

European communities council building, Brussels (Belgium)

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8. European Communities Council Building, Brussels (Belgium)

Owner:

– During Erection: *Ministry of Public Works (Belgian State)*

– Upon Provisional Acceptance: *European Communities*

User of the Buildings:

European Communities Council

Architects:

The Architects of the European Communities Council Buildings-Temporary Partnership

Design Engineers:

Temporary Partnership G.I.C.E.

Coordinating General Contractor:

Temporary Partnership E.G.C.

Works Duration:

1000 working days

Service Date:

1994

- a conference building, on the upper part of the site
- a secretariat building, built around large patios
- a common substructure which occupies the entire 4 hectares site.

The Conference building contains 55 000 m² gross area spread over seven full floors and four mezzanine floors, and can accommodate up to 3500 people on special occasions.

It consists of four meeting rooms for Ministers or Permanent Representatives, and of fifteen meeting rooms for Committee and working groups.

The secretariat building is designed to house 2500 officials. It contains 88 000 m² gross area of accommodations spread over 11 levels.

The substructure is also built on different levels covering six floors and totaling 75 000 m² gross area.

There are about two thousand parking places, a general store, miscellaneous storage rooms, archives, plant rooms, cold stores for foodstuffs, etc.

Foundations

Taking into account the heterogeneity of the soil layers (the buildings rest on one side of the Maelbeek's valley), the foundations consist of driven Franki-type piles and slurry-walls, penetrating into the sandy layers of the Ypresian horizon.

General

The new Council Complex provides approximately 215 000 m² gross of floor. It consists of three separate parts which are closely interrelated:

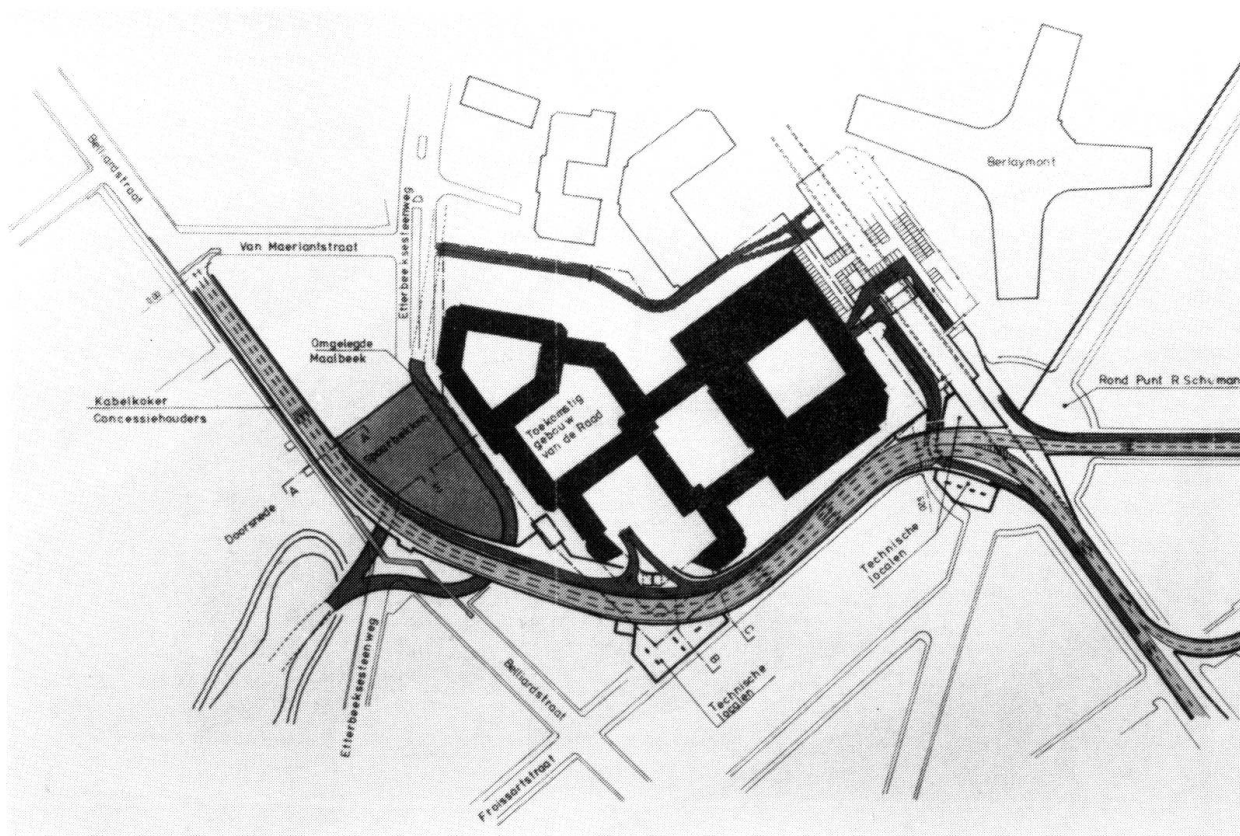


Fig. 1: Site plan



Fig. 2: Facade of the building

The South-East corner of the «Secretariat» building is supported by the top slab of a new road tunnel.

Framework

The framework is realized for the most part, even for the facade walls and the wind-bracing cores, in conventional reinforced concrete structures.

Although the most often used spans are 9 m wide, the buildings are distinguished by large spans covering conference halls, delivery areas etc, requiring the use of steel prestressed-concrete girders.

In particular, in the substructure, the 13.5 m bays are spanned by prestressed hollow-core slabs or ribbed elements, while the delivery area is covered by 25 m span prestressed beams.

In the «Secretariat» building, the floors of the different parts spanning from facade to facade on 13.50 m, con-

sist of very close steel girders supporting a thin reinforced concrete slab. Building equipment passes through large holes provided in these girders.

The upper floors of the «Conferences building», including the large meeting rooms, are supported by welded steel plate girders, reaching 31.5 m span and 2.5 m height, and supporting a reinforced concrete slab.

The fire-resistance of the structural elements is provided either by the own resistance of the concrete elements or by a fibro-silicates protection on the steel girders.

Facades

The facade is clad in sheets of pinky-grey granite, 2.5 to 3 cm thick and attached by stainless steel ties to the structural concrete frame.

(D. Beurms)