

WATER RETENTION STAIRCASE [10]

Address: 60 Rue Waassertrap, Sanem, Luxembourg
Landscape design: ELYPS landscape + urban design
Completion: 2017; **Size:** 38,500 m²
Client: AGORA s.à r.l. & Cie

This project transforms an industrial site back into an environmental haven. The wetland environment has been restored where possible and recreated where restoration was not viable. The site not only offers a lush green area for children to play or where residents can stroll, it also houses a wealth of animals, insects, flora and fauna.



This project is located in Luxembourg, in an industrialized area that was once used by the steel industry. Recently transformed into an attractive working and living environment, the new city quarter will eventually expand to incorporate four separate residential quarters. These quarters will be connected by a green backbone, the water retention promenade. This functions as a combined cyclist and pedestrian promenade. In order to reclaim the wetland ecosystem, the original creek was restored where possible, and an artificial, new creek has been created where restoration was not possible. The water retention staircase similar to the natural, original creek, and this was intended to restore the former landscape as closely

as possible. 26 barriers made of European oak poles have been added for storm water management purposes. On the promenade, 33 spillways have been designed, made clearly visible by numbered Corten steel elements on the gabion-parapet. These numbers refer to the former steel blast furnace with its numbered equipment. The spillways transport the storm water from the promenade to the retention-staircase. The ensemble of three bridges is a clear landscape design element, emphasizing the existing wetland ecosystem. A total of 86 multitrunk *Alnus Glutinosa* were planted. This type of tree is indigenous and well-suited to the wet environment.

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Rainwater inspection pond, promenade with alder trees, oak bridges, promenade and Belval residential area, site plan, water element. Credits: Elyps, Nijmegen; Agora, Belval (Sp. 11 L)

