

#### LEVEL 10 477 Collins Street Melbourne Vic 3000

URBIS.COM.AU Urbis Pty Ltd ABN 50 105 256 228

#### **ADVERTISED COPY**

20 October 2022

Anne Maree Roberts Planning Department Monash City Council 293 Springvale Road Glen Waverley VIC 3150

Dear Anne Maree,

## PLANNING PERMIT APPLICATION FOR BACKFILLING OF FORMER QUARRY PIT IN DOMAIN 4, REMOVAL OF NATIVE VEGETATION AND ALTERATION TO AN ACCESS TO A TRANSPORT ZONE 2 1221-1249 CENTRE ROAD, OAKLEIGH SOUTH

We continue to act on behalf of Huntingdale Estate Nominees Pty Ltd in relation to the former Talbot Quarry site at 1221-1249 Centre Road, Oakleigh South.

As you are aware, there are current applications for ground improvement works (preloading) for the north-western portion of the site (Domain 1) and the northern and eastern boundary of the site (Domains 2a, 3a, 3b and 5).

This application relates to south-western portion of the site, known as Domain 4, which comprises an open former quarry pit. This quarry pit is up to 20m deep and currently contains some water, sediment and 'slimes' (a by-product of the former sand quarrying), which are required to be removed and dried and reused as backfill material (if deemed suitable). The balance of the quarry pit will be filled with clean fill that is either brought in from off-site or the preloading stockpiles from other Domains on the site.

The term 'Domains' relates to areas of the site grouped by similar geotechnical ground conditions, whereas site 'Zones' relate to environmental conditions and associated management requirements as outlined in the Environmental Audit. Geotechnical Domain 4 is the same area as identified as Environmental Zones 4 and 4A in the Statements of Environmental Audit.

This letter should be read in conjunction with the following supporting documentation:

- Existing Conditions Plan prepared by Tetra Tech Coffey;
- Proposed Works plan prepared by Tetra Tech Coffey;
- Tree Removal Plan prepared by Tetra Tech Coffey;
- Backfill Design Report Domain 4 prepared by Tetra Tech Coffey dated 14 October 2022;



- Environmental Information in support of planning application prepared by Tetra Tech Coffey dated 20 October 2022;
- Traffic Management Plan for Imported Fill for Domain 4 prepared by Cardno dated 11 October 2022;
- Stormwater Management Plan prepared by Afflux.
- Arboricultural Assessment and Report prepared by Tree Logic dated 15 September 2021;
- Flora and Fauna Assessment prepared by Ecology and Heritage Partners, dated September 2021;
- Targeted Surveys for Growling Grass Frog prepared by Ecology and Heritage Partners dated February 2022;
- Aboriginal Cultural Heritage Assessment prepared by Ecological Australia dated 31 March 2021;
- Construction and Environmental Management Plan, dated 1 May 2020;

Please note the Construction and Environmental Management Plan (CEMP) is the same as that appended to the Statements of Environmental Audit (SoEA) which have previously been provided to Council. Compliance with the CEMP is a condition of the SoEA.

## 1. BACKGROUND

The site's previous uses and activities of sand quarrying at site require a geotechnical response to backfill the former quarry void in Domain 4 to enable future development works.

The backfilling of the quarry pit in Domain 4 has previously been approved in 2015 under Planning Permit TPA/43336. The proposed backfill design is essentially the same as that previously approved. The backfill design report lodged under Permit TPA/43336 was peer reviewed by Golder Associates in 2015 and the final endorsed document incorporated matters raised in the peer review.

The backfilling planning permit was concurrently approved with a separate permit for stockpiling works across the site (TPA/4337). Under the stockpiling permit, stockpiles of fill were placed on the majority of the eastern side of the site which was intended for future use as backfill material in Domain 4. The backfilling of Domain 4 did not commence before both permits expired in 2019.

The Environmental Audit was completed in May 2020 which resulted in three Statements of Environmental Audit (SoEA) permitting sensitive uses subject to various requirements and conditions.

This application is part of the staged approach for ground improvement works across the site. Planning permit applications for works in Domain 1 and Domains 2a, 3a, 3b and 5 are currently under assessment by Council.

# 2. SITE AND SURROUNDS

The entire property comprises almost 19 hectares, situated to the north east of Centre and Huntingdale Roads intersection in Oakleigh South. The land has a long history of use for quarrying and sand extraction, and landfilling in parts of the site. Stockpilling of fill has been the most recent activity undertaken on site.



The works proposed as part of this application will predominantly take place in the south western portion of the site (Domain 4). During the first part of the work, which involve removing the existing sediment and slimes, drying areas and truck movements, this will occur in other Domains on site.





Figure 1 - Zones in Environmental Audit

Figure 2 - Geotechnical Domains

The quarry pit in Domain 4 is up to 20m deep in the southern portion. Standing water and up to 2m of silt and clay sediments are present in this portion of the pit. Some bunds are located towards the centre of the quarry pit. Within the northern portion of Domain 4, approximately 5m deep clay slimes (north west area) and variable fill materials (fill platform in the north east) are located.

To the south of Domain 4 is a four storey apartment building located at the corner of Huntingdale and Centre Roads at 1215 Centre Road and two storey apartment blocks at 1219 Centre Road. Talbot Park is located to the south-east. To the west, on the opposite side of Huntingdale Road is Huntingdale Golf Course.

There are residential properties which front onto Huntingdale Road along the north-western boundary of the whole site and Davies Reserve, including a scout hut, is located to the north. To the north of the eastern portion of the site and along the eastern boundary, the site interfaces with the rear of residential properties. To the north-east, the former primary school site is currently being developed for townhouses.

## 3. PROPOSAL

The key features of the proposal are:

- Removal of the water from the base of the pit
- Removal of existing sediment in the southern part of Domain 4, drying and reuse (as appropriate)



- Removal of slimes and uncontrolled fill from the northern parts of Domain 4, drying and reuse (as appropriate)
- Removal of trees and patch of native vegetation within the quarry pit.
- Crushing of concrete within the pit for later use in the engineered fill.
- Reuse of stockpiles in other Domains on site for backfilling of the quarry pit.
- Importation of clean fill to the site for the balance of backfilling required for the quarry pit.
- Alteration to the existing access to Huntingdale Road to allow a double width access point (also sought approval under the Domain 1 and Domains 2a, 3a, 3b and 5 applications).

The sediment and slimes in the pit require drying before reuse. It is expected that the majority of the excavated material will be suitable for use as controlled fill. It is proposed for the sediment and slimes to be excavated from the pit and placed either on the existing fill platform within Domain 4 or on part of the eastern domains and spread out to enable the drying of the material. The drying period would be 1-4 weeks depending on weather conditions and once dry, the sediment and slimes can be reused, as appropriate, as fill for the quarry pit.

Previous investigations have identified the presence of concrete in the Domain 4 quarry pit. The volume and extent of the concrete is not known. A concrete crusher is proposed to be used on site (within the quarry pit) for crushing concrete found to be reused as fill in the quarry pit.

It is proposed to backfill the former quarry pit in a controlled manner, including a 2m thick drainage layer, to form an engineered fill surface that is suitable to support future redevelopment (subject to future approval) that may include medium to high density residential / commercial land uses with associated civil infrastructure including roads and services. The objective of the controlled filling is to provide a relatively uniform platform to support the proposed services and structures that will behave in a predictable manner and within tolerable differential settlement limits for the development.

Various layers of fill are proposed, which will be placed and compacted in an engineered manner. Fill will be used from existing stockpiles on site (and future stockpiles from Domain 1 – subject to a current separate planning application) as well as importation of fill from off-site. Settlement monitoring will be carried out to ensure that settlements are within tolerable levels.

Stormwater will be managed during the filling process. It is proposed that a retarding basin be constructed towards to the upper layers of fill to provide stormwater storage for the site.

## 4. PLANNING CONTROLS AND POLICIES

#### 4.1. ZONING AND OVERLAYS

The site is located in the **General Residential Zone – Schedule 3** (GRZ3) and the **Special Use Zone 2** (SUZ2). The majority of Domain 4 is located in the GRZ3.

The proposed use and works associated with the backfilling of the quarry void, as an 'innominate' use requires a planning permit under the General Residential Zone and the Special Use Zone.





Figure 1 - Zoning Plan

The subject site is affected by an **Environmental Audit Overlay**. The Environmental Audit is now complete and considers the backfilling of the quarry void.

### 4.2. CULTURAL HERITAGE SENSITIVITY

The south western portion of the site is located in an area of cultural heritage sensitivity as shown in the plan below.





Figure 2 - Aboriginal area of cultural heritage sensitivity

An Aboriginal cultural heritage assessment has been carried out by Ecological Australia. This assessment concluded that the previous activities on the site has resulted in significant ground disturbance and the mandatory cultural heritage management plan (CHMP) will not be required for quarry infilling or any future redevelopment of the site for mixed-use residential purposes, on the basis that no areas of Aboriginal cultural heritage sensitivity are present within the study area.

### 4.3. PARTICULAR PROVISIONS

**Clause 52.17** 'Native Vegetation' seeks to ensure no net loss to biodiversity resulting from removal, destruction or lopping of native vegetation. Pursuant to Clause 52.17-1, a permit is required to remove, destroy or lop native vegetation, including dead native vegetation, with some exemptions.

**Clause 53.18** 'Stormwater Management in Urban Development' seeks to ensure stormwater in urban development, including retention and reuse, is managed to mitigate the impacts of stormwater on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits. Whilst the proposed works are not for new buildings, the provisions of this clause have been taken into account.

**Clause 52.29** 'Land Adjacent to the Principal Road Network'. A permit is required to alter the access to Huntingdale Road which is a road located in the Transport Zone 2.

#### 4.4. RELEVANT PLANNING POLICIES

**Clause 11.02-1S** 'Supply of Urban Land' seek to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.



**Clause 13.04-1S** 'Contaminated and potentially contaminated land' seeks to ensure that 'potentially contaminated land is suitable for its intended future use and development, and that contaminated land is used safely'.

**Clause 21.13** 'Sustainability and Environment' seeks to (amongst other strategies) '*ensure that planning, development and associated infrastructure complies with the principles of economic prosperity, social advancement and environmental protection.*'

**Clause 22.05** 'Tree Conservation Policy' seeks to 'maintain, enhance and extend the Garden City Character throughout Monash' and 'to promote the retention of mature trees and encourage the planting of new canopy trees with spreading crowns throughout Monash'.

**Clause 22.09** 'Non-Residential Use and Development in Residential Areas' seeks to '*ensure that* development is appropriate having regard to the residential environment of the surrounds and that the amenity of the neighbourhood is not adversely affected by a business conducted in a residential area.'

## 5. PLANNING CONSIDERATIONS

The engineered backfilling of the former quarry pit is required to enable the site to be used for future redevelopment.

#### 5.1. CONSISTENCY WITH PLANNING POLICY

The proposal is consistent with relevant planning policy, having regard to:

- The works will rehabilitate the land to enable it to be available for future redevelopment, increasing the supply of well-located urban land for more beneficial uses than a redundant quarry (Clause 11.02-1S)
- The works are consistent with the Environmental Audit, which contemplates the backfilling works and specifies the environmental monitoring requirements during the works (Clause 13.04-1S).
- The proposed backfilling will assist in facilitating the rehabilitation of the former quarry pit to make it suitable for future development The works will be carried out in accordance with the requirements of the Environmental Audit to ensure the surrounding environment is protected (Clause 21.13).
- Whilst Clause 22.05 seeks the retention of semi-mature and mature tree canopy, tree retention is not possible within the quarry pit due to the backfilling earthworks which will change the ground levels. None of the trees to be removed have a high value rating in the Arboricultural assessment. Trees will be retained along the street boundary and the southern interface of Domain 4.
- Amenity impacts can be minimised and managed for the works to be appropriate adjacent to existing residential areas (Clause 22.09).

#### 5.2. GEOTECHNICAL CONSIDERATIONS

The backfill the former quarry pit is proposed to be carried out in a controlled manner to form an engineered fill platform that is suitable to support the future construction of roads, lanes, open spaces, infrastructure and dwellings (subject to separate approval). The quarry pit will be filled with engineered fill under Level 1 supervision in accordance with in AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development,".



A slope stability assessment has been carried out (appended to the Backfilling Design Report) and the results have been summarised in the Backfilling Design Report. The recommendations of the assessment will be followed to ensure the works proceed in a safe manner.

Whilst we note that Clause 52.09 'Extractive Industry and Extractive Industry Interest Areas' refers to the rehabilitation of previously extracted areas, this Clause does not apply to the current application as:

- the proposed works are not for extraction industry, within an Extractive Industry Interest Area; or
- within 500 metres of an existing or proposed extractive industry operation.

Whilst not applicable, the Clause refers to a 20m setback from site boundaries to not alter the natural condition or topography of the land. The previous quarrying activities at the site occurred up to around 5m from the site boundaries. The proposed backfilling works form part of the geotechnical ground improvement strategy for the site to improve the ground conditions so it can be used for future urban purposes that would be more beneficial to the local community than its current fenced off condition, vacant condition.

#### 5.3. ENVIRONMENTAL MANAGEMENT CONSIDERATIONS

The proposed backfilling works have been reviewed by and are supported by Tetra Tech Coffey Environmental Scientists (see enclosed letter from Tetra Tech Coffey).

The backfilling works are contemplated in the Statements of Environmental Audit (SoEA) and are subject to conditions of the Environmental Audit is that require that the Construction Environmental Management Plan, the Conceptual Design of Site Management Measures (CDSMM) and the Groundwater Quality Management Plan (GQMP) must be adhered to. Conditions of the Audit also require that an environmental auditor appointed under Part IXD of the Environment Protection Act 1970 (or its successor), reviews and verifies the backfilling of the Zone 4 quarry void is completed on accordance the design and associated environmental audit requirements.

Due to the presence of former landfill materials in Zone 1, environmental monitoring of landfill gas (LFG) and groundwater is required during backfilling. This is a precautionary approach, as the potential changes in LFG conditions (or associated amenity impact) off-site, associated with the proposed backfilling works are considered unlikely. The monitoring during backfilling is primarily required to provide information regarding LFG conditions to inform the final development design (potential LFG protection measures) for Zone 4 (Domain 4).

Groundwater conditions are generally stable under current site conditions. However, there is potential that the proposed filling of the Zone 4 quarry void could alter the groundwater flow regime at the site. The potential changes have been modelled and the primary purposes of on-going groundwater monitoring at the site are to:

- validate the results of the groundwater modelling;
- to ensure that no unacceptable risks to beneficial uses subsequently arise; and
- the extent of the established groundwater quality restricted use zone (GQRUZ) remains appropriate.

The CEMP requires that all LFG and groundwater monitoring infrastructure at the site (including additional bores to be installed within the quarry void) must be protected during construction works.



The enclosed letter from Tetra Tech Coffey outlines the monitoring regimes, which are requirements of the SoEA.

With regard to the landfill cap required for Domain 1, the CEMP requires that prior to the completion of construction of the landfill cap, filling of Domain 4 must have progressed to a sufficient degree that the cap construction at the interface of the Domain 1 and Domain 4 boundary can be completed.

#### 5.4. OFF SITE AMENITY CONSIDERATIONS

All works will be carried out in accordance with the Construction Environment Management Plan (CEMP) which forms part of the Environmental Audit Statements. The CEMP includes comprehensive mitigation measures to ensure amenity considerations are appropriately managed and neighbouring properties will not be adversely impacted.

It is considered there will not be any unreasonable amenity impacts associated with these works having regard to the following:

- To limit the impact of noise associated with the construction works, working hours will be restricted to:
  - 7am 6pm Monday-Friday
  - 8am to 12pm Saturdays
  - No work on Sundays or public holidays.
- The CEMP identifies a number of measures are to be taken to minimise the amount of dust detected outside the site. These include minimising the movement and speed of vehicles at the site and using a water spray for dust suppression, if required.
- The use of a concrete crusher is proposed on a temporary basis within the existing quarry void approximately 8 metres below ground surface level. Conditions specifying this requirement including a minimum setback of 150 metres to any adjoining residential property can be specified on any permit issued.
- As part of the slimes and sediment drying process, the drying areas have been nominated within the central portion of the site, away from neighbouring properties.
- When the stockpiles in other domains are removed for use within Domain 4, a bund of stockpile material will be retained around the boundaries of the site to assist with noise amelioration until such time as this is the last stockpile fill to be used and this will be removed for use in the Domain 4 quarry pit.

In line with previous permits on the site and the S173 Agreement applying to the land, a community consultative committee will be re-established to liaise with all parties and deal with and resolve any ongoing issues associated with the project. Residents and landowners surrounding the development will be invited to participate in the community consultative committee prior to the use and development commencing.

#### 5.5. ACCESS AND TRAFFIC

The existing access to Huntingdale Road is proposed to be widened to enable trucks to enter and exit from this access while the backfilling works take place (approval also sought under the Domain 1 and Domains 2a, 3b, 3b and 5 applications).



The amount of the traffic movements is expected to be relatively low. The ground improvement works across the whole site will be carried out in stages so the traffic generation from this application is expected to follow the preloading works, rather than at the same time.

A Traffic Management Plan has been prepared by Cardno which prescribes safe vehicle movements into and within the site for imported fill truck movements.

#### 5.6. TREE REMOVAL

Trees within the quarry pit of Domain 4 will be required to be removed to enable the backfilling to occur. Trees along the Huntingdale Road street frontage and outside the quarry pit adjacent to the southern boundary of Domain 4 will be retained.

An arboricultural assessment has been undertaken for the whole site. For the proposed works in Domain 4, a total of 4 individual trees and 1 large tree group are proposed to the removed. The arboricultural rating, which reflects its retention value from an arboricultural perspective, for the trees to be removed are as follows:

- No trees were assessed to have a High arboricultural rating.
- No trees were attributed an arboricultural rating of Moderate A, being prominent trees in Fair or better condition and with a moderate to long useful life expectancy (ULE).
- One (1) tree was rated Moderate B, being middle of the range and typical of the species worthy of retention where possible.
- Two (2) trees and one (1) large tree group were rated Moderate C, being of either small size or displaying accumulated deficiencies that are tending towards becoming of Low arboricultural value.
- No trees were attributed an arboricultural rating of Low, displaying symptoms of decline and / or structural deficiencies.
- One (1) tree was attributed a rating of Very Low due to being dead or becoming hazardous.

Overall, the vegetation removal is considered appropriate to enable earthworks that are required to enable the future redevelopment of the site. Importantly, none of the tree features proposed to be removed were assessed to have a High or Moderate A arboricultural rating. Furthermore, extensive planting of trees is proposed as part of the proposed redevelopment of the site which will result in an overall net gain of trees.

### 5.7. NATIVE VEGETATION REMOVAL

A Flora and Fauna assessment has been carried out. A patch of Swampy Woodland native vegetation (Coastal Tea-tree) is present at the south-eastern edge of Domain 4 quarry pit.

Due to the backfilling works, this patch of native vegetation will be required to be removed and appropriate offsets have been identified Flora and Fauna assessment.

#### 5.8. BIODIVERSITY ASSESSMENT

The Flora and Fauna Assessment carried out for the whole site identified that the former quarry pit provides potential suitable habitat for one nationally significant species, the Growling Grass Frog. Targeted surveys for the Growling Grass Frog were conducted by qualified zoologists during



November and December 2021. Despite surveys being undertaken during suitable conditions and in accordance with the survey guidelines for the species (DEWHA 2010), Growling Grass Frogs were not detected within the study area.

### 5.9. STORMWATER MANAGEMENT

A Stormwater Management Plan has been prepared by Afflux, which provides the measures required to ensure stormwater is appropriately managed during the backfilling works and after the quarry void is filled.

To drain the existing water from the quarry pit, it is proposed pump the water to the Huntingdale Road stormwater drainage system. Controls will be in place to ensure the water is suitable for off-site disposal.

The quarry void in Domain 4 currently acts as an informal stormwater retarding basin for the site. To ensure this purpose continues during the backfilling works, temporary stormwater basins will be created as the quarry void is progressively backfilled.

When the backfilling is nearing completion, a more permanent basin is to be constructed as a retention point to collect runoff from the site. The most appropriate location of this basin will be toward the south end of Domain 4 due to the topography of the site and the drainage outfall point on Centre Road. The final design of the permanent basin will be to future detailed design.

## 6. CONCLUSION

Overall, the backfilling works are considered appropriate as an engineered geotechnical design response to rehabilitate the site to enable future development of the land, which will realise a far more compatible land use interface to surrounding neighbourhoods than the existing redundant quarry.

We submit that all the documents forming part of the application documentation and the documents that must be complied in the Statements of Environmental Audit will mitigate any potential amenity impacts on surrounding residential properties through the period of backfilling works. Specific measures in relation to potential dust, odour, noise and erosion control, as well as stormwater management, traffic management, stockpile management and environmental monitoring have been incorporated into these documents to ensure that community amenity is not prejudiced through the backfilling process.

We trust that the information provided in this application is satisfactory. If you have any questions please don't hesitate to contact me.

Yours sincerely,

Claire Betteridge Associate Director +61 3 8663 4948 cbetteridge@urbis.com.au