





控制性生长 Growth Under Control

2016 高校木结构设计邀请赛 公园咖啡厅项目

2016 University Timber Strucures Design Competition: Cafe in a park

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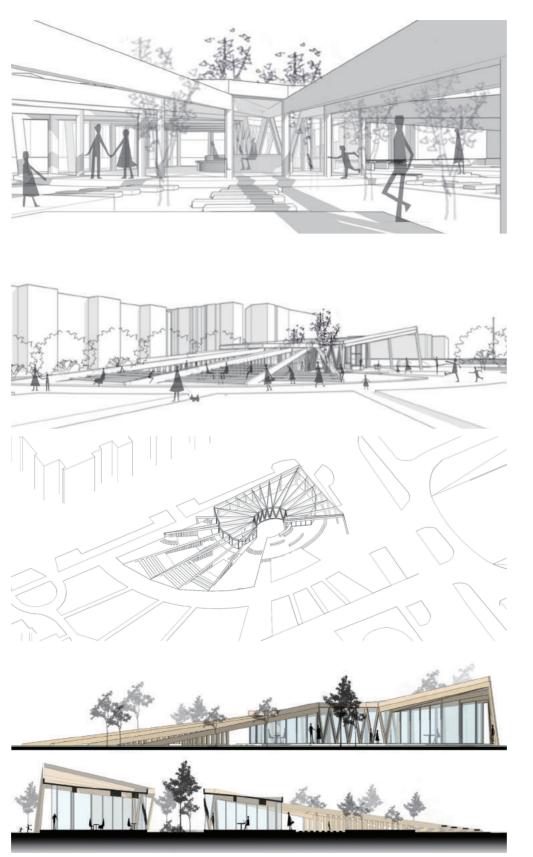
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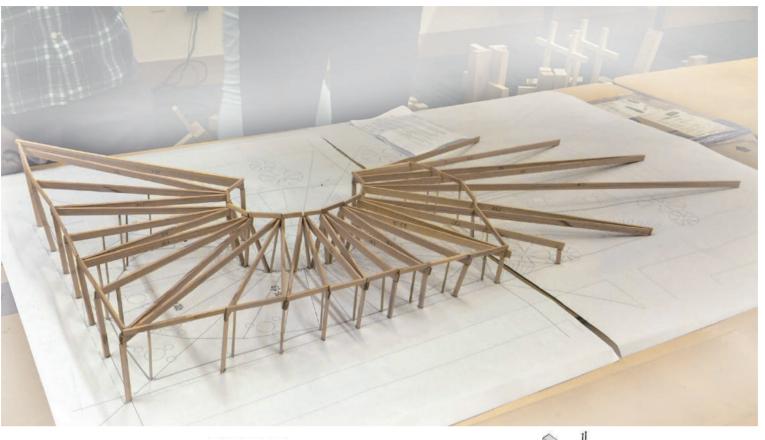


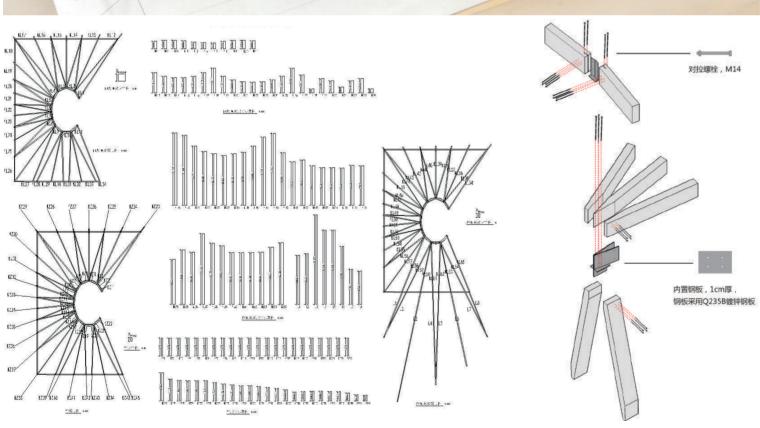
建筑

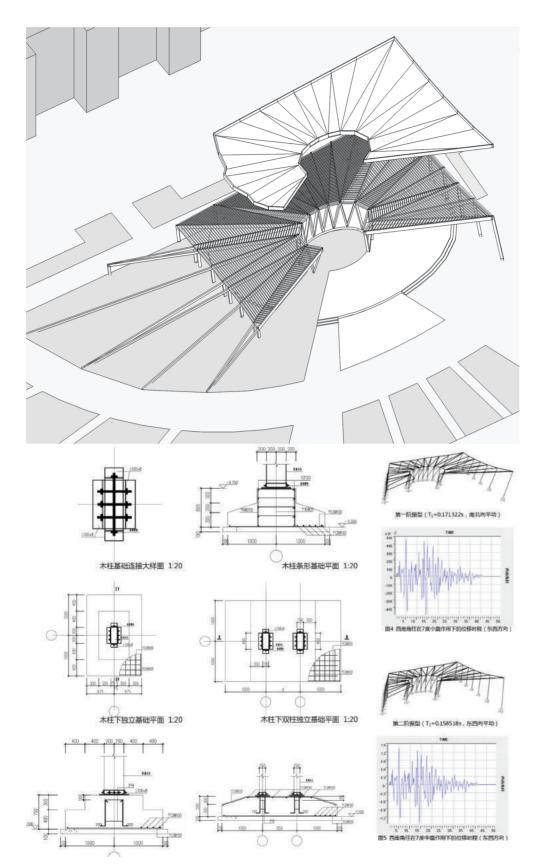
基地位于某公园中轴线末端,面向北边一片活动绿地,为强调结构的理性生成,我们从场地本身的不同方向环境不同的特性出素与力,并确立设计的控制性因素与边界条件,之后以置入发散与大人。一个院子为中心向外发散与大场,并经过多方案的比较与抗境,寻求由内向外的自发性生长与由外向内的环境限制的平衡点,实现结构与形式语言达到统一

Architecture

The site is located at the end of a park central axis facing green land in the north. To emphasize the rational development of the structure, we establish the controlling factors and boundary conditions in the design by finding the characteristic of the site. The courtyard become the core and the structure spread outward to form the whole building. Through comparison and selection, the design seek the balance between insideout spontaneous growth and outside-in environment limitation to achieve reunification between structure and form.







结构

该咖啡厅为一层建筑,总建筑面积240m2(以有顶覆盖面积计算)。咖啡厅为空间框架结构体系,材料选择花旗松胶合木。

房屋抗震设防类别为丙类建筑, 抗震设防烈度为7度。

结构由柱、梁等构件组成,梁柱采用螺栓连接,梁柱基础连接均为铰接。内外圈梁截面为150mm*150mm,屋面放射性框架梁断面:150mm*400mm,柱断面为150mm*400mm,内圈基础采用条形基础,外圈采用独立基础,部分距离较近的基础采用双柱基础

Structure:

This cafe has only one floor with a total construction area of 240 m2 (in the calculation of the coverage). The structure of cafe is a spacial frame system with citigroup pine glulam as the material. Structure consists of components such as the column and beam. Beam adopts bolt connection while all the base connections are articulated. The scale of the beam and column section is 150 mm * 400 mm.