

Designing a mobility plan for the estate of Paleis Soestdijk

Public summary

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This Bachelor's final assignment for the study Industrial Design Engineering at the University of Twente is carried out for the company MeyerBergman Erfgoed Made By Holland Exploitatie B.V. The company is currently making plans for the renovation and development of their estate of Paleis Soestdijk, which includes giving the estate new functions (Mbegroep, 2020). The estate is protected because of its nature and monumental history. The new functions on the estate will include a hotel, a museum, conferences, outdoor and indoor events, restaurant and café services, expositions, and housing. To accommodate all these functions their logistic flows must be well managed. Therefore, they offered the assignment of designing a sustainable mobility plan for the future activities on their estate of Paleis Soestdijk. The reference year is 2025 (*Transitie - Made By Holland*, 2022), when the activities on the estate will be available to the public and when a mobility plan will have to be in use.

The stakeholders who make use of the mobility plan in the future were the starting point of the research. First, the stakeholders had to be defined. This was done by looking at all the future functions of the estate and the movements over the estate they will require. The stakeholders were grouped into 4 main categories, the visitors, the staff, delivery and collection, and the natural environment. A list of requirements of the stakeholders was created by researching company documents and interviewing stakeholder representatives and company experts. Here quantitative and qualitative requirements that could influence the mobility plan were described. A tool used to better describe some stakeholders was creating personas (Figure 1). With the personas, the focus of the design shifted to the users, as they will be the ones using and (sub)consciously following the mobility guidelines of the service-oriented activities on the estate.



Figure 1: Personas of some stakeholders

To define the possible logistical flows of the stakeholders on the estate, the prior defined requirements were followed while taking into account the visitors presented by personas. Three scenarios were created as possibilities for the final logistical flows, each scenario having its advantages and disadvantages. The disadvantages were, in most cases, consequences of conflicting requirements and wishes of different stakeholders. The next step was looking at the transport possibilities on the estate. These were solutions for the transport of some guests and goods, as access to some locations on the estate would not be

suitable for cars or trucks. To be able to integrate the mobility plan into the infrastructure of the estate, all the adaptations that would be needed were marked.

The final solution includes the scenario of logistic flows where the flows are separated where possible, and protecting the natural environment is one of the main requirements while the costs are also considered. This decision on the flows can be seen in Figure 2.



Figure 2: The final logistical flows on the estate of Paleis Soestdijk

The adaptations needed on the estate (Figure 3), such as entrances for different visitors, a delivery point, adaptations of some paths, charging points for EVs, the company can use to know which adjustments on the estate will be needed to implement the chosen mobility plan.



Figure 3: Marked areas where adaptations are needed to implement the mobility plan

Finally, in Figure 4 the different mobility flows on the estate can be seen from one point on the estate.



Figure 4: The different flows from one point on the estate

References

1. Mbegroep. (2020, July 8). *Paleis Soestdijk*. MeyerBergman Erfgoed Groep. Retrieved April 7, 2022, from <https://www.mbegroep.nl/projecten/paleis-soestdijk/>
2. *Transitie - Made By Holland*. (2022, February 22). Paleis Soestdijk. Retrieved April 7, 2022, from <https://www.paleissoestdijk.nl/transitie/madebyholland/>