



KEY PROJECTS

T232 SEWAGE PIPES AND MANHOLES ALONG WOODLANDS NORTH COAST ROAD

Date won/completed: 2024 – ongoing

Client: Penta-Ocean Construction Co. Ltd.

Developer: Land Transport Authority (LTA) - Singapore

Role: Design and Supervision Consultant

PROJECT BACKGROUND

This sewer pipeline project is part of the PUB initiative to upgrade infrastructure to meet the increasing demand for the sewerage system in the North Woodlands area.

The project consists of 150m of sewer pipes (up to 450mm in diameter) and four deep shafts. The tunnels are located 3m to 8m below ground level within backfill materials. The primary challenge is ensuring the safe installation of pipes within a narrow corridor, situated between above-ground structures and below-ground utilities such as the MRT tunnel, bus stops, and other services.

The final reinstatement level is up to 3m higher than the proposed pipe invert level. Backfilling works, reaching up to 11.4m, were planned in stages, and the pipe jacking method was plan to be used for connections between manholes.

Strader Consult was engaged by the D&B contractor as the lead QP design consultant. In addition, we are overseeing site supervision for both the pipe jacking and shaft construction phases of the project.

PROJECT OUTCOME

Successfully obtained approvals from various authorities/departments through strategic planning and close collaboration with the clients to address authority comments timely.