

Catalina

LIFE & STYLE



Western Precinct – Earthwork Mitigation Strategy



TAMALA PARK
Regional Council

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Background

The Tamala Park Regional Council (TPRC) is developing the Catalina Estate, located in Clarkson and Mindarie. To date the TPRC has developed approximately 700 lots at Catalina in the area east of Marmion Avenue.

In June 2015 the TPRC proposes to start development of the land west of Marmion Avenue, known as Catalina Beach, which will involve bulk earthworks over a significant portion of the site. The Catalina Beach Precinct is 32 hectares in size and is directly west of Marmion Avenue, adjacent to the existing Mindarie residential area, with the southern boundary comprising the Tamala Park coastal reserve. The area is proposed to accommodate approximately 500 lots as per the Tamala Park Local Structure Plan. The bulk earthworks are required in order to develop the future housing sites.

The land is to be developed in accordance with the Tamala Park Local Structure Plan, approved by the City of Wanneroo and the Western Australian Planning Commission. It has been zoned for Urban purposes in the Metropolitan Region Scheme since 1993 and in the City of Wanneroo District Planning Scheme No. 2 since 2001.

The purpose of this document is to describe the nature and timing of the works to be undertaken on the land and the mitigation measures proposed. A reference to the area is shown in Annexure A.

Proposed Works

It is proposed to undertake the bulk earthworks over the north east and central portions of Catalina Beach comprising approximately 15 hectares, shown as Phase 1 in Annexure A. The bulk earthworks involve cutting sand and limestone soils from the high portions of the site and placing the material in the lower sections of the site.

The bulk earthworks have been designed to accommodate the following outcomes:

- minimise level differences for the adjoining Mindarie residential area;
- minimise the extent of imported fill brought to the site;
- integrate with the sewer in Longbeach Promenade.

The proposed earthworks are to be undertaken between June and September 2015 when climatic conditions are most favourable to minimise the potential impacts to Mindarie residents.

An area has been nominated in the south east portion of Catalina Beach away from existing residents to be used as a stockpile area for topsoil / mulch / soil for re-use within future stages.

All bulk earthworks are to be undertaken in accordance with the Department of Environment dust control guidelines.

The earthworks design requires 271,000m³ of sand to be cut predominantly from the most western end of the precinct from a node. This sand will be placed across the Catalina Beach precinct in two fill areas being the north western boundary and northern side of the entrance off Marmion Avenue where the natural topography drops away.

The Catalina Beach Precinct will require additional fill which is to be obtained from the land on the eastern side of Marmion Avenue.

The first phase of earthworks will enable 200 lots to be serviced. An indicative layout of the lots is shown in the attached Annexure B.

Prior to bulk earthworks being undertaken a number of actions are to be initiated on the site:

- signs to be erected on site with contact numbers;
- security, dust and wind fencing to be installed;
- fauna relocation - fauna trapping will be undertaken, with all trapped animals to be relocated to nearby national parks or reserves;
- clearing of vegetation to enable UXO searching; vegetation is required to be slashed to enable effective and safe UXO searching;
- UXO searching - prior to any earthworks onsite a UXO (unexploded ordinance) search is required to be undertaken, as the area is part of a former army artillery range and may contain unexploded ordinance;
- flora relocation - it is proposed to remove a significant number of grass trees for re-planting across the site in the future.

Construction Timeframe

It is planned to commence early June 2015 with completion in October 2015. The timing of the key works is shown in the attached program (Annexure C). In summary the following tasks are to be undertaken:

- Mindarie residents to be advised by letter drop of works;
- information signs be erected on site;
- site fencing;
- dust and wind fencing to be installed;
- fauna relocation;
- flora relocation;
- clearing of vegetation to enable UXO searching;
- UXO searching;
- individual meetings to be held with landowners where their property levels will be directly impacted;
- bulk earthworks;
- site stabilisation;
- civil works.

Project Coordination

The Satterley Property Group has been appointed as project managers for the Catalina Project which includes the management of the earthworks in the Western Precinct. The site superintendent is Cossill & Webley, civil engineers who are responsible for administering the earthworks contract.

The bulk earthworks are to be undertaken by RJ Vincent.

Mitigation Measures

Dust Mitigation Measures

The following measures will be implemented to minimise potential dust impacts to residents:

- Security fencing will be installed along the boundary of earthworks operation to prevent unauthorised vehicles.
- Wind fencing will be installed along northern boundary of earthworks operation.
- Provision of 2 dust monitors along the northern boundary of earthworks operation to record dust readings.
- Contractor access to the site will be via Marmion Avenue / Aviator Boulevard intersection.
- Deployment of 2 designated water carts to wet down earthwork areas and 1 designated water cart to wet down the access roads.
- A bore is to be installed in the Catalina Beach Precinct, providing water for dust suppression, during the earthworks and construction program.
- Water carts will utilise water from the hydrant located at the end of Rio Marina Way, for a period of up to 4 weeks, whilst the bore is being installed.
- Road sweeping to the Marmion Avenue / Aviator Boulevard intersection on a weekly basis to ensure dust levels are kept to a minimum, whilst importing material from the Central Precinct.
- Height restriction on all stockpile material to enable piles to be hydro mulched.
- Respreading topsoil on completed areas to generate growth where required.
- Hydro mulching or direct seeding to areas of completed earthworks.
- Haul roads servicing the site will be wetted down to minimise dust.
- Maintaining 25 km/hr speed limits on the site to reduce the level of dust generated from vehicle movement.
- Daily review of weather conditions and mitigation measures and/or work practices to reflect conditions.
- Where there is extreme wind conditions dust suppression controls will be adjusted or work activities will be modified to minimize dust production.

Noise Mitigation Measures

The following noise control measures will be implemented to ensure the potential impacts to residents are minimised:

- The Environmental Protection (Noise) Regulations 1997, which prescribe standards for noise emissions, will be adhered to.
- Working hours are to be 7:00am to 5:00pm Monday to Friday and 8:00am to 5:00pm Saturday.
- No work is to be carried out on Sundays or Public Holidays.

Vibration Mitigation Measures

Pre-construction dilapidation surveys will be offered to all Mindarie residents directly abutting the Catalina Beach Precinct. Additional pre-construction surveys may be undertaken if requested and deemed necessary.

Compaction within 50 metres of buildings will be undertaken by static or low amplitude compaction techniques, "*oscillating compaction technology*", specifically designed to work near or adjacent to buildings, houses and infrastructure. This system of compaction will minimise potential impacts to residents.

In the event that an owner or resident or occupant of premises considers that vibration has caused damage, RJ Vincent will organise an initial assessment within one business day of the complaint being received.

Fire Safety

Firebreaks have been undertaken adjoining the Mindarie residential area in accordance with bush fire regulations. The earthworks are to be undertaken during a low fire risk period however the contractors will monitor bush fire notices during the period of the bulk earthworks and comply with any fire restriction notices or advice in order to maintain an appropriate level of fire safety. There will be a high flow groundwater bore, high pressure fast-flow overhead tanks and a number of water carts which can be deployed in the event of a fire event. A Bushfire Management Plan has been prepared and will be implemented as part of the earthworks strategy.

No onsite burning of any cleared material or waste will be permitted. This will reduce risk of fire and ensure there is no smoke nuisance from the site.

A limestone access track will be installed to the northern boundary connecting to the existing San Marino Way. A fire hydrant is located at the boundary interface of San Marino Way providing a close source of existing water supply, if required. A bore will also be installed within the Catalina Beach landholdings ready for the Phase 1 works.

Emergency Response

In the event of an emergency contact should be made to the RJ Vincent site supervisor who will immediately notify the superintendent (Cossill and Webley) to advise of the situation with a formal report on the emergency to be provided within 48 hours of the incident. Contact numbers for RJ Vincent and Satterley Property Group are listed below.

Complaints Resolution

In the first instance the complaint should be addressed to RJ Vincent's site supervisor who will be responsible for addressing the concern and conveying corrective actions to the complainant.

RJ Vincent will prepare a report for review by Cossill and Webley, who will then provide a copy to Satterley Property Group and Tamala Park Regional Council.

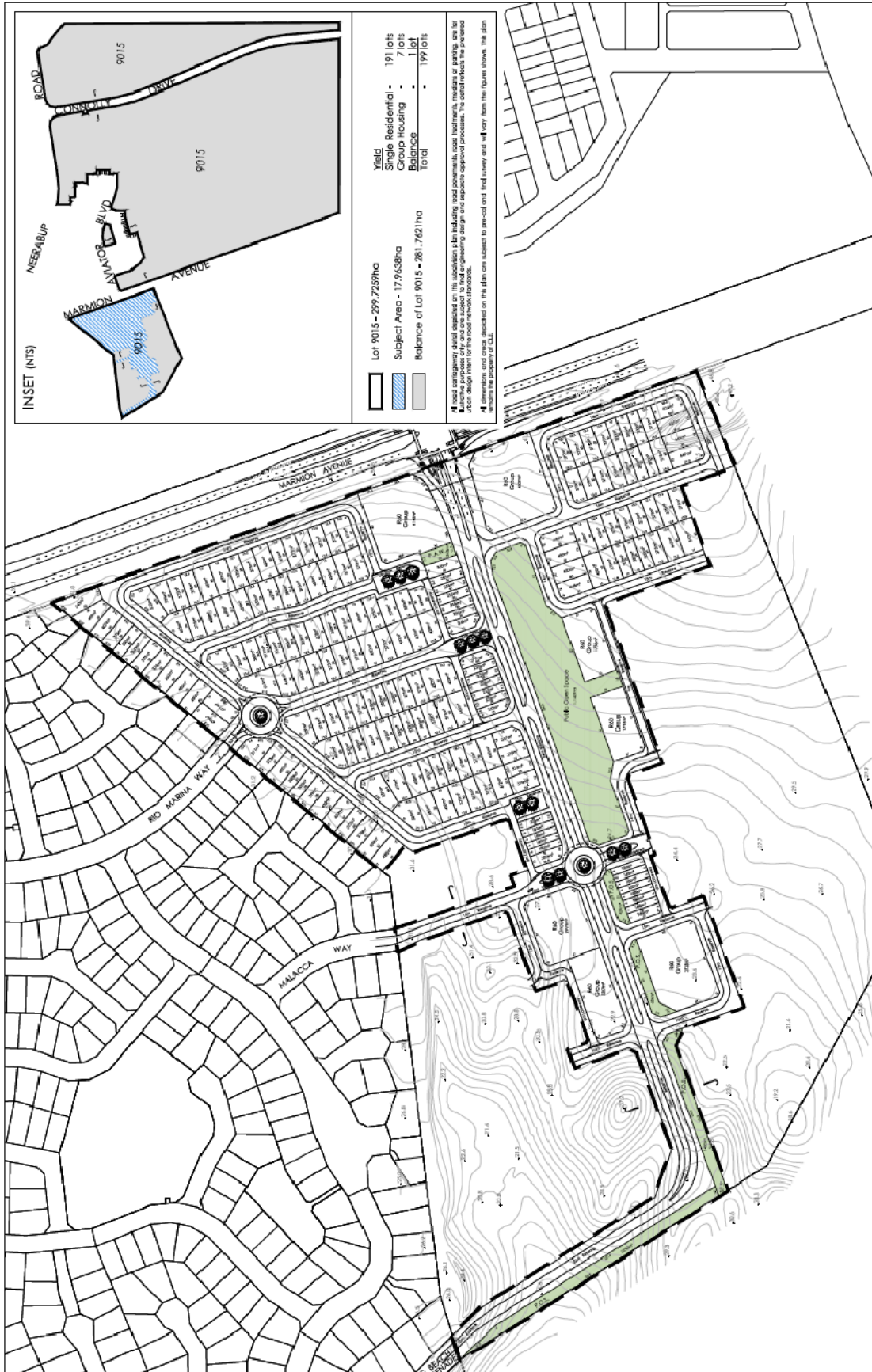
All complaints will be taken seriously and will be responded to within one business day of the complaint.

Project Contacts

If there are any queries concerning the proposed bulk earthworks, mitigation measures or any related works, the following people will be able to assist:

- Satterley Property Group (Aaron Grant - Development Manager 0438 217 354)
- Cossill & Webley (Nathan Butson – Superintendent 0488 207 865)
- RJ Vincent (Dermott Walsh - Project Manager 0447 711 541)
- Tamala Park Regional Council (Luke Aitken - Project Coordinator 0421 953 433)

Annexure B – Indicative Concept Plan



Annexure C – Program

Catalina Beach Bulk Earthworks Program - Phase 1, 2015				Dated: 5 May 2015	
	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15
Letterbox drop to Mindarie Residents within 100 metres of site					
Fauna Relocation					
Site Fencing					
Dust and Wind Fencing					
Information Signs Installed					
Bore Installation for Dust Suppression					
Dilapidation Surveys of homes within 50m of site					
Flora Relocation					
UXO Vegetation Clearing					
UXO Searching					
Bulk Earthworks					
Site Stabilisation					