

BATEMANS BAY INDEPENDENT COASTAL ASSESSMENT – A REPORT FROM MEMBERS OF THE PROJECT REFERENCE GROUP

The Project Reference Group (PRG) for the Batemans Bay Independent Coastal Assessment comprised:

1. Mr Ian Hitchcock representing the NSW Coastal Alliance (NCA).
2. Mr Russell Schneider AM representing the Eurobodalla Coast Alliance (ECA).
3. Ms Rosemary Deadman representing the Surfside Community Group.
4. Mr Viv Sethi / Mr Graeme Shoobridge representing the Surfside Engineers Group.
5. Mr Geoff Fielding representing the Wharf Road Owners Group.

The Project Reference Group was formed by the NSW Minister for Transport in September 2018 to steer an independent study into:

“the effect that the new Batemans Bay bridge would have on the northern shoreline and sediment movement within the bay.”

The formation of the PRG and the study was the result of an injunction action initiated by Lower Surfside and Wharf Road community groups to stop the new bridge construction proceeding until:

- A. The cause of serious erosion of Wharf Road, the Surfside spit and northern sand shoals was investigated and the contribution of man-made structures acknowledged.
- B. Sediment movement within the bay was examined in relation to the ongoing northside erosion and the deposition of sand at Corrigans Beach.
- C. The effect of turbulence created by the new bridge was assessed and a mitigation plan developed to restore the natural sand shoal protection and protect against future storm damage.

The community withdrew its injunction action in return for an assurance from the NSW Minister for Transport, the Hon Andrew Constance, that he would deliver mitigation to the affected area.

The community's case was strongly supported by the "Sethi Report", a study undertaken by a local engineer and PRG member Mr Viv Sethi, and his addendum to that report. Both of these documents were endorsed by prominent coastal engineer Mr Angus Jackson, the principal of Queensland based International Coastal Management (ICM).

The Sethi report examines the historic evidence of northside erosion and pinpoints the causes as channel dredging, the construction of sea walls on the southern bank of the Clyde estuary and construction of the existing Batemans Bay bridge. The sea walls include the wall built in the 1960's to protect the CBD, raising of the half tide training wall to a full revetment wall in the early nineteen sixties, and extension of this sea wall in the early 1990's.

Turbulence created by the existing Batemans Bay bridge was the major contributor to the erosion and destruction of the old Wharf Road subdivision. This was confirmed in a report provided to Mr Sethi by the General Manager of the Eurobodalla Shire Council (ESC), and full details are contained in an addendum to the main report.

Within days of the RMS management team being appointed, the Minister appointed a community based Project Reference Group (PRG) to guide the study. RMS then appointed engineering consultants GHD to undertake the studies.

A chronology of events over the next 18 months appears at "Appendix One".

The PRG attended a series of meetings arranged by the RMS/GHD team and the Minister over the next eighteen months, but unfortunately the advice and concerns of the community based PRG

was ignored. It would appear that the consultants, and an ever-changing group of RMS public servants, developed a Stage One study to correct a deficient Review of Environmental factors on their new bridge. The PRG believes they ignored the agreed purpose of the study and failed to address any of the community issues. Of greater concern to the PRG was the deception employed by RMS and their consultants to meet their agenda.

In the unanimous opinion of the PRG, the nature and extent of the deception calls for an official government inquiry into the handling of this project, and the hundreds of thousands of taxpayer dollars wasted by the responsible public servants and engaged consultants.

Following is a list of PRG concerns that call for close examination by a truly independent investigator and/or an official inquiry;

1. The close association the consultants have with their employers and the appointment of GHD without any competitive tendering process.
2. Failure of the RMS to follow the original brief that was only released to the PRG after 18 months, and complaints to the Ombudsman. (See "Appendix Two").
3. Persistent false claims by the consultants over 18 months that there was no client brief.
4. Authority used to change the brief, firstly from "the effect of the new bridge on the northern shoreline" to a "no worse than the existing bridge" criteria, and then to an "overall no worse than the existing bridge" after the study showed that the effect of new bridge on the northern shoreline was in fact worse than the existing bridge.

5. Splitting up of the bridge and foreshore works presumably to avoid environmental review requirements for all aspects of the project.
6. Accuracy of the claim that all design changes were included in the modelling, when the modelling was completed prior to the finalisation of the bridge design, and before development of related foreshore works and retention of the existing bridge buttresses.
7. Collapse of the temporary boat launching ramp (which was constructed by the bridge contractor on the northern shoreline near Korner's Park) due to a design failure.
8. Anomalies with the peer review process including failure of GHD to provide the reviewer with the original brief or to inform the reviewer that the study related to the northern shoreline only.
9. The appearance of a fourth pylon in the Clyde floodway after the Minister and RMS went to great lengths to convince the public that only three pylons would be located in the river.
10. The apparent failure to design the base of the fourth pylon to minimise water turbulence indicating that it may be the intention of the contractors to reclaim the waterway between the pylon and the natural shoreline without due consideration of the erosive effects of this pylon and its surrounds.
11. Did RMS obtain legal authority from the Crown Lands Division to reclaim foreshore land? Did RMS request Crown Lands to examine the potential for the fourth pylon to increase turbulence and erosion on the northern shoreline?

12. The accuracy of claims by the consultants that the fourth pylon in its final form was modelled as part of the study when the consultancy brief showed only three pylons in the water. It is noted that there is no evidence to support any suggestion that the consultant GHD undertook any sensitivity testing (with/without the fourth pylon or realignment of the shoreline) to determine its impact.
13. The admission by the consultants on 2nd September 2019 that the Stage One “independent” report was in fact a due diligence exercise to support the original REF. This admission is a clear indication that the RMS, as a trusted government construction authority, failed in its responsibility to revisit the REF after the design was developed by the contractor.
14. Bridge construction work commenced in April 2019 without a proper environmental assessment of the final design and related foreshore works. The draft of the Independent Assessment was released in March 2019 however the report was not finalised until September 2019, and not peer reviewed until early 2020. Claims in an October 2019 Consistency Review that the study was finalised in March 2019 so that bridge construction could commence were deceptive and misleading.
15. Numerous consistency review reports were released in late 2019 but never brought to the attention of the PRG. These consistency reviews are dated in late 2019 and appear to be belated knee-jerk reactions to cover up deficiencies in the bridge design and administrative processes.

16. The peer review by Professor Patrick Linett of the University of Southern California comprises a little over three pages of comment. It is brief, heavily qualified, and prepared by the Professor on the basis of the Stage One report and the submissions report (another document that is still being withheld from the PRG). He was not provided with the client brief against which the study was to be undertaken.

The cost of this scant document and value for money should be investigated, as well as the date the report was submitted to the consultants/client.

17. The Stage One report claimed to address community concerns, however the study area only extends as far as Wharf Rd and ignores the affected community of Lower Surfside. The PRG expressed concern that two point six kilometres of the three-kilometre study area was conveniently moved upstream instead of downstream where the erosion problem exists.

OBSERVATIONS, COMMENTARY AND CONCLUSIONS OF THE PROJECT REFERENCE GROUP

Consultancy Appointment

The Project Reference Group was involved in the assessment process from the very beginning, and was led to believe by the Minister that the studies would be guided by the PRG on behalf of the affected community.

The immediate concern of the PRG was the appointment of GHD as the “independent” consultants. Our request for the inclusion of the highly respected coastal engineering consultants International Coastal Management (reviewers of the Sethi Report) on the tender list was ignored, and GHD was appointed to undertake the \$250,000

consultancy without any competitive tendering or calling for Expressions of Interest from qualified consultants.

The PRG was initially informed that GHD was a completely independent coastal engineering consultant with no direct association with the RMS. Inquiries initiated by members of the PRG later on in the exercise revealed that GHD was in fact a very close associate of the RMS and heavily reliant on RMS for consultancy work.

Corruption of the Study Process

At some point, early in the study process, the RMS team has focussed on their original environmental assessment for the new bridge. This original assessment or REF, which was prepared by consultants Aurecon, was based on a purely generic design and data from Nelligen, 15 kilometres up-stream. The authors Aurecon, alluded to the need for further studies and modelling when the bridge design was finalised.

RMS staff must have known that the Aurecon report was outdated and unfit for purpose, and its inadequacy would have been amplified by the erosion issues raised in the Sethi report. **The RMS management team had failed in their duty to update the original Review of Environmental Factors (REF) when the bridge design was finalised, and were building a bridge without a valid REF.** The PRG concluded that RMS needed a means to correct the deficiency without attracting public attention, and diverting the Surfside study away from its original purpose, provided a convenient solution.

The PRG was pressured to endorse the Stage One study and informed that it must sign off on Stage One if it wanted to progress to Stage Two, where community concerns would now be addressed. The PRG refused to endorse a report that bore no resemblance to the original agreement with Minister Constance, and failed to address community concerns. The March version was only a draft

report that was amended in September 2019 and sent for peer review as late as early 2020. It has still not been accepted by the community.

Manipulation of the Client Brief

As the project developed, it was obvious that the contributions and requests of the PRG were being ignored by the RMS/GHD management team. The public servants and their consultants seem to have had their own agenda. The team denied the existence of a client brief for 18 months until pressure was applied by the Ombudsman. When released, that brief (See “Appendix Two”) called for “an independent assessment of the effect that the new Batemans Bay bridge will have on the northern shoreline and sediment movement within the bay.” The assessment was required to show two cases. One without any bridges and one with the new bridge in place, and the existing bridge demolished. An investigation was also required into the “movement of sediment in the Surfside area and historic causes of erosion at the northern sand spit, shoal and Wharf road shoreline”. This is exactly what the community asked for and the Minister agreed to deliver. Nowhere did the brief mention the “no worse than” criteria or the utilisation of the study as REF update to reflect the amended bridge design.

Instead of following this official brief, the RMS/GHD team denied its existence, and advised the PRG that its brief was to establish that the erosive effect of the new bridge on the northern side of the estuary was “no worse than the existing bridge”.

After the Surfside Engineers Group pointed to the fact that the draft March report showed that the new bridge would be ‘worse than’ on the northern side, the September version was altered to the effect that while worse on the (unprotected) north, it was significantly better on the totally protected south side, and was therefore “better overall”, and therefore satisfied the spurious “no worse than” test.

The assessment criteria had changed once again to “no worse overall, than the existing bridge”. The wording added to the September version of the report was; “It may be argued that an increase in flow velocity on the Northern side is observed when comparing the new bridge to the existing....Figure 27 demonstrates that the existing bridge caused an increase in flow velocity on the Southern side where the increment is an order of magnitude larger than that caused by the new bridge to the Northern side”

The southern shoreline of the estuary was never included in the study parameters (as it already enjoys protection from the full revetment wall), and this manipulation was clear evidence of a contrived outcome. It is again noted that the northern shoreline remains without protection from upstream of the existing bridge to Surfside.

Deletion of Key Elements of the Client Brief

In December 2018 the RMS /GHD team took a more aggressive approach in its dealings with the PRG. The team refused to undertake a review of historic erosion claiming that the task was too difficult. It also informed the PRG and members of the public that there would be no hydraulics report of the erosive effects of the new bridge. Two major elements of the study had been arbitrarily eliminated without any reason. There was no response when a member of the PRG suggested that the RMS was afraid of being sued or paving the way for Council and/or the State Government to be sued for negligence in respect of past engineering works undertaken within the bay. Nor was the comment included in the minutes of that meeting.

Study Independence

From the beginning, the Minister informed the local community in person that he would fund an Independent study that was independent of Council, OEH and the new bridge management team.

It was gleaned from comments made by RMS staff at the 13th December meeting, that the independence of the study, if it ever existed, had been compromised. Comments made by a senior RMS representative parroted the comments of one of Council's coastal advisers, who publicly challenged the right of Surfside to exist.

It was later confirmed in documents withheld from the PRG (See Appendix Three) and questioning of the consultants that GHD had been in direct contact with the local Council and OEH staff, contrary to the agreed level of independence from Local and State government officials who had previously displayed strong opposition to engineered coastal management solutions. The PRG believes the bridge management team were also deeply involved in the study process, manipulating the study to cover up a deficient Review of Environmental Factors (REF).

Cover up of Deficiencies

The inadequacy of the original Review of Environment Factors was first uncovered by the Surfside Engineers Group. The first draft of the commandeered Stage One study was released to the PRG in March 2019 and placed on public exhibition in July 2019. The study was not supported by a peer review at that time and was rejected out of hand by the PRG. Submissions were requested from all of the organisations and community groups represented on the PRG. The final report was not released until September 2019. The undated four-page peer review supporting the study, was not released until March 2020.

In Feb 2020 RMS provided links to new documents available on their website. Among them was the March draft of the Independent Assessment as well as 'consistency reviews' for the new bridge REF. The October 2019 "Overview of consistency reviews" states:

"Roads and Maritime finalised an Independent Coastal Impact Assessment in March 2019 to independently evaluate the impact of the new bridge on riverbed and shoreline changes, waves, flooding, sea level rise and currents in the Clyde River **compared to the existing bridge.**"

This is confirmation of the fact that the Independent Assessment that the Minister funded on behalf of his community was, commandeered by RMS to address its failures in respect of new bridge REF process.

The consistency review goes on to state:

"Construction activities for the bridge commenced in May 2019, following completion of the additional assessment documentation referred to above".

This is extremely concerning due to the fact that the Independent Assessment was only a draft in March 2019 and not 'finalised', as claimed by RMS.

It was the September version of the document that was sent out for peer review and contained several important changes from the March version. If RMS was authorised to use the Independent Assessment as the environmental assessment of the final bridge design, construction in the Clyde River should not have commenced until the Assessment had been peer reviewed.

The undated peer review was not provided to the PRG until March 2020 whereas the other 'REF Consistency Reviews' for design changes to the bridge rely on the Independent Assessment being finalised in March 2019.

The October 2019 consistency reviews appear as “Appendix xxxx”

The Peer Review

As far as the peer review goes (Appendix Four), the peer reviewer states:

“This reviewer was provided the following materials:

- Batemans Bay Independent Coastal Assessment Stage One - Impacts of the Batemans Bay Bridge Replacement Project, dated September, 2019.
- Batemans Bay Independent Assessment Submissions Report, dated September, 2019 No additional documentation or technical information was provided”.

From this statement it is important to note that the reviewer was;

(1) Provided the September 2019 version, confirming that the Independent Assessment was not finalised in March 2019. Not only did the RMS /GHD commence the bridge work in May 2019 without a current REF, they appear to have falsified and backdated documentation to cover the deficiency.

(2) Not provided (or asked for) with the Brief for the Independent Assessment and as such was reviewing it without any knowledge of the tasks that the consultants had been commissioned to undertake.

The review goes on to state:

“Therefore, this AR is primarily a comparative report, examining the relative effects of the new bridge configuration as compared to the old..... The AR is a comparative modelling study, and will be reviewed as such.”

This is in clear conflict with the brief from RMS to GHD, which was not meant to be a comparative modelling. Rather, it was meant to be an absolute modelling of the effect the new bridge would have on

the northern shoreline. The peer review is not a strong endorsement of the Independent Assessment and goes on to concede that:

“The new bridge yields similar or slightly larger velocities in the northern section of the channel and lower velocities in the southern section. This may lead to an increase in erosion in the northern channel”

This confirms that the erosive effect of the new bridge will be worse on the north side than the existing bridge, and we must not forget that it was the erosive action of the existing bridge that destroyed the old Wharf Road subdivision.

Unsurprisingly, the brief sent to the peer reviewer was withheld from the PRG and is still to be provided.

The Phantom Fourth Pylon

In July 2019 a member of the Surfside Engineers Group observed that contrary to the Ministers statement and concept design drawings, a fourth pier was being constructed in the water, on the northern shore of the floodway. The base of this pylon was not designed to minimise turbulence, and it was apparent that the contractors intended reclaiming land that would constrict the channel and increase the erosion risk on the north shore.

The consultants claim to have modelled the fourth pylon in the water in their Assessment, and included it in their calculations. The GHD modelling was undertaken well before the location of the fourth pylon was established and the senior coastal engineer admitted in writing that GHD modelling was based on the original bridge design. It is also common knowledge that river reclamation activities require investigation and approval of the Crown Lands administrators. There is no evidence of this approval being sought or obtained by the RMS management team.

The deposition of rock and reclamation of 50 odd metres of foreshore on the northern side of the floodway is not a minor issue. It could have a massive effect on channel flows and turbulence on the northern shoreline, and the constriction of the channel could substantially increase the flood risk to the CBD.

The RMS response to the problem was published in October 2019 on pages 19/20 of Consistency Review Number three in October 2019 as follows;

Design change – Impact neutral

“Appendix A also describes pier one as being located in close proximity to the existing sea wall rock protection near the northern boat ramp presenting a risk of scouring during a flood event undermining the sea wall. Additional scour protection in the form of a rock rip rap was recommended.....”

Our engineers were astounded by this cavalier response to a serious design problem.

The Final Solution

At the last meeting on 13th March 2020, the RMS/Transport for NSW representative informed the PRG that the matter would now be handed over to a task force headed by NSW Planning (and including Council, OEH and Transport for NSW) who would look at solutions in the context of a Coastal Management Program (CMP). Fixed structures (a revetment wall) would be one of the options examined.

It was the development of a CMP by the very departments nominated for this task force that caused the initial community uproar over eighteen months ago. The current Minister for Planning is an exponent of “planned retreat”, as are Eurobodalla Council planning staff, the Environment Office, and the Coastal Council.

The Lower Surfside Community is now right back where it started, after being “led up a garden path” by Transport for NSW public servants and their appointed consultants

The PRG reserves its judgement on the involvement of the Minister, Andrew Constance, in the sham consultation process and manipulation of the “independent” study. The PRG acknowledges that the Minister tried on numerous occasions to get the project back on the original track, but has still been unable to guarantee the community that the original undertaking would be honoured, given the nature of the Task Force, which will undoubtedly do all in its power to prevent effective protection of the northern shore.

CONCLUSION

Members of the Project Reference Group are most disappointed at the outcome of eighteen months of unpaid work on behalf of their community and the State of NSW. They believe the way they have been treated by a group of public servants who appear to have no regard for due process or their role in servicing the Government of the day, is inexcusable.

The manner in which clear instructions from the Minister were ignored, displayed a level of arrogance that reflects so poorly on Transport for NSW leadership and the current NSW Coalition Government.

The PRG has witnessed a blatant disregard for design/construct environmental control principles in the first place and then a complex system of manipulation and diversions to correct operational failures. Acts of misinformation were rampant and deception, the order of the day.

The PRG calls for a truly independent investigation into this matter and the delivery of coastal protection for the Lower Surfside and Wharf Road communities as part of the current bridge project. It

calls for recognition of the erosive action past engineering works have had on the natural protection once afforded to low lying suburbs on the northern side of the Clyde estuary, and the delivery of mitigation works at no cost to the property owners.

Prepared and endorsed by:

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