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Our ref: IDAS1120520 Our file: IDAS1120520 Your ref: DA2017/0547

General Manager City Of Ryde Att J Pucci Locked Bag 2069 RYDE NSW 1670

Attention: Council Person

14 November 2019

Dear Sir/Madam

Re: Integrated Development Referral – General Terms of Approval

Dev Ref: DA2017/0547

Description: 80mm submersible pump

Location: 11-17 Khartoum Road Macquarie Park

I refer to your recent letter regarding an integrated Development Application (DA) proposed for the above location. Attached, please find the WaterNSW General Terms of Approval (GTA) for part of the proposed development requiring a Water Supply Work approval under the *Water Management Act 2000* (WM Act), as detailed in the subject DA.

Please note Council's statutory obligations under section 91A (3) of the *Environmental Planning and Assessment Act 1979* (EPA Act) which requires a consent, granted by a consent authority, to be consistent with the general terms of any approval proposed to be granted by the approval body.

If the proposed development is approved by Council, WaterNSW requests these GTA be included (in their entirety) in Council's development consent. Please also note WaterNSW requests notification:

if any plans or documents are amended and these amendments significantly change the
proposed development or result in additional works or activities (i) in the bed of any river,
lake or estuary; (ii) on the banks of any river lake or estuary, (iii) on land within 40 metres of
the highest bank of a river lake or estuary; or (iv) any excavation which interferes with an
aquifer.

WaterNSW will ascertain from the notification if the amended plans require review of or variation/s to the GTA. This requirement applies even if the amendment is part of Council's proposed consent conditions and do not appear in the original documentation.

- if Council receives an application under s96 of the EPA Act to modify the development consent and the modifications change the proposed work or activities described in the original DA.
- · of any legal challenge to the consent.

As the proposed work or activity cannot commence before the applicant applies for and obtains an approval, WaterNSW recommends the following condition be included in the development consent:

The attached GTA issued by WaterNSW do not constitute an approval under the Water Management Act 2000. The development consent holder must apply to WaterNSW for a Water Supply Work approval after consent has been issued by Council and before the commencement of any work or activity.

A completed application form must be submitted to WaterNSW together with any required plans, documents, application fee, security deposit or bank guarantee (if required) and proof of Council's development consent. Finalisation of an approval can take up to eight (8) weeks from the date the application and all required supporting documentation is received.

Application forms are available from the WaterNSW website at:

www.waternsw.com.au > Customer Services > Applications & Fees.

WaterNSW requests that Council provide a copy of this letter to the development consent holder.

WaterNSW also requests a copy of the determination for this development application be provided by Council as required under section 91A (6) of the EPA Act.

Yours Sincerely

Hemantha Desilva

Senior Water Regulation Officer - Projects Water Regulatory Operations

idard Meaves

WaterNSW



Attachment A

General Terms of Approval for building dewatering

- 1 The Department of Planning, Industry and Environment—Water has determined that an authorisation to account for the temporary and transient impacts on groundwater systems associated with the proposed development for up to twelve months is required (to be issued by WaterNSW).
- A Site Hydrogeology Report prepared and certified by a qualified, experienced and practising hydrogeologist must be provided with the authorisation application that includes, but is not limited to, the following:
 - a. pre-development (existing) conditions in the form of a baseline monitoring record and comprehensive groundwater system description:
 - site and neighbouring area stratigraphy, formation description, site groundwater levels, groundwater flow paths, site aquifer and aquitard (if relevant) hydraulic characterisation
 - ii. groundwater quality and specific consideration of groundwater potentially affected by contamination from surrounding land uses or acid sulfate soils where they are found to exist
 - iii. neighbouring users, groundwater dependent ecosystems, water bodies and other relevant features within a one kilometre radius of the subject site
 - iv. the above site information must not date more than six months prior to the date of lodgement of the development application to account for climate trends and maintain the currency of groundwater data
 - excavation phase (during dewatering), in the form of a comprehensive impact prediction description as well as a monitoring and management strategy (the latter equivalent to the requirements for a Dewatering Management Plan):
 - i. predicted groundwater modelling impacts (extent, magnitude and duration) that are developed through suitable methods comprising either;
 - numerical modelling in high risk areas
 - analytical solutions in low risk areas
 - ii. corresponding trigger levels (levels, quality, flow, volume and ground surface settlement) to manage any potential impacts
 - iii. construction techniques and approaches that will be used to prevent any ongoing groundwater pumping at the same time as not causing any obstruction to natural groundwater behaviour
 - iv. details of monitoring (groundwater levels, quality as required, rate of inflows, metered pumping)
 - v. where a risk of ground settlement is identified due to the proposed dewatering, the proponent is to provide a program of monitoring, trigger and responses to Council (Note while it is the Proponent's responsibility to identify the risk, the Department recommends that Council enforce this requirement for all applications in all high risk areas which includes sand formations or other unconsolidated ground).



- c. post-excavation phase (during aboveground construction) in the form of a comprehensive post-dewatering impact review (equivalent to the requirements for a a Dewatering Completion Report):
 - i. collation of monitoring records.
 - ii. analysis of actual impacts compared to predicted impacts, noting that some impacts may be delayed,
 - iii. magnitude and extent of potential long-term effects from the completed structure
 - iv. arrangements for reporting (measurements, technical analysis and future predictions) to the relevant authority
- d. occupational phase (after building completion) in the form of an annual groundwater monitoring plan:
 - monthly monitoring to demonstrate the magnitude of groundwater pumping after construction, either through satisfactory photographic and documented evidence of no visible seepage into the building or, if inflows cannot be prevented, measured flow rates into all pump-out sumps
 - ii. recording arrangements to document ongoing compliance, event-based notification of unexpected groundwater take to the relevant authority and annual reporting arrangements
- 3 All required monitoring and reporting arrangements are to be designed to demonstrate the activity meets due diligence with respect to the Water Management Act 2000, the relevant water sharing plan(s) and the NSW Aquifer Interference Policy during construction and occupation phases of the building.
- 4 At the time of application for a Construction Certificate, the developer must be able to demonstrate to the consent authority that an authorisation for the pumping of groundwater for temporary construction dewatering has been obtained for the relevant groundwater source from which water is being taken.
- 5 At the time of application for an Occupation Certificate, the developer must be able to demonstrate to the consent authority that any unexpected groundwater pumping (resulting from poor construction methods, materials or inadequate waterproofing) has been authorised by a water access licence purchased for the relevant groundwater source from which water is being taken and must be able to demonstrate no impact on neighbouring sites or the integrity of the aquifer.
- 6 All monitoring data collected for the development and all monitoring and management reports are to be provided in electronic format (tabulated and raw corrected data) to the Department of Planning, Industry and Environment—Water.



General Terms of Approval

for proposed development requiring approval under s89, 90 or 91 of the Water Management Act 2000

Reference Number: IDAS1120520

Issue date of GTA: 14 November 2019

Type of Approval: Water Supply Work

Description: 80mm submersible pump

Location of work/activity: 11-17 Khartoum Road Macquarie Park

DA Number: DA2017/0547 LGA: City Of Ryde

Condition Number Details

Water Sharing Plan Area: Greater Metropolitan Region Groundwater Sources

The GTA issued by WaterNSW do not constitute an approval under the *Water Management Act 2000*. The development consent holder must apply to WaterNSW for the relevant approval **after development consent** has been issued by Council **and before** the commencement of any work or activity.

		Dewatering
(GT0062-00001	Groundwater shall not be pumped or extracted for any purpose other than temporary construction dewatering at the site identified in the development application.
(GT0063-00001	An authorisation under the relevant water legislation, such as a Water Access Licence (WAL), shall be obtained for the take of groundwater as part of the activity. For avoidance of doubt, these terms do not represent any authorisation for the take of groundwater, nor do they constitute the grant, or the indication of an intention to grant, any required WAL.
(GT0064-00001	An authorisation under the relevant water legislation, such as an Approval, is also required for the works involved in extracting the groundwater. For avoidance of doubt, these terms do not represent any authorisation for the construction or installation of such works.
(GT0065-00001	The relevant works must not be carried out, installed or operated until a specialist hydrogeological assessment has been completed by the Department of Planning Industry and Environment, which concludes that adequate arrangements are in force to ensure that no more than minimal harm will be done to any water source, or its dependent ecosystems, as a consequence of the construction or use of the proposed water management work.
(GT0066-00001	The design and construction of the building must prevent any take of groundwater after the authorisation has lapsed by making any below-ground levels that may be impacted by any water table fully watertight for the anticipated life of the building. Waterproofing of below-ground levels must be sufficiently extensive to incorporate adequate provision for unforeseen high water table elevations to prevent potential future inundation.
	GT0067-00001	Sufficient permanent drainage shall be provided beneath and around the outside of the watertight structure to ensure that natural groundwater flow is not impeded and: a. any groundwater mounding at the edge of the structure shall be at a level not greater than 10 % above the level to which the water table might naturally rise in the location immediately prior to the construction of the structure; and b. any elevated water table is more than 1.0 m below the natural ground surface existent at the location immediately prior to the construction of the structure; and c. where the habitable part of the structure (not being footings or foundations) is founded in bedrock or impermeable natural soil then the requirement to maintain groundwater flows beneath the structure is not applicable.



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Water Sharing Plan Area: Greater Metropolitan Region Groundwater Sources

GT0068-00001 Construction methods and material used in and for construction shall be designed

to account for the likely range of salinity and pollutants which may be dissolved in groundwater, and shall not themselves cause pollution of the groundwater.

GT0069-00001 The Applicant is bound by the above terms and any other terms and conditions of

the subsequent authorisation(s) required for the extraction of groundwater and the

associated works under the relevant water legislation.

GT0070-00001 Measurement and monitoring arrangements to the satisfaction of WaterNSW are

to be implemented. Weekly records of the volumes of all groundwater pumped and the quality of any water discharged are to be kept and a completion report provided after dewatering has ceased. Records of groundwater levels are to be kept and a summary showing daily or weekly levels in all monitoring bores

provided in the completion report.

GT0071-00001 Following cessation of the dewatering operations and prior to the surrender of any

associated authorisation, the applicant shall submit to WaterNSW the completion report which shall include: a. detail of the volume of water taken, the precise periods and location of water taken, the details of water level monitoring in all of the relevant bores; and b. The location and construction of groundwater extraction works that are decommissioned c. a water table map depicting the aquifer; settled groundwater condition and a comparison to the baseline conditions; and d. a detailed interpreted hydrogeological report identifying all actual resource and third party impacts, including an assessment of altered groundwater flows and an assessment of any subsidence or excessive settlement

induced in nearby buildings and property and infrastructure.

SCHEDULE 1

The plans and associated documentation listed in this schedule are referred to in general terms of approval (GTA) issued by WaterNSW for integrated development associated with DA2017/0547 as provided by Council:

- Statement of Environmental Effects 11-17 Khartoum Road & 33-39 Talvera Road Macquarie Park
- Appendix 1- 11-17 Khartoum Road & 33-39 Talvera Road Macquarie Park Macquarie Technology Centre Geotechnical Site Investigation Report p 8-16