

## **George Town Esplanade Seawall and Promenade, Penang, Malaysia**

### **Executive Summary**

The North Seafront Masterplan of George Town, a UNESCO World Heritage Site, envisioned a much-improved seawall and a public promenade along the town's central Esplanade. The Masterplan foresaw the upgrading of the seawall itself, which stretched for about 460m, from the Medan Renong food court to the Royal Malaysian Navy base.

The original seawall was not built in one go, but in distinct parts over a period of nearly two centuries, based on necessity and available funds. In the early 19th century, rock revetment and mass gravity walls were the preferred method of erosion control in the face of incessant waves from the North Channel of the Penang Strait.

By late 2017, signs of cavities and holes undermined toe protection. Poorly repaired patches, hastily built to prevent the seawall's collapse, were evident across the entire length of the structure. Various options to protect the structure were explored, with special emphasis on its heritage values and significance within the UNESCO World Heritage Site.

Following a thorough multi-disciplinary assessment, a comprehensive seawall upgrading master plan was finalised. The decision was made to construct a new seawall offset outward from the original footprint of the old wall. This consisted of a granite mass gravity structure made of granite blocks with cut-off sheet piles at the toe for long-term protection and resilience.

The initiative was funded by the City Council of Penang Island (MBPP) and supported by the George Town Conservation and Development Corporation (GTDC), with the project being jointly supervised by both parties.

Following its completion, the project has expanded the city's limited public space and improved the public amenities along the seafront, receiving an overwhelming public response since its opening in May 2022.

The City Council of Penang is proud to have completed this multiple award-winning project, which has significantly enhanced and regenerated the historic centre of the UNESCO World Heritage City of George Town through strategies that prioritized place-making, public realm, and urban mobility enhancements, including the expanded promenade, as well as addressing climate resilience with the new seawall.