

29 MARCH 2012

Foxground and Berry bypass – Kangaroo Valley Road interchange and the Victoria Street precinct

The Kangaroo Valley Road interchange and the Victoria Street precinct working group held its second meeting on Thursday 29 March 2012 at the Berry Agricultural Pavilion (showground).

Attendees:

Judith Ball, resident
Pamela Bice, resident
Peter Bice, resident
Nancy Bevan, resident
John Cullity, resident
Jenny Clapham, resident
Heather Fealy, resident
Rick Gainford, resident
Carol Hampson, resident
Alan Johnson, resident
Mike Lans, resident
Norma McMurdo, resident
Rob McMurdo, resident
Ian Monteith, resident
David Munn, resident
Lucie Stanford, resident
Philip Thorniley, resident
Beryl Ward, resident
Jenny Warden, resident
Scott Wells, Shoalhaven City Council representative
David Woolbank, Straight Talk Facilitator
Adam Berry, RMS Project Development Manager
Ron de Rooy, RMS Project Manager
Graham Birch, RMS Road Safety & Road Design Review
John Popuski, RMS Road Safety & Road Design Review
Carla Brookes, RMS Project Communications
Annette Beedles, RMS Graduate Engineer
David Bohm, AECOM Transport Planning
Angela Malpass, AECOM Community Consultant
Riley Dayhew, AECOM Graduate Engineer
David Appleby, Conybeare Morrison Urban Designer

Ken O'Neil, Aurecon Bridge Designer

Summary – Purpose of the meeting

Roads and Maritime Services (RMS) convened a working group of registered community members to review various community and design issues for the Kangaroo Valley Road interchange and the Victoria Street precinct.

The session was opened and facilitated by David Woolbank of Straight Talk.

Adam Berry, RMS Project Development Manager presented the actions and issues, which were outstanding from the previous working group meeting. Mr. Berry advised which issues RMS has addressed, for which suggested solutions were presented as part of this meeting, as well as the issues RMS has not had the opportunity to review fully.

David Appleby from Conybeare Morrison presented examples of possible urban design treatments for the bridge at Kangaroo Valley Road interchange.

Adam Berry advised the group that the work done to date was conceptual only and RMS still needs to undertake further work before it can confirm the feasibility of each suggestion. All designs reviewed and discussed during the working group are therefore subject to change.

The following is a summary of the discussions held at the working group, responses and actions agreed to by RMS.

Discussion	Response / action
<p><i>RMS to review and consider alternatives for taking the north bound off ramp under Kangaroo Valley Road and connecting it to Kangaroo Valley Road on the other side.</i></p> <p>Scott Wells, representative of Shoalhaven City Council, advised that council had suggested a similar arrangement (minus the roundabout) previously but felt the need for large vehicles to undertake an acute turn to access North Street was not acceptable. Mr. Wells advised that the roundabout arrangement addressed this concern.</p> <p>Adam Berry confirmed that the roundabout at Huntingdale Park Road was a requirement of the DA for the Huntingdale Park Estate.</p> <p>A working group member asked RMS to clarify where the northbound on ramp would be located and how many roundabouts would need to be negotiated to</p>	<p>RMS provided the working group with a hard copy print out of the proposed concept design, which is available on the project website at www.rta.nsw.gov.au/fbb.</p> <p>Action: RMS to upload a copy of the presentation and the suggested alternative arrangements to the concept design on to the project website.</p> <p>Action: RMS to review connecting the western end of North Street to the proposed roundabout.</p>

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travel north from Queen Street using this intersection.

Adam Berry confirmed that there would be a total of three roundabouts.

A working group member asked if the north bound off ramp would be flood prone with this arrangement.

Adam Berry advised that RMS still needed to look at flood immunity for this arrangement, but the off ramp would be at the same level as the highway which is designed for the 1 in 100 year flood.

A working group member asked RMS to confirm if the roundabout in the paddock is needed, or could it be replaced by an intersection?

Adam Berry advised that the roundabout is needed to manage semi-trailer movements from the two farms. Graham Birch advised that to enable all movements you need a certain level of separation between the movements and roundabouts are the neatest solution. With intersections you need to include right hand turning bays to enable the necessary level of separation, which increases the intersection footprint.

A working group member asked RMS to clarify which direction the semi-trailers from the two farms currently go?

Scott Wells advised that currently the trucks can head either direction along North Street, but following the upgrade North Street will be segregated and all traffic will need to use the intersection at Kangaroo Valley Road.

A working group member asked RMS to confirm that North Street would still be cut off with this new arrangement.

Adam Berry advised that North Street would be split by the highway alignment and RMS has no plans to construct a road bridge across the highway to connect North Street.

A working group member asked RMS to confirm whether there would be an impact on the on ramp for this arrangement from Town Creek.

Adam Berry advised that there would be no impacts on the on ramp from Town Creek.

A working group member asked RMS to confirm whether Kangaroo Valley Road and the roundabout would have the capacity to deal with the potential

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growth of Huntingdale Park Road.

Scott Wells confirmed that Kangaroo Valley Road has the capacity to deal with 5000 vehicles per day.

RMS to review and consider ways of reducing the footprint of the interchange (T-junctions rather than roundabouts).

Option 1: Adam Berry advised that this arrangement comprises a 'staggered T' controlled junction, with stop and give way signs, which requires a number of driver decisions. Mr. Berry advised the bridge would require a right turn bay, which would increase its width from two to four lanes.

Mr Berry advised that RMS has a history of problems with this arrangement, accident histories due to the number and closeness of conflicting driver movements. Storage capacity of the off load ramp is also a consideration.

A working group member asked RMS to clarify if this arrangement would resolve the issue of moving the entrance to Huntingdale Park Road.

Adam Berry advised that it doesn't and RMS would still need to resolve this issue.

Scott Wells advised the working group that if this arrangement was built and found not to work in the future then council would be left with the cost to resolve it.

A working group member asked RMS to confirm whether it was possible for this arrangement to work in part with one roundabout? Is it possible to have a combination of roundabouts and traffic signals / T-junctions?

Graham Birch confirmed yes it would be possible, however such an arrangement would have a large footprint.

Option 2: Adam Berry asked the working group to consider the introduction of traffic lights rather than T-junctions.

Mr. Berry advised that the disadvantage with a two phase coordinated traffic light arrangement would be longer waiting periods.

A working group member suggested the benefit of utilising traffic lights would be improved pedestrian

RMS provided the working group with a hard copy print out of the proposed concept design, which is available on the project website at www.rta.nsw.gov.au/fbb.

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crossing safety.

A working group member asked if RMS has any statistics on collision frequency for roundabouts and T-junctions.

Graham Birch advised that ideally RMS would prefer to use roundabouts as they reduce queuing and also allow transition of speed down on the approach to the roundabout.

A community member asked RMS to clarify how similar this arrangement is to the first Kiama bypass exit (Saddleback Road).

Adam Berry advised that the main differences would be volume of traffic and the dominant flow of traffic at Kiama is a left turn. Traffic would be moving in both directions at the southern Berry intersection.

Option 3: Adam Berry advised that this arrangement comprises traffic signals with vertical walling and all the issues previously discussed for Option 2 would be relevant.

Mr. Berry advised that the traffic lights can become one set of integrated signals as they are closer together, which will reduce wait times.

A working group member asked RMS to clarify if a traffic light arrangement would resolve the issue of trucks on North Street.

Adam Berry advised RMS brief was for designers to look at ways of resolving the footprint of the intersection and not to look at competing issues.

Graham Birch advised that this arrangement was similar to something you would experience in Sydney where space is limited, with little capacity for modifications.

Scott Wells proposed that the difference between Sydney and rural areas is available space.

Scott Wells also advised the working group that another condition of consent of the Huntingdale Park development was to provide traffic lights at the junction of Queen Street and Huntingdale Park Road as part of the final stage. This was an RMS request.

A working group member asked if it is possible to apply the vertical wall approach to the roundabout option?

RMS advised yes, however still required to have a

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certain level of separation for roundabouts to establish sight lines.

A working group member asked RMS to confirm that the highway footprint has the capacity for three lanes in each direction.

RMS confirmed yes.

A working group member asked if RMS could make future provision for entry to Huntingdale Park via the roundabout in the estate, as per the original concept design.

RMS advised that traffic figure projections do not support this approach.

A working group member suggested an alternative could be to open Ford Street.

A working group member advised that the development consent for Huntingdale Park did not allow for Ford Street to be opened.

A working group member suggested that the disadvantage of traffic lights is traffic backing up, while the disadvantage of roundabouts is pedestrian conflict. Couldn't this be resolved through a pedestrian bridge at North Street?

Adam Berry advised that pedestrian connectivity is also required from Huntingdale Park Road to Queen Street and Victoria Street.

A working group member queried whether RMS was addressing pedestrian safety properly.

Scott Wells suggested that it was difficult to talk frankly about traffic signals versus roundabouts without viewing the traffic data.

A working group member suggested that many of the issues being identified could potentially be resolved if the northern on and off ramps are removed.

Adam Berry confirmed that traffic and pedestrian conflict is reduced with this option, however there are a number of other issues resulting from removing the northern on and off ramps, which will be discussed later.

A working group member asked RMS to clarify how pedestrians cross roundabouts?

Graham Birch advised that it is through a two stage crossing process. Mr. Birch advised that an

advantage of the southern Berry interchange is that RMS has the space to design safe pedestrian crossings.

A working group member asked whether an approach similar to the arrangement at Leura has been considered.

Adam Berry advised that the intersection at Leura is a cut and cover tunnel with retaining walls which has a significantly more expensive than the intersection currently being proposed.

A working group member suggested a single roundabout arrangement similar to Goulburn.

Adam Berry advised that such an arrangement would not improve pedestrian connectivity.

Urban design treatments for Kangaroo Valley Road interchange

David Appleby clarified that safety barriers would be required on the Kangaroo Valley Road bridge.

A community group member asked David Appleby to clarify whether the 900mm road barrier would be included in the three metres needed for the throw screen.

David Appleby confirmed yes, the 900mm is included.

A working group member suggested that a barrier on the outside of the bridge is preferred over a barrier on the edge of the road, as without it may give a perception to children of an open bridge, with it appears to provide some protection.

Scott Wells advised that a barrier on the edge of the bridge would be preferred by council who would be responsible for maintaining any green space on the bridge. Council would need access to this green space.

A working group member asked if a barrier at the side of the road would provide any noise mitigation.

RMS advised that any noise mitigation would be minimal.

Scott Wells suggested that the working group should consider the texturing / treatment of the throw screens. Mr. Wells asked RMS if they had any examples to show the group.

A working group member asked RMS to clarify

David Appleby presented examples of possible urban design treatments for the Kangaroo Valley Road bridge.

Action: RMS to provide the group with examples of throw screen patterns / imprints.

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<p>whether expansion joints would be required for the bridge.</p> <p>Ken O'Neil confirmed that one expansion joint would be required.</p>	
<p><i>RMS to provide traffic figures to the working group. Figures to highlight any increased traffic impacts on local roads. RMS to demonstrate traffic movements for the Kangaroo Valley Road interchange and Victoria Street for a typical morning commuter peak.</i></p> <p>Adam Berry defined the 'design hour' as the 100th busiest hour of the year. The design hour is the traffic volume to which RMS designs road capacity.</p> <p>A working group member asked RMS to clarify if the counts represented traffic travelling in both directions?</p> <p>Adam Berry confirmed the figures represent traffic travelling in both directions.</p> <p>Adam Berry clarified that actual traffic counts for George Street, Victoria Street, Woodhill Mountain Road and Edward Street are not available. The model calculates the traffic flow figures for these streets by assuming that traffic will take the shortest route to a destination. RMS can add local traffic management measures to influence traffic behaviour.</p> <p>A working group member expressed concern that the model is fundamentally flawed as drivers do not always use the shortest route and without actual data RMS does not know where traffic is originating from.</p> <p>David Bohm confirmed that the following data had been collected and was used as a basis for the model:</p> <ul style="list-style-type: none"> • Origin destination surveys. • Volume traffic counts. • Intersection turning points. <p>A working group member asked RMS to clarify what the road counters being installed in Victoria Street are for.</p> <p>Scott Wells advised council have had traffic counters installed along Edward, George and Victoria Streets and will review peak period traffic movements over</p>	<p>RMS provided the working group with a hard copy print out of the traffic figures, which is available on the project website at www.rta.nsw.gov.au/fbb.</p> <p>Action: RMS to provide the working group with 2037 design year traffic volumes without the upgrade.</p> <p>The following actions were received by RMS post meeting:</p> <p>Action: RMS to consider and address all of the concerns raised by a working group member in correspondence received on Sunday 1 April.</p> <p>Action: RMS to provide the working group with additional traffic forecast figures for additional locations in Berry, as requested by Shoalhaven Council representative Scott Wells in correspondence dated Monday 4 April. These figures to be provided on a network diagram for ease of understanding / interpretation.</p> <p>Action: RMS to undertake further analyse of the project's traffic, and related noise and other environmental impacts, as requested by Shoalhaven Council representative Scott Wells in correspondence dated Monday 4 April. The request is for further impact assessments to be undertaken with a particular focus on the need for a second northbound off ramp and the potential closure of Victoria Street.</p> <p>Action: RMS to confirm whether they are willing to commission OD surveys on Victoria Street as requested by Shoalhaven Council representative Scott Wells in correspondence dated Monday 4 April.</p> <p>Action: Shoalhaven Council to provide traffic data collected during their surveys to RMS when available.</p>

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the next 12 months.

A working group member questioned the logic that traffic would not use Queen Street as the main through route following the upgrade as current congestion patterns will be changed.

Action: RMS to consider pedestrian / cycle connectivity across the highway.

Option 1: Underpass from Mark Radium Park underneath Queen Street to the new green space.

Option 2: Underpass from Victoria Street to Huntingdale Park.

A working group member asked RMS to clarify where there is a similar pedestrian underpass of this size (Option 1).

RMS advised that it would need to get back to the working group.

A working group member asked why a pedestrian underpass was not being considered to re-connect North Street.

RMS advised that the upgrade alignment is low in this area and the tunnel would be a long way underground. As an alternative residents have suggested a pedestrian bridge.

A working group member queried why an underpass is needed in this area (Option 1) when a pedestrian crossing would be simpler and cheaper.

Scott Wells questioned the logic of such an elaborate scheme (Option 1) when traffic figures show a dramatic reduction in traffic volumes along Queen Street.

Adam Berry advised that RMS was asked to look at solutions but does not believe (Option 1) is a viable option.

A working group member commented that (Option 2) appeared to be a good option for pedestrians and would retain access to Mark Radium Park from Huntingdale Park.

Action: RMS to provide working group with examples of underpasses of similar size.

Action: RMS to explore underpass from Huntingdale Park to Mark Radium Park further.

Working group process

The next working group meeting will be held on 17 April 2012 at the Berry Agricultural Pavilion (showground) and will concentrate on the agenda

Action: Working group members to discuss issues with local residents and report comments / concerns to the next working group.

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items not covered during the meeting on the 29 March 2012:

- RMS to consider removing northern on and off ramps at the Kangaroo Valley Road interchange.
- RMS to consider relocating the entire interchange further south of Berry.
- RMS to consider how the design can be modified to limit the impact on the eucalypts alongside the existing highway at Mark Radium Park.
- RMS to examine closing Victoria Street and making the southbound on-load ramp one way.