

WASTE MANAGEMENT PLAN

LAKE MACQUARIE YACHT CLUB

MARINA EXTENSION, NEW CLUB FACILITY AND CAR
PARK ALTERATIONS

Ada Street, Belmont NSW 2280

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1. DESCRIPTION

Lake Macquarie Yacht Club (LMYC) located at the end of Ada Street, Belmont is a not for profit community based yacht club. This club has provided facilities for yacht sailing on Lake Macquarie for 80 years. Its current facilities include an 84 wet berth marina, a part two storey clubhouse building and associated car parking for 94 cars.

There is increasing demand in Lake Macquarie for yachts and motor cruisers and the yachts are now being designed with deeper keels requiring deeper mooring facilities. The existing clubhouse building is a timber framed structure founded on timber piles and is located over the waters of Lake Macquarie. This structure has worked well for the Club and the community for the last 80 years but is now deteriorated beyond reasonable repair. The LMYC Board and its members have taken the decision to extend the marina to the west to accommodate the increased marina demand and the demand for deeper berths as well as the complete demolition of the existing club building and its reconstruction using modern materials that will last into the future. To accommodate the increased marina demand and new building facilities the existing car park is to be reconfigured and an additional lease from the Department of Lands will be obtained on park of Cullen Park to accommodate the additional vehicle parking requirement.

The new facilities after construction will accommodate 140 wet berths in the marina, 127 cars parked on the existing car park foot print and a further 24 cars parked in the Cullen Park car park, a new two storey club house and a new landscaped area between the new Cullen Park car park and the Lake foreshore.

2. DEMOLITION / EXCAVATION

The proposed new works requires little demolition and waste removal related to the proposed new marina and the alterations and additions to the car parking area however the existing club house and its associated support piles are to be removed from the site.

It is proposed that the new works will be constructed in stages. The first stage of the works will include the construction of the new marina structure, the reconfiguration of the existing car parking area and the construction of a new car park on the western fringe of Cullen Park. The second stage will follow as LMYC funds permit and will include the demolition of the existing club house and the construction of the new club house.

All demolition materials will be progressively removed from the site as they are demolished to avoid double handling and on-site storage problems. Any sorting or processing of the demolished materials will be carried out off-site at a site established by the demolition subcontractor. Asbestos cement sheeting is to be handled and disposed of as per WorkCover requirements by the licensed demolition contractor.

3. NEW CONSTRUCTION

Stage 1 Construction

The first stage of the project will involve minimal demolition and provision of waste materials. The new marina additions will involve the construction of a piled structure with appropriate decking. This structure will be constructed over the existing Lake bed and will include minimal demolition. The only demolition will be the existing 'Starters Box' located in the south western corner of the existing marina. This is a very small structure only 2m x 2m and demolished materials will be recycled where possible. The new marina will be constructed from timber/steel/concrete piles and associated structure.

Decking will be new material selected to allow suitable light penetration to the Lake bed allowing sunlight penetration to the sea grass colonies.

The existing car park is located on a gravel and rock ballast platform that was constructed some 30 to 40 years ago. This platform has a perimeter rock ballast support wall and it is proposed to extend the car park platform out to the edge of this rock ballast. This extension on both the northern and southern sides allows alteration of the current angled car park configuration into a more regular 'squared' configuration facilitating a further 33 car parking spaces. It is proposed that these northern and southern extensions will be in the form of a piled and deck structure rather than a filled structure allowing the existing rock ballast/water interface to remain. This structural concept will involve the creation of only a small amount of waste in the form of excavated fill material to allow the new structural deck to be 'socketed' into the existing car park. This waste material is expected to be able to be reused in the formation of the new car parking area at the western edge of Cullen Park. Hence to only waste material to be removed from the site will be any bitumen sheeting that is removed. This material will be disposed of in an appropriate manner consistent with Council regulations.

The construction of the new car parking area on the western edge of Cullen Park will involve the filling of that area to obtain an appropriate level as required to be above the flood levels. The waste material from the reconstruction of the existing LMYC car park will be utilised as fill for the Cullen Park car park. The only waste material for the construction of the Cullen Park car park will be top soil material that is not structurally suitable for reuse in the car park as engineered fill. It is proposed that landscaping adjacent to this car park is part of the Stage 1 works and any surplus material that cannot be reused in the car park construction can be used in the landscaped areas if appropriate.

Stage 2 Construction

The stage 2 works will provide the most waste materials as the works involves the complete demolition of the existing club house and associated timber support piles. The existing club house is a predominately timber framed structure. The support piles are timber and in some instances they are concrete encased. The support floor structure is a bearers and joist type structure with timber flooring. Many of the structural members are large sized timber although many have rotted over time or are distorted due to their 80 year interface with the extreme salt water environment. The walls are all timber as is the roof structure with terra cotta tile roofing.

It is proposed that the new club house facility will be supported on a concrete pile and beam system with a concrete floor decking that may be a precast concrete plank system to allow ease of construction. Walls will be precast concrete wall panels. The upper floor will also be concrete either precast or insitu. The roof structure will be a galvanised steel frame and a metal sheeted roof cladding. Windows and door frames will be powdercoated aluminium and new handrails will be of stainless steel and glass construction. All new materials will be selected for their ease of maintenance and longevity in a hostile marine environment.

Waste Removal – Demolished Club House

It is proposed that the demolition of the existing club house and support structure will be subcontracted out to a licensed demolition contractor who will have their own Waste Management Plan. It is anticipated that most of the timber can be recycled by the demolition contractor as many of the structural timbers are of large sizes which are difficult to procure these days and have heavy demand. The piles to be removed will be able to be reused as structural timbers or as landscape materials. There are many steel brackets joining the structural timbers that can be recycled. The existing cladding is timber weather boards that will be recycled by the demolition contractor. There are some concrete floor slabs that will be recycled as crushed roadbase. The terra cotta

roofing will also be able to be reused as crushed roadbase. Much of the existing plumbing and electrical wiring is copper which will be recycled.

The main waste material that will go to land fill will be the internal wall linings. Many of these wall linings are plasterboard. There are sections of wall and soffit sheeting that is asbestos containing sheeting. This will be addressed by a licensed asbestos removal contractor and disposed of in accordance with Council and WorkCover requirements.

Waste Removal – During Construction

Waste materials generated and from other sources during construction will be sorted as suitable for recycling or removal by approved means to an approved waste dumping site by the builder's site management controls.

Designated material containers for segregation of recyclable and waste materials will be located in the builder's site area compound and monitored in conjunction with approved policies during the works.

4. BUILDING WASTE MANAGEMENT – SCHEDULE OF ACTIVITIES

Schedule of Waste Materials				
Material On-Site		Destination		
Type of Material	Estimated Volume (m ³)	Reuse & Recycling		Disposal
		On-Site	Off-Site	
Excavation Material from existing car park	25	25 m ³	Material will be road base gravel and will be reused to construct the proposed new Cullen Park car park.	Minimal
Bitumen from existing car park	5	Nil	Nil	Removed to approved dumping site.
Green waste from the construction of the Cullen Park car park	Very minimal	Mainly grass and top soil. Will be reused in the site landscaping adjacent to this car park and the foreshore.	Very little will be removed from site	Top 50mm including existing degraded turf to approved landfill site by excavation subcontractor.
Bricks	20	Nil	Bricks, mortar and render to approved crushing and recycling company.	Nil
Concrete	60	Nil	Concrete paths, floor and bathroom slabs to be demolished to approved crushing and recycling company.	Nil
Timber piles	10	Nil	Timber piles to be removed and taken to demolishers yard for sale as recycled timber.	Nil
Concrete encasing to piles	5	Nil	Nil	Removed to approved dumping site. Unable to be reused due to poor condition and very high salt content.
Timber - hardwood	100	Nil	Timber wall, floor and roof framing to be	Nil

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			taken to demolishers yard for sale as recycled timber.	
Timber - flooring	15	Nil	Timber flooring boards from Club to be demolished to be taken to demolishers yard for sale as recycled timber.	Nil
Timber - cladding	60	Nil	Timber wall cladding boards from Club to be demolished to be taken to demolishers yard for sale as recycled timber.	Nil
Asbestos cement cladding	10	Nil	Nil	Fibre cement sheeting from the demolition of the Club is to be disposed of to approved landfill area. All WorkCover and Council precautions will be taken and removal will be by a licensed demolisher.
Roof tiling – Terra Cotta	25	Nil	Terra Cotta roof tiling from Club to be demolished to be taken to demolishers yard for sale as recycled tiles.	Nil
Metal Roof Sheeting	8	Nil	Metal roof sheeting from Club verandah and upper floor roof to be demolished to be taken to demolishers yard for sale as recycled metal sheeting.	Nil
Plasterboard sheeting	16	Nil	Nil	To approved landfill site by demolisher.
Metal – guttering	5	Nil	To metal recyclers by demolisher.	Nil
Metal – copper	3	Nil	To metal recycler by demolisher.	Nil
Aluminium Framed Windows	8	Nil	Aluminium framed windows from Club to be demolished to be taken to demolishers yard for sale as recycled windows.	Nil
Timber Framed Windows	8	Nil	Timber framed windows from Club to be demolished to be taken to demolishers yard for sale as recycled windows.	Nil
Doors	5	Nil	Doors from Club to be demolished to be taken to demolishers yard for sale as recycled doors.	Nil
Fixtures and Fittings		Nil	Fixtures and fittings that can be successfully removed from the Club to be demolished will be	Fixtures and fittings not able to be successfully removed to go to approved landfill site.

			taken to the demolishers yard for sale as recycled products. Some other metal materials to go to metal recyclers.	
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Note:

As the project is currently at the Development Application stage the project program is too early to have let any demolition contracts and the name and details of the building contractor or the demolition subcontract is not yet known.

5. ONGOING USE OF PREMISES

LMYC is currently very responsible in relation to the waste management of their club activities. The Club currently has a waste management strategy and it is proposed that this waste management strategy will be taken into the future after the new facilities are constructed.

The LMYC waste management strategy both now and into the future involves recycling where possible and minimising where appropriate. The Club has two large waste bins that are emptied three times per week by contracted waste removal contractors using large waste removal vehicles. This waste removal contractor has its own waste management plan. Of the two bins one is for general waste and the other is for glass and paper. The Club also has an oil waste facility to allow disposal of oil based waste from the marina. Members are encouraged to dispose of their waste materials appropriately directly into these waste containers. Also the Club employs two staff who have duties associated with the apportionment of waste into the appropriate places.

There is little waste associated with the marina. This waste typically includes drink and food waste containers. There is very little oil based waste as there are no mechanical repair facilities on the site and there are no refuelling facilities on the site.

Waste minimisation will be implemented by LMYC as part of their normal business management.