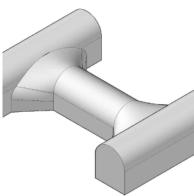




## THE INTERNAL STRUCTURES OF THE EMERGENCY CROSS PASSAGES AND **AUXILIARY SUBSTATIONS BETWEEN THE TWIN TUNNELS**

PRELIMINARY DESIGN AND FINAL DESIGN OF THE INTERNAL STRUCTURES; TECHNIQUE ASSISTANCE TO THE CONSTRUCTION





Client: Riotrilhos / CCRB - Consórcio Construtor Rio Barra / CJC - Engenharia e Projetos, Ltda

Location: Line 4 (Section Jardim Oceânico / Gávea) of the Rio de Janeiro Metro

Expansion Project - Rio de Janeiro - Brasil

Design date: 2012 - 2014

Construction date: 2013 - 2016

Services: Preliminary Design and Final Design of the Internal Structures; Technique

Assistance to the Construction

The 35 emergency Passages are located between Lines 1 and 2 twin tunnels, and are divided into levels corresponding to cables routes and an emergency anteroom.

Buildings for Auxiliary Electrical Posts (SSA) and Correction Posts (SSR) which are technical spaces that include a differentiated area for the installation of electrical equipment and an emergency anteroom.

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