Advices of NSW Office of Water below.

Will follow under formal DPI letterhead shortly.

<u>However</u> - can you advise whether this application was referred to the other DPI agency of Fisheries NSW (including the Marine Parks Authority)?

Thanks you,

Greg Paine Business Services Department of Primary Industries

Tel: 8289 3951

1. <u>Water quantity and quality treatment and the protection of downstream environment</u>

The former Department of Infrastructure Planning and Natural Resources (DIPNR) when responding to this development when initially submitted emphasised the importance of water quantity and quality management treatment from the Town Centre to protect the sensitive downstream receiving environment (DIPNR letter dated 28 April 2004). The submission advised:

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□ □ □ □ the proposed basin should ensure that the likely pollutant sources are identified and dealt with to a high degree (e.g. sediments and oils from car parks, litter from shopping centre, etc).
 □ □ □ the return of flow from the basin to the natural waterway is an important aspect of the design so that concentration of flows and scouring of the natural drainage system is avoided.

The Environmental Assessment (EA) for the current Modification application indicates it seeks to employ the same stormwater management principles as that of the original approval (page 11). Table 5 in the EA notes that Water Sensitive Urban Design measures incorporated into the design of the Town Centre ensure that pollutant loads in stormwater are no greater than current loads, to protect the water quality of the downstream coastal water bodies (see points (i) and (m), pages 29 and 30).

However, the NSW Office of Water recommends the water quality treatment measures for the Town Centre provide a high degree of treatment and improve upon any high levels of existing pollutants rather than ensuring the pollutant loads are no greater than current loads.

Based on the comments that the design will ensure that pollutant loads in stormwater are no greater than current loads, it is not clear if the different pollutant loading between pre and post development has been assessed. There will be differing types of pollutants coming from the future Town Centre (for example oils, general litter, etc) compared to the state of the catchment now. If this has not been assessed, it is recommended this assessment be undertaken in detail to ensure the treatment measures for the Town Centre are adequate to mitigate impacts on the downstream environment.

The Amended Statement of Commitments (SOC) (15) indicates the proponent is to undertake further detailed design of the top-up arrangements for the pond to maintain aesthetics during dry periods. The Landscape and Sustainable Design diagram indicates the pond is proposed to be located on-line. It is recommended that management issues relating to blue green algae and aquatic weeds are comprehensively understood to ensure the downstream SEPP 14 wetlands are adequately protected.

SOC (15) also indicates the detailed design will investigate the use of rainwater tanks for topping up

the pond. Water balance details are required to assess whether the rainwater tanks will be adequate to top-up the pond during dry periods. If not, details need to be provided on what other alternative water supply options are proposed.

2. Boardwalk Creek

Clarification is required on the proposed treatment of "Boardwalk Creek". Based on the information provided in the current Modification application it is unclear if Boardwalk Creek is still proposed to be piped, or if is now proposed to remain as an open system, for example:

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 □ □ □ the Architectural Design Statement indicates the character of the landscaped creeks and trees will not be adversely impacted by the proposed modification (page 4).

The Landscape and Sustainable Design diagram shows the location of Boardwalk Creek.
 The Proposed Connectivity and Vincentia District Centre diagrams show a boardwalk / car park is proposed to be located over Boardwalk Creek.

• □ □ □ the Amended Statement of Commitments (SOC) (13) refers to the design of the drainage channel in the location of Eastern Creek with the design of Stage 1A including detailed designs of the piped drainage system (page 3).

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 the Design Statement refers to "reopening the creek to the sky" (see point (g) under boardwalk on page 14).

If Boardwalk Creek is to remain open, it is recommended:

- 🗆 🗆 🗆 it is rehabilitated to mimic a stable natural creek system from the local area,
- 🗆 🗆 🗆 a vegetated riparian corridor is established along either side of Boardwalk Creek, and
- 🗆 🗆 🗆 the riparian corridor is planted with native plant species from the local vegetation community;

3. Other comment

The NSW Office of Water also recommends that the recent clearing of the site needs to be stabilised, including Boardwalk Creek, so as to protect the downstream environment from degradation.

For further information please contact Janne Grose, Planning and Assessment Coordinator (Penrith office) on 4729 8262, or at: <u>Janne.Grose@water.nsw.gov.au</u>.

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