

maubertec

Project:

São Paulo Metropolitan Ring Road **South Section – Subsection 2**

Client: DERSA - Desenvolvimento Rodoviário S.A.

CAT-CREA-SP: SZC-13.623 Start: Jan/2003 Completion: Dec/2007 Cost of Services: R\$ 7,599,479.89 (Oct/02)

Services: Executive Projects and Technical Supervision of Works

PROJECT DESCRIPTION

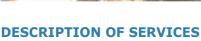
South Section of Mário Covas Ring Road starts at Régis Bittencourt Road (junction with the West Section), by interconnecting that road and Imigrantes and Anchieta Roads, and ends at Av. Papa João XXIII in the municipality of Mauá, over a total extension of 57 km.

It has a special Class "O" road standard and the following characteristics: 2 roadways containing three 3.60-m wide traffic lanes and one 1.00-m wide shelter in each direction, separated by an 11.00-m wide central bed, 3.00-m wide shoulder, and a

limit speed of 120 km/h.

Subsection 2 object of this agreement extends from Parelheiros road (current Avenida Sadamu Inoue) to Imigrantes Road, and crosses arms of Billings and Guarapiranga dams. It is 15.2-km long.





Design of final engineering project and detailed construction projects, Technical Supervision of Works and performance of Specialized Technical Support Services.

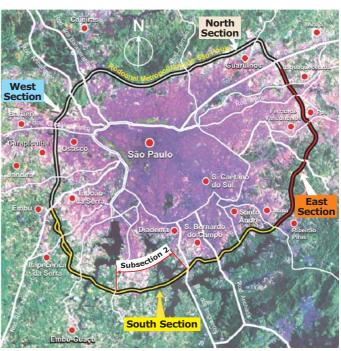
Major activities included:

1-LAYOUT OPTIMIZATION (PHASE 1)

- Analysis of Preliminary Layout; Studies of Alternatives and Determination of Final Layout; - Preliminary Hydraulic and Hydrological Studies; - Geological Mapping of Surface and Determination of Drilling Areas;
- Plan Layout and Cross-sectional Profile on restitution and Orthophoto, with definitions of S.E.W. and major C.E.W.; -Compatibility with Local Road System.

2 - FIELD SERVICES

- Aerial Survey; Complementary Topographic Surveys;
- Geotechnical Investigations; Laboratory Essays.



Site Map

3 - FINAL ENGINEERING AND CONSTRUCTIVE **DETAIL PROJECT (PHASES 2 & 3)**

Projects: Geometric; Earthworks; Drainage and Paving; 14 Special Engineering Works; Current Engineering Works; Expropriation; Signalization and Safety Elements; General and Building Lighting; Quantity and Price Schedules.

4 - RAIL RING

The agreement also included, within the same domain area, the design of basic projects for São Paulo Rail Ring.

Four alternative solutions were considered:

- Alternative 1-Dersa covering an extension of 26.8km;
- Alternative 2-Railway covering an extension of 27.6km;
- Alternative 3-Pitu covering an extension of 15.0km and
- Alternative 4-Transcorr RSC covering an extension of 17.1km.

Maubertec led the joint venture with the company Ductor Implantação de Projetos S.A.