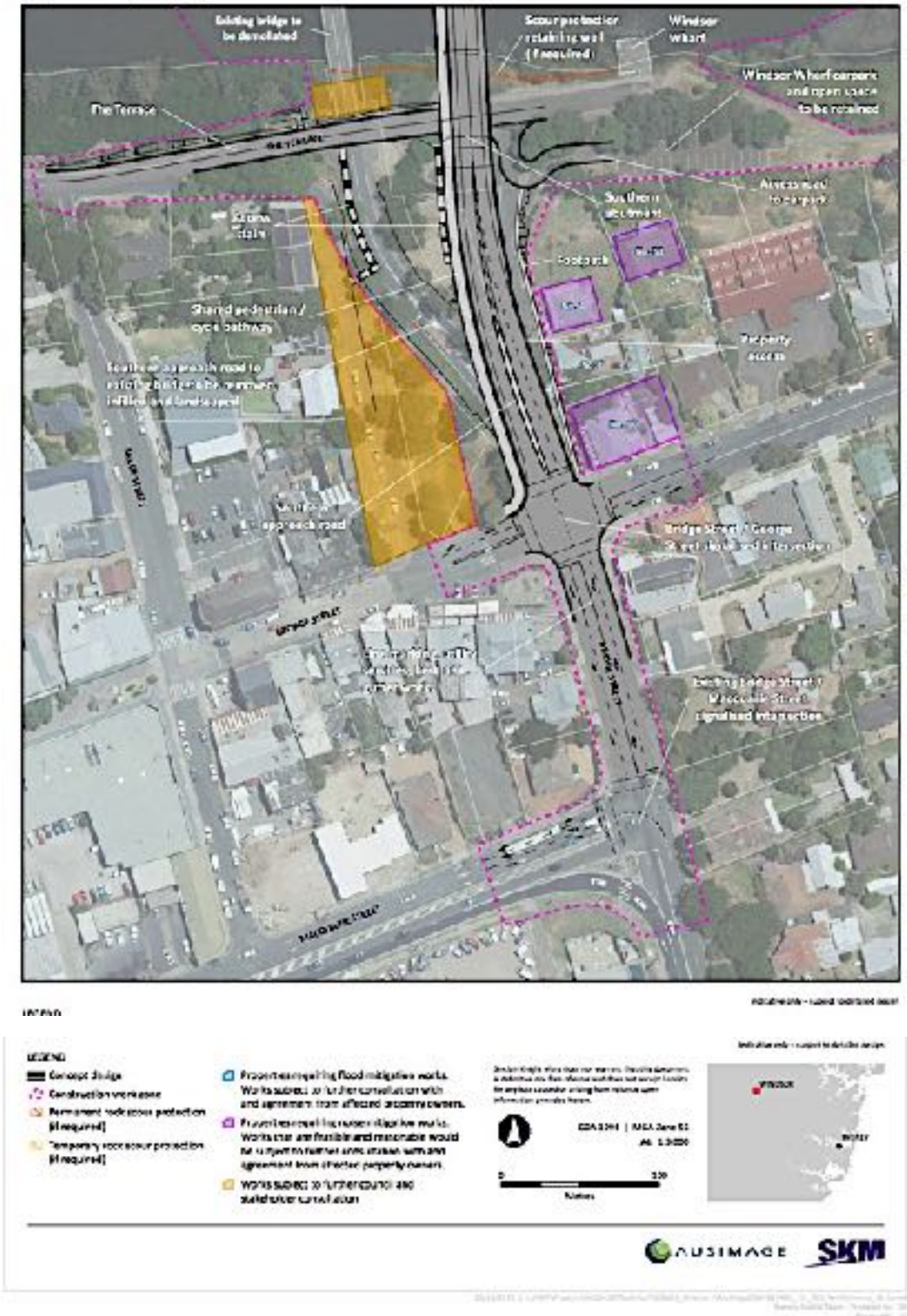


“Key Project Elements” (EIS Chapter 5).



The enlarged version (below) of the southern section shows more clearly the cadastral lines and road reserve.

Figure 5-1a | Key project elements - Southern Approach



10 Bridge Street, Current Situation:

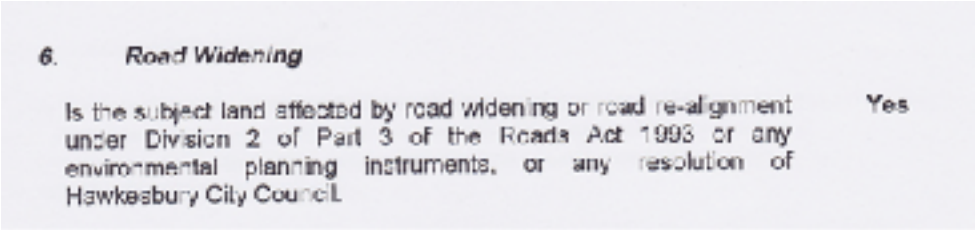
The satellite image implies the Government is not including the verandah as part of this significant heritage structure. However, the Australian Heritage Commission in a Statement of Significance published in 1993 describes the verandah as “particularly fine cast iron verandah to both floors fronting Bridge Street”.

The LRA does not appear on the certificate of title, however, the Hawkesbury City Council Planning Certificate signed in August 2007 by the Acting General Manager, contains what may be conflicting advice. Point 8 (See below) clearly states the land is not reserved for acquisition.

8. ***Land Reserved for Acquisition***

Is the land affected by any environmental planning instrument, deemed environmental planning instrument, or draft environmental planning instrument which provides for the acquisition, whether in part or whole of the land as referred to in Section 27 of the Act. **No**

Yet Point 6 (see below) acknowledges the land is (has been?) affected by road widening.



6. *Road Widening*

Is the subject land affected by road widening or road re-alignment under Division 2 of Part 3 of the Roads Act 1993 or any environmental planning instruments, or any resolution of Hawkesbury City Council

Yes

Screenshots sourced from the Planning Certificate.

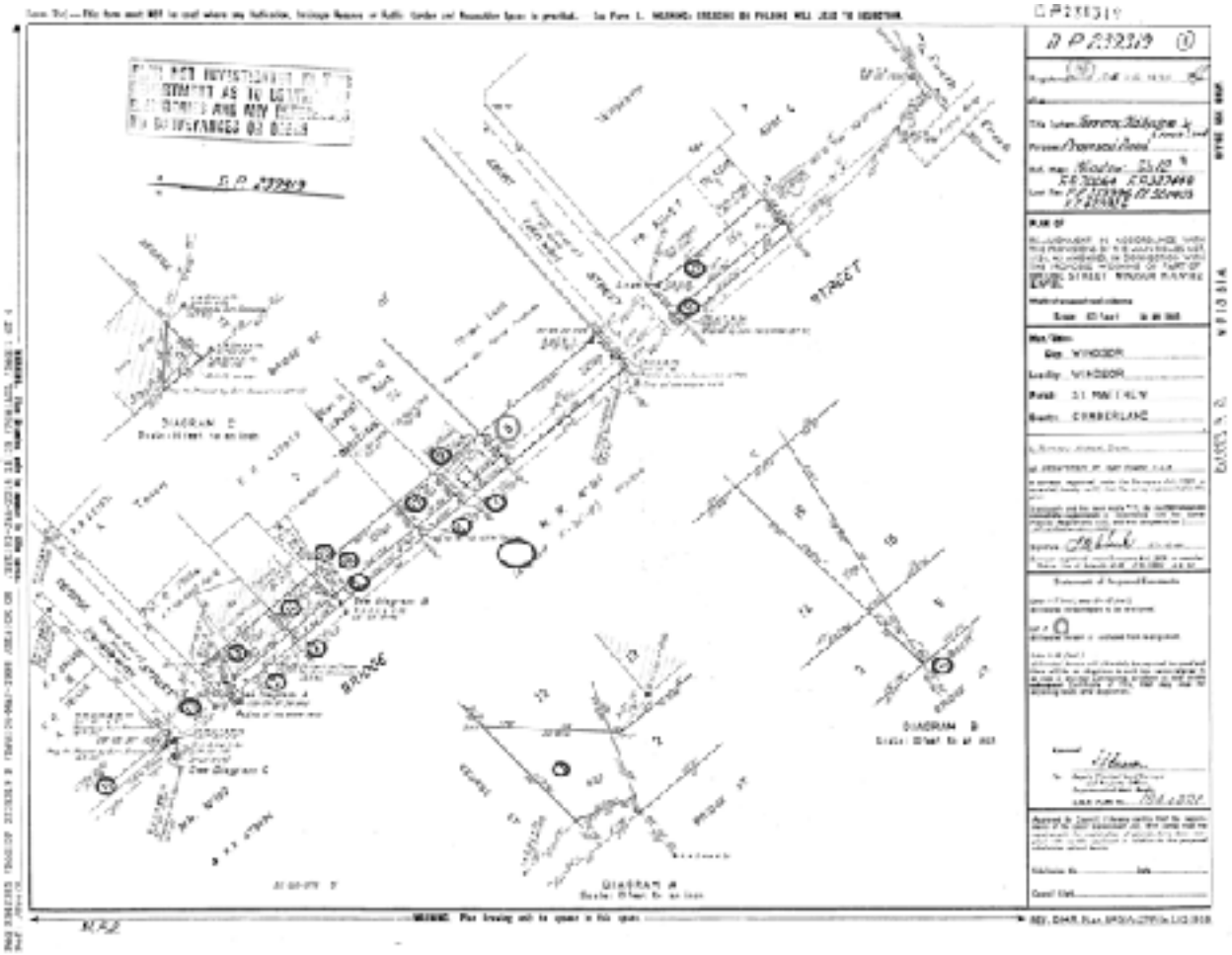
Since purchasing the property in 2007, the owners were not advised of any Land Reservation over the property despite the obvious impact on the property and its value both heritage and fiscal. The LRA was identified by a third party who alerted the owners.

The LRA appears significant in that, if not activated for the current project, it indicates there are plans for future road expansion, despite assurances to the contrary, particularly as promises to remove the LRA have never been realised.

.

Previous ‘LRAs’:

There has been at least one previous LRA on the corner of the property. Indeed, there have been some ‘ambitious’ plans for roads through Thompson Square.



This document (above), endorsed in 1969 and registered in 1970 clearly indicated the extent of road building proposed by authorities at the time.

The sidebar says, *“Lots 1-7 (incl.) and Lots 9-18 (incl.) delineated hereon are to be realigned.*
Lot 8 delineated hereon is excluded from realignment.
Lots 1-18 (incl.) delineated hereon will ultimately be required for road and there will be no objections to such lots being referred to as road in any new

conveyance or shown as road on any Certificate of Title that may issue for adjoining lands after acquisition."

This 'realignment', if fully executed, would have resulted in the demolition of the School of Arts, as the new road alignment would have required the entire front half of the block. As it is, the RMS already 'owns' the lowest steps of the entry to this building.

Lot 8 is the old Police Station outside of which are the archaeological remains of the colonial garrison.

Lot 11 is a small triangle located in the corner of #10, precursor to the present-day LRA. Scrutiny of Diagram C reveals it is 31 sq-ft and cuts off the corner of the shop that existed at the time.

This shop existed until the renovation of the Square for the 1988 Bicentennial celebrations when it was removed and the building façade restored to its current form.

Also worthy of note amongst the Lots set aside for roadworks are Lots 1 and 2, visible in Diagram A (in Form 2(c) at the start of this section). Both of these lots are now owned by the RMS. Lot 1 being purchased in 1974. 1974 is the year the new Fitzroy Bridge over South Creek opened.

The ‘New’ Traffic Study

Other matters have also contributed to community concerns about this proposed modification.

It would appear there are three possible traffic studies the RMS could be referring to in the Modification Proposal:-

1. Traffic and Options Modelling Report, December 2017
2. Traffic and Options Modelling Report with updated appendix, March 2018
3. Traffic Counts Data Comparison Between 2017 and 2019, November 2019

In the WBRP Project Update, October 2019, it states,

> *“While we have continued to develop and build the new bridge, we have also taken the opportunity to carry out updated traffic studies* ***in 2017 and 2019.*** *(emphasis added)*
>
> *The new traffic modelling indicated a change to the existing design would allow traffic to flow better northbound during the afternoon.*"

The traffic studies referred to in the Project Update were undertaken in March 2017, and August 2019.

These two traffic studies were again referred to in the October Project Update:-

> *“The updated traffic modelling we carried out in 2017 and 2019 has created an opportunity for us to improve traffic outcomes in the area*

and help fulfill longer term road network needs in the area." WBRP Community Update, October 2019.

These statements imply BOTH the 2017 and 2019 traffic studies have informed the modelling used for the Modification 1 proposal.

Then, in the "Windsor Bridge Replacement Project Environmental Assessment Modification", it states:-

> *"Roads and Maritime has undertaken additional investigations to confirm traffic growth rates since the EIS was prepared. Essentially the new study indicated that traffic had grown slightly faster than originally predicted, and that about 2,000 additional vehicles per day could potentially be travelling the route in 2026 than predicted in 2012." Windsor Bridge Replacement Project 4 Environmental Assessment Modification pg.5 (emphasis added)*

It is not clear which additional investigations the RMS is referring to.

On page 11 of the same report:-

> *"The **new traffic study** shows that during the afternoon peak there will likely be more congestion and delays at the Bridge and George Street intersection than originally anticipated unless there is a better opportunity for vehicles to merge prior to approaching the new bridge." (emphasis added)*

It would not be unreasonable for the reference to the "new traffic study", and the finding that "there will likely be more congestion and delays at the Bridge and George Street intersection than originally anticipated…" was possibly a result of the most RECENT traffic study, which was conducted in August 2019.

However on page 13, a reference to the "new traffic report" as being the "Traffic and Options Modelling Report", conducted in March 2017 and updated with an appendix in March 2018.

> *"The traffic delays outlined in the **new traffic report (Arcadis, 2018)** would not be addressed by the do nothing option even though the issues have been recognised." pg.13*

Similarly, on page 23 of the Windsor Bridge Replacement Project Environmental Assessment Modification,

> *"As over five years has passed since the last traffic assessment was completed for the EIS (SKM, 2012), Roads and Maritime undertook **a new, independent traffic count and modelling report for the project. This Traffic and Options Modelling Report was prepared by Arcadis (2018)** and is provided in Appendix B. A summary of the report is provided in the following sections."*

And then on page 68:-

> *"As part of a regular process of review and as more than five years had passed since the traffic assessment was completed as part of the EIS, the Roads and Maritime undertook a **new, independent traffic count and modelling report (Arcadis, 2018)** for the project.*
>
> *"Roads and Maritime has undertaken additional investigations to confirm traffic growth rates since the EIS was prepared. Essentially the **new study** indicated that traffic had grown slightly faster than originally predicted, and that about 2,000 additional vehicles per day could potentially be travelling the route in 2026 than predicted in the EIS (2012)."*

On the same page,

> *"This **new study (Arcadis, 2018)** reviewed current land use data, proposed future developments and reviewed traffic origins and destinations. The new traffic modelling with updated data, compared to the study undertaken in the EIS, indicated that the approved design would operate with a reduced level of service at the Bridge and George Street intersection than originally anticipated unless there is a better opportunity for vehicles to merge prior to approaching the new bridge."*
>
> Windsor Bridge Replacement Project Environmental Assessment Modification pg.68

There can be no doubt the modification report itself is referring to the amended traffic report released in March 2018, based on traffic counts undertaken in 2017. Yet the Project Update released in conjunction with the Windsor Bridge Replacement Project Environmental Assessment Modification report is clear in its intentions to have the community believe that this proposal is based on the most up-to-date traffic data. This is not the case.

Why was the modification proposal pushed ahead when new traffic data was imminent? Not only was the community deceived by the implied statements in the Project Update, the failure to model the proposal on the most recent traffic data warrants new investigations into the impacts and benefits of the proposal, and a re-opening of exhibition period to allow proper consultation with accurate information provided.

Published Traffic Reports

Further to the concerns expressed in the previous section, the announcement of the proposed modification to provide a merging lane northbound on Bridge St the RMS released a Project Update which stated:-

> *"While we have continued to develop and build the new bridge, we have also taken the opportunity to carry out updated traffic studies in 2017 and 2019."*

and….

> *"The updated traffic modelling we carried out in 2017 and 2019 has created an opportunity for us to improve traffic outcomes in the area and help fulfill longer term road needs in the area."*

It stood to reason both these traffic studies would be available to the public.

The RMS website for the WBRP had two traffic reports published.

One report was published under the heading "May 2019 traffic and options modelling report".

File	Title	Size
PDF	May 2019 traffic and options modelling report Windsor Bridge Replacement Project.	5.57Mb

Clicking on this link took you to the Arcadis 2018 report, which is the amended version of the 2017 traffic report.

https://www.rms.nsw.gov.au/projects/01documents/windsor-bridge-replacement/windsor-bridge-project-traffic-and-options-modelling-report.pdf

What is curious about this is, not only is the 2018 report NOT the 2019 traffic report, but at no time has a document titled "May 2019 traffic and options modelling report", ever been published, or even referred to in any documentation.

Does it exist within the RMS and they have not released it?

This link stayed active until 7 November, 2019, when it was changed to the 'Traffic Counts Data Comparison Between 2017 and 2019' report. This was the very same day submissions closed to the modification proposal the Project Update said was based on *"updated traffic modelling we carried out in 2017 and 2019"*.

Was the RMS trying to fool the community into believing the 2018 traffic report was actually the 2019 report? And what is the document the RMS refer to as the May 2019 report?

Timing of the Traffic Reports

The following dates document the timing of the traffic reports in conjunction with the planning for the merge lane as outlined in the Environmental Assessment Report released in October 2019.

- 24 March 2017 to 30 March 2017- Daily mid-block traffic survey was conducted on the Windsor Bridge for a continuous seven-day period.

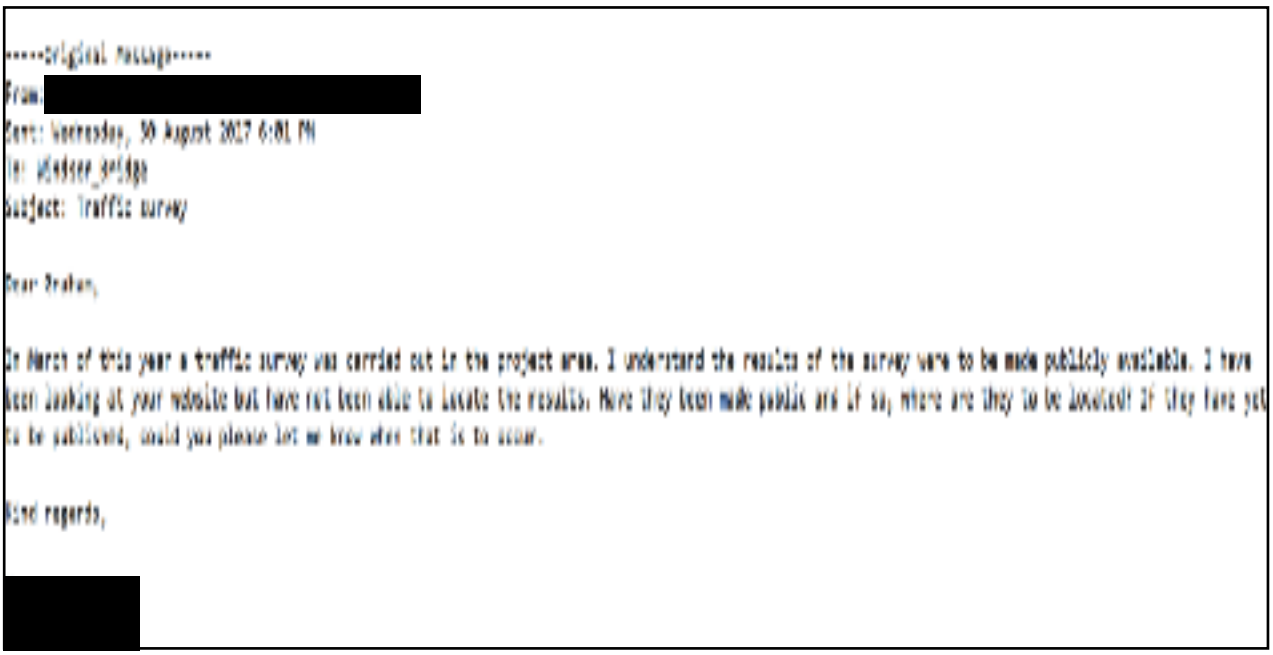
- 28 March 2017 - Intersection turning movement counts and queue length surveys were conducted.
- 28 March 2017 - Travel time surveys were conducted.
- 21 June 2017 - Final revision of the “Traffic and Options Modelling Report” by Arcadis was approved.

REVISIONS

Revision	Date	Description	Prepared by	Approved by
A, B, C, E	May 2017	Draft for internal review	MW, SI	
D	30 May 2017	Draft for Client Review	KN	MR
F	16 June 2017	Draft Final for Client Review	KN	MR
G	21 June 2017	Final Report	KN	MR

Despite the 2017 traffic report having been finalised in June 2017, it would be many more months before it was made public.

An email exchange between a member of the public and the RMS highlights the issue:”



-----Original Message-----
From: [redacted]
Sent: Wednesday, 30 August 2017 6:01 PM
To: Windsor_Bridge
Subject: Traffic survey

Dear Madam,

In March of this year a traffic survey was carried out in the project area. I understand the results of the survey were to be made publicly available. I have been looking at your website but have not been able to locate the results. Have they been made public and if so, where are they to be located? If they have yet to be published, could you please let me know when that is to occur.

Kind regards,

[redacted]

[redacted]

On 12 Sep 2017, at 1:36 pm, Windsor_Bridge <Windsor_Bridge@rms.nsw.gov.au> wrote:

[redacted]

We have received your enquiry and it has been passed onto the project team.

We will be in touch in due course.

Thank you for your interest in this project.

The Windsor Bridge Team

From: [redacted]

Reply | Reply All | Forward | Archive | Junk | Delete | More

Subject: Re: Traffic survey

To: Graham STANTON <Windsor_Bridge@rms.nsw.gov.au>

Dear The Windsor Bridge Team, be it Bianka or Colin,

Thank you for your reply to my email of 16 August. I am usually in some state of confusion and I seek your assistance in clearing the fog and thus allowing for more efficient and effective communication.
Your email is above The Windsor Bridge Team title and it indicated you will forward my email to the project team. This implies to me there are two different teams. I am concerned the delay in my receiving replies to my email(s) may in fact be due to me sending my emails to an incorrect email address or one that adds unnecessary intermediary steps into the process. It would be greatly appreciated if you could lead me to the correct path of righteousness as they say.

In addition to the email identified below, I am waiting for responses to my emails dated:
20 July 2017 Subject: Clarification
01 August 2017 Subject: Clarification
10 August 2017 Subject: Clarification
21 August 2017 Subject: Clarification

If these emails have been mislaid I am happy to re-forward them to you or to the appropriate email address.

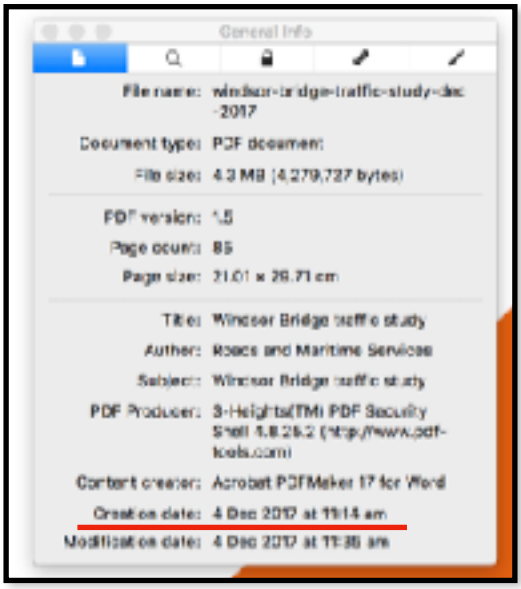
Looking forward to productive and efficient communication.

Kind regards,

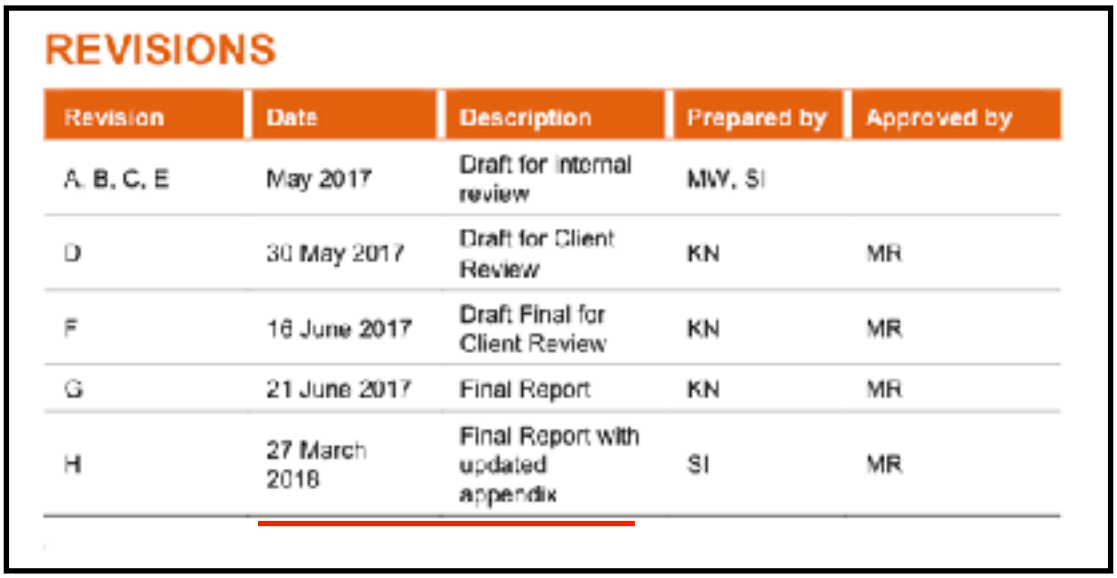
[redacted]

PS I trust your stay is longer than for your predecessors.

In December 2017 the RMS released the report “Traffic and Options Modelling Report” on their website. The file name was Windsor Bridge Traffic Study 2017.



Another version of this report with an updated appendix was released on 27 March, 2018.



REVISIONS

Revision	Date	Description	Prepared by	Approved by
A, B, C, E	May 2017	Draft for internal review	MW, SI	
D	30 May 2017	Draft for Client Review	KN	MR
F	16 June 2017	Draft Final for Client Review	KN	MR
G	21 June 2017	Final Report	KN	MR
H	27 March 2018	Final Report with updated appendix	SI	MR

It should be noted the December 2017 traffic report and the updated March 2018 report were both titled, “Traffic and Options Modelling Report”.

In both of the reports, the proposed modification of the concept design to include a 4th lane for merging is discussed on page 39.

> "*4.6 Proposed Modifications to the Concept Design (Modified Concept Design)*
>
> *<u>Roads and Maritime have proposed modifications</u> to the Concept Design (referred as the Modified Concept Design) to increase traffic capacity in the northbound direction including:*
>
> 1. *Linemarking modification on the George Street southern approach at George Street / Bridge Street intersection to provide two through lanes in the northbound direction (one dedicated and one shared through and left turn); and*
>
> 2. *Provision of an additional short exit lane (30 metres parallel lane plus 70 metre merge) on the George Street northern approach (Windsor Bridge) at George Street / Bridge Street intersection. The additional lane merges into one lane northbound on Windsor Bridge.*
>
> *To meet possible future demand, the modification allows for future tidal flow arrangements on Bridge Street. This would result in two lanes northbound across the bridge during the afternoon peak.*

The fact the RMS requested Arcadis model the merge lane is a clear indication they were aware of the project’s failings back in 2017.

The Conclusion of the “Traffic and Options Modelling Report” states:-

Arcadis' modelling assessment on the Modified Concept Design found that:

- *The proposed modifications to the Concept Design (see Figure 4-3) would reduce delays and improve the Level of Service at Bridge Street / George Street and Bridge Street / Macquarie Street in the afternoon peak. The Level of Service B would be achieved in 2026;*

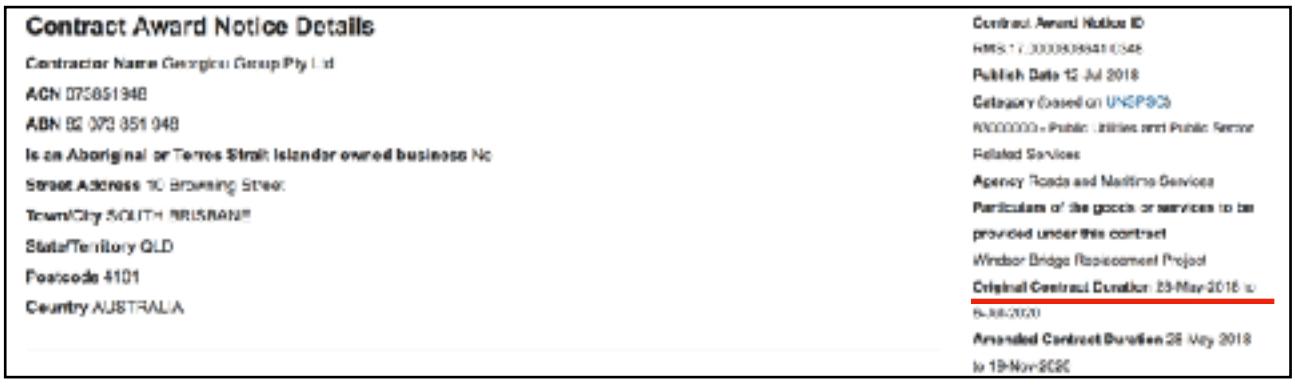
- *At Bridge Street / Macquarie Street, the intersection Level of Service would be improved to D in 2026; and*

- *In 2036, the proposed modifications would improve Level of Service at Bridge Street / George Street to C in the afternoon peak.*

NO FURTHER discussion was detailed in the March 2018 amended report regarding the implementation of the modified concept design to include the merge lane in the design of the bridge. It was not raised with the public again until the release of the Environmental Assessment Modification report in October 2019.

- 28 May 2018 - Government signs contract with Georgiou.

From https://tenders.nsw.gov.au/rms/?event=public.cn.view&CNUUID=71CEA748-E037-878C-6C45AB24318F0F5E :-



Contract Award Notice Details

Contractor Name Georgiou Group Pty Ltd

ACN 073651948

ABN 82 073 651 948

Is an Aboriginal or Torres Strait Islander owned business No

Street Address 10 Browning Street

Town/City SOUTH BRISBANE

State/Territory QLD

Postcode 4101

Country AUSTRALIA

Contract Award Notice ID

Publish Date 12 Jul 2018

Category (based on UNSPSC)

Related Services

Agency Roads and Maritime Services

Particulars of the goods or services to be provided under this contract

Windsor Bridge Replacement Project

Original Contract Duration

Amended Contract Duration 28 May 2018

It should be noted on page 5 of the Environmental Assessment Modification it states the contracts were awarded in September 2018. This is incorrect.

> *"Planning Approval was granted in December 2013, and in September 2018 a construction contractor was appointed to construct the approved project on behalf of Roads and Maritime." Environmental Assessment Report pg.5*

- 23 April 2018 - RMS appears at the first hearing of the Upper House Inquiry into the WBRP.
- 7 May 2018 - RMS appears at the second hearing of the Upper House Inquiry into the WBRP.
- 23 October 2019 - RMS document "Windsor Bridge replacement project-Environmental assessment modification" is publicly released.

Reports contained in the appendices of the modification report reveal whilst the RMS had not alerted the Upper House Inquiry nor the public of the possible modification to the concept plan, moves to progress the proposal were underway prior to the 2017 traffic plan being released.

The table below from the Jacobs 'Noise Impact Assessment' (Appendix F) documents an early draft of the report was approved on 13 July **2017**. The final date on the document as it appears in the modification report is 30 August, 2019.

The 'Landscape Character and Visual Impact Assessment Memo' by Spackman Mossop Michaels, (Appendix E) has a preliminary draft date of 1 August **2017**, and a final report date of 19 September 2019.

Job reference number 10076

Rev	Date	Description	Author	Approved by
01	01.08.2017	Preliminary Draft LCVIA Memo	MN/EH	MW
02	07.08.2019	1st Draft LCVIA Memo	MN/EH	MW
03	21.08.2019	2nd Draft LCVIA Memo	MN/EH	MW
04	13.09.2019	3rd Draft LCVIA Memo	MN/EH	MW
05	16.09.2019	Final Draft	MN/EH	MW
06	17.09.2019	Final	MN/EH	MW
07	18.09.2019	Final	MN/EH	MW
08	19.09.2019	Final	MN/EH	MW

These two reports reveal preliminary investigations into the modification report were taking place in between the finalisation of the 2017 traffic report in June 2017 and its subsequent release in December 2017.

It is thus apparent the RMS was actually proceeding with investigations for the merge lane in 2017, prior to the release of traffic report.

Just weeks after the RMS released the amended 2018 traffic report, and at the same time as they were supplying documents to the committee of the Upper House Inquiry, Jacobs finalised the technical drawings for the merge lane amendment. These are published as Appendix A in the “Windsor Bridge replacement project-Environmental assessment modification” report.

TITLE	INITIAL	DATE
DRAFTSPERSON	JP	14.05.18
DRAFTING CHECK	SH	14.05.18
DESIGNER	DH	14.05.18
DESIGN CHECK	BDP	14.05.18
PROJECT MANAGER	TR	14.05.18

Again, these were produced prior to commencement of construction and before the contract was signed for the construction of the bridge.

Why didn't the RMS submit their plans BEFORE construction began?

On 28 October 2019 the RMS appeared at a Budget Estimates hearing:-

> *The Hon. PETER PRIMROSE: Mr Hardwick, can I ask you just one question briefly? If I was to access information under the Government Information (Public Access) Act [GIPAA] of all the correspondence and reports in relation to the proposal to take an extra 300 metres off Thompson Square for an extra lane, would I see that this was not being actively considered during the time of the parliamentary committee that I was a member of?*
>
> *Mr HARDWICK: I cannot comment on whether you want to GIPAA something or not but as far as this was concerned it came to me in about the last two or three months as they had done some traffic studies in the area related to some other works. There was noticed around the changes that were occurring and the traffic uplift that had occurred was going beyond the bridge compared to the studies that were done leading up to the environmental impacts and those sorts of things. Remember it is 300 square metres. It is three metres wide roughly and 10 metres long.*
>
> *The Hon. PETER PRIMROSE: I distinctly remember the amount of detail we put into looking at the proposed traffic movements, which were actually used as the argument as to why you needed to put the new bridge there in the first place. If you cannot answer that question, who can? Maybe Mr Staples can. If I was to put in a GIPAA request for all correspondence and reports in relation to the proposal for an*

extra 30 metres being taken out for an additional lane, would that show that this was not being actively considered during the period that I and other members of this Committee were members of the committee that inquired into the Windsor Bridge project?

Mr STAPLES: I am not trying to be cute but I think you will respect that I am not going to start providing advice on the GIPAA. I think the essence of what you are asking is: What knowledge did we have during that inquiry of the potential for that? If I can just set aside the GIPAA analogy—

The Hon. PETER PRIMROSE: The GIPAA request would show me—if I was given access to the information—what was being considered within your agency. I am simply asking you: Would I see that that was being actively considered by RMS or not?

Mr STAPLES: I certainly did some preparation for that inquiry because I attended part of the inquiry, if you recall.

The Hon. PETER PRIMROSE: Yes, I remember.

Mr STAPLES: I do not have any recollection of that. But with the help of Mr Hardwick we can undertake to see whether or not there was any work being done at the time of that inquiry and we can provide a response to your question.

The Hon. PETER PRIMROSE: If there was any work on that could you please advise me why it was not made available to the committee? You would recall that we went out there and also spent ages looking at projections to consider whether there would be sufficient width with the existing roads. That was, in fact, one of the things queried. I would be very interested to find out whether that information was

being considered and whether it was made available to the inquiry. I will leave it to the witnesses to decide who the appropriate respondents are in relation to that matter.

(https://www.parliament.nsw.gov.au/lcdocs/transcripts/2266/Transcript%20-%20UNCORRECTED%20-%2028%20October%202019%20-%20PC6%20-%20Transport%20and%20Roads,%20and%20Regional%20Transport%20and%20Roads%20(combined).pdf)

In his response to Mr Primrose, Mr Hardwick stated *"... as far as this was concerned it came to me in about the last two or three months as they had done some traffic studies in the area related to some other works."*

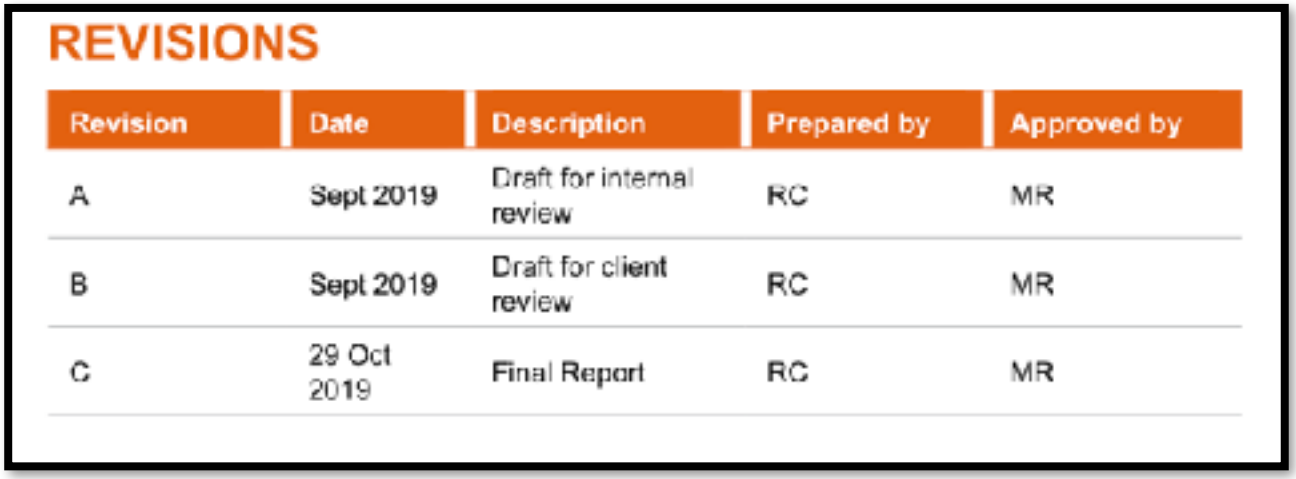
It is unclear which traffic studies Mr Hardwick is referring to although we know the Environmental Assessment Modification was based on traffic studies from 2017, and much of the proposal was finalised or at least very advanced at the time of the 2019 traffic studies.

If alternate traffic studies exist which informed the RMS of the need to proceed with proposing the modification why haven't they been included in the modification report?

Collating the dates of the reports irrefutably demonstrates the RMS was proceeding with investigations for this proposal in mid-2017, and therefore it WAS *"…being actively considered during the period that I and other members of this Committee were members of the committee that inquired into the Windsor Bridge project..."*

Facts have not only been misrepresented at the Upper House Inquiry, but also at the Budget Estimates hearing just a few weeks ago.

The third traffic study, 'Traffic Counts Data Comparison Between 2017 and 2019' was not approved until 29 October 2019, and subsequently was not publicly released until 7 November, 2019, the same day as submissions for the Modification Proposal closed.



REVISIONS

Revision	Date	Description	Prepared by	Approved by
A	Sept 2019	Draft for internal review	RC	MR
B	Sept 2019	Draft for client review	RC	MR
C	29 Oct 2019	Final Report	RC	MR

On page 4 of the 'Traffic Counts Data Comparison Between 2017 and 2019' it states traffic counts were taken between Tuesday 6 August 2019 and Monday 12 August 2019 inclusive. Yet these counts have **not** been taken into account for any of the modelling of future traffic growth, noise, amenity or heritage.

On page 3:-

> *In 2017, Arcadis Australia Pacific (Arcadis) assisted Roads and Maritime Services (Roads and Maritime) on a traffic modelling study for the proposed Windsor Bridge Replacement project (the 'project'). To support the project, traffic data was collected in March 2017 which included daily automatic traffic counts, intersection turning movement counts, queue length surveys and travel time surveys.*

The results of these counts and surveys were documented in 'Windsor Bridge Replacement Project, Traffic and Options Modelling Report' prepared by Arcadis in March 2018 (hereinafter referred as the '2018 Report').
At that time, the decision was as made not to proceed with the "zip" or merge lane and instead undertake traffic counts in the future. (*emphasis added*).

The RMS DID NOT undertake further traffic counts prior to proceeding with the merge lane **proposal,** yet they did undertake preliminary studies to support their plan, including the technical drawings.

At a minimum, the behaviour of RMS officers is extremely unprofessional. It is certainly escalating community suspicious regarding their intentions for Thompson Square. Compounding these suspicions, the curve of the new bridge structure actually appears to allow for the creation of the proposed merge lane, despite its current, unapproved status.

The timing of the reports is consistent with the RMS having every intention, from at least the finalisation of the traffic report in June 2017, of proceeding with the merge lane.

Projected Traffic Growth

In the 'Traffic and transport' report in the EIS from 2012 (page 235), it states the projected traffic growth in 2026 will be 24,000 vehicles.

Table 7-16 Bridge Street ADT projections

Road	2012 ADT (base)	2021 ADT	2026 ADT
Bridge Street, over Windsor bridge	19,000	22,500	24,000

In the 'Traffic and Options Modelling Report' from 2018 it states the projected traffic growth in 2026 will be 25,000 vehicles.

Table 4-5 Estimated Average Weekday Traffic on Windsor Bridge for 2026 and 2036

	Existing			Forecast Average Weekday Traffic (vehicles)					
	2017 Counts			2026			2036		
	NB	SB	Two-way	NB	SB	Two-way	NB	SB	Two-way
Daily	10,800	10,800	21,600	12,500	12,500	25,000	14,000	14,000	28,000
AM peak	430	1,050	1,480	500	1,230	1,730	550	1,360	1,910
PM peak	1,220	570	1,790	1,420	660	2,080	1,590	730	2,320

This is a variance of 1,000 vehicles between the forecast made in 2012 and that of 2017/8, i.e. over a period of 5-6 years.

Yet on page 5 of the "Windsor Bridge Replacement Project Environmental Assessment Modification" it states:-

Need for this modification

Planning Approval was granted in December 2013, and in September 2018 a construction contractor was appointed to construct the approved project on behalf of Roads and Maritime.

*Roads and Maritime has undertaken additional investigations to confirm traffic growth rates since the EIS was prepared. Essentially the new study indicated that traffic had grown slightly faster than originally predicted, and that about **2,000** additional vehicles per day could potentially be travelling the route in 2026 than predicted in 2012.*

Consideration of this new information has led to this proposed design modification which would improve traffic flows in the long term and provide greater future proofing. There could be significant northbound delays in the afternoon peak at the Bridge Street and George Street intersection by 2026 if the design modification is not implemented. (emphasis added)

And again on page 68, as a primary driver for the modification, it states :-

*"Roads and Maritime has undertaken additional investigations to confirm traffic growth rates since the EIS was prepared. Essentially the new study indicated that traffic had grown slightly faster than originally predicted, and that about **2,000** additional vehicles per day could potentially be travelling the route in 2026 than predicted in the EIS (2012)." (emphasis added)*

Yet the tables from the two relevant studies indicate there will only be 1,000 additional vehicles.

The RMS is claiming double the projected traffic growth indicated in their own documents.

If the slip lane is based on a claimed ‘unexpected' increase of 2,000 vehicles per day then the entire rationale for the proposal is flawed.

Clarification of this figure is urgently required.

2017 and 2019 Traffic Comparison

The ‘Traffic Counts Data Comparison Between 2017 and 2019’ documents states:-

> *Across the two time periods, traffic on Windsor Bridge has increased by 100 vehicles (0.5 per cent) per day. This suggests that the overall traffic volumes have remained relatively consistent between 2017 and 2019.*

In correspondence to Hawkesbury City Council, darted 5 November 2019, Project Manager Graham Standen noted:-

> *To validate the 2017 traffic data and assessment further traffic counts were undertaken in August 2019. The 2019 traffic counts validated the outcomes of the 2017 traffic data and assessment. (*https://www.hawkesbury.nsw.gov.au/__data/assets/pdf_file/0006/139830/ORD_NOV1_BP_Att1ofItem204.pdf*)*

As indicated in ‘Traffic Counts Data Comparison Between 2017 and 2019’ the 2017 traffic survey recorded a daily five-day average of 21,550 vehicles, whilst the 2019 traffic survey recorded a daily five-day average of 21,650 vehicles.

Vehicle Classification	Survey Year		Traffic Change in two years	
	2017	2019	No. of Vehicles	%
All Traffic Classes	21,550	21,650	100	0.5% ▲
Light Vehicles	19,180	18,860	-320	-2% ▼
Heavy Vehicles	2,370	2,790	420	18% ▲
% Heavy Vehicles	11%	13%	2% increase in heavy vehicle proportion of total vehicles	

Note: Volumes have been rounded to the nearest 10 vehicles. Volumes on Windsor Bridge are based on average weekday (5-day, Monday to Friday) traffic.

These overall figures have remained reasonably constant, but are not consistent with the projected annual increases in traffic which the 2018 Arcadis traffic report calculates to be 1.7% annually.

Future traffic growth assumptions have been reviewed and agreed with Roads and Maritime project team. Table 4-2 shows future traffic growth rates proposed for traffic modelling of the Windsor Bridge Replacement project.

Table 4-2 Proposed Growth Rates for Traffic Modelling Purposes

Road / Location	Growth Rate per Annum (%)		
	2016-2026	2026-2036	2016-2036 (average for 20 years period)
AM Peak			
Bridge Street (Windsor Bridge) and Macquarie Street	1.7%	1.0%	1.3%
George Street and Court Street	0.5%	0.5%	0.5%
PM Peak			
Bridge Street (Windsor Bridge) and Macquarie Street	1.7%	1.1%	1.4%
George Street and Court Street	0.3%	0.3%	0.3%

Table 4-2 indicates the following:

- The future traffic growth rate on Bridge Street (Windsor Bridge) and Macquarie Street will be 1.7 per cent per annum between 2016 and 2026, followed by 1.1 per cent per annum between 2026 and 2036.

Traffic growth consistent with the prediction outlined in the Traffic and Options Modelling Report are set out in the table below.

Vehicle Class	2017 traffic counts	2019 actual traffic counts	2019 traffic counts m modelled on the 1.7% increase predicted in 2017	Difference between predicted and actual traffic counts
All vehicles	21,550	21,650	22,300	-650
Light vehicles	19,180	18,860	19,850	-990
Heavy vehicles	2,370	2,790	2,450	340

It was not predicted in 2017 the number of light vehicles would actually drop, nor the number of heavy vehicles would increase by a massive 18%.

The report ‘Traffic Counts Data Comparison Between 2017 and 2019’ does not outline why the counts in 2019 do NOT validate the outcomes of the 2017 traffic data and assessment, as claimed by the project manager.

The report also fails to model predicted traffic growth for 2026 using the most recent traffic figures. With the concept of the modification proposal based on the premise traffic is increasing at a rate inconsistent with the modelling in the EIS, it is imperative the most recent information is provided.

‘

Traffic

It is completely unacceptable any infrastructure project, prior to even being completed, could be assessed, as likely to have:-

- *Major congestion at a number of key intersections during peak periods by 2026*

- *Of the three key intersections analysed, two intersections showed LoS E in the afternoon peak in 2026 and two intersections showed a LoS F (over capacity) in the afternoon peak in 2036. The LoS categories are listed in Table 6-2;*

- *Significant delaying and queuing would occur on Bridge Street in the afternoon peak; and*

- *Road safety would potentially deteriorate on Bridge Street and associated intersections for all road users as traffic increases.*

This modification application confirms the inadequacy, inefficiency and ineffectiveness of Option 1, which the Government has been warned about since the early days of the project.

In 2008, a RTA document stated, "*traffic volume across Windsor Bridge already exceeded the threshold requiring 4 lanes across the river."*

Despite this the RMS told the community:-

> *"A four lane bridge has not been considered, as it would require a much larger footprint within Thompson Square to accommodate the bridge approach road."*

As evidenced in Section 5 of this submission, a four-lane bridge has most definitely been considered.

In the 2008 report 'Urban Design Assessment Of Bridge Over Hawkesbury River At Windsor', the Government Architect's Office condemns the plan to proceed with a new bridge in the location of the replacement bridge, and recommends:-

> *"In the longer term, in line with demand, a new bridge could be built in a more suitable location on the periphery of the historic town centre and more closely related to future urban growth. At that time, the original bridge could possibly be used to meet the needs of light local traffic or pedestrian and cyclists or decommissioned."* and,
>
> *"In consideration of the future traffic demands and urban growth develop a new bridge in a more appropriate location on the periphery of the historic town centre and more closely related to future urban growth."*

Then in 2013, in a report commissioned by the Department of Planning and written by Cambray Consulting, it was found:-

> *"Rather than constructing a three-lane (ultimate) bridge which has more traffic capacity than the roads and intersections feeding it, we would suggest considering alternative bridge crossing locations which may provide adequate traffic capacity for a longer period of time (e.g. a bypass option)." Cambray Consulting (p.24)*
>
> *"We suggest that it may be prudent to 'step back' and undertake a broader study to investigate long term solutions, and once a preferred long term solution is identified, consider a staged approach or interim treatments to progressively deliver that long term solution. This would*

avoid investing substantial funds into a traffic route which will have a limited 'life' due to constrained intersection capacity on the roads feeding the bridge." Cambray Consulting (p.70)

And in 2012,

"The opportunity should be taken now to resolve the heritage and traffic issues by completely removing the bridge route from the Thompson Square area. Leaving the route through the Square area, at very best, can only postpone problems for future generations. There is no doubt that eventually another crossing will be required that better copes with through traffic"
Engineering Heritage Committee of Sydney Division of Engineers Australia

The RMS knew where the failings of their replacement bridge lay. In a 2012 Question and Answers document, the RMS said "The traffic performance of the preferred option is largely related to the Macquarie Street / Bridge Street and the Windsor Road / Hawkesbury Valley Way intersections." It acknowledges, "modelling shows that these key intersections could not accommodate the predicted future traffic volumes and the models indicated traffic congestion."

Regardless of advice or traffic counts the RMS continues to push traffic through intersections at capacity and with little scope for improvement, unless the acquisition and total destruction of heritage buildings were to occur.

Although overall traffic counts remain relatively unchanged when comparing the 2017 and 2019 studies, the proportion of heavy vehicles to cars has risen dramatically over those two years.

The 18% increase in heavy vehicles has lead to an additional 420 trucks per day using Bridge Street. This increase in the proportion of heavy vehicles to light vehicles between 2017 and 2019 would change the traffic performance, yet this has not yet been modelled and has not formed the basis for the modification proposal.

The report titled "Impact on heavy vehicles on surrounding traffic characteristics" by Moridpour, Mazloumi and Mesbah, Journal of Advanced Transportation, September 2014, states:-

> *"Heavy vehicles impose physical and psychological effects on surrounding traffic flow because of their length and size (physical) and acceleration/deceleration (operational) characteristics."*

Simply put, it is not just the size of the heavy vehicles combined with the acceleration and braking capacity that will impede on traffic flow, but also the behaviour of surrounding cars, who may try to avoid being in the vicinity of heavy vehicles and will change their driving behaviour if surrounded by trucks.

The report continues:-

> *"Heavy vehicles impose physical and psychological effects on surrounding traffic flow because of their length and size (physical) and acceleration/deceleration (operational) characteristics."*

It is reasonable to suggest the increasing proportion of heavy vehicles to cars using Bridge Street will impede traffic flow, yet this has not been modelled, nor assessed.

Until the most accurate and recent traffic figures are modelled any claims made by the RMS of improved traffic flow and reduced queues are highly questionable.

Noise

The Environmental Assessment Modification report claims:-

Noise and vibration:

- *no change to the predicted total traffic noise level to residential receivers would result from to the proposed modification;*
- *changes in noise levels within the recreational areas of Thompson Square would be minor; levels in the southern portion would increase due to the relocation of traffic lanes westward at the Bridge Street and George Street intersection, however levels would reduce in the north as the design increases separation distances to the design;*

As included as Appendix F in the Environmental Assessment Modification, Jacobs undertook as Noise Impact Assessment for the Northbound Merge Lane on behalf of the RMS. The first draft was approved on **13 July, 2017.**

This was after the traffic counts were undertaken in 2017, yet prior to the 2017 Arcadis Traffic and Options Modelling Report released in December 2017.

According to its Document History and Status, the Jacobs report was updated on 5 August 2019, with the final date for the Noise Impact Assessment document listed as 30 August 2019. This document was publicly released on 23 October 2019 in the 'Windsor Bridge Replacement Project - Environmental assessment modification'.

With the 2019 traffic counts undertaken from Tuesday 6 August 2019 to Monday 12 August 2019 any assessment of noise was based on the 2017 traffic figures.

This is confirmed in the Noise Impact Assessment :-

“This noise assessment of the proposal is based on traffic volumes for the year of opening (2026) as provided in the Windsor Bridge Replacement Project Traffic and Options Modelling Report, Revision G (Arcadis, 21 June 2017).”

Yet these are not the most recent, therefore nor the most accurate traffic figures. Also noteworthy is the indication there are at least 7 versions of this “Modelling Report”.

In the document ‘Traffic Counts Data Comparison Between 2017 and 2019’, publicly released on 7 November 2019, it states the number of heavy vehicles using Bridge St has increased by 18% between 2017 and 2019. This is an increase of 420 heavy vehicles per day, from 2,370 to 2,790, averaged over a 5 day period.

Unfortunately, these additional truck movements were not taken into account when assessing the noise impacts of the merge lane.

Jacobs assessed the predicted noise of 2026 traffic based on figures collected in 2017. Yet, despite claims by the RMS to the contrary, traffic growth is not consistent with the rate predicted in 2017.

The 2019 traffic count indicated an average of 2,790 heavy vehicles per day. This rose by 18% over the previous two years. If heavy vehicles continued to rise at an estimated 9% each year, by 2026 there would be in excess of 5,100 heavy vehicles per day travelling along Bridge St.

If we were then to follow the methods of calculating traffic volumes in the Jacobs report, the number of heavy vehicles using the merge lane per day would be 408. This is derived from 2,550 heavy vehicles (half of the 5,100) travelling northbound, with a predicted 16% using the merge lane.

2. Road traffic volumes

This noise assessment of the proposal is based on traffic volumes for the year of opening (2026) as provided in the *Windsor Bridge Replacement Project Traffic and Options Modelling Report*, Revision G (Arcadis, 21 June 2017). The traffic volumes used in the noise assessment are presented in Table 2.1 below.

Table 2.1 : Road traffic volumes for 2026 year of opening used in noise assessment

Lane	Daytime (15 hour)				Night-time (9 hour)			
	Light Vehicle	Heavy Vehicle	Total	% Heavy Vehicle	Light Vehicle	Heavy Vehicle	Total	% Heavy Vehicle
Bridge Street – northbound								
Merge Lane	1672	126	1798	7	148	17	165	10
Right Lane	8976	676	9652	7	796	89	885	10
Bridge Street - southbound								
Left Lane	4867	311	5178	6	965	107	1072	10
Right Lane	4867	311	5178	6	965	107	1072	10

The traffic figures in the above table have been derived from the Arcadis report which indicates traffic volumes of 12,500 vehicles per day (vpd) northbound and 12,500 vpd southbound in the 2026, the year of project opening. Guidance for the distribution of traffic volumes over the through- and merge lanes was taken from Figure C-2 of the Arcadis report which indicates that the merge lane would convey approximately 15% of all vehicles.

Compare this to the table below, which when you combine the Daytime and Night-time heavy vehicle counts using the merge lane, gives us a total of 143 heavy vehicles using the merge lane per day.

The variance of those two figures is 265 heavy vehicles per day, or an additional 185% of heavy vehicles using the merge lane.

By not taking into account the most recent traffic figures, the methods of calculating any additional noise impact become inaccurate and inadequate.

Furthermore, by not providing the public with a complete data set including forecast traffic volume for 2026, as modelled according to the 2019 base figures, potential impacts of the merge lane cannot be accurately assessed.

In the Jacobs Noise Impact Assessment report it states:-

"The prediction of daytime (15 hour) and night time (9 hour) noise level change to Receiver R3 was determined using the UK Department of Transport, Calculation of Road Traffic Noise (CoRTN 1988) algorithms. The calculation algorithm allows for traffic volume and mix, type of road surface, vehicle speed, road gradient and ground absorption."

There are two distinct issues with this methodology - the use of CoRTN algorithms, and the location at which any adjustments to the noise levels were calculated.

Calculation of Road Traffic Noise (CoRTN 1988)

According to the NSW Road Noise Policy, published by the Department of Environment, Climate Change and Water NSW, there are "three models generally used in Australia, and which have been validated under specific Australian conditions". Pg. 49

The CoRTN method of modelling noise is described as,

"…relatively simple to use, and for this reason may be the most appropriate method for relatively small projects. However, the method provides only relatively simplistic corrections for the percentage of heavy vehicles and the distance from the roadway.".

The NSW Road Noise Policy advises:-

"A point that should be taken into account in any traffic noise calculation is the effective vehicle height. This can be crucial in determining the predicted attenuation from barriers. The effective

height of light vehicles is generally taken as 0.5 metres, and this appears to give acceptable results. However, for heavy vehicles there are often three distinct sources, representing the tyres, engine and the exhaust, with different noise emission levels and different heights. The recommended practice is to model heavy vehicles as three sources…"pg.49.

It goes on to say (page 50*)*:-

"It is important to note that any model used must be validated with representative in-field measurements so noise predictions reflect the actual situation as closely as possible and any differences between the model output and measured values are known."

It appears the noise assessment for the merge lane did not follow the guidelines in the NSW Road Noise Policy.

Once again by not including the most recent traffic figures as part of the assessment, accurate modelling has not been undertaken.

Locations for Modelling Noise

Even prior to the merge lane proposal, the impacts of noise on Thompson Square parkland were well documented in the 2012 EIS, which stated the operation of the new road will see noise levels in the parkland in excess of 72dB LAeq with peaks near 90dB.

If we look to the European Environmental Agency, they advise "that noise affects people physiologically and psychologically: noise levels above 40 dB LAeq can influence well- being, with most people being moderately annoyed

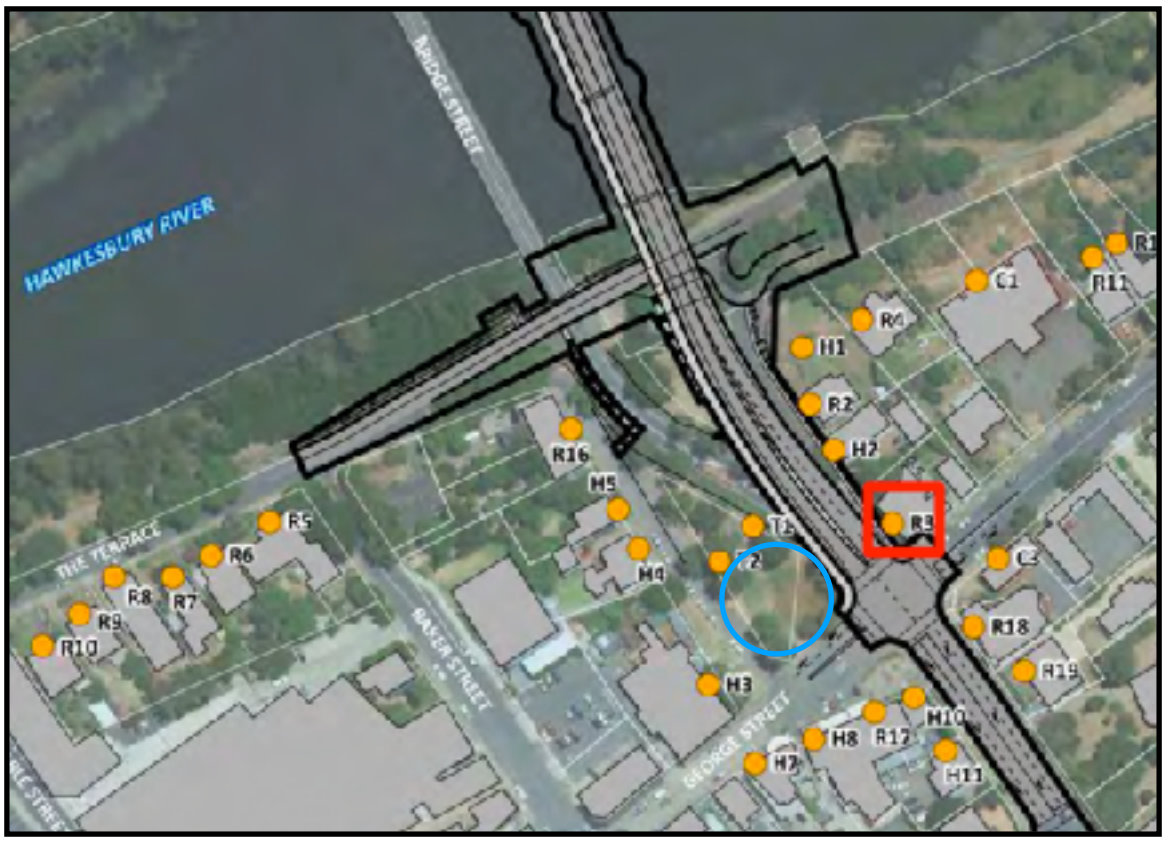
at 50 dB LAeq and seriously annoyed at 55 dB LAeq. Levels above 65 dB LAeq are detrimental to health".

In the 2012 EIS it states,

> *"Thompson Square parkland has been identified as an area of passive recreation adjacent to the project and as such has an $L_{Aeq\ 15\ hour}$ daytime noise criterion of 55 dB(A)." EIS, 7.5 Noise and vibration, pg. 301*

The levels recorded for the WBRP EIS are over 3 times the level stipulated in the RNP (every 10dB increment doubles the noise level, so 15dB is 3 times as loud, 20dB 4 times as loud) and in the future, noise in the Thompson Square parkland will be twice as loud (75dB) as levels detrimental to health. With increasing numbers of heavy vehicles beyond those predicted by the RMS the issue of excessive noise levels is only set to get indicated by the red box in the diagram below.worse.
Whilst the EIS assessed the noise impacts in nearly 30 locations, the modification proposal has only assessed the noise in one location - that of the residence on the corner of Bridge and George Streets - is

Disappointingly, no monitoring has taken place in the parkland closest to the proposed merge lane, indicated by the blue circle.



On page 17 of NSW Road Noise Policy the guidelines for the locations to assess noise includes:-

Open space – passive or active use	The noise level is to be assessed at the time(s) and location(s) regularly attended by people using the space. In this regard, 'regular' attendance at a location means at least once a week.

The Thompson Square parkland is frequented daily, and is a popular location on weekends. This certainly satisfies the criteria that open space attended at least once a week should be assessed.

The image below, taken in October 2018, is typical of the weekend patronage of the parkland in the Square.

It is unconscionable to suggest an increase of 18% in heavy vehicle numbers in 2019, potentially leading to an additional 185% of heavy vehicles using the merge lane in 2026, would not impact anyone in the parkland directly adjacent to the merge lane.

Are the noise levels responsible for the “High Amenity Parkland” being reduced to a strip of land a mere 18 metres wide?

And if we refer back to the NSW Road Noise Policy, we find the very idea of constructing a sub-arterial road through the heritage space defies good planning practices in reducing noise exposure.

> *“The primary need for the development of new roads is to improve access and safety, and reduce travel times. While the road network must be updated to cope with future demands, the network’s environmental footprint should be kept to a minimum. Development of new roads affords opportunities to reduce exposure to road traffic noise through techniques such as town bypasses. It is therefore important that during the early stages of road planning, noise minimisation is considered during route selection processes for new roads or major realignments.” NSW Road Noise Policy pg. 3*

Once again we are reminded of just what a poor plan the WBRP is when compared to the outcomes that could have been achieved with a town bypass.

Further monitoring and modelling of the noise impacts, based on the 2019 traffic data, is required to properly assess the full impact on Thompson Square.

Vibration

The Jacobs Noise Impact Assessment states:-

> "*No operational vibration impacts are expected as a result of the revised design, therefore vibration impacts have not been considered in this assessment.*"

The increase of heavy vehicles by 18% over the past two years, and the possibility of further large increases in the future, would impact Thompson Square regardless of the number of lanes on Bridge Street.

Regarding future traffic impacts being assessed for the proposal, at what point do the outcomes become so poor that further work to push increasing numbers of heavy vehicles through the Square is abandoned?

The opportunity has existed, but been dismissed, to relieve the Square of its traffic issues by putting through traffic on a bypass. This opportunity still exists.

Furthermore, the statement in the 2008 Options Report in discussing options such as a four lane bridge says:
“However, this could prejudice a decision to construct another crossing elsewhere where it could be more efficient, bypassing the township of Windsor.”

And with these words the entirety of the RMS’s betrayal of the Hawkesbury is laid bare.

The Business Case and the Upper House Inquiry

There is another serious matter regarding, in particular, the timing of the Modification 1 application. Scrutiny of RMS documents makes it very clear that at least as early as 2008 the RMS was contemplating the sort of changes now proposed. In fact, the plans for Modification One were actually published, at the very latest, by 2017.

Business Case V0.7, provided to the Upper House Inquiry was originally released in October 2016 and the version provided to the Inquiry was updated after the Gate 2 assurance review in November 2017.

The Inquiry itself was established on 16 November 2017.

Inquiry hearings commenced in April 2018.

The redacted business case was provided to the Inquiry on 11 May 2018, along with the associated Assurance Review Report and the Project Team Response and Action Plan.

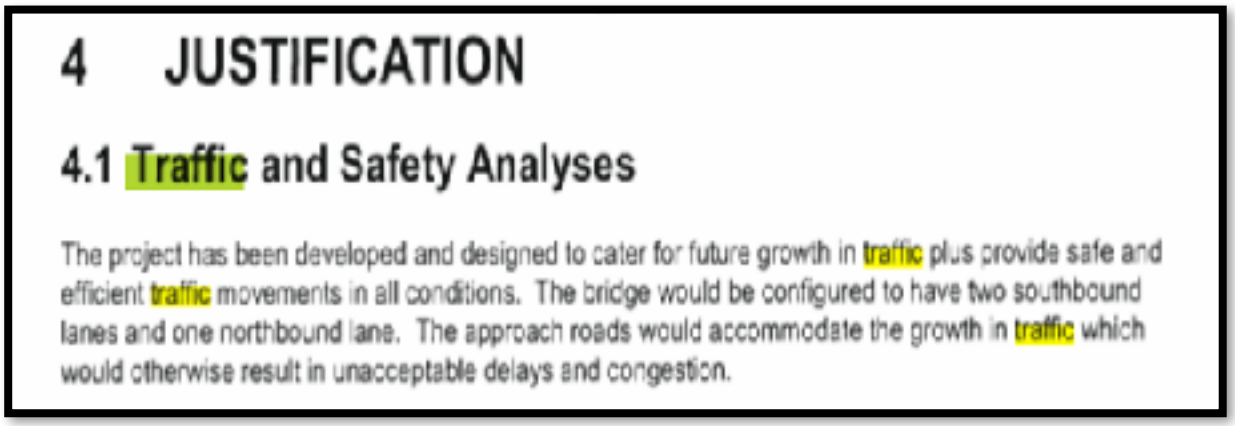
On 18 June 2018 the RMS provided the Inquiry with the Gate Four Gateway review, which had been provided to Mr Kanofski on the first of that month.

By the time RMS officers were giving evidence to the Inquiry the agency KNEW the traffic situation had deteriorated, making the Business Case inaccurate and their testimony questionable.

At the very least the RMS should be required to explain why, despite the specific request of the Chair of the Upper House Inquiry, they had not only commenced construction but were forging ahead with preliminary

investigations and contracting Arcadis to undertake the work. Their failure to mention these matters to the Inquiry, particularly given the redacted Business Case abounds in text and data testifying the significance of traffic in its conclusions, sets a very dangerous precedent.

For example, on page 39:



4 JUSTIFICATION

4.1 Traffic and Safety Analyses

The project has been developed and designed to cater for future growth in traffic plus provide safe and efficient traffic movements in all conditions. The bridge would be configured to have two southbound lanes and one northbound lane. The approach roads would accommodate the growth in traffic which would otherwise result in unacceptable delays and congestion.

On page 29:

> *Improved traffic and transport efficiency through:*
> - *Reduced queuing and delays*

On page 24:

> *"The 2017 survey data shows that average travel speeds on Windsor Bridge are between 20 and 40 km/h; lower than the posted speed limit of 60 km/h.*
>
> *In the morning peak the average travel speed on the bridge is 40 km/h in the northbound direction and 20 km/h in the southbound direction. In the afternoon peak, average travel speeds on the bridge are 40 km/*

h in the northbound direction and 30 km/h in the southbound direction."

(This is a somewhat disingenuous analysis given the posted speed for the 2,400 heavy vehicles as they cross the bridge is 40kmph, constraining the speed at which other vehicles can travel).

Alarmingly, consistent with tenor of the 2008 Options Report, Page 26 of the Redacted Business Case says:

"A further modification was investigated post-EIS-approval for this intersection post approval (sic) to further improve PM peak performance. It included a two-lane northbound exit from the intersection that merged back to one lane before the bridge. Whilst this was found to provide further benefit at negligible additional cost to PM Peak traffic, the modification was not adopted due to its non-compliance with the EIS and Minister's Conditions of Approval. The modification required further encroachment into Thompson Square. The current proposal enables this modification to be undertaken as future low-cost retrofit upgrade at a later date."

While page 13 of the Mod 1 document says:

"The option of adding an additional north-bound lane on the new bridge was considered but deemed to be unacceptable and unnecessary for the following reasons:

- *Significant cost associated with widening the bridge deck;*

- *A longer period of disruption to the community and traffic for the construction;*

- *Greater impact on heritage and character of the local area; and*

- *A further reduction of the Thompson Square parkland associated with changes required to the bridge approach and foundations.*

The proposed option of the merge lane best meets the project objectives of minimising the impact on heritage and the character of the local area, meeting the long term community needs and providing a cost effective and affordable outcome."

And the RMS Q&A 2012 says:

Could the bridge be expanded to four lanes in the future?

RMS is not designing a four lane bridge. The width of the proposed bridge allows for a 3 metre shared path, two 3.5 metre lanes with 2 metre shoulders adjacent, and bridge barriers. The bridge will be linemarked for two lanes, with provision to re-linemark for three lanes when necessary. A four-lane bridge would mean extensive and costly modifications to the bridge and the approach roads. A separate pedestrian bridge would also need to be provided.

Would a four lane bridge and approach roads provide a better cost/benefit ratio?
A four lane bridge has not been considered, as it would require a much larger footprint within Thompson Square to accommodate the bridge approach road.

Process

CAWB remains most concerned regarding project processes. In particular, in this case, the statement, “Any refinements to the project which are not consistent with the approved project must be approved by the Minister under Section 5.25 of the EP&A Act.” (page 7).

When CAWB raised the matter of a previous design change to the southern abutment, we were advised, “I can also confirm that this is the first formal modification to be considered to the approved project. The design changes that were made by RMS were deemed by RMS to be undertaken consistent with the terms of the approval.”

It would be appreciated if the Department of Planning could clarify their role with regard to project compliance and explain why a major redesign of the southern abutment with all the associated risks to priceless archaeology does not require any input from Planning, or community consultation, when something variously described by a senior Roads bureaucrat as a “slip of land” and “a thin strip of land” does.

Gaps in Information Provided

CAWB supports the request by Hawkesbury City Council seeking the following information:

(i) Traffic data (movements, numbers and time of day) that relates to a more realistic project catchment, including:

• Court Street and related access roads to the Governor Philip Boat Ramp
• Bridge Street to Fitzroy Bridge, South Creek
• Bridge Street to the Wilberforce Road/Freemans Reach Road intersection
• Macquarie Street to Kable Street

(ii) Details of the 2017 and 2019 Traffic Surveys, together with:

• A summary of the differences between them
• Details of the actual counts (date and time) that informed those differences

(iii) Details of:

- The status of the previously proposed Stage 2 works on Fitzroy Bridge that involved the conversion of the existing Fitzroy Bridge pedestrian walkway to an additional traffic lane.
- Options and cost estimates considered as part of the process of adopting the currently preferred option, including details of options considered to eliminate and/or reduce the area of Thompson Square proposed to be alienated by the proposed road/bridge widening.
- Options for responding to the provisions of the Thompson Square Conservation Management Plan.

In addition to this and as requested, CAWB notes ongoing difficulties obtaining sought or promised documents from RMS officers, including:

- A formal response to a requested discussion paper regarding international aspects of the historic significance of Windsor Bridge

- Promised technical drawings explaining the need for the project to intrude in a westerly direction into the parklands to the extent currently planned.

Calculation of Areas

In November 5, 2012 CAWB requested, from the then-Project Director for the Windsor Bridge Project, Mr Iain MacLeod, the measurements, calculations and a map or plan, in order to better understand how the claimed increase of 500 square metres of space in the Square was arrived at.

Given this claim was, at the time, widely publicised, it was anticipated a computer-generated plan and calculations would be provided. However, it appeared the calculations to verify the claim were done as a consequence of CAWB's request.

Then on November 14 the EIS was released and in it the RMS were claiming a 1400 sq ms increase in area, describing it as "additional accessible usable open space within Thompson Square parkland. "

Amended calculations in support this new claim were again requested.

The information was provided with the caveat that verification of the information provided was being sought and this "may take some time". It is noteworthy that this was being said about a claim in the project's, already-released EIS. Verification was never received.

Mr MacLeod also said, "Effectively, the additional useable space has become that which is now contiguous with the space that is currently used between the Macquarie Arms and the existing bridge approach road. ...."

However it is clear the lower parkland actually ceases to exist. Most of it is under the arterial road being built and most of the balance is under the bridge.

This makes establishing the scale of what is currently proposed equally difficult and the RMS themselves yet again seem a little unclear on the matter.

An RMS document states:-

> *“Increase in open space is reduced from 9% to 4% more than present.*"

Assuming the 9% is the 500 m² (not the 1,400 m²), CAWB did the following simple calculation:

500 divided by 9 = 1%

Multiply by 4 (i.e. the 4% increase) = 222.2 m² increase.

To establish the loss of area subtract the 222.2 from the 500 m

This simple calculation results in an area of 277.8 or around 300 m².

It is unclear how the RMS is deriving the 160 m² they claim will be lost from the proposed increase in area.

Mr Hardwick (RMS) when answering questions in Parliamentary Estimates, at one stage referring to three hundred square metres.

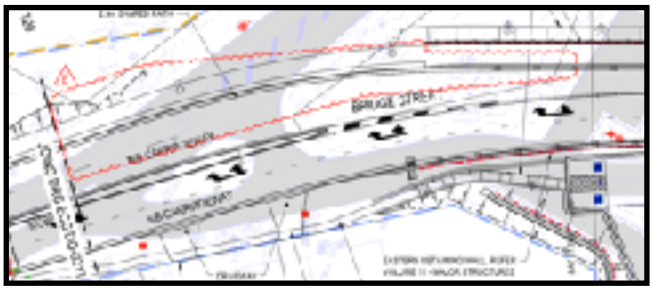
However Modification 1 has revealed the situation is actually worse than the above calculations indicate. RMS documents now reveal the high amenity parkland is a strip 18 m wide with designated notional landscape buffers on either side.

In responding to Modification One the community was entitled to this information, in a clear and transparent format.

Technical Drawings

Appendix A of the Windsor Bridge Replacement Project Environmental Assessment Modification contains a series of technical drawings produced by Jacobs on behalf of the RMS.

Each of these has a section highlighted with a scalloped red line, and is marked with the letter ‘B’ in a red triangle.

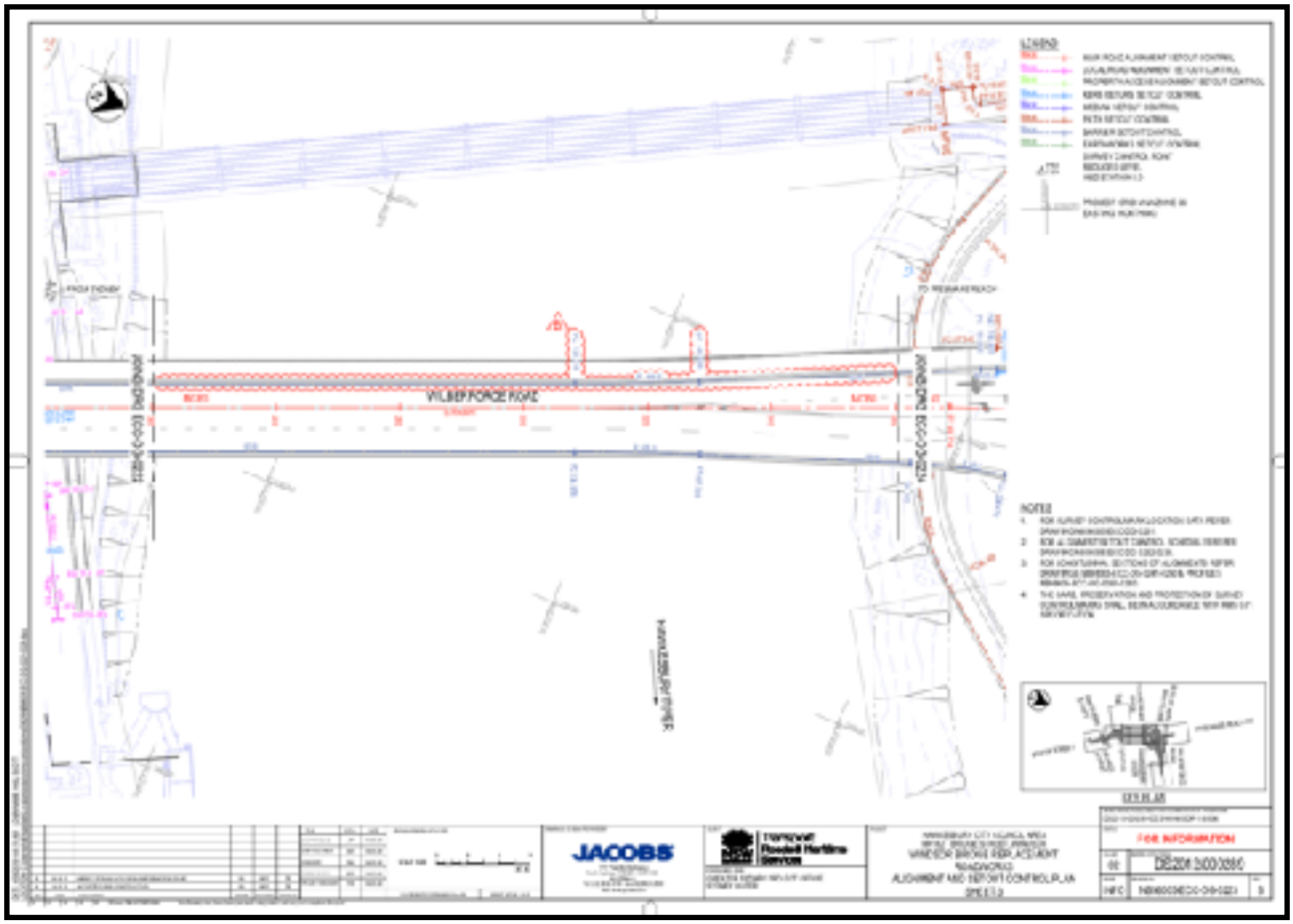


It is assumed these areas highlight the location of the proposed works for the proposed merge lane.

Whilst a person with the required technical skills would be able to decipher these drawings, for a member of the general public to distill information from these diagrams can be a challenge, particularly when explanatory information is not provided.

Such is the case with the technical drawing of ‘ALIGNMENT AND SETOUT CONTROL PLAN SHEET 3’.

This diagram highlights the barrier between the roadway and the shared pedestrian/cycleway.



As the bridge deck has now been built, this diagram raises questions as to whether there are possible amendments to the shared pathway barrier, or to the lane configuration.

It is requested additional information be provided to inform the community of the purpose of these drawings.

Heritage

The Environmental Assessment Modification report states:-

> *"The heritage assessment determined that the cumulative impact of this design change is minor and within the context of the project…" pg 34*

At a Hawkesbury City Council meeting on 12 November 2019, Councillor Danielle Wheeler described this as, "RMS speak for we can't make a bigger mess than we already have"

The reality is this proposal exacerbates, but ignores all the impacts previously caused by this project and identified by relevant experts.

From Windsor Bridge Replacement Project Independent Heritage Review, Casey and Lowe,

> *"The **Urban Design** mitigation measures must be examined closely as they do not relate to heritage significance, or heritage design principles and conservation policies. The mitigation measures do not alleviate the implication that appears to be acceptable to RMS that the WBRP can have such a major impact on a SHR conservation area and State significant archaeology. The urban design report's assessment has concluded that all visual impacts within Thompson Square are High, the highest level of impact. The heritage report's assessment has stated that the only real mitigation for the proposed impacts relates to archival recording, archaeological excavation of the site, reporting and interpretation. The main mitigation for the built heritage appears to be a design which consolidates the park and undertakes planning for a redesign of Thompson Square and the*

Terraces. This proposed design is not based on a full understanding of the significance of the heritage values of the place, nor on any heritage design principles or conservation policies, on which to base a future design. Therefore it is not mitigating impacts on heritage but an additional impact ." pg.8

Former Government Architect Peter Mould was equally scathing towards the project when, at the Upper House Inquiry, he stated:-

"I remain convinced that infrastructure of the scale proposed would have such a negative impact on Thompson Square and its heritage significance that alternative locations should be pursued. There is much discussion in the reports on mitigation measures to lessen the impact of the bridge on the square—bridge design, urban design, and so forth—but they all accept the proposition of a bridge in the square. I do not believe the impacts of a bridge of this height and width can ever be successfully integrated into the square. The scale of the intrusion is too great and will destroy its urban setting and its heritage values."

And now there is a proposal is for an even wider approach road.

To describe the parkland lost due to this proposal as simply a 'slip' of land (Budget Estimates) or rating the impacts on amenity and landscape as 'slight' belies the importance of this space and its cumulative story.

Dismissing the impacts of the proposal because they are comparatively less than the already undeniably catastrophic heritage destruction does not lessen their impact.

Of extraordinary concern is the following statement (pages 69-70):

• Aboriginal heritage:

- the proposed modification would bring construction works closer to the area of highly significant Aboriginal archaeology sensitivity. A reduction in the buffer zones identified in the Detailed Salvage Strategy (AAJV, 2017c) would mean additional Aboriginal archaeological impacts are not anticipated;

The dishonesty of this approach, this “moving of the goalposts” is abhorrent and if agreed to by AAJV casts their professionalism into serious doubt. Either their original assessment of the area of the buffer zone was wrong, or they have compromised their professional standards by reducing it.

Thinking Outside the Square

With the yet unfinished replacement bridge already being identified as having poor traffic outcomes, it raises the issue of why an alternative solution wasn't properly investigated.

Across the world and in Australia there is an overarching trend towards building bypasses to keep traffic moving. In NSW, recent years have seen the completion of bypasses at Berry, Kempsey, Nambucca Head and Moree. Many of these roads have less daily traffic and heavy vehicles than currently cross Windsor Bridge.

Yet in Windsor we are told, “Traffic volumes are too low to warrant a bypass”.

However traffic through Thompson Square exceeds that used to justify bypasses of other towns in NSW.

Consider the following data:

- **Windsor: 22,600 vehicles/2,800 Trucks**
- Berry Bypass: 21,300 vehicles/1,704 Trucks
- Kempsey Bypass: 21,538 vehicles/2,700 Trucks
- Nambucca-Urunga Bypass: 14,000 vehicles
- Moree Bypass: 1,700 Trucks – RMS Community Update

The 18% increase the number of heavy vehicles travelling across the bridge and through Windsor continues to grow at an alarming rate.

It has been NSW Government practice to remove such excessive numbers of trucks from towns and pedestrian areas. In Berry, Premier Gladys Berejklian proclaimed that "The people of Berry have their town back". Does Windsor not deserve to have our town returned to the people as well? A bypass, by definition, is not a connection to a town; it is a network connectivity solution to facilitate through traffic travelling between points other than the town itself.

There are six main routes out of Sydney: The Pacific Highway, Princes Highway, Hume Highway, Great Western Highway, Bells Line of Road and Putty Road.

Putty Road, the route accessed through Thompson Square and across Windsor Bridge, carries more traffic than roads through Berry or Kempsey and is still the main inland road north from Sydney.

Yet at the Upper House Inquiry, the following exchange occurred:-

Dr MEHREEN FARUQI: *I think it is in the questions and answers document on the RMS website dated August 2016 that one of the reasons to not build a bypass is that traffic volumes are too low to warrant it. We heard from witnesses today about bypasses that have been built for much lower volumes. I have looked at them in other towns, for instance in Goulburn and other places. What would you say to that? Do you think it is still valid to say that the traffic volumes are too low to warrant a bypass with 26,000 vehicles per day as assessed?*

Mr LANGFORD: *I can talk to some of that. I think the key area of concern around a bypass is that when we have done the traffic studies no one bypass actually meets all of the objectives and all of the travel demand. I think when you talk about bypasses in other towns or other places they are very specific to what the need is. At Windsor itself the traffic studies have shown—and Mr Allan can go into it in further detail —that either a bypass on the east or the Rickabys Line bypass to the south does not address the majority of travel demand from either side of the river. The bypass does not provide improved traffic performance compared to the proposed replacement bridge on the current alignment.*

The reality is no proper bypass solution was ever investigated as part of the WBRP, therefore to claim a "bypass does not provide improved traffic performance compared to the proposed replacement bridge on the current alignment" is a falsehood.

Yet it begs the question - how could a bypass perform at a lower standard than a NEW bridge that will have:-

- Major congestion at a number of key intersections during peak periods by 2026 extending throughout a large part of the day;

- Significant delaying and queuing occurring on Bridge Street in the afternoon peak; and

- Road safety potentially deteriorating on Bridge Street and associated intersections for all road users as traffic increases. (Environmental Assessment Modification

When Mr Langford remarked, *"I think the key area of concern around a bypass is that when we have done the traffic studies no one bypass actually meets all of the objectives and all of the travel demand. I think when you talk about bypasses in other towns or other places they are very specific to what the need is."* he failed to acknowledge that around 70% of traffic using the bridge is 'through' traffic. He also failed to appreciate the need for a wider survey of traffic movements.

From the RMS Questions and Answers, April 2016:-

Q: What will happen when traffic demand increases in the future? Roads and Maritime will monitor traffic volumes over the new bridge once completed and will assess options for meeting future traffic growth, including improvements to the local and regional road network.

At a Budget Estimates hearing on 28 October 2019 the RMS was questioned on the modification proposal:-

The CHAIR: What are the other alternatives?

Mr HARDWICK: We would have to review the ways in which the road network works around that whole area to see other options available to us to move traffic.

The CHAIR: So no other options are being consulted on, just the one to take up more of that square?
Mr HARDWICK: At the moment, the option is to just take a thin strip of that land that is there. We are still returning more land back to Thompson Square than what was there when we started.

The CHAIR: Thank you.

How bad do the cumulative impacts of this project have become before the RMS takes steps to *"…review the ways in which the road network works around that whole area to see other options available to us to move traffic."* The scope of the Windsor Bridge Replacement project has been too narrow and simplistically focused on just the bridge and its immediate approaches. A broader analysis is required.

Budget

It is of some interest to note the lack of a budget for this application within the documents provided to the public. This absence is at odds with other stages in this project and represents yet another hurdle for the public in trying to assess the proposal. The financial cost of a project can be measured as "what else could be provided with the money?" Hence, how would this modification proposal compare, for instance, with other options?

In correspondence from Project Manager Graham Standen to Hawkesbury City Council Mr Standen says:-

> *"As the pavement widening area is only minor (160 m2) the additional cost of the works is estimated to be approx. $100,000. The modification however is estimated to deliver substantive saving in travel time costs over the lifecycle of the project."* *https://www.hawkesbury.nsw.gov.au/__data/assets/pdf_file/0006/139830/ORD_NOV1_BP_Att1ofItem204.pdf*

This cursory mention of $100,000 does not provide any breakdown of costs, including archaeology, planning and exhibition of the modification nor the associated public consultation.

It does not acknowledge the cost of the loss of high amenity parkland, of the additional noise impacts, pollution or the cost of the destruction of significant heritage.

Compliance Issues

There remain a number of compliance issues CAWB regards as unresolved. This section seeks to specifically deal with just one of these issues - matters associated with condition A4. In so doing, it also highlights the unreliability of information provided by the RMS and raises significant questions regarding the project budget and published tender amounts.

Relevant significant dates are:

Date	Action
20.12.13	WBRP approved by the Minister for Planning and Infrastructure
20.11.17	The Final Business Case Assurance Review Report was published. On page 13, it says: Ref. S2 The ERP were advised by DPE that condition A4 had already been satisfied because of the minor works that RMS has already undertaken on the site. Condition A4 relates to the 5 year consent lapse period as part of the planning approval conditions. Specifically, Condition A4 of the CoA states, "*A4 This consent shall lapse five years after the date on which is granted, unless the works the subject of this SSI consent are physically commenced on or before that date*."
14.02.18	Application for the approval of the CMP was submitted
28.05.18	**Government signs contract with Georgiou**
29.05.18	Daily Telegraph says contract is worth $101million
01.06.18	Windsor Bridge Gate 4 Gateway Review issued (i.e. AFTER the Georgiou contract was signed.)
18.06.18	Windsor Bridge Gate 4 Gateway Review provided to UHI.
19.06.18	Treasurer and Member for Hawkesbury, Dominic Perrottet brings down the 2018-19 State Budget. Windsor Bridge ETC is $137million, $33,744,000 spent to date.
07.07.18	Screenshot of cached Georgiou site clearly states contract cost is $101 million
12.07.18	Contract publication says contract cost is actually $67,544,965.35
03.08.18	Georgiou site now says Contract Value NFP

01.09.18	**A construction contractor was purportedly appointed "in September 2018" (Mod 1)**
20.12.18	The date by which construction had to commence.
01.09.19	**Construction of the approved project purportedly commenced "in September 2019" (Mod 1, page 9)**

In the Mod 1 document the RMS say:

> *September 2018 a construction contractor was appointed to construct the approved project on behalf of Roads and Maritime.*
> Page 5 "Windsor Bridge Replacement Project Environmental Assessment Modification".

On page 11 they say:

> *More than five years after the planning approval was granted, a contractor was appointed to construct the project on behalf of the proponent, Roads and Maritime. The project is currently under construction.*

Condition B1 of the CoA states,

> *The Applicant shall not carry out any pre-construction or construction activities on the southern side of the Hawkesbury River for the SSI before the CMP (Strategic Conservation Management Plan) has been approved by the Director-General. The CMP is to provide for the heritage conservation of the Thompson Square Conservation Area.*

The application for the approval of the CMP was submitted on 14 February, 2018.

The CMP, which, according to consent conditions, had to be approved <u>before construction commenced</u>, was submitted for approval three months AFTER

the RMS stated (i.e. on 20.11.17) they had started construction and pre-construction activities - which is a clear breach of the CoA.

However, the RMS also claim, *"Construction of the approved project commenced in September 2019 and these components of the project are anticipated to be complete by early 2021."*

Page 9, Windsor Bridge Replacement Project Environmental Assessment Modification.

It is thus inferred the RMS are either in breach of the legally binding CoA because they commenced work prior to approval of the CMP, or, they are in breach of the legally binding CoA because they commenced work nine months AFTER the cut off date of 20.12.18.

Modifications

In the DoPI&E Major Projects Windsor Bridge Replacement, reference is made to MOD1 - Bridge Street traffic lane change. The implication is Mod 1 may be the first of other modification requests.

This implication is reinforced by the title of the Arcadis 'Windsor Bridge Replacement Project Traffic and **Options Modelling** (*emphasis added*) Report of 2017' (aka 2018).

In the same document, on page 39 4.6 Proposed Modifications to the Concept Design (Modified Concept Design) it states, "To meet possible future demand, the modification allows for future tidal flow arrangements on Bridge Street. This would result in two lanes northbound across the bridge during the afternoon peak."

There is a reasonable expectation the above option may be introduced sooner than later, given the current modification application has been made at this late stage of the project; even though it was modelled in 2017 before the current contract had been signed.

Traffic modelling, has been significantly changing since 2011. The appearance is the traffic flow issues are proving to be a serious challenge to the RMS. This modification application is a bandaid strategy that does not adequately solve the issue of the Macquarie/Bridge Streets intersection and its relationship with the Court/Bridge and George/Bridge Street intersections.

Options

Throughout this project the RMS has consistently spoken about the requirement to provide options. This has not been the case in this modification application. There appears to be a range of seemingly reasonable options. Two of these are:

- To replace the current slip/zip lane proposal with the tidal flow option.

- To reverse the current two south bound lanes, one north bound lane configuration with one south-bound lane and two north-bound lanes. The traffic data clearly indicates there are more vehicles travelling north across the bridge than travelling south. The Traffic Volume Viewer 20 metres north of Court Street shows the variation of traffic numbers between north-bound and south-bound (it labels the directions as west and east.) It is of some interest the number of vehicles that travelled east in 2018 has fallen over recent years to the point it is at the 2012 level.

Modelling of these two options could, and should, be carried out.

Conclusion

In 2011 the O'Farrell Government, at the encouraging of the then RTA, embraced a project the Labor Government had rejected as incompetent. Having embraced the RTA's misinformation, no member of the NSW Government, nor relevant government agency, has since been willing to actually listen to the community and independent subject experts on the matter. This would be regrettable in most locations. In the case of a place once considered the capital of this country it has resulted in a NSW Government presiding over the heartbreaking destruction of nationally, probably internationally, significant heritage, the scale of which will form the benchmark against which future heritage destruction in Australia will be assessed.

This has been a disastrous project from the outset. It has been driven mercilessly under the original and arguably inadequate consent conditions.

CAWB can prove, beyond any shadow of doubt, lies have been told by project proponents in order to prosecute this project. We can show the fiscal and procurement anomalies and prove the lack of benefit from a current budget allocation of around $137million.

The review of just one historic project document has made it abundantly clear the agency concerned was, from the outset, well aware of what they were doing and sought to navigate a project pathway that would destroy Australia's oldest country town and they remain on track to do so.

The request to further water down any of the already manifestly inadequate consent conditions should be treated with the utmost caution. The community is entitled to see the implications of what is proposed properly interrogated through a rigorous cumulative impact assessment.

Recommendations

- The Department of Planning (DoP) reject the current modification application.
- The Windsor Bridge Replacement Project Team (WBRPT) be instructed to model, at a minimum, the two options outlined in this submission.
- The DoP commission a report into cumulative noise impacts of the proposal on the upper grassland of Thompson Square based on the most recent traffic count.
- The DoP commission a report into cumulative air quality impacts of the proposal on the upper grassland of Thompson Square based on the most recent traffic count..
- The WBRPT provide correct and independently validated data on the projected increase in traffic volume for 2026 based on the most recent traffic count.
- The WBRPT clarify the discrepancies in its currently provided traffic data.
- The WBRPT provide precise figures as to the amount of land resumed for the current slip/zip lane proposal.
- The DoP, when evaluating any future modification application, consider the cumulative economic impacts on the businesses of Thomson Square including the consequences of further deterioration of noise and air quality within the remaining grassland area.
- All aspects of any future proposal be rigorously considered within a cumulative impact framework.
- No future proposal, which requires any further encroachment on archaeology buffer zones, nor actual archaeology, be accepted.
- The DoP require the preservation of the historic Windsor Bridge.
- The community be given a cast-iron commitment there will be no further intrusion of through and heavy traffic permitted within Macquarie's Windsor.

- This commitment be backed up with a commitment to the construction of a town bypass should traffic conditions warrant further changes to the currently planned road and associated bridges.