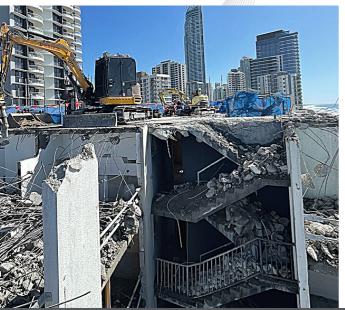




## 49 GARFIELD TERRACE, SURFERS PARADISE





## MARCH 2022 - JANUARY 2023 CLIENT: CARLINGFORD PROJECTS CONTRACT VALUE: \$2.15 M

Constructed in 1967, the 9 storey highrise located at 43 Garfield Terrace, was the Gold Coast's original beachfront apartment block. DEMEX was engaged as principal contractor by developer Carlingford Projects to undertake the structural demolition, which involved removal of significant amounts of asbestos containing materials (ACM) from the narrow site, which spanned just 40 metres of beachfront. In addition to the volume of ACM, the project presented other challenges in the lack of integrity in structural materials, high wind speeds due to the beachfront location, proximity to neighbours because of the high density location, and exposure to high volumes pedestrian and vehicle traffic.

## **PROJECT HIGHLIGHTS**

 Full scaffolding wrap and fully enclosed bubble of the building to provide wind protection, to facilitate asbestos roof grinding, and allow for safe removal of ACM.

- Top down demolition on small 1,600m2 site in high density beachfront location.
- Independently verified confirmation that site was remediated in accordance with standards and that no asbestos debris was transferred to City of Gold Coast council land.
- Negotiations with Council meant a permit was secured to restrict pedestrian access along the footpath, allowing this area to be used without increasing any health and safety risks to workers or pedestrians.
- Excellent feedback from neighbours complimenting DEMEX on the team's professionalism and delivery.

## **PROJECT METHODOLOGY**

DEMEX facilitated all early works on the project, including site compound preparation works, temporary works to Northcliffe Surf Club (adjacent to the building), removal of retaining walls, and coordination of services contractors.



98% of project waste was recycled 3000m<sup>3</sup>

asbestos sand removed

8,000

tonnes concrete recycled

**60** 

tonne asbestos removed



- 2x 30T

- 100 T Crane

100%

local business

**220** 

tonnes of scrap steel recycled



The original methodology was designed as a top down demolition to level three followed by use of the 52 tonne high reach excavator for deconstruction of the remaining levels. This methodology was revised due to the limited space on the 1.600m2 site.

Because the original materials used for the structure were not compliant with current design practices and standards and unable to take the weight of small excavators, it was necessary to digitally engineer the methodology to ensure the structural demolition work could be undertaken safely.

The building was characterised by significant amounts of asbestos containing material, including all external suspended slabs, roof slabs which were covered in mastic paint; all windows (mastic) and large volumes of asbestos contaminated construction and demolition (C&D) materials.

On completion of structural demolition and commencement of slab removal, significant asbestos debris was identified in the sand. An independent asbestos contractor undertook samples and analysis and determined that all samples were positive, which led to recommendations for removal of sand to up to 1.4 metres. Due to the central location of the building on a busy thoroughfare along the Gold Coast's boulevard, traffic control was used for truck site access. The team maintained regular

At the conclusion of the project, an independent asbestos contractor provided a formal report confirming DEMEX had remediated the site and that asbestos debris from the site was not transferred to Council land.

communication with neighbours to

minimise disturbance during the

eleven month project.