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17 December 2021
Job No: 20214_Response to Council_REV2

DPIE C/o
FDC Construction & Fitout Pty Ltd
22-24 Junction Street
Forest Lodge NSW 2037

Re: Huntingwood Processing Facility – SSD 17352813 - 65 Huntingwood Drive, Huntingwood

Attention: DPIE,

We Sparks & Partners Consulting Engineers being the civil/stormwater engineer for the above proposed development have reviewed the comments provided by Council dated 16th November 2021 and provide the following responses regarding DPIE & Council concerns to assist in the SSDA assessment.

Comment	Response
On-site Stormwater Detention	
a) *Provide an On-Site Detention catchment plan of the existing On-Site Detention and the proposed On-Site Detention catchment. Considering the existing primary On-Site Detention is to be demolished the pre to post catchment should match. While the areas have been clearly stated in the integrated water report there is no catchment plan associated with this. The report and plans currently do not match and has to be fixed..*	• Catchment plan of existing OSD is provided as drawing DA4311. • Catchment plan of proposed OSD is provided as drawing DA4312.
b) *The On-Site Detention is to apply to all the development. Any bypass is to be clearly hatched and areas stated. Provide a separate On-Site Detention catchment plan, separate to the water quality catchment plan. Rename plans to suit.*	• Chocolate building, silo & storage shed is accounted for in OSD catchment area as bypass. Refer to catchment plan DA4312.
c) *The On-Site Detention calculation spreadsheet require that the 'obvert of*	• OSD calculation sheet obvert has been corrected for the 1050 dia outlet pipe.

pit outlet pipe' be 55.95 and not 55.23 based on a 1050mm pipe. This will result in slight orifice drowning. Review the spreadsheet.	• Refer to IWCM Report for OSD calculation sheet.
d) *The base of On-Site Detention can be 1% slope minimum to assist in achieving volumes.*	• OSD base has been adjusted to 1%. • Refer to drawings DA4711 & DA4712.
e) *Ancillary buildings and all buildings such as processing building (BLDG), storage shed, silo 1 and 2 etc must be included for On-Site detention of stormwater.* • *If new buildings (ancillary) are built over existing impervious areas and are discharging to existing ancillary On-Site Detention systems that are not demolished then they can maintain status quo provided that proof of existing ancillary On-Site Detention is supplied to Council in the form of a report and survey with drainage lines verified to lead to existing On-Site Detention.* • *Where On-Site Detention does not exist or does not cater for the extra development then On-Site Detention applies.* • *Where new buildings are proposed over pervious areas then compensatory On-Site Detention volumes will apply as a pre to post development model would have applied at the time of constructing the site.*	• *Chocolate building, silo & storage shed is accounted for in OSD catchment area and as bypass.* • *Refer to IWCM Report for OSD calculation sheet.*
f) *Provide details of the first flush pit (this is to be sealed)level by calculating the upstream and downstream pit's invert level.*	• Detail is provided on DA4702 and on plan DA4111.
g) *Uncovered (no roof above) On-Site Detention area is to be considered bypass for water quality*	• OSD is covered by upper floors and has no direct rainfall.
Water Quality	

a) *Water Quality applies to all the development including ancillary buildings such as 'processing building (BLDG)', storage shed, Silo 1 and 2. This is independent of On-Site Detention requirements. Further details are to be provided regarding water quality for the aforementioned buildings*	• Silo and storage shed drains to a system with no treatment and considered as bypass. • Chocolate building roof is treated by a separate Stormfilter chamber. Refer to DA4104 & DA4702.
b) *It appears that on Dwg. DA4301 ancillary catchment (1790 + 313m2) are unaccounted for. These are to be either treated or considered as bypass for Water Quality. Confirm water quality approach regarding the ancillary catchment (1790 + 313m2) as shown on Dwg. DA4301.*	• Areas are accounted for in the design. Refer to WSUD catchment plan DA4301 and IWCM Report.
c) *Model for Urban Stormwater Improvement Conceptualisation 'X' is not yet supported and a standard Model for Urban Stormwater Improvement Conceptualisation model is to be submitted.*	• MUSIC V6 model has been provided.
d) *Ensure Model for Urban Stormwater Improvement Conceptualisation model matches the plans in terms of names, abbreviations, areas and land use.*	• Catchment plans have been noted with prefixes to more clearly link the catchment plan and MUSIC model.
e) *Label each sub-catchment on Dwg. DA4301 i.e. on top of the hatchings for ease of identification.*	• Labels have been added to all catchment plans.
f) *Provide information on the total catchment area for 'SF1, SF2, bypass for water quality.*	• Total catchments to each chamber are more clearly noted in the catchment plan DA4301.
g) *Jellyfish calculations, detailed drawings, levels and splitter pits are to be provided to as per the Water sensitive urban design developer handbook chapter 12.13.*	• Jellyfish detail and calculations are provided on DA4702.
h) *All pits with OceanGuards are to be clearly noted on the plan.*	• Pits with Oceanguards are noted within a pit schedule on DA4701.

Should you have any questions with regard to the above please do not hesitate to contact the undersigned.

Regards,

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