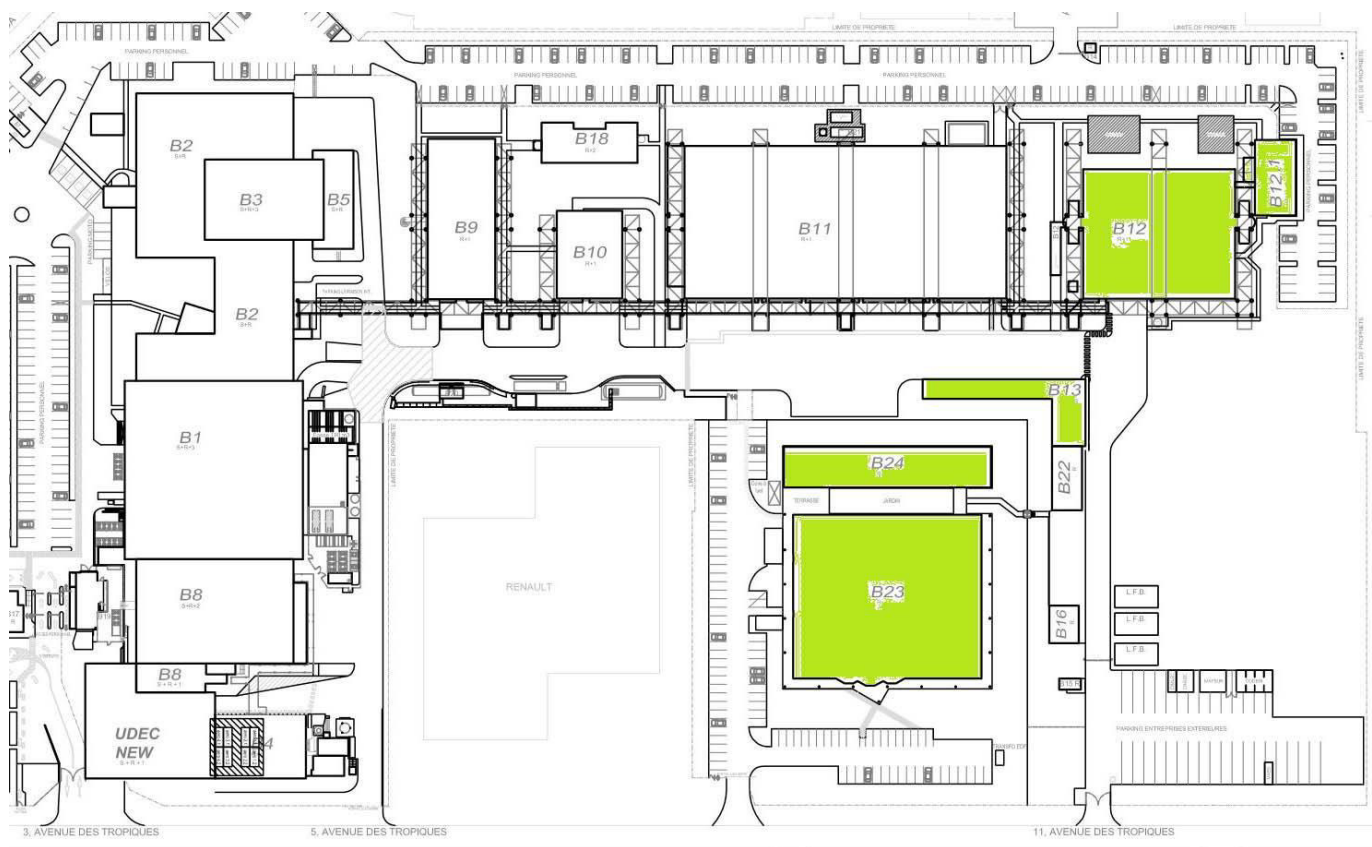


Project: O1741 – Novartis, Capella Project
11 Avenue des Tropiques, Les Ulis [Paris] France

Investigation Report

about buildings [B12, B12.1, B13, B23 & B24] structures



Although exact North direction is a little rotated, for the purposes of this report **"North" will be considered UP** at the scheme above

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Introduction

Buildings B12, B12.1, B13, B23 & B24 [and others minor ones] together with the plot around them were divided from a bigger plot, LFB property, by selling it to Novartis.

Investment intension [expanding the production] lead to the need of understanding & investigate the status of existing structures in order to minimize the risk during reconstruction & extension works.

Purpose of this investigation

...is to overview the buildings structures by analysis of available civil & structural documentation + collection of information by site observations & measurements. To point weak structural points, to give an ideal of structures bearing capacities*, to conclude reasonable ways of reconstructions & extensions, to explain the soil conditions.

*with respect of contemporary structural codes

Normative documents (structural codes) used within this investigation

The following regulations for the calculations performed by the Author have been used:

1. EN 1990 Eurocode 0: Basis of Structural Design
2. EN 1991 Eurocode 1: Actions on structures - Part 1-4 : Wind actions
3. EN 1991 Eurocode 1: Actions on structures - Part 1-3 : Snow actions
4. EN 1991 Eurocode 1: Actions on structures - Part 1-1 : General actions - Densities, self weight and imposed loads
5. EN 1993 Eurocode 2: Design of reinforced concrete structures
6. EN 1993 Eurocode 3: Design of steel structures

+ the National Annexes for France to them.

When for particular building are available calculation or explanatory notes by which is visible what code had been used for their design - this is quoted in text below.

Observations, Measurements and Tools used

Site observations and measurements were done during period 11÷12.07.2019 by the Author (with the help of Denis Luquiau & Pieter Hendrix). Site works were accompanied by Mr. Thomas Audiot from Novartis.

All measurements were executed with these simple tools:

- standard 8m roller meter,
- long distance laser meter [BOSCH 250 VF Professional],
- caliber gauge [for plate thickness and bolts diameters measurements]

Pictures were taken with professional digital photo camera:

- PENTAX K70 with lens:
 - TAMRON SP AF 17-50mm F/2.8 ϕ 67mm
 - SMC PENTAX DAL 50-200mm F/4-5.6 ED ϕ 52mm