La Ville et La Mer

A research regarding the relationship between Casablanca and its Sea
P4 presentation outline

Brief introduction regarding the Analysis and the research question

Methodology of intervention and Design strategy

Design

Conclusions and Considerations
How to reconnect the city of Casablanca with the sea?

A full frame strategy to perform a reconnection within a spatial identity based on the division.
PHASE 1: GROUND EXCAVATION AND PLACEMENT OF FOUNDATION ELEMENTS

PHASE 2: COMPACTING THE GROUND AND CREATION OF A 10 CM SAND LAYER

PHASE 3: ANCHORING OF THE 6 PRE-CAST CONCRETE PILLARS TO THE FOUNDATION ELEMENTS. THE DRY CONNECTION IS REALISED THROUGH ONE STEEL PLATE (0.6 MM) AND FOUR STEEL BARS (5 CM / 30 MM).

BEFORE THE PLACEMENT OF THE PILLARS, 8 SLABS OF PRE-CAST CONCRETE (30 CM) ARE PLACED IN ACCORDANCE WITH THE POSITION OF THE FOUNDATIONS.

PHASE 4: BETWEEN THE PILLARS TWO TYPES OF BEAMS ARE PLACED. ALONG THE LONGITUDINAL SECTION, L SHAPED PRE-CAST CONCRETE BEAMS AND ALONG THE CROSS SECTION T SHAPED PRE-CAST CONCRETE BEAMS. THESE ELEMENTS ARE CONNECTED TO THE STRUCTURE THROUGH BOTH A SET OF HANGERS (5 CM / 20 MM) POSITIONED IN THE PILLARS ABUTMENTS AND L SHAPED STEEL PLATES (6 MM) SCREWED TO BOTH THE PILLARS AND THE BEAMS.

PHASE 5: AFTER THE POSITIONING OF THE FLOORING (PRE-CAST-CONCRETE SLABS), PLACED ALONG THE L OR T SHAPED SLOTS OFFERED BY THE BEAMS; THE EXTERNAL CANOPY CAN BE BUILT BY USING THE EXTENDED T SAHPED BEAMS AS MAIN SUPPORT. THROUGH L SHAPED STEEL ELEMENTS A PRE-CAST CONCRETE BEAM (15 CM-30 CM) IS CONNECTED TO THE FOUR T SHAPED BEAMS. IN THE SLOTS CREATED, WOODEN SHADING SYSTEMS ARE LOCATED.

PHASE 6: THE FIRST FLOOR IS REALISED FOLLOWING THE SAME ACTIONS EMPLOYED FOR THE GROUND FLOOR. THE PILLARS ALONG THE CANOPY SIDE ARE CONNECTED TO THE THE T SHAPED BEAMS THROUGH A SIMILAR ELEMENT WHICH CONNECTS ALREADY THE PILLAR TO THE FOUNDATION ELEMENTS AT THE GROUND FLOOR.

AFTER THE ERECTION OF THE FULL STRUCTURE A STEEL STAIR WITH CONCRETE TILES IS CONNECTED TO BOTH THE BEAM AND THE GROUND FLOOR CONCRETE SLAB. THIS CONNECTION IS REALISED THROUGH A STEEL PLATE WELDED TO THE STEEL BEAM OF THE STAIR, ON THE GROUND FLOOR, AND THROUGH T SHAPED STEEL DOUBLE PLATE SCREWED TO THE L BEAM.

PHASE 7: (PRE-CAST CONCRETE SLAB WITH 1% SLOPE) TWO MEMBRANES ARE PLACED EITHER SIDE OF THE THE PRE-CAST ROOF. FIRSTLY A VAPOUR BARRIER (2,5MM) BELOW AND SECONDLY A WATER-PROOF MEMBRANE (2,5MM) ABOVE, WHICH SITS IN A PRECAST GROOVE WITHIN THE EDGE BEAMS, WITH A 3CM UP-STAND. THE POSSIBILITY OF PLACING GRAVEL ON THE ROOF HAS TO BE PRECEDED BY THE POSITIONING OF A NONWOVEN FABRIC LAYER IN ORDER TO PREVENT DAMAGE TO THE UNDERLYING MEMBRANES.
Conclusions