

89 Ross Watt Road, Gisborne - Stormwater Management Strategy (SWMS)

The following table provides a summary of the changes between Version 3 (22 April 2022) and Version 7 (VCAT Issue | 3 February 2023) of the Stormwater Management Strategy (SWMS) report prepared by Alluvium for the site at 89 Ross Watt Road.

One of the key differences is that Version 3 of the SWMS report was based on Version 7 of the Development Plan Layout whilst Version 7 of the SWMS report is based on Version 16 of the Development Plan Masterplan (VCAT Issue | 3 February 2023) Layout.

| Item | SWMS Version 7 Reference | Description of Change |
|------|--|--|
| 1 | Page 8, Section 4.1 (3rd bottom dot point) | Version 3: Jacksons Creek is an incised valley and has no capacity issues to contain the 1% AEP flood levels. The no (??) requirement for retardation precedent was set by Melbourne Water for the Sunbury Growth area where their investigations determined the above principal. Version 7 Amendment replaces the above with following: The Planning Scheme shows localised areas along Jacksons Creek (near Station Street) that is impacted by a Land Subject to Inundation Overlays (LSIO) (refer to Figure 9). Based on this overlay the criteria for the developed flows outfalling into Jacksons creek should be to control peak flow rates back to the equivalent pre-developed peak flow rates for rainfall events up to the 1% AEP. |
| 2 | Page 11, Figure 8 | Background layout image updated |
| 3 | Page 11 | New figure added showing LSIO extent along Jacksons Creek |
| 4 | Page 13, Section 4.3 | Section 4.3 updated to describe existing conditions near Rosslynne Reservoir and proposed control of future urban runoff (includes update to existing Figure plus an additional Figure) |
| 5 | Page 15, Figure 14 | Sub-catchment area plan updated. The major catchment boundary between the "west catchment" and "east catchment" has not changed. Some minor sub-area catchment changes due to revised development plan layout, Version 16 (particularly sub areas K, J, G) |
| 6 | Page 16, Table 1 | Minor changes to sub-catchment areas (ie column 2). Some text changes to the "comments" column (ie for subcatchments C, E, F, I, EX1) |
| 7 | Page 18 | Revised description provided under "existing peak flowrates" sub-heading to reflect hydrologic modelling of the "west catchment". Table 2 updated to include a column for the "west catchment". Additional Table 3 included to summarise pre-developed flow rates. |
| 8 | Page 19, Table 4 | "Table 4 - Objectives" updated and revised. The following text was added to the second row "Provide Rosslynne Reservoir with protection from urban runoff for the 1 in 1,000,000 rainfall event." The fourth row was amended to require retardation for the "west catchment" with the inclusion of the following text "LSIO requirement to provide retardation to control peak flow events (eg 1% AEP) back to predevelopment peak flow rates prior to entering Jacksons Creek". |
| 9 | Page 20, Table 5 (Section 6.1) | Minor changes to numbers in the calculations table due to item 5 (ie updates to layout plan and sub-catchment area plan) |
| 10 | Page 21, Table 6 & 7 (Section 6.2) | Minor changes to numbers in the calculations table due to item 5 (ie updates to layout plan and sub-catchment area plan) |
| 11 | Page 22, Figure 16 | Minor changes to the overland flow paths due to item 5 (ie updates to layout plan and sub-catchment area plan) |
| 12 | Page 23 | Under the "Western Catchment" sub-heading the text was amended to reflect that retardation of peak flow rates is required for this catchment. Specifically the following text was included "Retardation storage and stormwater treatment will be provided by an integrated treatment asset (West WLRB) within the proposed drainage reserve (2.35ha) adjacent to the existing tributary". |
| 13 | Page 25, Figure 18 | Figure updated in order to reflect revised layout plan (ie Version 16) |
| 14 | Pages 26-30, Section 6.4 | Section 6.4 amended to include retardation sizing and modelling for the western catchment. Figure 21 updated with latest layout (ie Version 16). Table 10 added. Figures 19,20 and 22 added. |
| 15 | Pages 31-35. Section 7 | New Section in report added, which is titled "Rosslynne Reservoir Protection". Hydrologic and hydraulic analysis of extreme events to demonstrate that the Rosslynne Reservoir is protected from urban stormwater runoff for rainfall up to the 1 in 1 million year event. The approach adopted the same principles as that applied to the Greenvale Reservoir. |
| 16 | Page 39, Figure 28. | Development Plan Maserplan layout (VCAT Issue 3 February 2023) updated in the Figure |
| 17 | Page 40, Figure 29. | Development Plan Maserplan layout (VCAT Issue 3 February 2023) updated in the Figure |
| 18 | Page 42, Section 9 | New Section in report added, which is titled "Sodic and Dispersive Soils Assessment and Management Plan". This section summarises the investigations, analysis and recommendations undertaken by Declan McDonald from Regen Soils (a pre-eminent sodic soils specialist) regarding sodic soils at the Ross Watt Road site, the existing drainage line along the escarpment, the proposed wetland/basin reserve and the outfall to Jacksons Creek. In summary the sodic soils and geomorphology assessment identified that the development site is susceptible to dispersion but are amenable to improvement and stabilisation. As a result a sodic/dispersive soils management plan has been prepared which provides the required recommendations and actions. |
| 19 | Page 45, Section 10 | New Section in report added, which is titled "Timing of Stormwater Assets". This section summarises the likely timing of key stormwater assets. |
| 20 | Page 46, Section 11 | New Section in report added, which is titled "Integrated Water Management Plan". This section identifies that an Integrated Water Management (IWM) Plan will be prepared for the site post permit |
| 21 | Page 46, Section 12 | Additional paragraph added to the conclusion to reference the sodic soils assessment and recommendations. |
| 22 | Page 48, Appendix A | Updated Development Plan Maserplan (VCAT Issue 3 February 2023) |
| 23 | Page 49, Appendix B | Addition of Appendix B, which includes the full Sodic Soils Assessment report from Regen Soils |