

Draft of the actions to naturalise stream margins affected by the

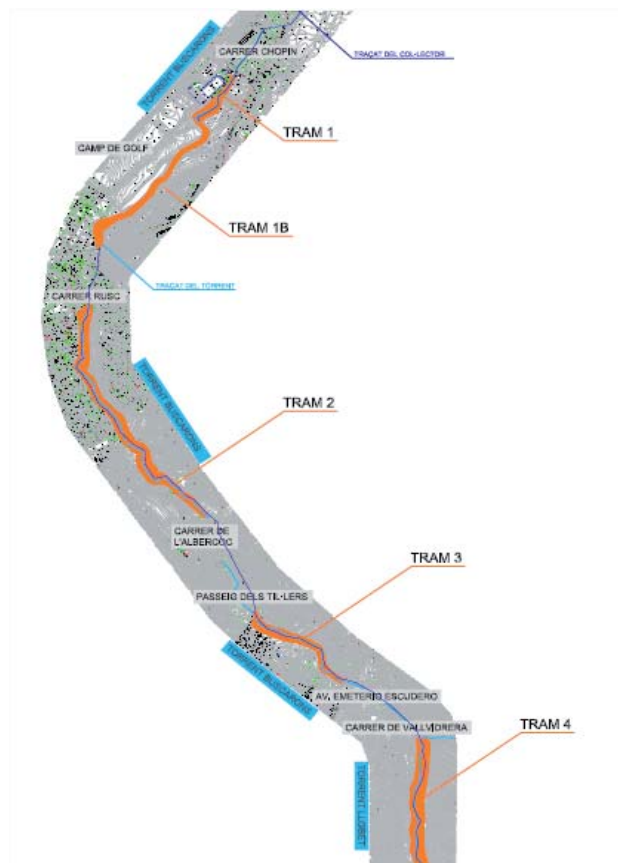
“Project for the renovation of the sewerage network in the streams of Buscarons and Saladrigues, between the streets of Cupré de la Floresta and Safareigs, in Sant Cugat del Vallès (Barcelona)”

INTRODUCTION

We find it interesting to draft this report because, from the start of the sewerage project, we have ensured that the plan fits in with its surroundings and that there is an improvement in the area while taking advantage of the magnitude of this project.

The City Council of Sant Cugat has undertaken this project with the aim of installing a new water collector passing through the streams of Buscarons and Saladrigues (affecting, partly, the streams of Can Trabal and Llobet).

The Temax Enginyeria business, are in charge of the project while Naturalea are designing the environmental improvements, focusing on the naturalisation and stabilisation of the slopes of the stream banks and on the protection and integration of the wells and the stormwater tanks.



LOCATION AND SECTIONING

The streams of Buscarons, Llobet and Can Trabal are located in southern Sant Cugat, east of the Valldoreix district, by Sant Cugat Golf Club, and flow northeastwards from La Floresta.

The project splits the area into 6 sections, according to the type of section and the characteristics of the area.

- Section 1: 196m in length. Area: between Chopin street and the golf course.
- Section 1B: 550m in length. Golf course.
- Section 2: 813m in length. Area: between the streets of Rusc and Albercoc.
- Section 3: 353m in length. Area: between the promenade of Passeig dels Til·lers and Emeterio Escudero avenue.
- Section 4: 412m in length. Area: between the streets of Vallvidrera and Cupré.
- Section 5: 550m in length. Area: A section of the Can Trabal stream, between the promenade of Passeig de Can Móra and Safareigs

AIMS OF THE PROJECT

- To promote stable river vegetation on the stream path.
- To properly integrate wells and stormwater tanks into the landscape.



PROJECT DESIGN CRITERIA

The actions in the project are split into six groups, according to their aims and execution phase:

- Preliminary actions, which must be carried out prior to moving land to install the collector.
- Actions for the re-vegetation of the margins affected by the installation of the collector.
- Actions for the integration of wells.
- Actions for the integration of stormwater tanks.
- Actions to improve critical points, where tension is very high and a specific design for the point is necessary.
- Actions aimed at the improvement of the habitat.

ACTIONS

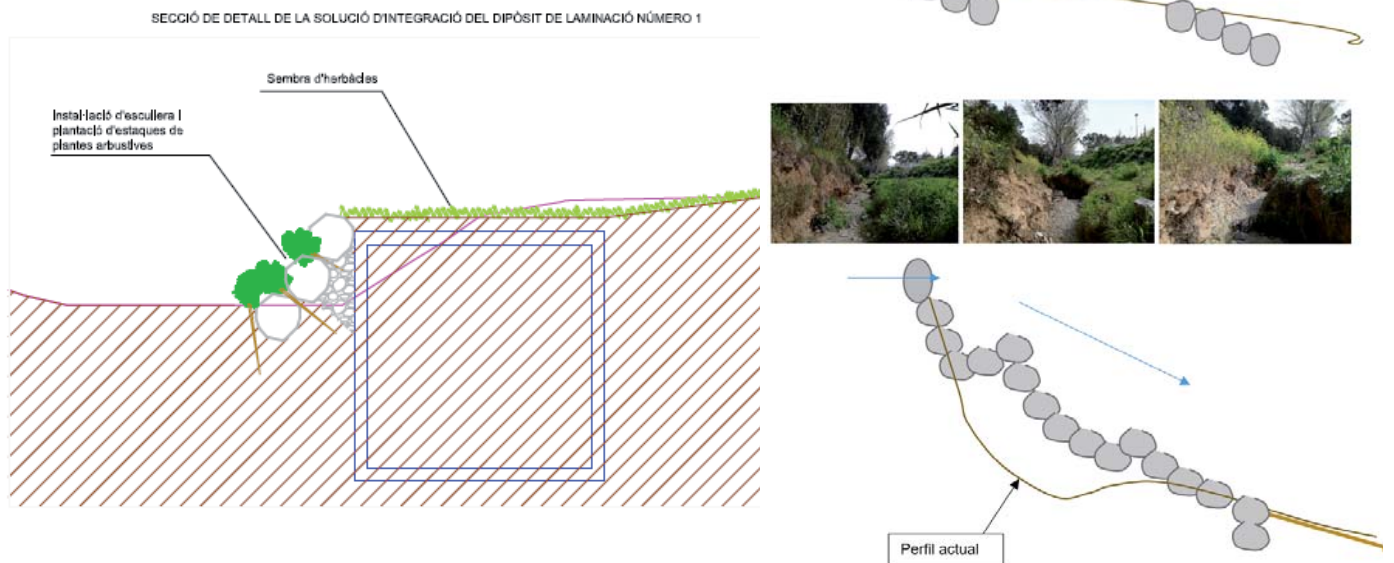
As a supplement to these actions, extra preliminary actions have been planned, including the removal of wild cane (Arundo donax), disposing of waste, and extracting and collecting land with agronomic value. In this manner, good conditions will allow for an optimal start to the remaining actions planned.

For each section, its parts have been classified according to the installation of the collector, the hydraulic tension in it, and the inclination of the slopes that will result from the planned earthworks.

Based on this classification, solutions are grouped into typical actions, both for re-vegetation and for the integration of wells.



Regarding the actions aimed at the integration of the stormwater tanks and improvement of critical points, an analysis has been carried out on a point-by-point basis to find the best solution because in most cases they need to be able to withstand a tension of 300N/m².



To aid the finish of the project, some actions have been planned to improve the habitat such as the plantation of trees and shrubs, placing of nest boxes, installation of insect hotels, creation of heaps of dead wood and rocks and, lastly, promoting the growth of bushes.