

# WPI Growing Pathways

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Growing  
Pathways



# Overview

- I. Introduction
- II. Background
- III. Objectives
- IV. Objective Methods and Results
- V. Video Tour
- VI. Limitations and  
Recommendations

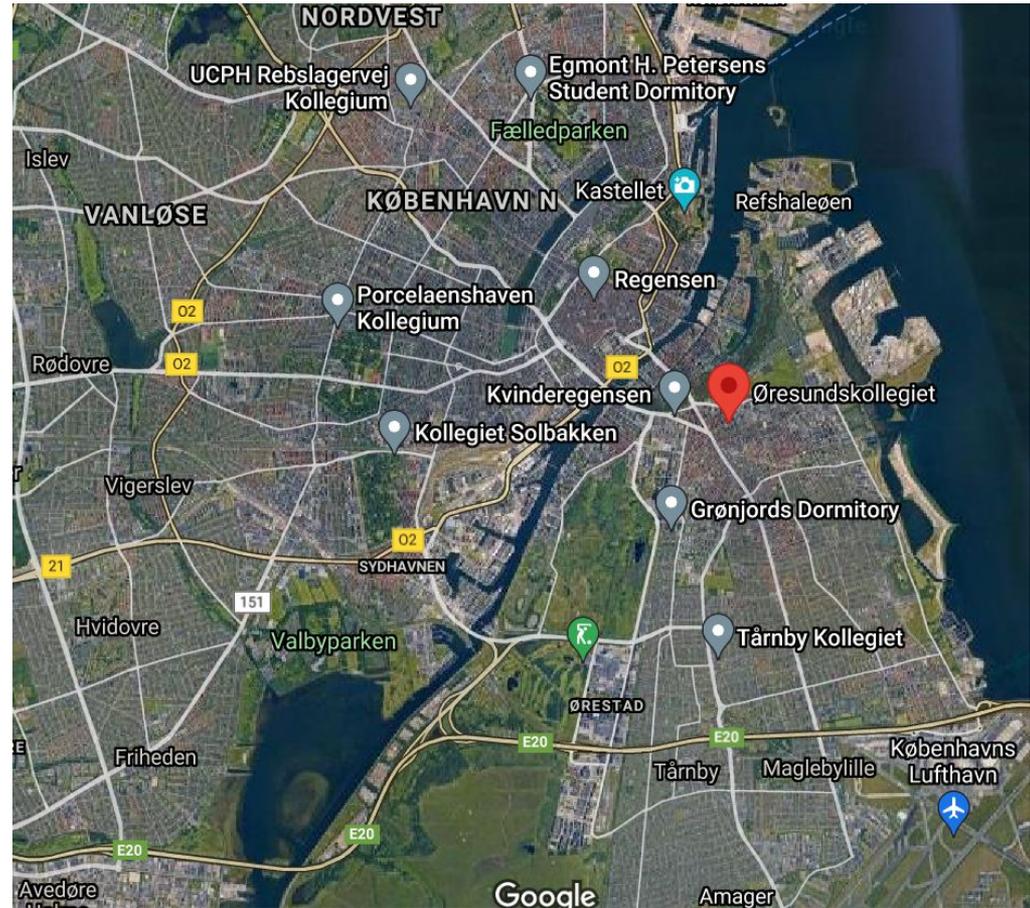
# Introduction

- We were in collaboration with Growing Pathways
- Population of study: university students at Øresundskollegiet dormitory
- Goal: engage community in urban nature and give recommendations to Growing Pathways for the development of a greenspace within the Øresundskollegiet community



# Øresundskollegiet

- University student dormitory in Amager with 1,600 residents
- Existing greenspaces are mostly hidden behind buildings and unused



# Steps to Achieve our Objective

Step 1: Interview experts and community members

Step 2: Survey residents in the Øresundskollegiet community

Step 3: Narrow down survey results with a design probe

Step 4: Create a model of our proposed greenspace design

# **Final Deliverable**

Recommendations to Growing Pathways on the  
greenspace design using our report and a 3D Model

# Project Objectives

1. Investigate the features of successful greenspaces
2. Utilize a community driven approach to develop our greenspace design
3. Deliver recommendations for a greenspace design in the Øresundskollegiet community

# **Objective 1**

Investigate the features of a successful greenspace

# Urban Nature and Greenspaces

- WPI team's focus in sustainability is urban nature
- What defines a successful greenspace initiative: to serve nature and society equally





# Native Species

- Deciduous Trees
  - European rowan
  - European hazel
- Coniferous Evergreens
  - Norwegian spruce
- Flowers and Herbs
  - Calendula, daisies
  - Dill
- Shrubs
  - Alpine currant
  - European Juniper (evergreen)



# Interview | Dr. Stuart Paul Connop

- Expert Interview
  - Senior Research Fellow -  
University of East London
  - Nature based solutions for  
multifunctionality in design and  
performance



# Interview | Dr. Stuart Paul Connop

- Takeaways
  - Project organization and planning
    - Key point of success in many urban nature projects
  - Community engagement
    - Encourages use of the space and interest



## **Objective 2**

Utilize a community driven approach to  
develop our greenspace design

# Interview | Marianne Spang Bech

- Local Council Interview
  - Director of the environmental point in Miljøpunkt Indre By
  - Working with Growing Pathways on community based project Agenda 21



# Interview | Marianne Spang Bech

- Takeaways
  - Networking
    - Key for project success
    - Brings in the people needed to complete the project
  - Community driven approach



# Interview | Niels Kristian Bjerg

- Community Interview
  - President of the Resident Council of Øresundskollegiet
  - Insight into the dorms goals and past project
  - Knowledge of the area and its residents



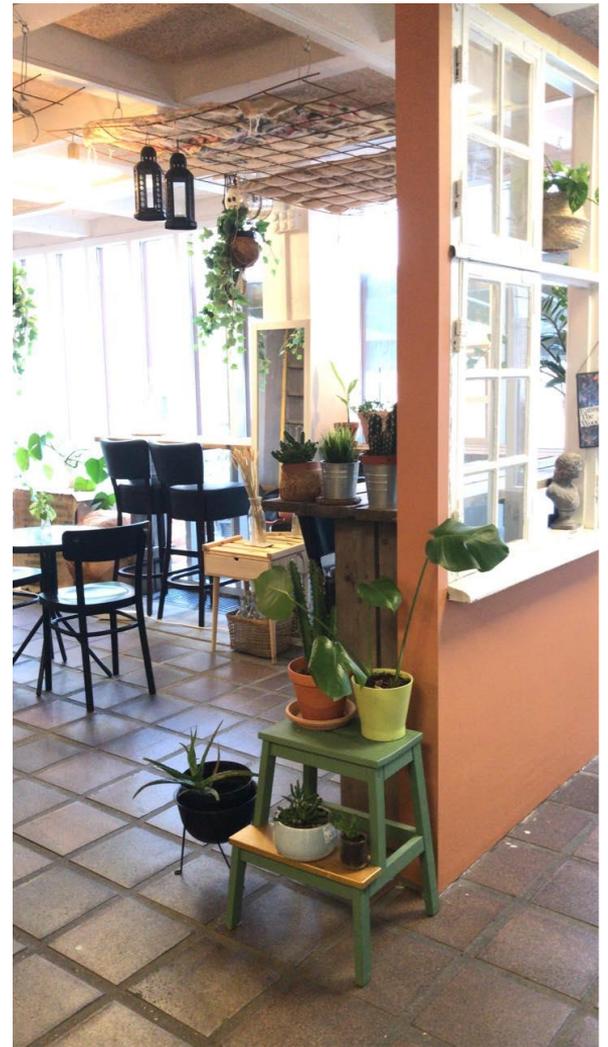
# Interview | Niels Kristian Bjerg

- Takeaways
  - Socializing
    - Seating areas
    - Places for activities
  - Resident involvement
    - Community Gardens
    - Composting/Recycling



# Interview | Benjamin Harrus

- Community Interview
  - Owner of the ØK Cafe
  - First vertical indoor farm in Denmark
  - Insight on urban and vertical gardening



# Interview | Niels Kristian Bjerg

- Takeaways
  - Socializing
    - Seating areas
    - Places for activities
  - Resident involvement
    - Community Gardens
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# Survey

- Received 33 responses
- Distributed using Facebook group and poster
- Gave us a list of community priorities

## Grow your community with the **Greenspace Survey**

Help us design your greenspace for the dorm!

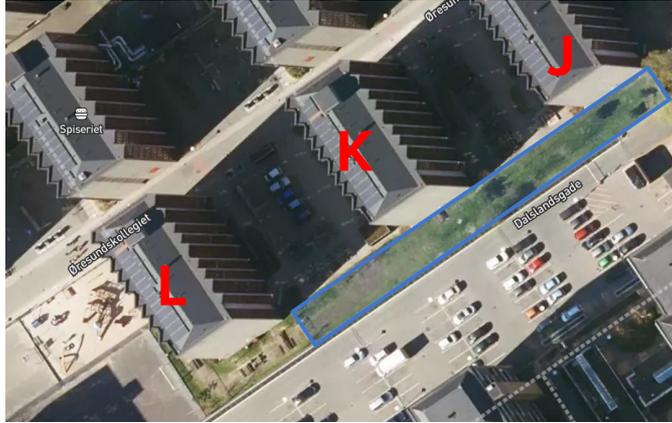
A project in collaboration with Growing Pathways and students  
from Worcester Polytechnic  
Institute in the USA

Use this QR code to reach our survey or the following link:  
[http://wpi.qualtrics.com/jfe/form/SV\\_57NQ7hDM0k9jBci](http://wpi.qualtrics.com/jfe/form/SV_57NQ7hDM0k9jBci)

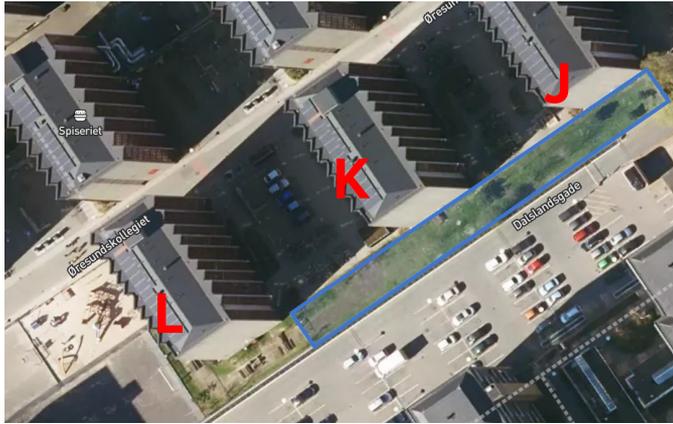


Growing  
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# Location Options

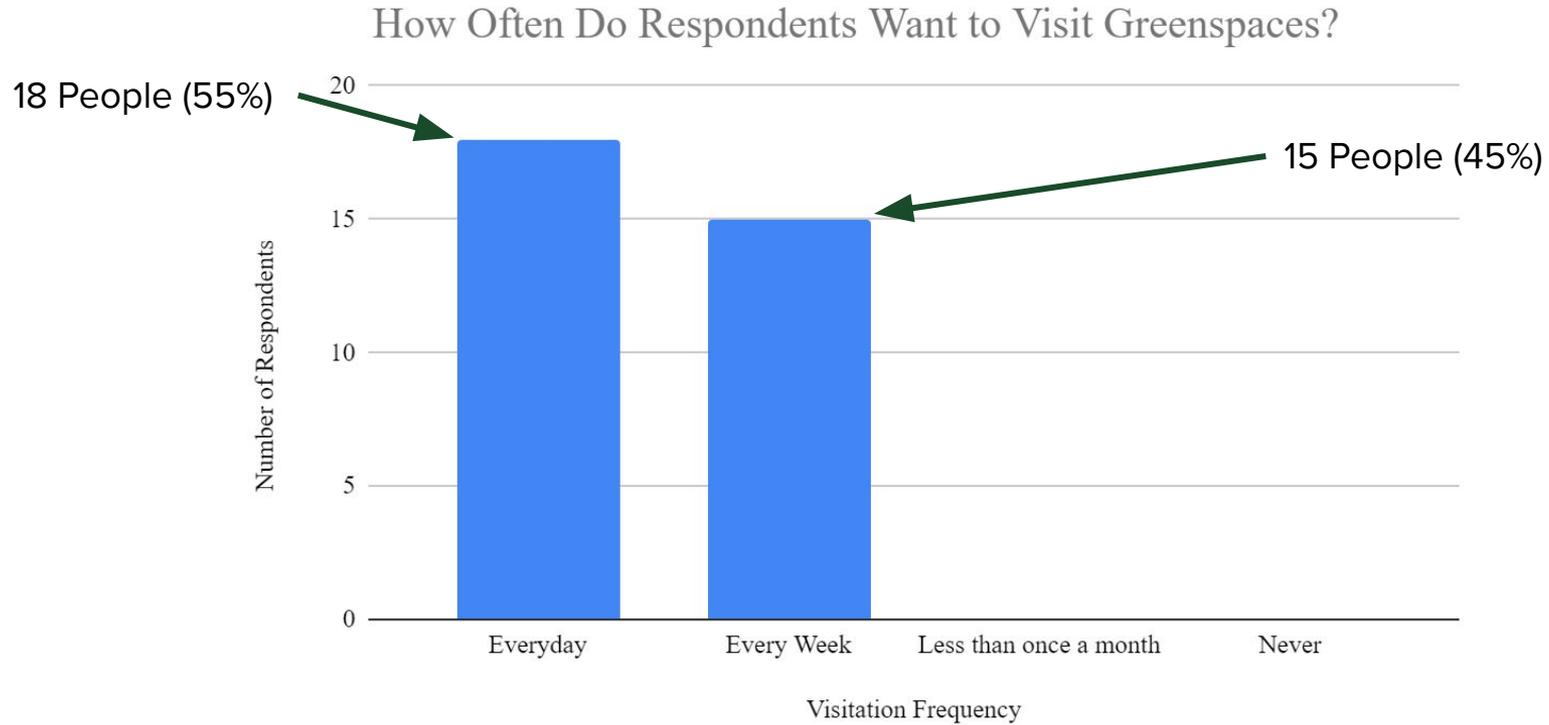


# Location Options



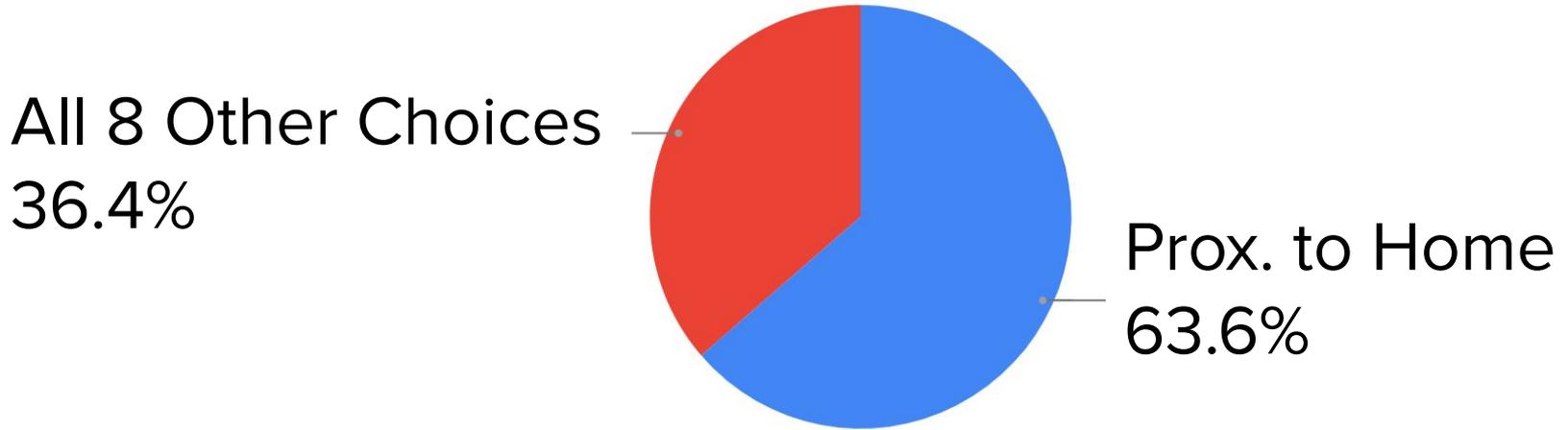
- Patch of grass
- 7.98 m x 82.6 m
- 631 m<sup>2</sup> (~6,792 ft<sup>2</sup>)
- Next to blocks J, K, and L of the dormitory complex

# How Often Do Respondents Want to Visit Greenspaces?



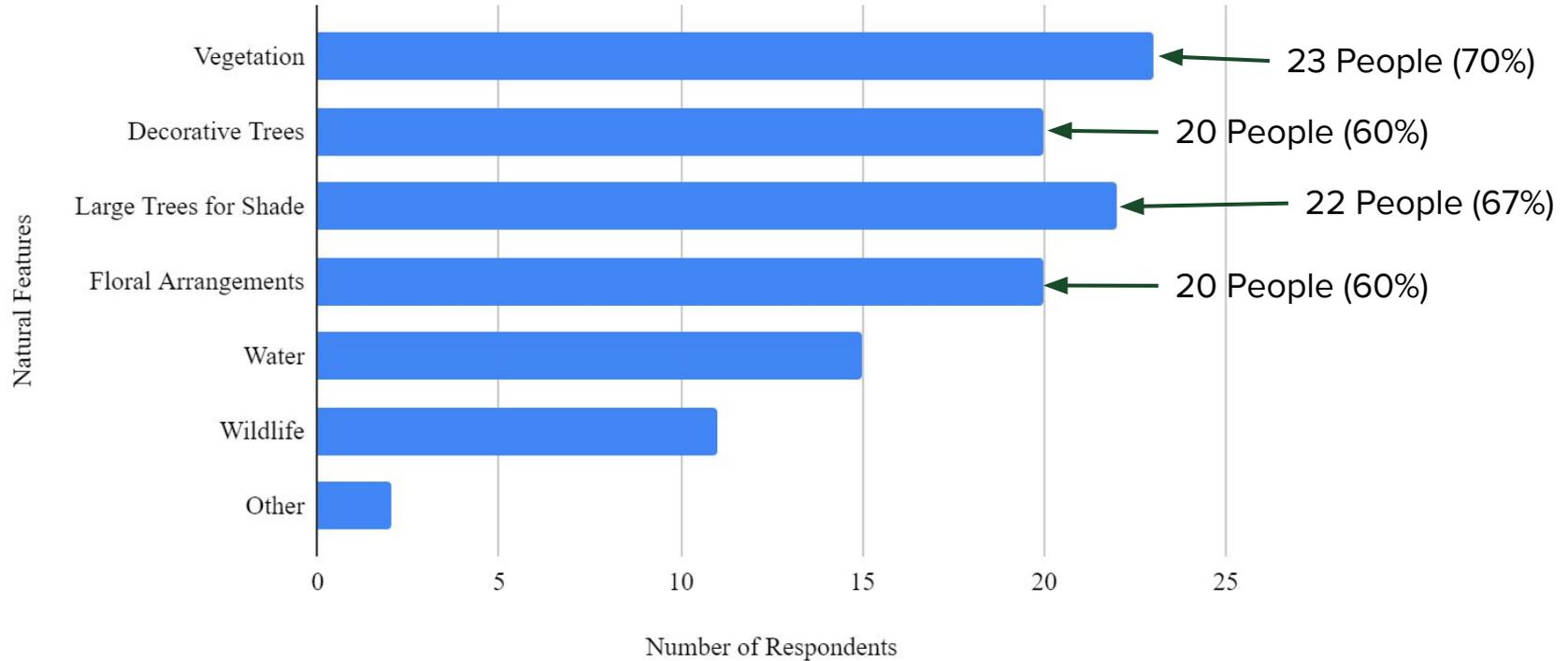
# Proximity to home is the highest priority for the Øresundskollegiet community

Important Features in a Greenspace



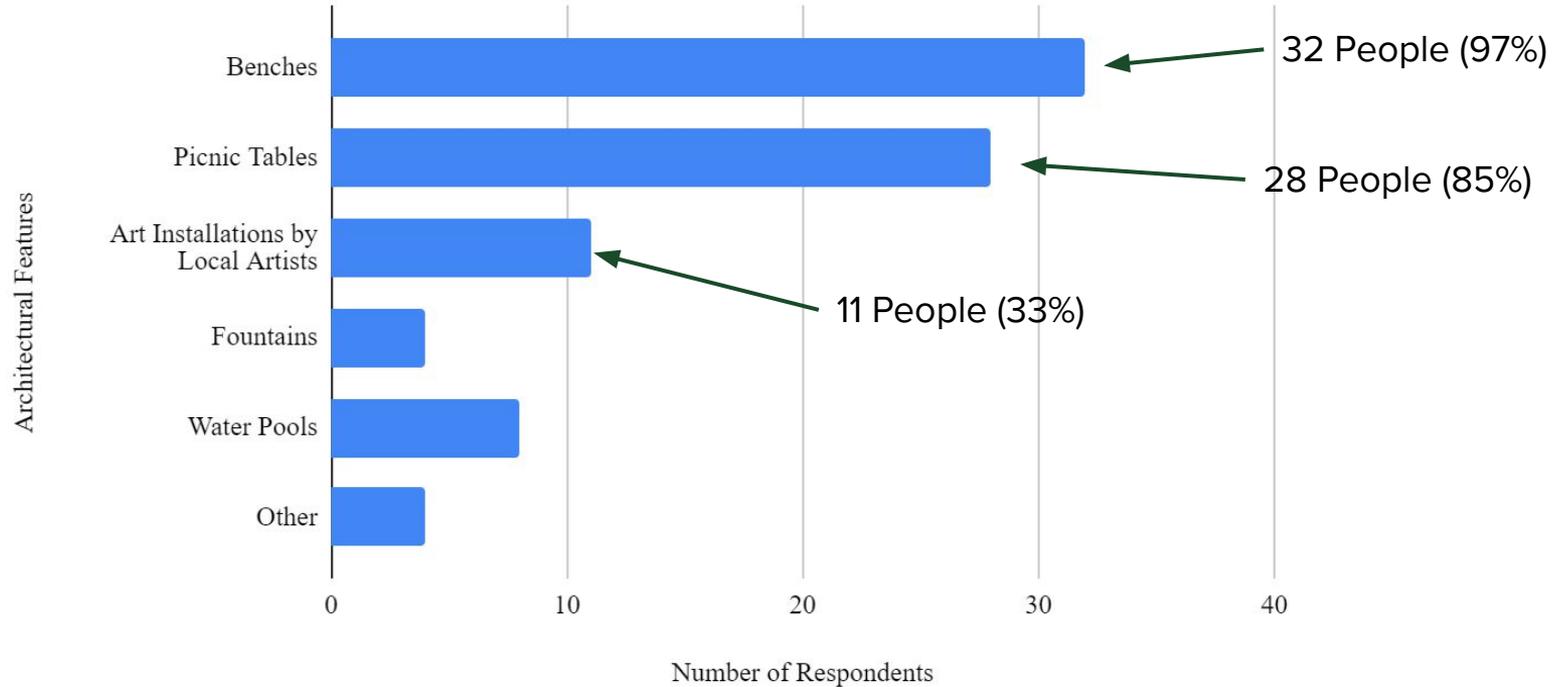
# What Important Natural Features Belong in a Greenspace?

What Important Natural Features Belong in a Greenspace?



# What Important Architectural Features Belong in a Greenspace?

What Important Architectural Features Belong in a Greenspace?



# What People Want to Use the Greenspace For

Top three choices:

- 1. Recreational Greenspace
- 2. Climate Adaptation Greenspace
- 3. Community Garden Greenspace

# Design Probe

 Growing Pathways Focus...  



 Share













**How to create a building**

- 1. Select the building type
- 2. Choose the building style
- 3. Select the building color
- 4. Choose the building height
- 5. Select the building location
- 6. Choose the building orientation
- 7. Select the building materials
- 8. Choose the building details
- 9. Select the building accessories
- 10. Choose the building finishes

**Use the design's properties for the area with the building**





**Use the design's properties for the area with the building**





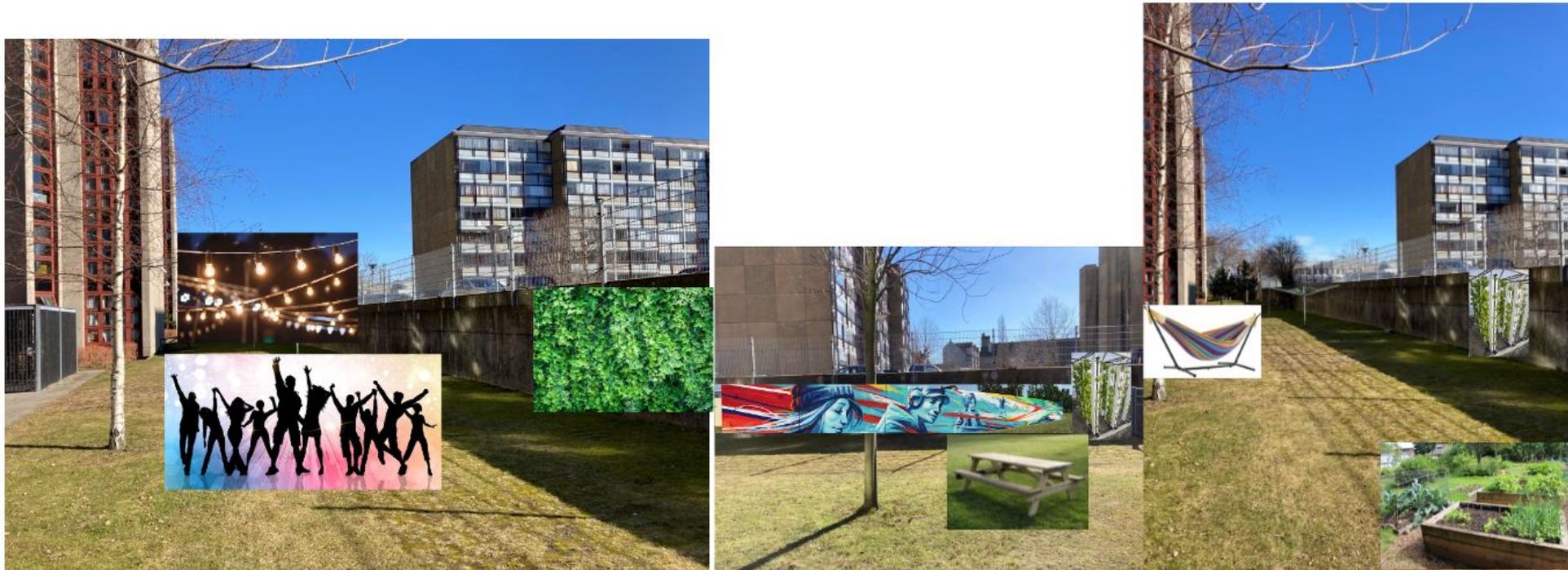
For some reason I can't add more pictures. Probably because I'm not doing it right... SO you get it!

<https://we.tl/t-NHekX0S1O2>

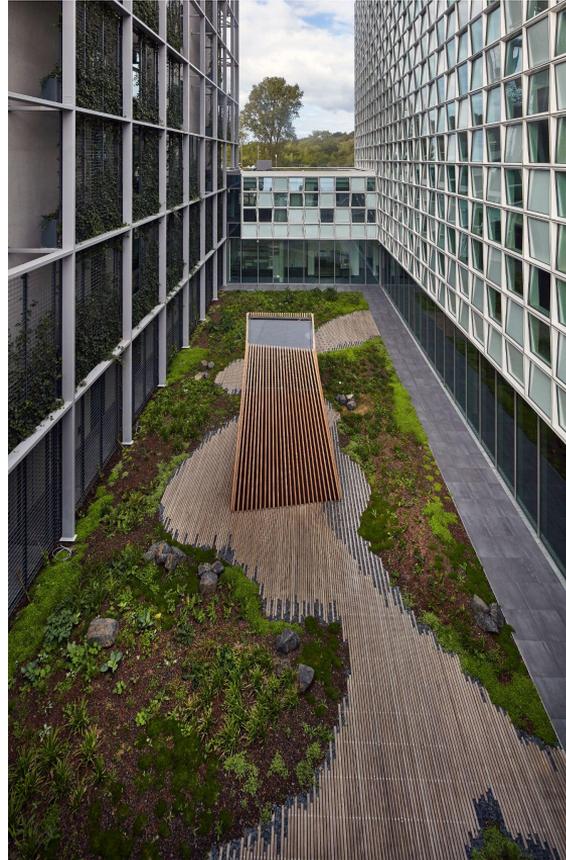
What's my wish for the outdoor space you are designing for is that it appeals to a lot of different residents as well as the local community. Therefore it would be nice with some benches, picnic tables and maybe a firepit. As well as plants that smell, taste and look nice together with some trees or bushes that may create more intimate meeting spaces.



# This is what our design probe came up with on the vision board



# Some additional photos for inspiration were submitted via email





## **Objective 3**

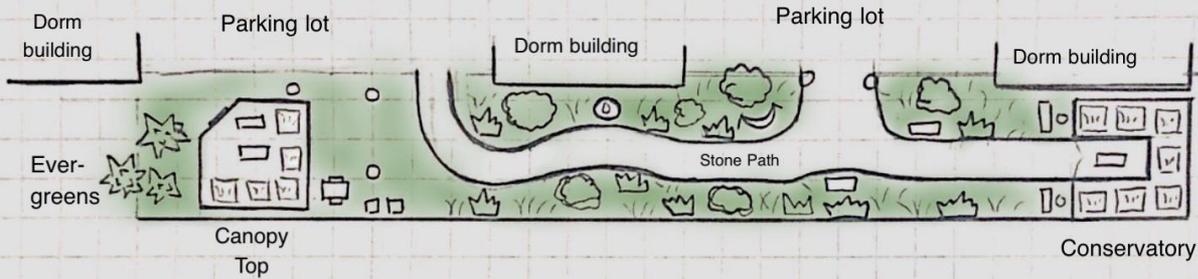
Deliver recommendations for a  
greenspace design in the  
Øresundskollegiet community

# Refining Our Final Design

- Showed Niels Kristian the design we created based on our survey and design probe results
- Positive feedback
  - “A million times better than how it is now”
  - “f\*\*\*\*ing amazing”
- Will be easy to extend water and electricity to the space
- Dorm will have a budget to do these improvements to the space

# Greenspace Design

## WPI Growing Pathways Final Greenspace Design



- Key:
-  Bench
  -  Garden bed
  -  Light structure
  -  Water feature
  -  Tree
  -  Shrub
  -  Recycling station
  -  Picnic table
  -  Hammock





Rowan

Hazel

Juniper



Currant

Hazel



Rowan



Currant



Juniper

# Video



# Limitations

- COVID-19
- Could not be there in person
- Online format was not ideal
- Could not properly look into budget

# Key Recommendations

- Supporting biodiversity while providing ample space to socialize and relax
- Building with sustainable materials and methods
- Involving the community in every stage of the project

# Acknowledgements

- We would like to thank the following people:
  - Professor Jennifer Carlson, WPI
  - Professor Blake Currier, WPI
  - Professor Peter Hansen, WPI
  - Oleg Koefoed, Growing Pathways
  - Bergen Jome, Growing Pathways
  - Patricia Csobánczi, Growing Pathways
  - Benjamin Harrus
  - Niels Kristian Bjerg
  - Lori Ostapowicz-Critz, WPI
  - WPI Writing Center

**Thank you! Any questions?**

# LucidSpark Board

<https://lucid.app/lucidspark/87baa210-d2bf-4413-954e-626d87bb81f7/edit?shared=true#>

# Photos of the space







