Lauwin-Planque
105 ha logistics area
Infrastructure and public facilities

Country
France

Client
Communauté d'Agglomération du Douaisis

Date
2005-2008

Cost of works
€4.5m before tax

Sogreah's services
- Design services and project supervision:
  - Definition of public facilities programme for the area
  - Study of stormwater discharges
  - Landscaping and environmental integration

Background

The project aims to provide roads and services for a logistics area in the town of Lauwin-Planque, to cover an area measuring 105 hectares.
The development works must comply with eco-construction standards and, in particular, the "PALME" sustainable development charter:
- Soundproofing
- Waste management
- Energy management
- Water treatment
- Optimisation of materials

Sogreah's design and implementation brief from the Douais urban area authority covered the road developments, wastewater and stormwater treatment and landscaping measures.

This project aims to create a pleasant environment that is attractively landscaped and easily to maintain, providing companies with a wide range of services.

The developments include setting in place alternative water management techniques and creating paths for pedestrians and cyclists.

A roundabout has already been created on the RN 43 trunk road in order to improve access to the area.

Description

Sustainable road developments
- Creation of a 2050 m long service road:
  - In-situ treatment of subgrade;
  - Use of medium-grained asphaltic concrete;
  - Noise-reducing road surface;
  - Definitive signage.
- Integration of pedestrian and cycle paths with porous surfaces totalling 1880 m in length
- Restoration of farm tracks and creation of maintenance tracks over a distance of 3350 m.

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- In-situ treatment of subgrade.
- Use of a treated gravel-sand mixture.

Stormwater management structures - alternative treatment

- Two watertight stormwater detention basins sized for a 100-year event for the purpose of treating runoff water through settling and separation of floating contaminants.
- Finishing treatment involving passing the water through two seepage basins.
- Collection of surface water from the roads through manholes fitted with "Adopta" type honeycomb units.
- Injection of water into swales laid out parallel to the road (with capacities sized for a 100-year event) with regulation systems.

Connection with utility networks outside the site and internal services

- Creation of two electrical distribution stations and a gas pressure regulator station.
- Connection with electricity, gas, telecommunications and drinking water networks.
- Laying of optical fibres.
- Drilling beneath the RN 421 trunk road to lay pipes.
- Creation of a pumping station for the wastewater network, connected to the Lauwin-Planque mains network.

Landscaping

- Urban furniture.
- Plantations, green spaces, grass planting, landscaping.
- Noise bund along the RN 421 road.

Public lighting

- Placing of 64 6.50m high lamp posts.
- "Luxyol" type public lighting remote management system (cost control).