



figura 1. Reciclaje de las placas de hormigón / recycling concrete slabs.



figuras 2 y 3. Plaza hexagonal. Estado inicial/ Hexagonal Square. Initial state



figuras 4, 5, 6. Plaza hexagonal. Estado final Hexagonal Square. Final state

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Arquitectos / architects:
Categoría / section:

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B. ESPACIOS EXTERIORES / OUTDOOR SPACES

REHABILITACIÓN DE DOS PLAZAS HEXAGONALES EN EL POBLADO HIFRENSA (ANTONIO BONET, 1967-75) / REHABILITATION OF TWO PLACES IN THE HIFRENSA SETTLEMENT

Some test bores have been made in situ to know precisely the physical reality of the materials and constructive details. The information has been contrasted with the original project documentation. Some discussions have been maintained with technicians who knew Bonet: Nicolau Rabasseda, who was the quantity surveyor during the construction of this settlement, and Bonet were co-workers from 1966 to 1972, and Lluís Caula who was an engineer of Texsa (Waterproofing Company). Before adopting the intervention criteria, we visited some contemporary works of Bonet in La Manga del mar menor, Murcia: the Hexagonal Set (1963) and the Marina 'Dos mares' (1965). They have suffered the same 'mutilation' as the HIFRENSA Settlement. They all have in common that the treatment of concrete is 'rough' and has imperfections. The contrast between the precise modulation or standardized solutions and the scarcity of resources remind us of the Maison Jaoul and La Tourette designed by Le Corbusier.

Hexagonal square:

The aim of the intervention has lain in removing completely the interventions made in the 80s and returning the square to its original state. It has been necessary to repair or replace the elements affected by the pathologies of the garages which are located on the lower level. The test bores have revealed the composition of the original concrete which is characterized by the use of a specific aggregate called 'cigronet'. The 'cigronet' is composed largely by light and dark gravel and to a lesser extent by reddish and ocher gravel from 'Mallafre' Quarry which is located in the neighboring municipality of Montroig del Camp. Several tests with different granulometric composition have been tested and the time required to wash the concrete surface before it sets to recreate the original appearance of the pavement has been estimated thanks to them. The demolished concrete plates (on the two places) were moved to a nearby site where they were crushed (Figure 1) to be recycled as the base of the new intervention thereby improving the drainage and settlement because the initial draft did not have any base.

Square of 'lawn':

The aim of the intervention has lain in removing completely the interventions made in the 80s and returning the square to its original state, except that the proposal has modified the initial conditions of the service road, because it was made by compacted soil. The drainage of the square was ineffective and it caused water logging during the rainy days and dust and erosion due to the strong Northwest wind. A stormwater retention of the square has been made by means of topographic changes. So a new slope has been made and a considerable amount of gravel has been buried. A geotextile layer, which prevents the entrainment of 'fine aggregates' and allows grass growth on it, has been placed there. Two different pavements have been placed to distinguish between the traffic area and the parking area. The rainwater is filtered through these pavements which also allow the original grass growth and the coexistence with the traffic. Many low railings, which have been raised only 20cm over the ground, have been placed to prevent the invasion of the vehicles into the pedestrian corridors which provide access to the houses.

Regarding treatment of vegetation, the Bonet spirit has been applied in both places:

Regarding the existing vegetation, it has been aimed not only to preserve, but to invigorate and to increase it.¹

Holm oaks, oaks, planetrees, cupressus and nettle trees have been planted in small groups to look for a natural-looking result. The approach of the rest of the Settlement has been followed in the project and some photographs from the 'Fons Bonet' COAC historical archive (College of architects of Catalonia) have been adopted as a reference.

¹ Extracted from the project memory. 'Fons Bonet' COAC historical archive (College of architects of Catalonia).