

Development: 3-Story Walk Up

Municipality: Fairfield City Council

Fairfield City Council services a large number of 3 storey “walk-up” developments across the local government area and at present, these developments are provided with either bulk bins or a 240L mobile garbage bin (MGBs) garbage service. The Council is currently trialling the use of an underground bin for garbage collection in a 3-storey walk-up multi-unit dwelling, as a possible replacement for current waste services. The trial period will examine the potential benefits in terms of odour control, amenity and increased efficiency of servicing. The system provides an example of another option for waste management practices.

Description of service

The underground bin is a large round plastic tank that is installed 1.5 metres into the ground, with only 900mm protruding above ground. The bin has a capacity of approximately 4m³ and is being used to service 12 unit developments.

The above ground section of the bin is fitted with a large dome top incorporating an opening waste disposal lid, where residents are able to dispose of their garbage. The bin is lined with an internal high tensile strength polypropylene lifting bag.

The new waste service is supported by commingled recycling which uses 240L split MGBs that are collected fortnightly.

Collection

The underground bin is located at the front of the development and adjacent to the property driveway, to enable easy access for the waste collection vehicle. Council has been able to utilise an existing waste collection vehicle fitted with a crane, to undertake the collection and emptying of the bag from the underground bin.

Recycling bins are collected fortnightly from the kerbside, and are stored near the front of the development to enable easy access for residents.

Amenity

The design of the bins includes wooden panelling for aesthetic purpose, and landscaping has been provided so that the overall appearance of the bin location blends in with the surrounding development and landscape.

Implementation of the underground garbage bin

An issue that has arisen from the implementation and trialling of the new system is leachate from the internal polypropylene bag.

The problem has been overcome by using a ‘nappy’ type bag that is designed to trap the leachate, which is then emptied into the collection vehicle with the waste from the internal bag, at the time of collection.



Example of bulk bin collection service that has been replaced by the underground garbage bin



Resident lifting the bin lid to dispose of garbage

The underground bin is located on private property and council vehicles are required to enter the property boundary to service the bin. Therefore, indemnity against potential damage to property such as driveways is required.

Trial results to date

According to Fairfield City Council, trial results so far have indicated that the underground bin has only needed emptying on a fortnightly basis, and that operational efficiencies may be achieved with the system. It has also been reported that litter and odour around bin storage areas has improved.

Feedback from the residents living in the development has been very positive, and Fairfield Council is now looking to trial the bin in a further 6 similar home unit blocks.



Collection of the underground bin



Recycling bins are stored adjacent to the building main entrance

Underground garbage bin located near property driveway to enable access for collection