Department of Planning and Environment
320 Pitt Street
Sydney
NSW 2000

Attention: Andy Nixey,

Response to Submissions
Residential development at 1 & 2 Murray Rose Avenue,
Sydney Olympic Park (SSD 9403)

Dear Andy,

I refer to your letter dated 18 April 2019 inviting comments from Sydney Olympic Park Authority (SOPA) in relation to the Response to Submission (RtS) document and appendices submitted by the proponent in respect of the above development located within the Sydney Olympic Park.

SOPA has reviewed the information provided and in combination with our previous comments, dated 25 March 2019 provide the following comments with regard to Green Star, the Remedial Action Plan and conditions regarding landscaping and the public domain interface.

1. Green Star

SOPA appreciates the applicant's commitment for the development to be the first residential high rise to target 6 star Green Star and the potential difficulty of achieving this rating.

SOPA is keen for the development to achieve a 6 star Green Star rating and act as an exemplar for future developments within Sydney Olympic Park. Given the potential reliance of the project on claiming cross-credits from SOPA's 6 Green Star Communities certification to achieve the 6 star Green Star rating; SOPA acknowledges the complexity of satisfying the condition as originally proposed prior to the issue of a Construction Certificate.

The rewording of the condition as proposed by the applicant, however, does not provide any measurable requirements or clear outcomes for the applicant to satisfy. As such, SOPA recommends the condition be reworded to allow for flexibility in achieving a 6 star Green Star rating, whilst also requiring the applicant to document their ongoing commitment to achieving this rating throughout the detailed design and construction process. Accordingly, we propose the following amended wording to the condition, taking into consideration the issues highlighted by the proponent in currently achieving the accreditation:

Condition
Prior to the issue of a Construction Certificate, the Applicant must provide to SOPA's Director, Environment and Planning:

a) *Evidence that a Green Star Accredited Professional (GSAP) has been engaged throughout the Green Star certification period; and*

b) *A Green Star scorecard, signed off by the GSAP for the project, updated to reflect any changes to the proposed Green Star pathway*

In addition to the proposed planning condition, SOPA also has a separate development agreement in place with the applicant to ensure that all reasonable efforts are made to achieve the 6 star Green Star Design and As Built rating.

2. Remedial Action Plan

SOPA has reviewed the submitted Remedial Action Plan (RAP) for the site as recommended by the detailed Site Investigation. SOPA's review identified various inadequacies in the RAP as summarised below:

- The conceptual site model does not consider other environmental receptors;
- The submitted report does not provide any alternative remediation strategy to that proposed. Whilst it is noted that the proposed option may well be the only option in this instance, this should be suitably set out with reasons as to why alternative solutions have been dismissed;
- It is currently not known whether the groundwater at the site is contaminated. The subsequent Construction Environmental Management Plan (CEMP) should include within it remediation and management measures which will be undertaken in the event that the site contains contaminated ground water; and
- The groundwater assessment is yet to be complete. The finalised remediation strategy should be reviewed and amended based upon the outcomes of the groundwater assessment.

A full commentary of all issues to be addressed is set out in Appendix 1 of this letter and should be taken into consideration when the updated RAP is submitted. Accordingly, SOPA recommends the following condition is included in any planning approval in order to ensure a suitable RAP is devised for the site.

Condition
Prior to any below ground development occurring, an amended Remedial Action Plan (RAP), must be submitted to the satisfaction of SOPA's Senior Manager, Planning.

3. Public Domain and Landscaping

SOPA acknowledges the extent of consultation and design review undertaken by the applicant to achieve a positive outcome for the through-site link to the west of the site. To ensure that the quality and integrity of the through-site link design is carried through to construction, SOPA re-iterates the previous request to impose a condition of consent requiring that the public domain interface and landscaping plan be approved by SOPA prior to the issue of the relevant Construction Certificate.

Other Matters
We note the referral letter in relation to this RtS amendment was sent to SOPA on 18 April 2019, however, it was not received until 4 May 2019. In order to ensure a timely response to future referrals, please ensure these are sent to SOPA's new address, which for the avoidance of doubt is set out below:

Senior Manager, Planning
5 Olympic Blvd,
Sydney Olympic Park
NSW 2127

Alternatively, referrals can be forwarded directly to SOPA's planning e-mail: planninginfo@sopa.nsw.gov.au

Should you have any queries or wish to discuss these matters further, please do not hesitate to contact urban planner Richard Seaward on Tel: +61 2 9714 7146 or e-mail: richard.seaward@sopa.nsw.gov.au

Yours sincerely,

Alix Carpenter
Senior Manager
Planning

09.05.19

Appendix 1

Full schedule of Remediation Action Plan comments to be addressed

- Section 1.4 – Include NSW Waste Regulations. List of applicable guidelines is incomplete. Please complete.
- Section 3.1 – There is an error in the text.
- Section 2 – Roles and Responsibilities
  - Local Authority is SOPA
  - Department of Planning are responsible for ensuring compliance with planning consent. SOPA is responsible for any local consent issued in relation to the development.

- Tab 3.1 should also list SOPA as local Authority

- Section 3.2 Previous Investigations –
  - Site history: Legal and illegal landfilling operations occurred over several decades on lands that are now within Sydney Olympic Park. Following an extensive clean-up program across the site 10 engineered landfills were constructed. It is noted that waste may be found potentially during excavation of areas of Sydney Olympic Park that are not mapped as remediated lands. Appropriate management procedures must be applied. Please find attached Section 9 – Management of Unexpected Waste of SOPA's Remediated Lands Management Plan. Appropriate measures must be included in the unexpected finds protocol.
  - What were the depths of the boreholes?
  - Figure 2 shows only PAH and TRH results for samples collected from boreholes drilled in the northern part of the site. It is not clear in the report whether samples form the southern part were tested for PAH and TRH, or if PAHs and TRH were not detected in the tested samples form the southern part of the site or that detected PAHs and TRH concentrations were below the human health and ecological site assessment criteria. Please provide missing information in the report.
  - Figure 2 shows the approximate location of groundwater monitoring wells (EI, 2018). RAP states that no groundwater was encountered during investigations. It is unclear whether those monitoring wells were installed or not. Does Figure 2 refer to proposed monitoring wells or have the monitoring wells been installed but groundwater was not intercepted? Please clarify. What is the (proposed?) depth of the monitoring wells?
  - Please provide some additional information on vertical and lateral delineation of TPH and PAH contamination.

- Section 3.2 - Data Gaps: For an appropriate groundwater investigation and risk assessment the following parameters are required:
  - Depth to groundwater
  - Aquifer systems present on site
  - Groundwater flow direction and hydraulic gradient
  - Groundwater quality on site
  - If groundwater contamination is detected investigate quality of groundwater migrating on to the site and migrating off site
  - Provide report on groundwater assessment
  - Vertical and lateral delineation of soil contamination? Please see comments above.

- Section 3.2 – Conclusions and Recommendations:
  - The unexpected finds protocol must include both the management of unexpected waste/soil contamination and groundwater contamination. Although previous soil investigation have not identified any asbestos on site it is possible that asbestos may be encountered during excavations works. On the grounds of Sydney Olympic Park has an industrial history the
- Section 3.3 Conceptual Site Model
  - Assumption of minimal exposure is not warranted. The likelihood that construction workers are exposed to contaminated fill and groundwater is high but the risk is defined by likelihood and consequence of exposure. The report should stress that

there are WHS risks for workers and future residents/occupants associated with contaminated fill and possibly groundwater but the risks can be managed effectively if appropriate measures are taken during construction and suitable remediation measures implemented. Evidence of appropriate risk management during excavation/construction must be provided in the CEMP.

- Groundwater: The report states that groundwater was not encountered during the investigation. But the CSM claims a significant depth to groundwater and the presence of the basement across the site acting as a significant buffer that reduces the risk of exposure to car-park users. These statements are unfounded and contradictory based on the provided information in the report with regards to the statement that groundwater was not encountered on site. According to the provided development plan it appears that the bottom of the lowest basement is approximately 9.5m bgl (below ground level) where groundwater may be present. This is supported by a citation from the geotechnical report that the groundwater table would be in direct contact with the proposed basement floor. CSM should be reviewed and amended.
- Groundwater investigation and assessment is required for a proper groundwater risk assessment and CSM. Review CSM after completion of groundwater assessment.
- Environmental receptors including receiving waters have been ignored. Please review CSM and amend.

- Section 4 Remediation Strategy - Generally a RAP discusses and evaluates remediation options and proposes the most suitable option to render a site suitable for the proposed use. This report does not provide a discussion or evaluation. The only justification why the selected remediation strategy has been deemed suitable has been cited from the Geotechnical Report by JK Geotechnics, 2017. It is cited that the groundwater table would be in direct contact with the proposed basement floor and therefore onsite encapsulation is not considered appropriate. That statement contradicts the assumption in the conceptual site model that the basement would act as a buffer reducing the risk of exposure to groundwater to car-park users. In case groundwater is contaminated the report should stress that appropriate measures must be taken during construction to avoid exposure to groundwater. If groundwater is contaminated how will be ensured that residents, carpark users are not exposed to contaminated groundwater? What remediation and management measures will be taken? How will it affect the design parameters of the basement? How will environmental receptors be protected? The RAP should discuss the required steps.

- Section 4.2 Remediation Criteria
  Please provide information where on the premises the consultant proposes to adopt the proposed soil remediation criteria.

- Section 4.3 - Remedial Strategy: With regards to the outstanding investigations for closing the data gaps the remedial sequence may have to be reviewed and amended accordingly. It is understood that both contaminated and not contaminated fill will be stockpiled on site for sampling and testing to determine its fate. Please clarify if suitable fill is referring to fill that will be reused on site. Please provide procedure for assessing suitability of soils for reuse on site.

- Section 4.3.1 – Application for development consent should be lodged with SOPA.

- Section 4.3.2 – CEMP must be submitted to SOPA for approval.

- Section 4.3.3 - Data Gap Closure Investigations
  - One round of groundwater sampling and testing does not provide representative data. Three rounds are recommended, including at high and low groundwater levels at appropriate intervals. Groundwater flow directions and hydraulic gradient may change during low and high groundwater levels. Include groundwater level measurements and preparation of contour map of water table.
  - Groundwater investigation and assessment should be undertaken by a qualified experienced groundwater professional in accordance with but not limited to NSW EPA Guidelines for the Assessment and Management of Groundwater

Contamination, ANZECC & ARMCANZ guidelines and NEPM (Assessment of Site Contamination) Guidelines on Investigation levels for soil and groundwater
- The report should consider the industrial history of Sydney Olympic Park. SOPA manages legacy wastes in accordance with Contaminated Land Management Notice 28040. The consultant may want to include ammonia in the suite of analytes.

- Section 4.3.4 - Excavation and removal of unsuitable fill in the northern half of the site
  - Include disposal in accordance with Waste Classification Assessment (NSW EPA Waste Classification Guidelines – Part 1)

- Section 4.3.5 - Stockpiling of suitable fill from the southern half of the site
  - … in order to minimise erosion, run off, pollution of stormwater and receiving waters and dust emissions. Please include. A stockpile management plan must be included in the CEMP.

- Section 4.3.6 – Excavation and disposal of excess fill and natural soils

  - Excavation and disposal……in compliance with relevant environmental legislation and guidelines instead of to the satisfaction of the environmental consultant.
  - To determine the fate of fill and naturals soils representative samples must be Guidelines. What does the consultant mean with waste classification certificates will be created from previous investigation results? Waste must be tested and disposed of in accordance with Waste Classification Assessments and waste dockets must be kept and provided on request.

- Section 4.4 – Excavation and disposal of excess fill and natural soils
  - The report does not provide a discussion or justification why excavation and offsite disposal is considered to be the most appropriate remediation strategy.

- Section 5.1 – all excavated, impacted and separately stockpiled material must be covered over night. A stockpile management plan must be included in the CEMP detailing how contaminated/impacted material will be managed on site to prevent any run-off, pollution of stormwater and receiving water and dust emissions and other dispersion of the material in the course of works. It is noted that all material requiring disposal must be tested and assessed in accordance with the NSW EPA Waste classification guidelines. Stockpile management procedures must also established for non impacted, non-contaminated excavated material.

- Section 5.2 – analytical suite for waste classification: It should be stressed that analytical testing will be conducted in accordance with NSW EPA Waste Classification Guidelines.

- Section 5.3 – Importation of material – Importation of soil must be in accordance with Waste Regulations in NSW. Please make a reference in the report.

- Section 6 : SAQP
  - Be more specific about type of hydrocarbon contamination
  - Develop a Decision Rule: The decision rules hasn't considerer groundwater, its potential impacts on the suitability of the site for the proposed use and associated risks to construction workers/occupants/residents and environmental receptors. This applies to contamination originating from the site and contamination sourced off site. A reference should be made that to the Duty to Report Contamination under the CLM Act.

- Section 7 and 8: The groundwater assessment hasn't been completed yet. The remediation strategy should be reviewed and amended based on the outcome of the groundwater assessment. Please refer to comments to Section 4.