

Modular stormwater solution for Brookwater Estate

Project: Brookwater Estate

Location: Springfield, QLD

Master Precaster: Humes

Client: Brookwater Residential

Engineer: Jacob Meecham, BMD Group

Civil Contractor: BMD Group

Water is the lifeblood of any community and a new development south of Brisbane is proving just that.

Brookwater is a premier residential golf community in Ipswich offering a distinct blend of everyday living, golf and leisure. Below it, lies an elaborate precast concrete stormwater collection system.

From the project's inception, developer Brookwater Residential collaborated with leading design organisations to shape a wholesome living environment where home design, stunning landscape architecture and quality amenities have been used in combination to create spacious, safe and inviting facilities. Offering a variety of properties to suit all types of lifestyles, the estate contains facilities for every stage of life.

Demand for efficient stormwater drainage system

Luxurious properties demand efficient stormwater drainage and in Brookwater's case this was a high priority as it partnered with civil contractor BMD Group.

Accordingly, BMD contracted National Precast



Master Precaster Humes to manufacture a complete modular precast solution. With its head office based in Brisbane, the company has factories all over Australia and was well-equipped to deliver an outstanding stormwater solution.

Pipes and modular pits

With twin DN1500 reinforced concrete stormwater pipelines running through the estate, three large custom pits of various dimensions were required to meet pipeline access and change of depth requirements. All three of the pits, the largest measuring 4100mm long by 1200mm wide and 3200mm high internally, were supplied as modular

Off-site manufacture to speed construction and minimise safety risk

Choosing to use a precast solution offered BMD the advantage of greatly reducing the construction programme and exposure to on-site hazards that an in-situ installation would have required. The choice to use precast concrete allowed for the major components of the project to be manufactured in an off-site location in a controlled factory environment, this being Humes' Ipswich facility.

Delivered to site as required, the construction site was also kept hazard-free as there was no requirement for on-site storage.

The major lifting and installation component for each of the three custom pits was completed in just two hours with only an additional day's labour required for grouting, sealing and lid placement.



Good outcome for all

BMD was impressed with the general quality and finish of the custom pits.

With the installation going smoothly and significantly reducing labour time, BMD's Project Engineer, Jacob Meecham said "Everything has been going well from our end, I would definitely look to use Humes moving forward for these types of structures".

And for the residents, stormwater drainage will never be an issue.

