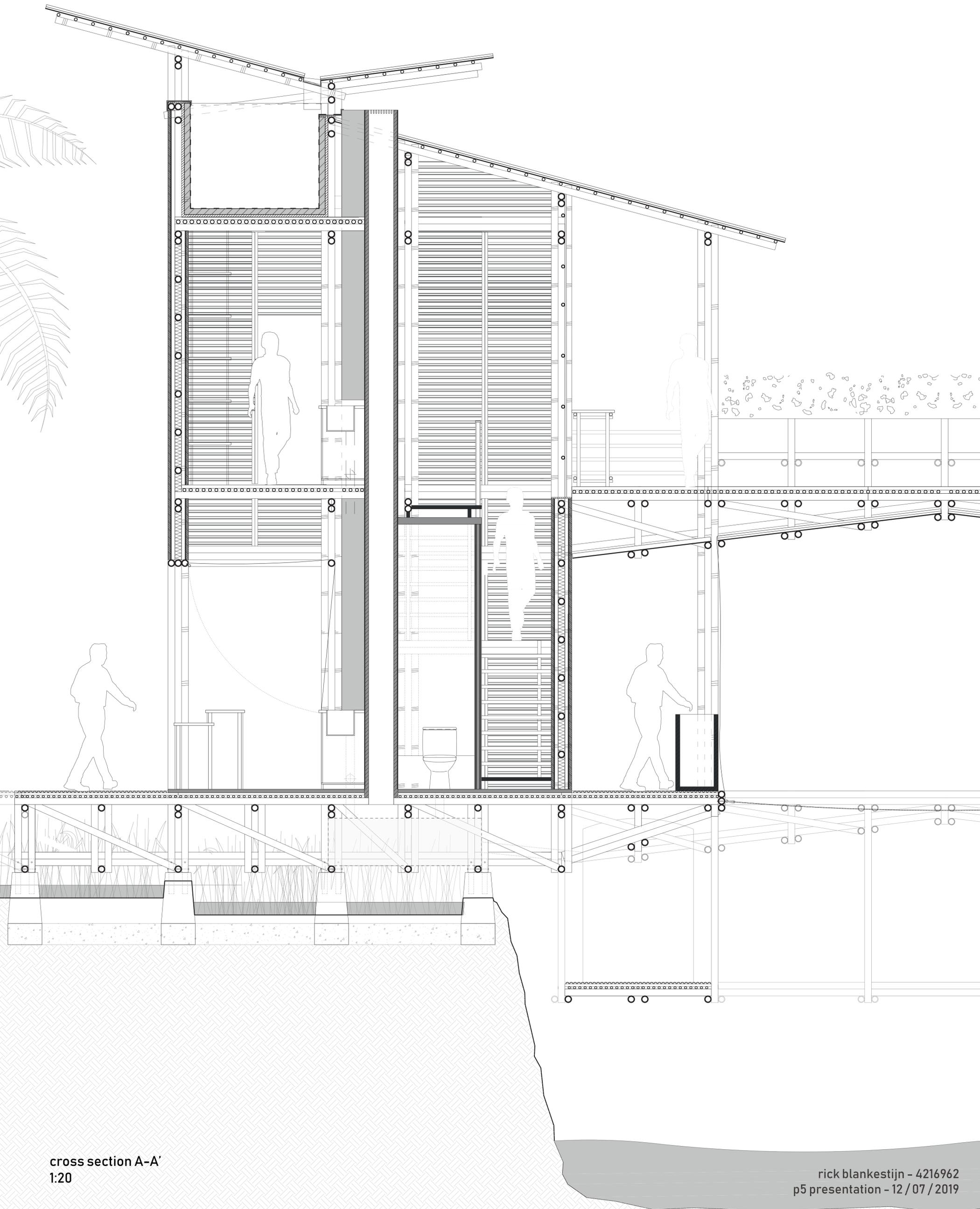


# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area



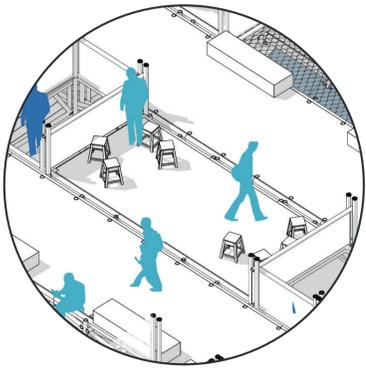
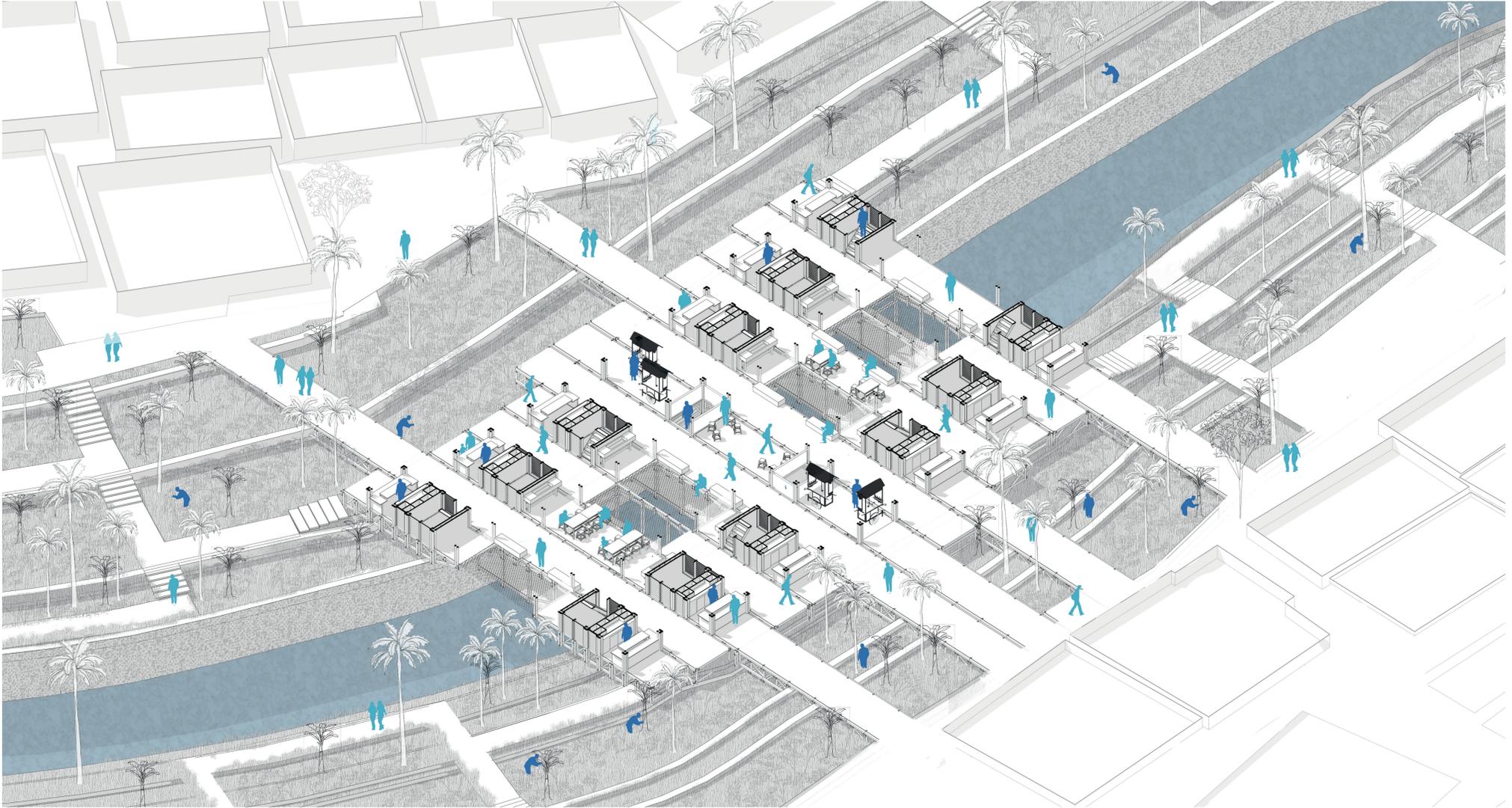
cross section A-A'  
1:20

rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019

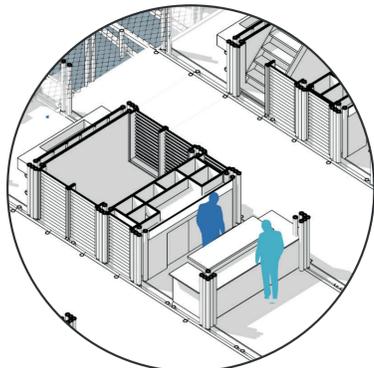
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

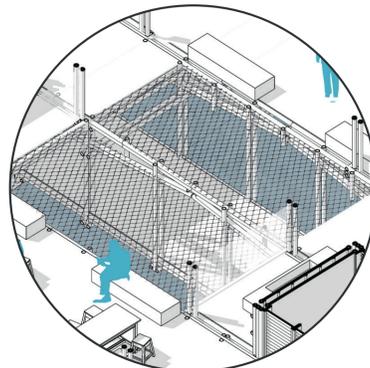
rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



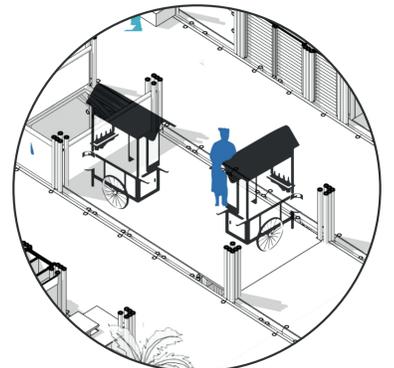
integrated central community square



foodstalls with individual character



dining areas directly connected to the Cikapundung river



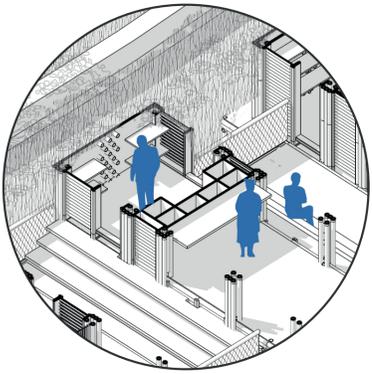
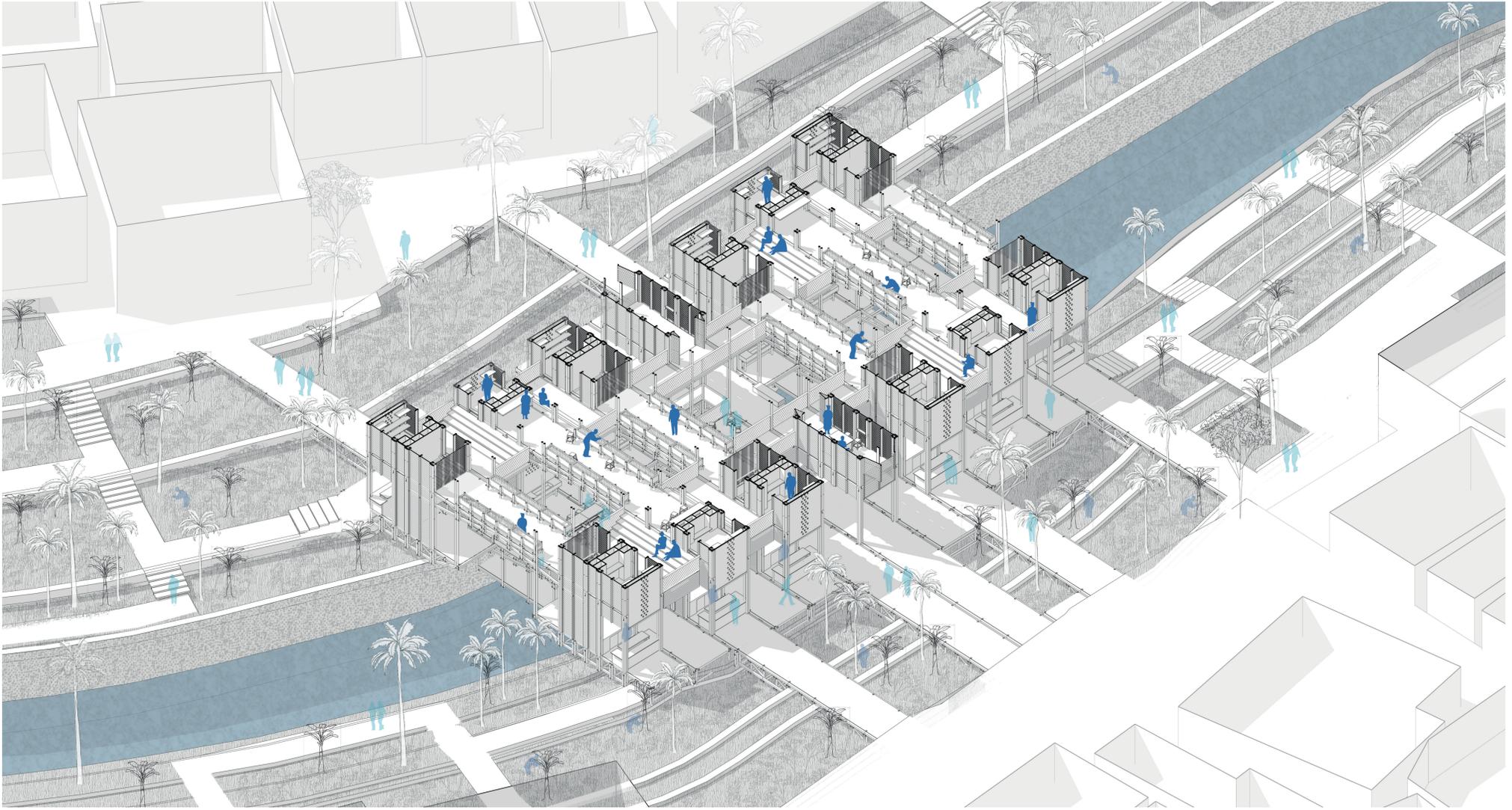
flexible spaces, offering street food vendors economic possibilities



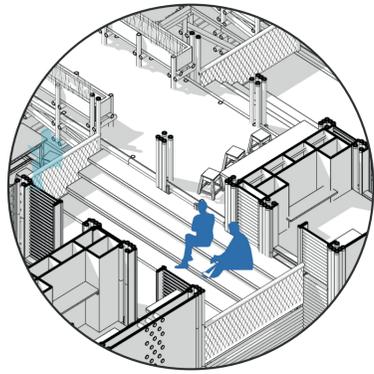
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

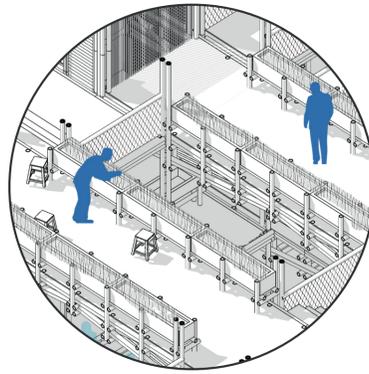
rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



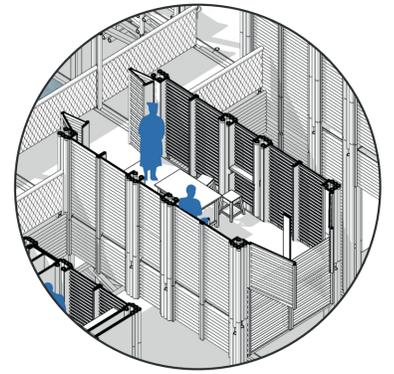
individual food storage space  
and communal preparation area



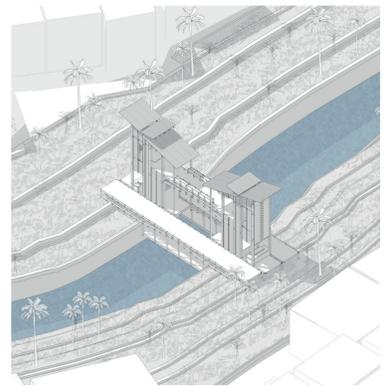
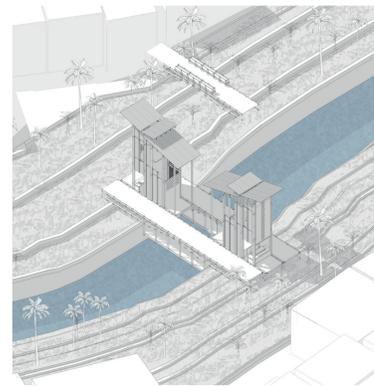
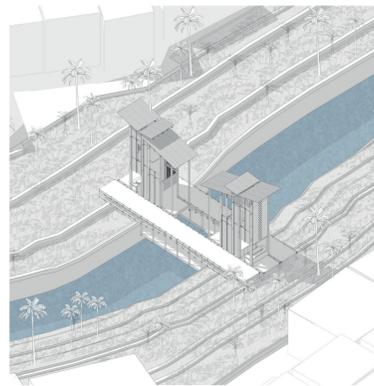
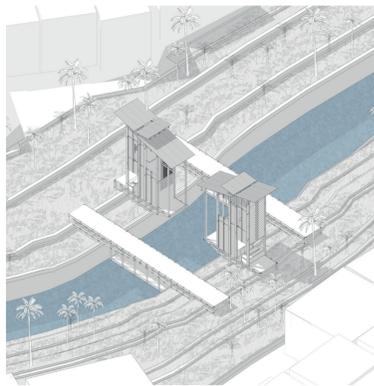
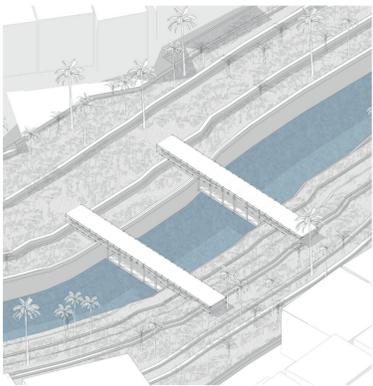
communal food preparation area  
allowing flexible use



urban farm roofscape reflecting  
traditional Indonesian villages



integrated RW community office  
and meeting space

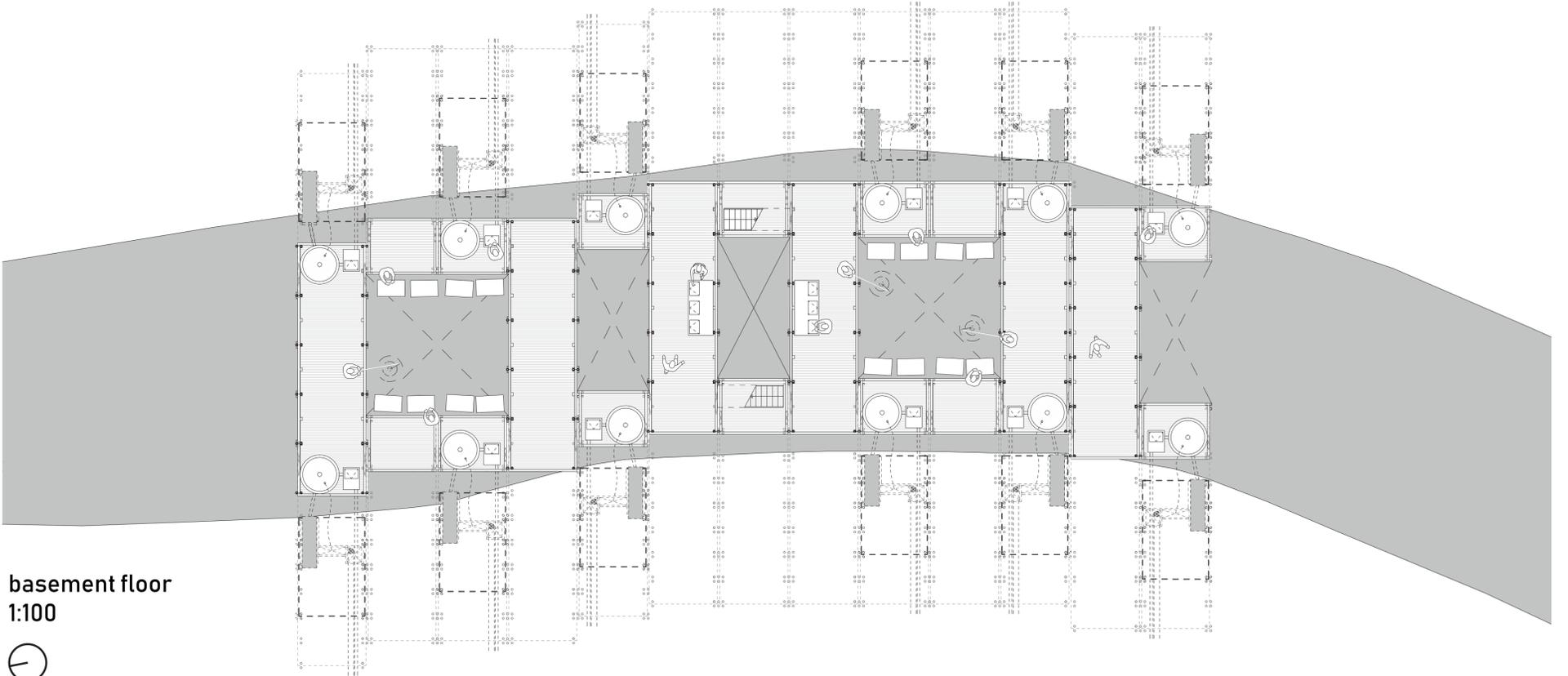


west elevation  
1:100

# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

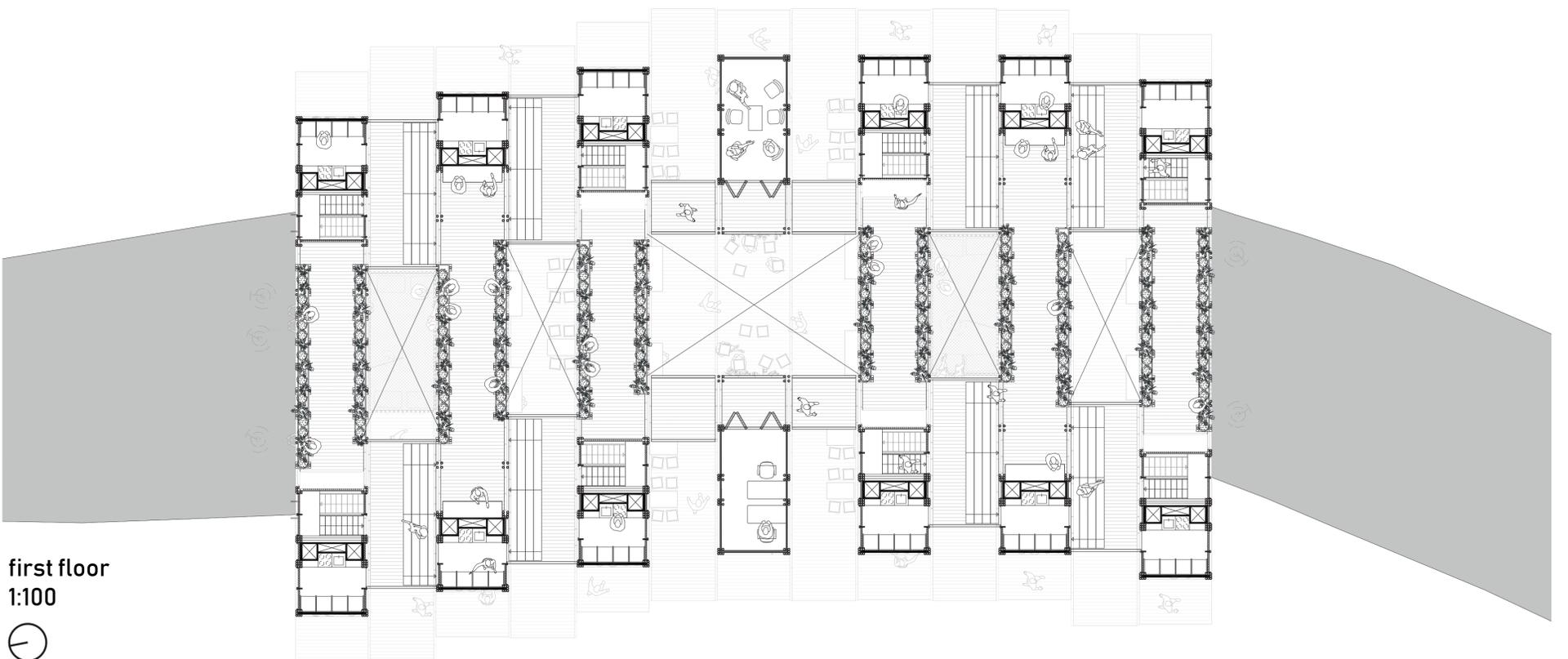
rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



basement floor  
1:100



ground floor  
1:100



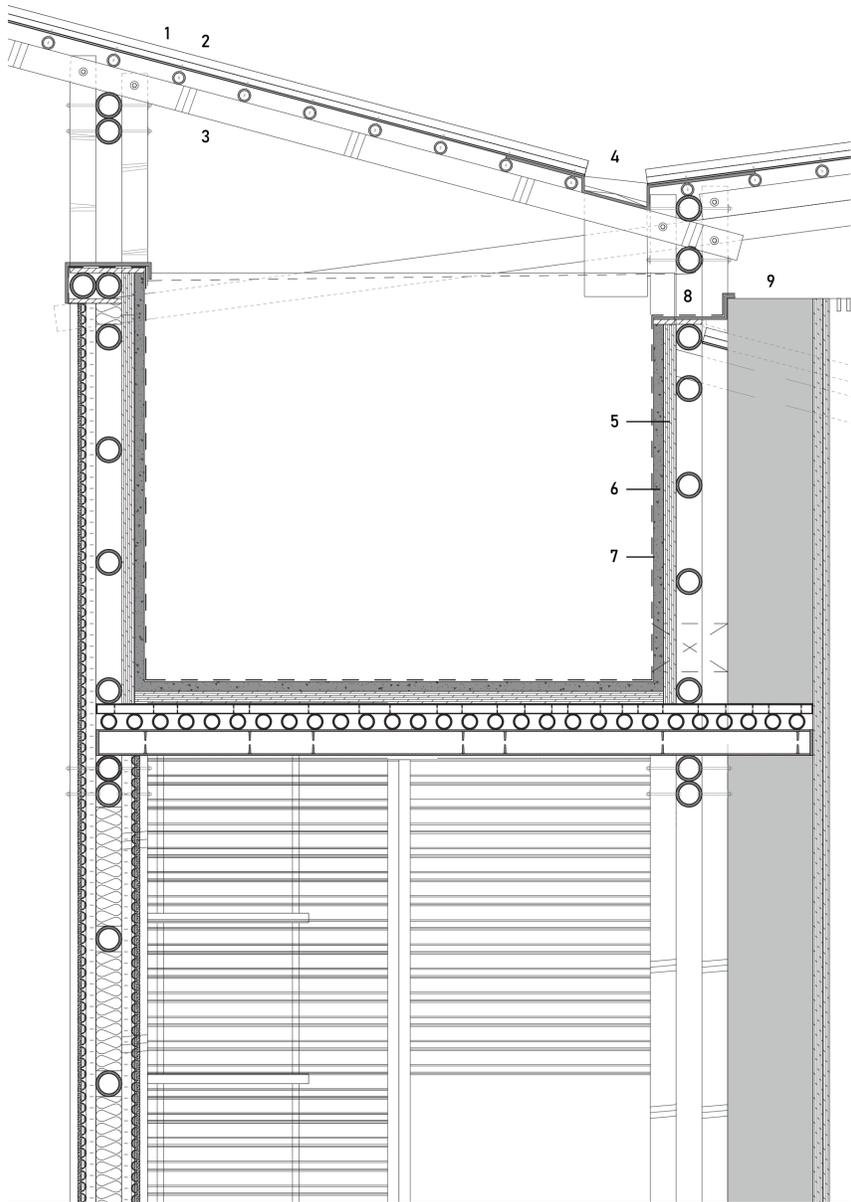
first floor  
1:100



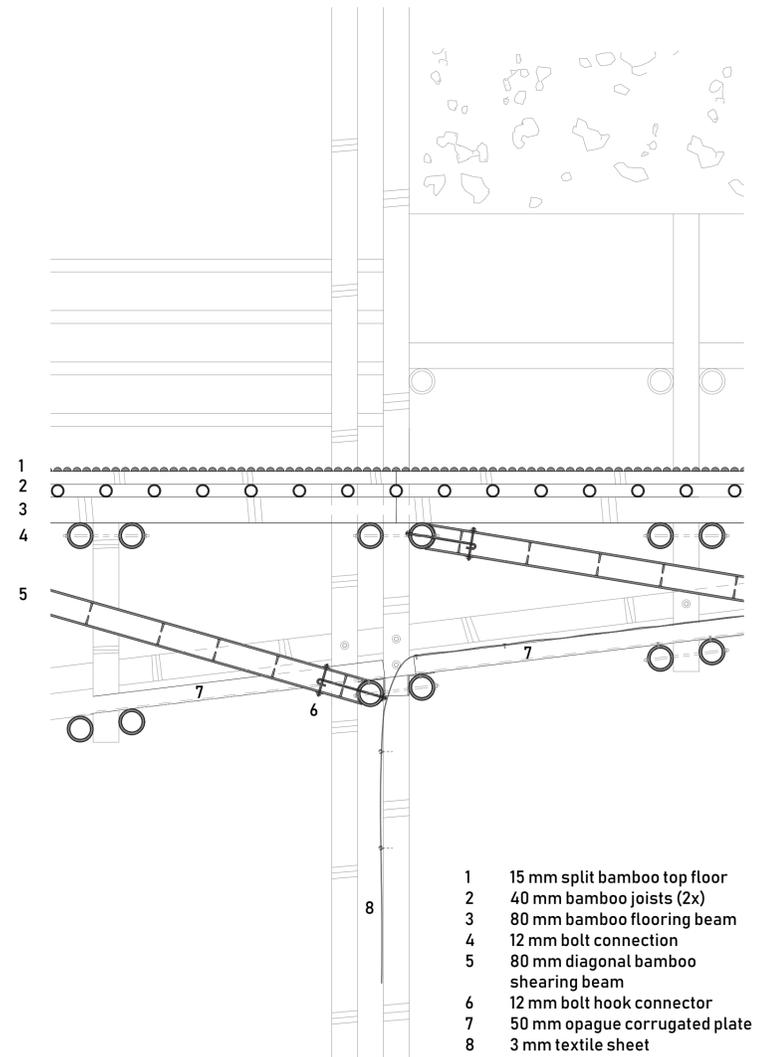
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



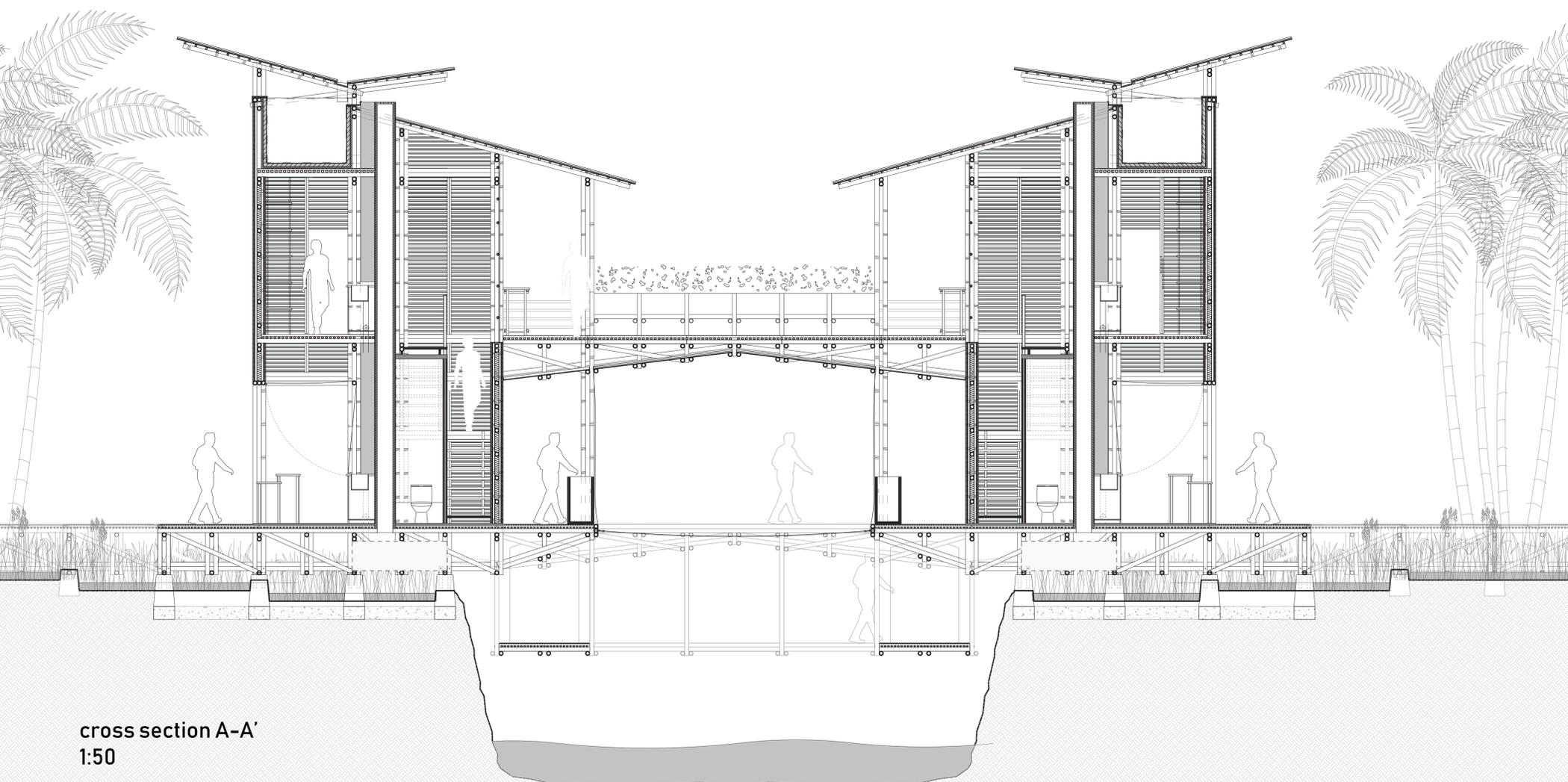
- 1 50 mm corrugated iron roofing sheet
- 2 40 mm bamboo roof structure
- 3 80 mm bamboo roof beam
- 4 bespoke fibre-reinforced plastic rain gutter
- 5 40 mm cement particle board
- 6 water resistant sheeting
- 7 30 mm poured concrete layer
- 8 bespoke fibre-reinforced plastic rain sill
- 9 chimney



- 1 15 mm split bamboo top floor
- 2 40 mm bamboo joists (2x)
- 3 80 mm bamboo flooring beam
- 4 12 mm bolt connection
- 5 80 mm diagonal bamboo shearing beam
- 6 12 mm bolt hook connector
- 7 50 mm opaque corrugated plate
- 8 3 mm textile sheet

detail A  
roof gutter & water tank  
1:10

detail B  
roof gutter & water tank  
1:10



cross section A-A'  
1:50

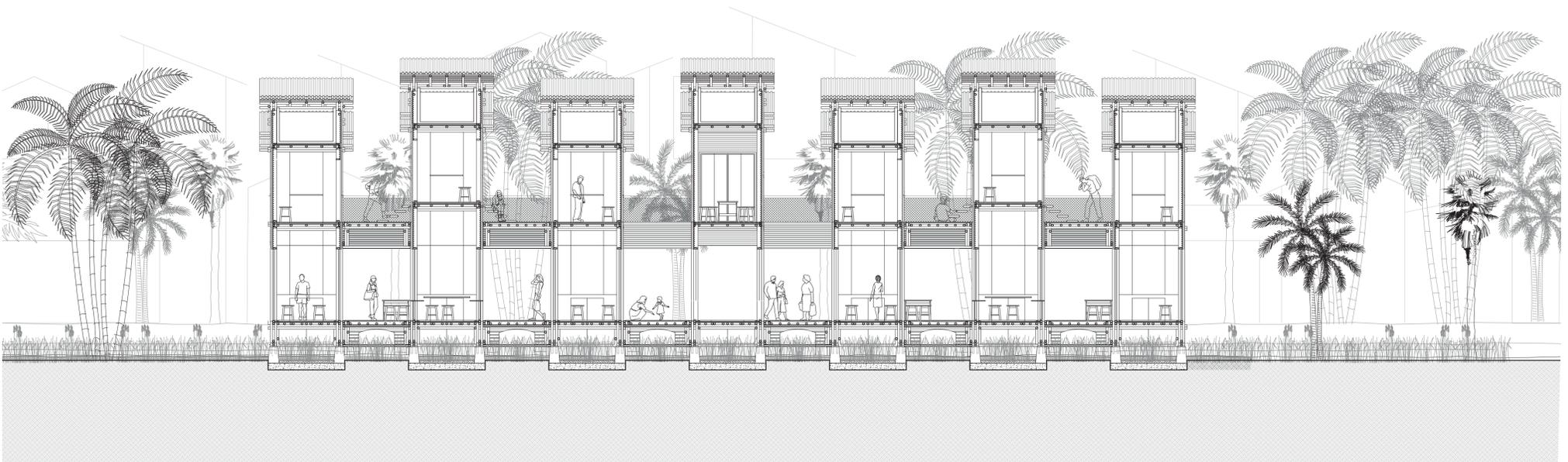
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

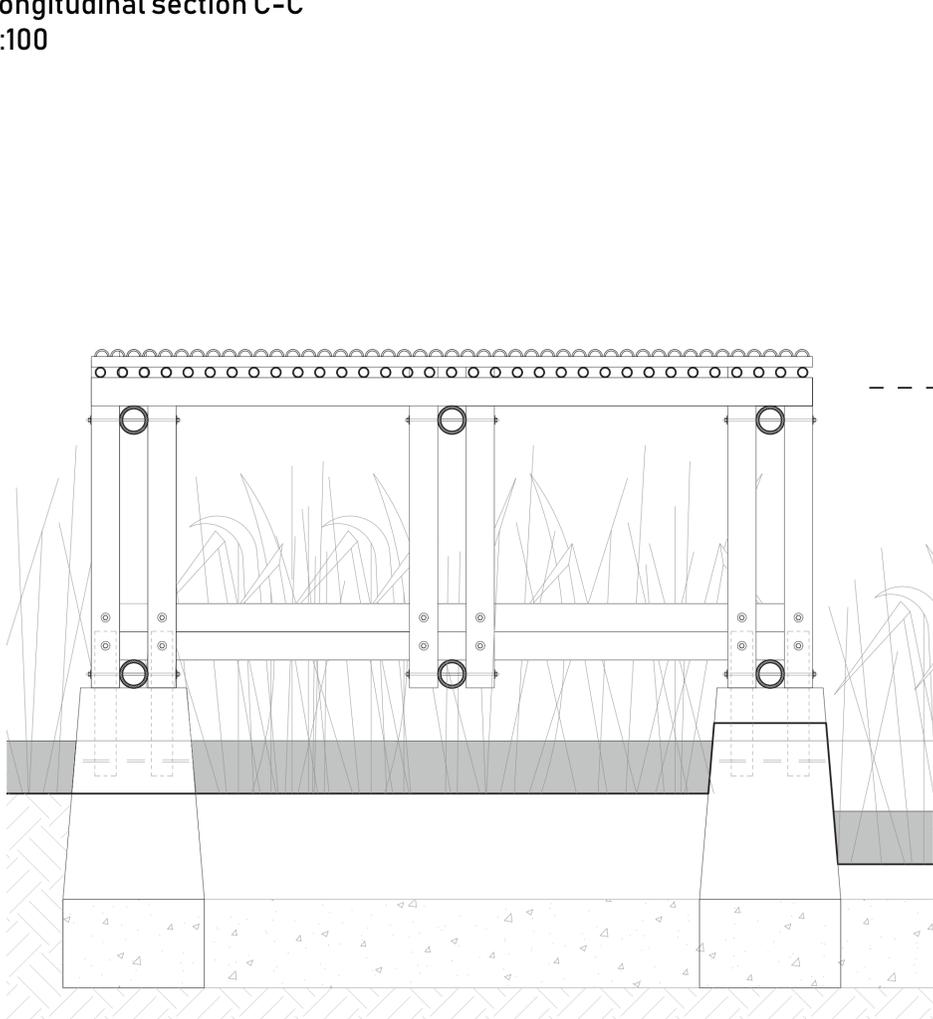
rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



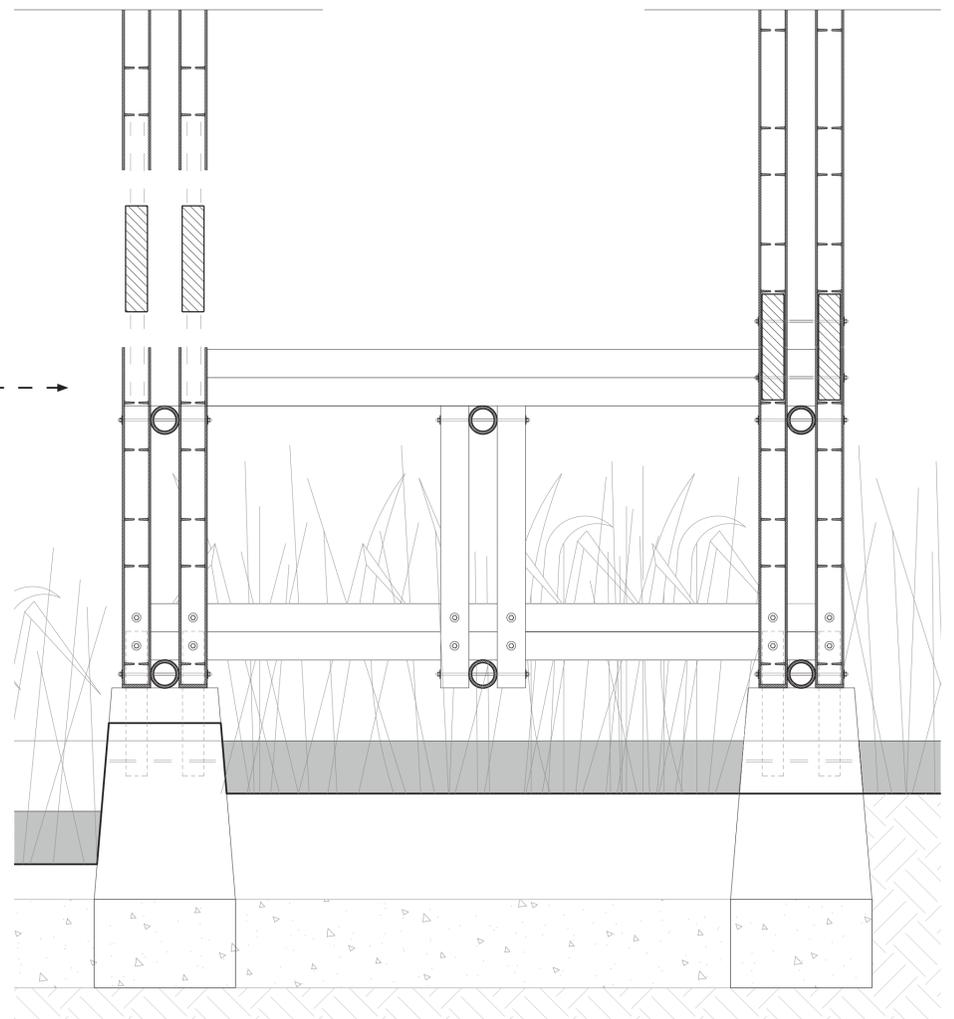
longitudinal section B-B'  
1:100



longitudinal section C-C'  
1:100



replicable foundation structure; cross section A  
1:10

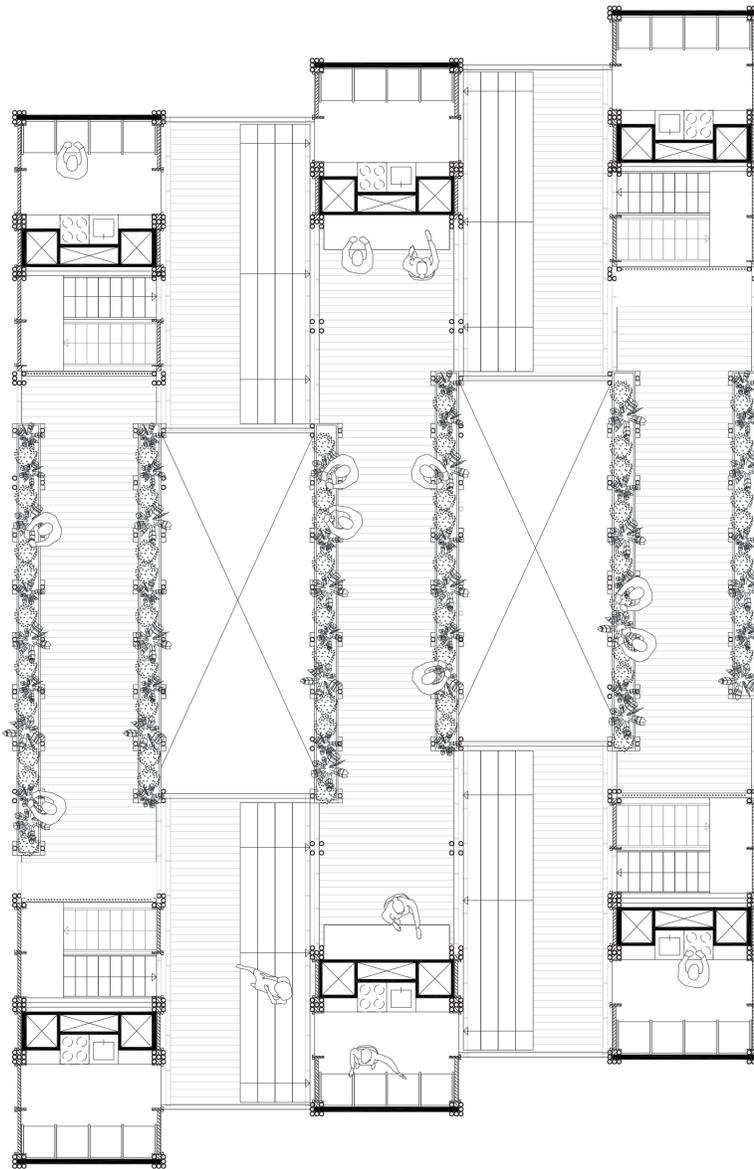


vertical expansion principle - cross section B  
1:10

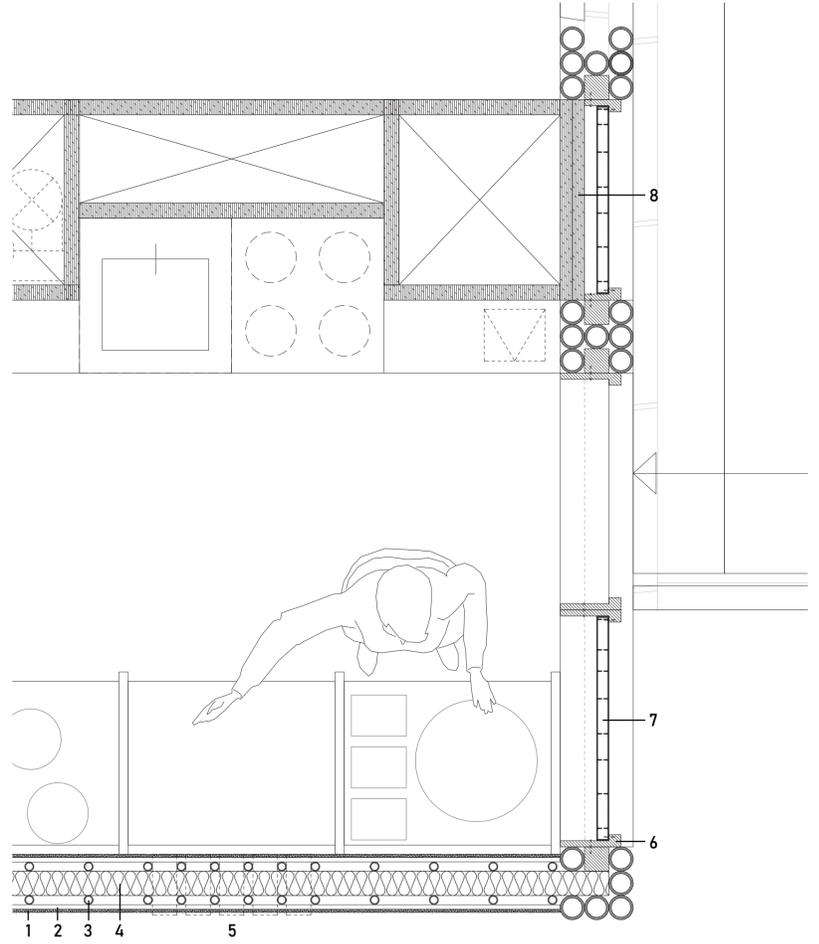
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019

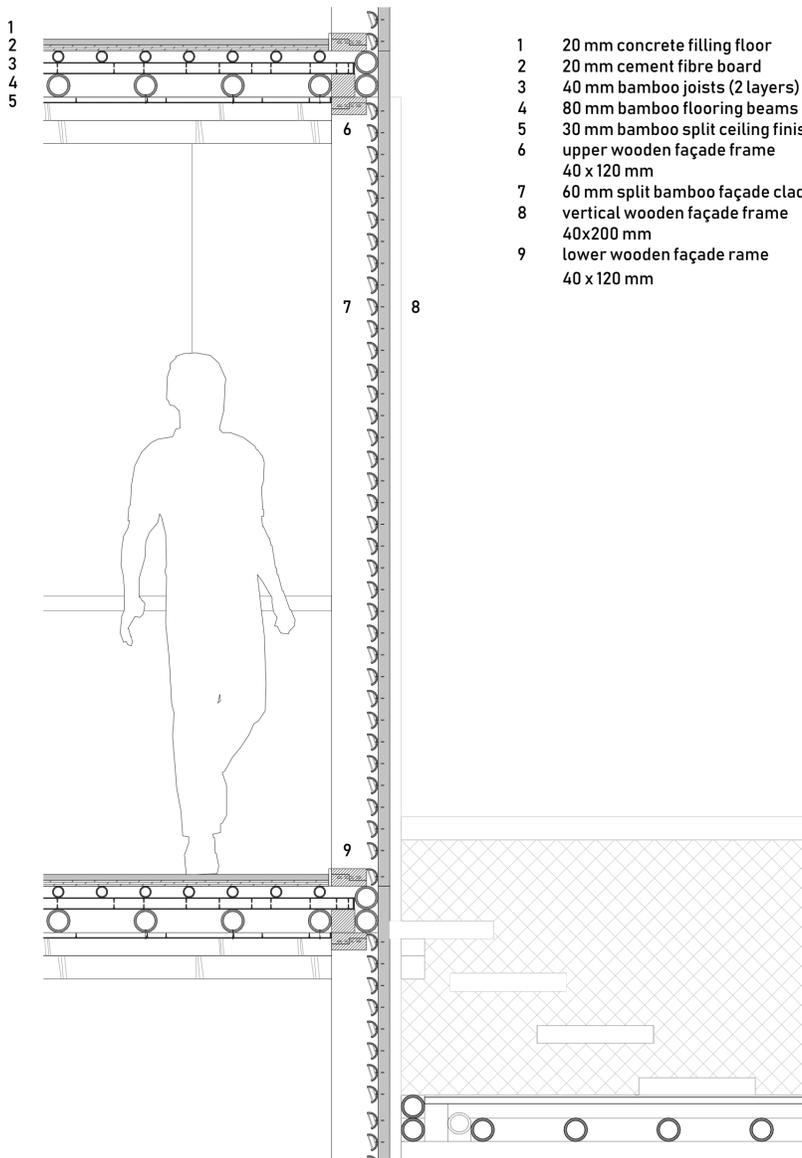


⊖ first floor - fragment; storage rooms, food preparing and urban farming spaces  
1:50



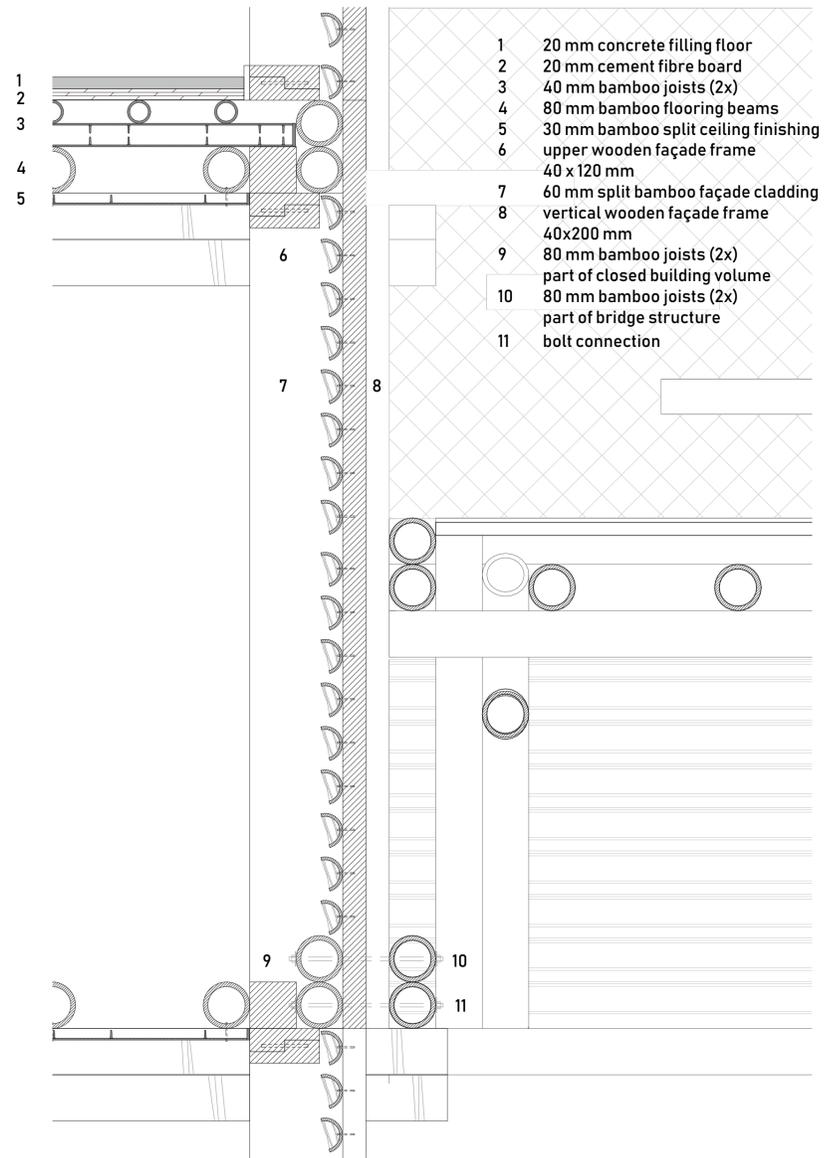
- |   |                                                                               |   |                                        |
|---|-------------------------------------------------------------------------------|---|----------------------------------------|
| 1 | 10 mm earth mixture; lime, sand & cow dung (2 layers: rough + smooth coating) | 6 | vertical facade side frame 40 x 120 mm |
| 2 | 15 mm horizontal split bamboo cladding                                        | 7 | 40 mm split bamboo cladding            |
| 3 | 40 mm vertical bamboo structural jambs                                        | 8 | 40 mm cement board                     |
| 4 | 80 mm insulation                                                              |   |                                        |
| 5 | 80 mm diameter cut bamboo ventilation openings                                |   |                                        |

horizontal facade detail - storage room  
1:10



- |   |                                        |
|---|----------------------------------------|
| 1 | 20 mm concrete filling floor           |
| 2 | 20 mm cement fibre board               |
| 3 | 40 mm bamboo joists (2 layers)         |
| 4 | 80 mm bamboo flooring beams            |
| 5 | 30 mm bamboo split ceiling finishing   |
| 6 | upper wooden facade frame 40 x 120 mm  |
| 7 | 60 mm split bamboo facade cladding     |
| 8 | vertical wooden facade frame 40x200 mm |
| 9 | lower wooden facade rame 40 x 120 mm   |

vertical facade detail - storage room  
1:10



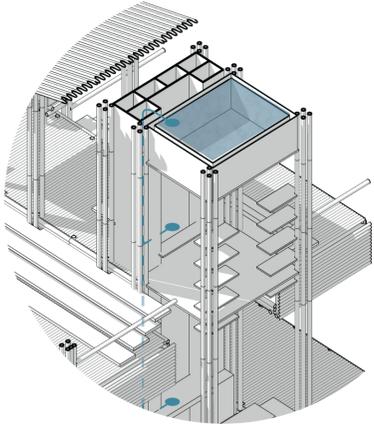
- |    |                                                         |
|----|---------------------------------------------------------|
| 1  | 20 mm concrete filling floor                            |
| 2  | 20 mm cement fibre board                                |
| 3  | 40 mm bamboo joists (2x)                                |
| 4  | 80 mm bamboo flooring beams                             |
| 5  | 30 mm bamboo split ceiling finishing                    |
| 6  | upper wooden facade frame 40 x 120 mm                   |
| 7  | 60 mm split bamboo facade cladding                      |
| 8  | vertical wooden facade frame 40x200 mm                  |
| 9  | 80 mm bamboo joists (2x) part of closed building volume |
| 10 | 80 mm bamboo joists (2x) part of bridge structure       |
| 11 | bolt connection                                         |

storage - bridge structural connection detail  
1:5

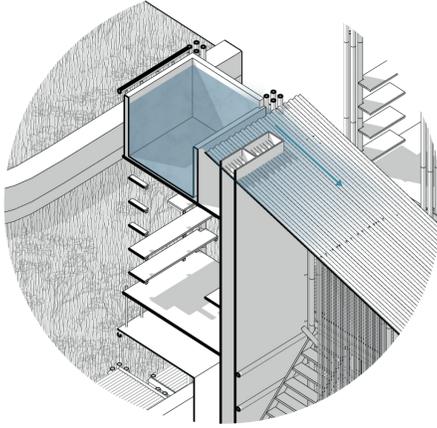
# upwards along the pipes

utilizing the recyclable potentials of local organic waste to revitalize the Cikapundung river area

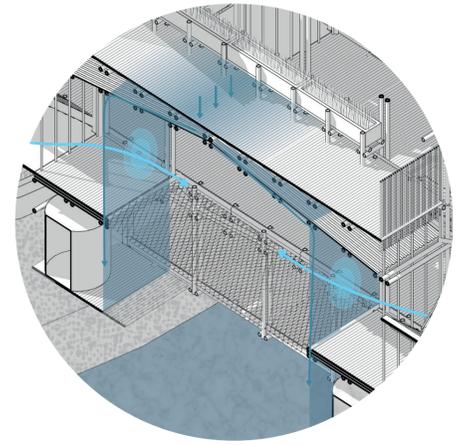
rick blankestijn - 4216962  
p5 presentation - 12 / 07 / 2019



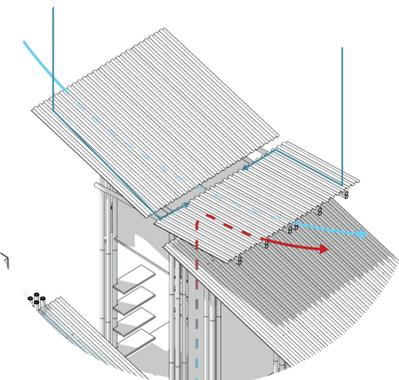
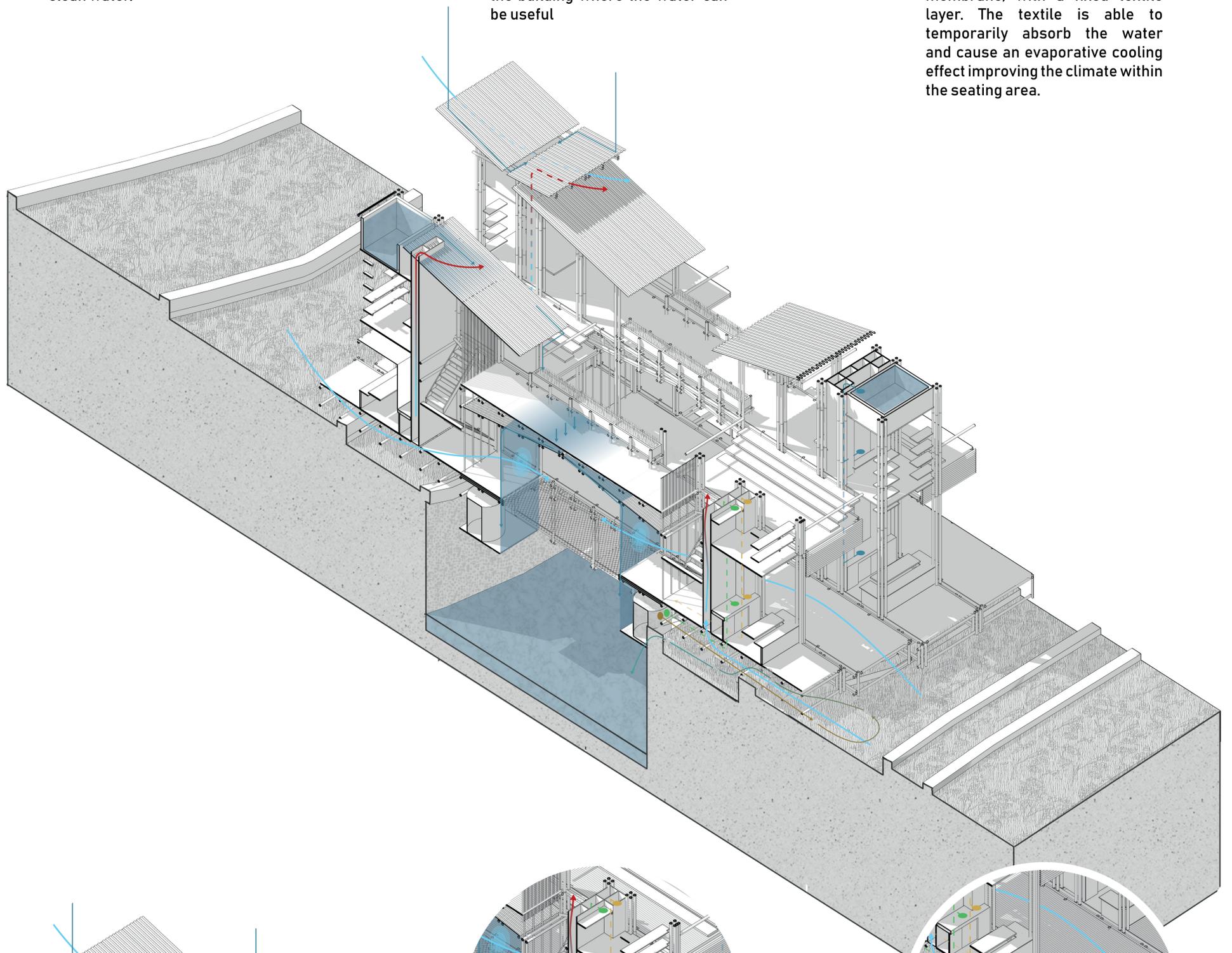
the self-sufficient units are individually equipped with water tanks to provide the underlying food industry and visitors with clean water.



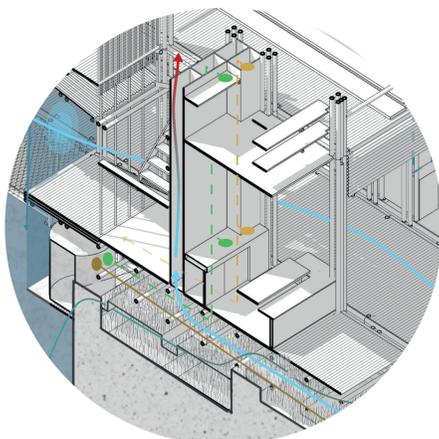
the water tanks are designed in such a way that they never exceed their maximum capacities, but overflow towards another part in the building where the water can be useful



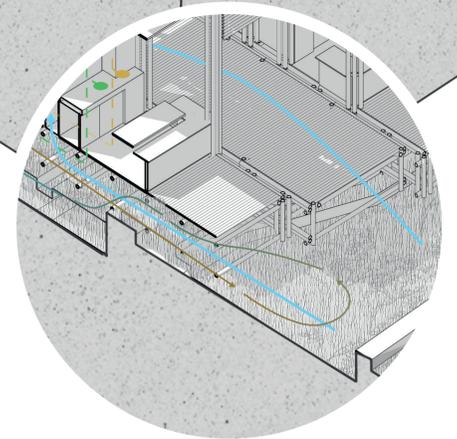
the overflowing water and larger volumes caused by heavy rainfall can penetrate through the bamboo flooring onto a waterproof membrane, with a fixed textile layer. The textile is able to temporarily absorb the water and cause an evaporative cooling effect improving the climate within the seating area.



the roof is specifically shaped to catch rainwater and lead it to the integrated water storages, while the open structure also allows natural ventilation to stimulate the vertical chimney effect ventilating hot air and food smells.



each unit is provided with a vertical shaft where food waste and organic waste are combined and end up in a biogas digester in the basement, where biogas is produced for cooking.



the discharged effluent is directed towards the underlying horizontal constructed wetlands, which reduce the pollutant level of the water caused by human disposals and food waste.