





Michael Oliver
40 Balfour Road
CULCAIRN NSW
2660

Letter18122014_Albury_Street_RMS_Handover_Works.docx

18 December 2014

Attention: Michael Oliver

Dear Michael,

Re: Albury Street, Holbrook – Recommended Works Pre RMS Release of Responsibility

With the construction of the Holbrook Hume Highway Bypass, RMS are preparing to release responsibility of Albury Street (previously the Hume Highway) to Greater Hume Shire Council. Prior to this handover, RMS are obligated to undertake required resurfacing and drainage works.

At the request of Council, WMAwater have considered various flood mitigation works as part of the Holbrook FRMS&P with the aim of incorporating these works into the work performed by RMS prior to releasing responsibility of the Road. These works include:

1. Raising of Albury Street Bridge by 0.5 m;
2. Raising of Albury Street Bridge by 1.0 m;
3. Doubling the length of the Albury Street Bridge;
4. Adding additional culverts under Albury Street;
5. Increasing the conveyance of existing culverts; and
6. Reducing the crest level of Albury Street on the Ten Mile Creek floodplain.

These scenarios were modelled in the hydraulic model. It was found that none of these scenarios caused significant reductions to peak flood levels in the 1% AEP event.

In terms of flood mitigation, there is little that can be achieved by modifying Albury Street. However, Albury Street has a number of issues during smaller, more frequent rainfall events that could be alleviated with drainage works. There are a number of proximate properties upstream of Albury Street that have floor levels similar to the crest level of the road. During significant rainfall events water ponds on the upstream side of Albury Street and causes over floor inundation. Passing traffic adds to the flood affectation of this area by sending bow waves through these properties. From a drainage perspective a number of measures should be implemented prior to RMS releasing their responsibility for the road. These works include:

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1. It is recommended that milling of Albury Street be undertaken such that the crest level of the road is 0.2 m lower than the current road crest level. This would allow water to pass over Albury Street and reduce the depth of ponding.
2. To aid in the removal of floodwaters, the kerb drainage of Albury Street should be improved to divert water to Ten Mile Creek or to the series of culverts under Albury Street near Bardwell Street.
3. If the kerb drainage system cannot be effectively improved, culverts under the road may be able to be constructed, again to reduce ponding on the upstream side of the road.

WMAwater have prioritised communication of this issue with Council so that RMS can be informed of this issue before the proposed work commences.

Yours Sincerely,
WMAwater



Zac Richards
Project Engineer



Michael Oliver
40 Balfour Road
CULCAIRN NSW 2660

Letter23102014_Albury_Road_Resurfacing.docx

23 October 2014

Attention: Michael Oliver

Dear Michael,

Re: Albury Street, Holbrook – Proposed RMS Resurfacing

A notable finding from the recent Holbrook Community Meeting on the 14th October 2014 is that the RMS are reportedly proposing to resurface Albury Street through the township of Holbrook.

Further details of this proposal are not available to WMAwater, however it is likely that any increase in crest height of Albury Street on the Ten Mile Creek floodplain will increase flood levels and affectation in the region.

WMAwater have modelled a 0.15 m increase to the Albury Street crest height to simulate the proposed resurfacing. To determine the impact of road crest level raising, the 5% AEP flood event has been run for the raised road crest scenario and was compared to the 5% AEP existing conditions scenario. The change in peak flood level between the two scenarios is displayed on the impact map, Figure 1. Flood impacts in excess of 0.1 m (up to 0.23 m) affect numerous properties on the upstream side of Albury Street and there is a significant area of previously flood free land that will become inundated. An increase to the Albury Street crest level will also impact of local flow drainage with the potential to increase flood liability.

It is reported that a number of properties on the upstream side of Albury Street have floor levels close to the existing road crest level. Any increase in crest height will likely lead to more severe and frequent overfloor flooding in this area. This problem would be further compounded by traffic along Albury Street creating bow waves.

It is recommended that milling of Albury Street be undertaken before road resurfacing is performed to ensure that the road crest height is not increased.

WMAwater have prioritised communication of this issue with Council so that RMS can be informed of this issue before the proposed work commences.

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Yours Sincerely,
WMAwater

A handwritten signature in blue ink, appearing to read "Zac Richards". The signature is fluid and cursive, with the first name "Zac" being more prominent and the last name "Richards" following in a similar style.

Zac Richards
Project Engineer

FIGURE 1
**FLOOD IMPACT 5% AEP
 RAISE ALBURY STREET 0.15M**

