

Submission – Flood Risk Objection

**Residential with In-Fill Affordable Housing
159–167 Darley Street West, Mona Vale**

Application Number: SSD-91496958

1. Executive Summary

This submission requests that the Planning Panel refuse or defer determination of SSD-91496958 on the basis that the proposal does not adequately address critical risks relating to flooding, groundwater interception, basement inundation, hydrostatic uplift, contamination pathways, and easement constraints. The Environmental Impact Statement does not provide the minimum technical evidence required to demonstrate that the development can be constructed or operated safely within a flood-affected catchment.

2. Flooding - Failure to Demonstrate Safety or Compliance

2.1 Absence of a Complete Flood Impact Assessment

The EIS does not include a compliant Flood Impact Assessment, 1D/2D hydraulic modelling, Flood Planning Level determination, overland flow path analysis, or flood storage assessment. Without these, the Panel cannot determine whether the proposal increases flood risk, obstructs overland flow, or meets the "no worsening" principle.

2.2 Three Basement Levels in a Flood-Affected Catchment

The proposal includes three basement parking levels, significantly increasing inundation risk, entrapment risk, structural failure under hydrostatic pressure, and pump failure during storm events. Planning requires that basement car parks must not flood in the 1% AEP event. The EIS does not demonstrate this.

3. Groundwater - High Risk and Insufficient Assessment

3.1 Groundwater Interception

A three-level basement is almost certain to intercept perched groundwater, shallow aquifers, and seasonal groundwater fluctuations, introducing long-term risks including continuous groundwater inflow, permanent reliance on mechanical pumping, drawdown impacts, and settlement of adjacent structures.

3.2 Missing Groundwater Documentation

The EIS does not include a Groundwater Impact Assessment, Dewatering Management Plan, hydrostatic uplift modelling, contamination risk assessment, or long-term pump-out strategy.

4. Structural & Safety Risks - Unresolved

4.1 Hydrostatic Uplift

No evidence has been provided that the basement slabs and retaining structures can resist uplift forces during high groundwater conditions, flood events, or pump failure.

4.2 Pump System Reliability

The EIS does not demonstrate compliance with industry requirements for dual pumps, backup power, alarm systems, and redundancy for 1% AEP events.

5. Easements & Drainage Constraints - Unclear and Unresolved

5.1 Existing Easements Not Identified

The site comprises five lots (Lot 1-5 DP 11108). The EIS does not clearly identify stormwater drainage easements, sewer easements, overland flow path easements, utility easements, or access easements.

5.2 Potential Obstruction of Natural Drainage

If the site contains or contributes to a natural drainage line or overland flow path, the proposed excavation and built form may obstruct lawful drainage, increase flood risk, or require new easements.

6. Environmental & Public Safety Risks

6.1 Contamination Pathways

If groundwater is intercepted, pollutants from vehicles may enter the water table unless the basement is fully tanked and sealed. The EIS does not demonstrate compliance with Sydney Water discharge requirements.

6.2 Evacuation Safety

The EIS does not provide a compliant Flood Emergency Response Plan. Basement flooding during storm events poses life-safety risks.

7. Determination Test for the Panel

Approval cannot be granted unless the Panel is satisfied that flood risk is managed, groundwater impacts are mitigated, basement structures can withstand hydrostatic forces, drainage constraints are resolved, and the development does not increase risk to neighbouring properties. The current EIS does not meet these thresholds.

8. Recommendation

It is recommended that the Planning Panel refuse SSD-91496958 or defer determination pending submission of a complete Flood Impact Assessment, Groundwater Impact Assessment, hydrostatic uplift modelling, Dewatering Management Plan, full easement mapping, and a compliant Flood Emergency Response Plan.