

School yard redesign

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Redesigning and greening of a primary schoolyard

The client of this thesis was the Nutsbasisschool Burgst in Breda, Netherlands. The current schoolyard of the Dutch primary school is used as a space for free play by the pupils during breaktimes and after school when they spent their afternoon at an adjoining daycare center. The two parties decided to renovate the playground and asked for a new design concept. There were two main problems with the current schoolyard. First is that the children do not have the chance to connect and interact with nature while playing outdoors. The schoolyard has only a few trees and bushes which is not enough greenery and the children have no chance to interact with the natural environment. The second problem is that there is not enough play equipment for the children. The research questions represented the main goal of the redesign: How can the schoolyard be designed into an area where the children are more connected with nature? How can the schoolyard be designed

in order to promote new play possibilities? The aim of this project was, therefore, to create a visual representation of the new schoolyard that would be focused more on a green schoolyard and would provide the children with new play equipment that promotes them to be active in different play activities. During the process, it was important to consistently co-design with the school and the children, so their ideas, needs and wishes are translated and implemented into the final concept.

The first steps during the process were to conduct relevant research. The main research was focused on two aspects. First, studies were examined on the definition of a green playground and how one can be designed. Second, the play behaviour of children between the ages of 4-12 was explored, to provide the children of this schoolyard with appropriate play equipment that supported their desire for certain play activities. The stakeholders of this project and the users of the schoolyard were, also, analyzed in

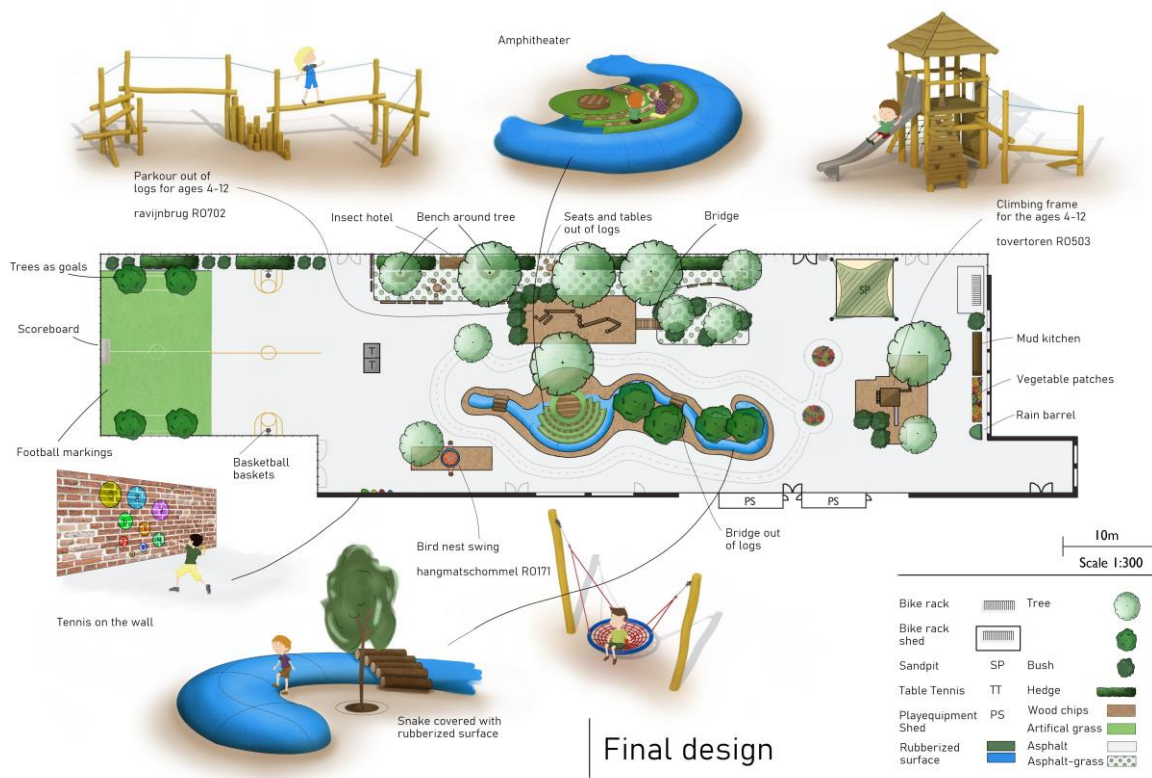


Figure 1: Landscape plan of final schoolyard design

Climbing frame model: Tovertoren RO503, Log parkour model: Ravijnbrug RO702, Swing model: Hangmatschommel RO171 by Europlay, 2019. <https://onlinetouch.nl/vaneespeeltoestellen/eco-playnl-2014?html=true#/12/>

detail. Furthermore, observations were carried out on current schoolyards and playgrounds, to collect ideas for play equipment. Norms of outdoor playground structures were researched to fulfill the regulations for safety on a schoolyard. The findings were consistently shared with the school to work closely together during the decision-making process for the equipment. Three concepts were created and sketched out. Each concept was evaluated by the committee. For each concept, a cost estimate was made by the playground supplier van Ee and each was analyzed to what extent it meets the requirements of the project. With the results, a final design was made.

The final schoolyard design is visualized in several sketches and a landscape plan, which can be seen in Figure 1. It presents a combination of a schoolyard that is based on manufactured equipment and natural play equipment, found in green play spaces. Some of the equipment that the final schoolyard consists of are manufactured equipment out of wood, that is provided by the playground supplier,

such as a climbing frame, a log parkour and a swing. Other equipment is more natural and can be built during fun school projects with the children, such as an insect hotel or a mud kitchen, that promote the interaction between the children and nature. In addition, more greenery is placed on the yard to create a more natural atmosphere and the flooring is based on asphalt, artificial grass and wood chips. The final design achieves to meet the goals of the project and meets all of the requirements that consider the wishes of the school. A requirement that could not be met is to create a diverse topography due to the high costs. The final concept, considered the aspect of the costs of the redesign, to the extent possible. It achieved to meet certain requirements that were needed for the school in order to apply and receive grants for this project and increase its budget. Before the beginning of the construction in May 2020, the concept will be further discussed and adapted by the playground supplier to make it realizable for the school considering its final budget.

References

Europlay. (2019). *Ravijnbrug RO702* [Image format]. Retrieved from <https://onlinetouch.nl/vaneespeeltoestellen/eco-playnl-2014?html=true#/12/>

Europlay. (2019). *Tovertoren RO530* [Image format]. Retrieved from <https://onlinetouch.nl/vaneespeeltoestellen/eco-playnl-2014?html=true#/12/>

Europlay. (2019). *Hangmatschommel RO171* [Image format]. Retrieved from <https://onlinetouch.nl/vaneespeeltoestellen/eco-playnl-2014?html=true#/12/>