Transitional territories

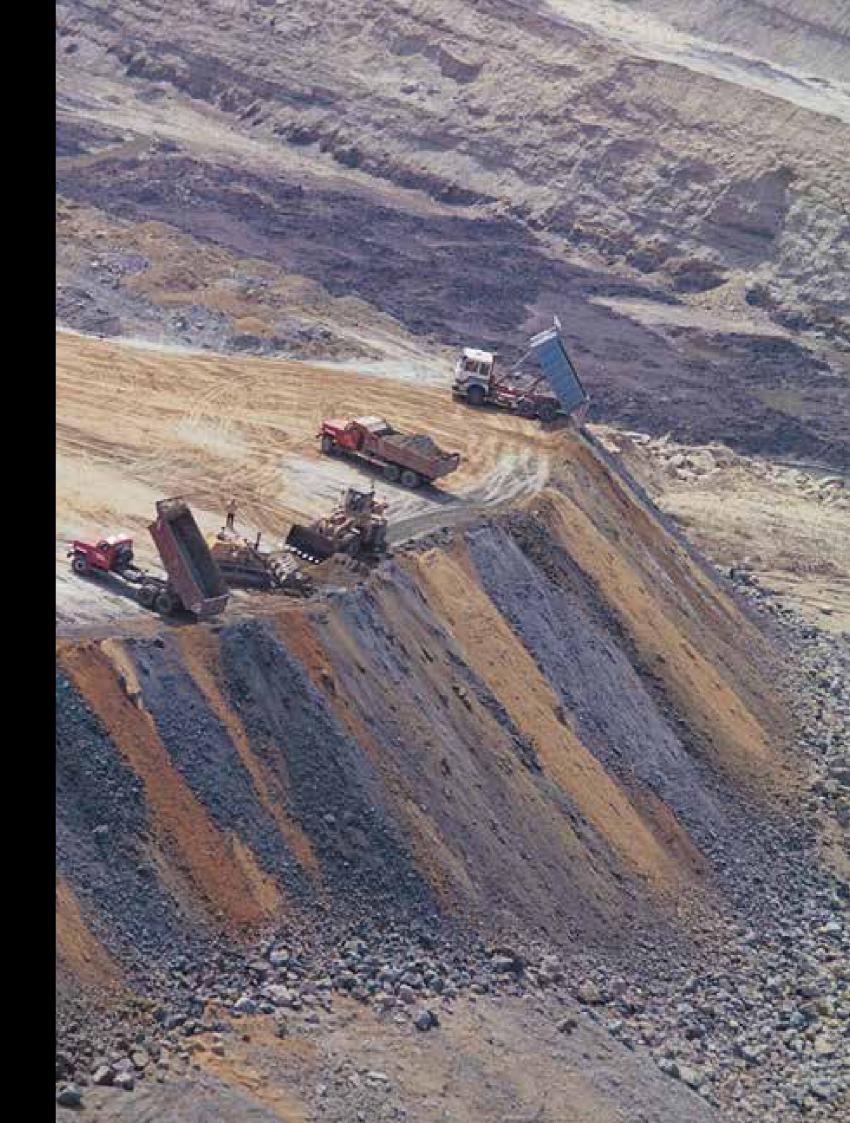
Architecture of (post)-extraction in the Ağaçlı coal fields, Istanbul

"Do you shovel to survive, or survive to shovel?"

Kōbō Abe, The Woman in the Dunes, 1964

Contents

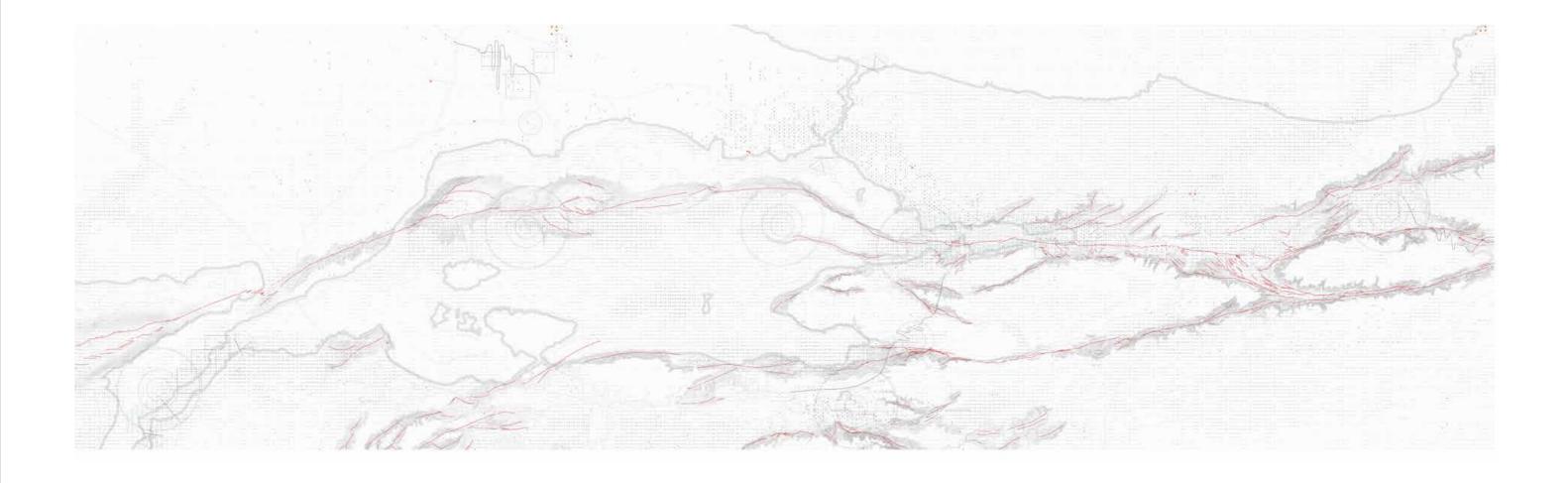
- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- **6. Object 3** | Water treatment facility
- 7. Object 2 | Highway rest stop



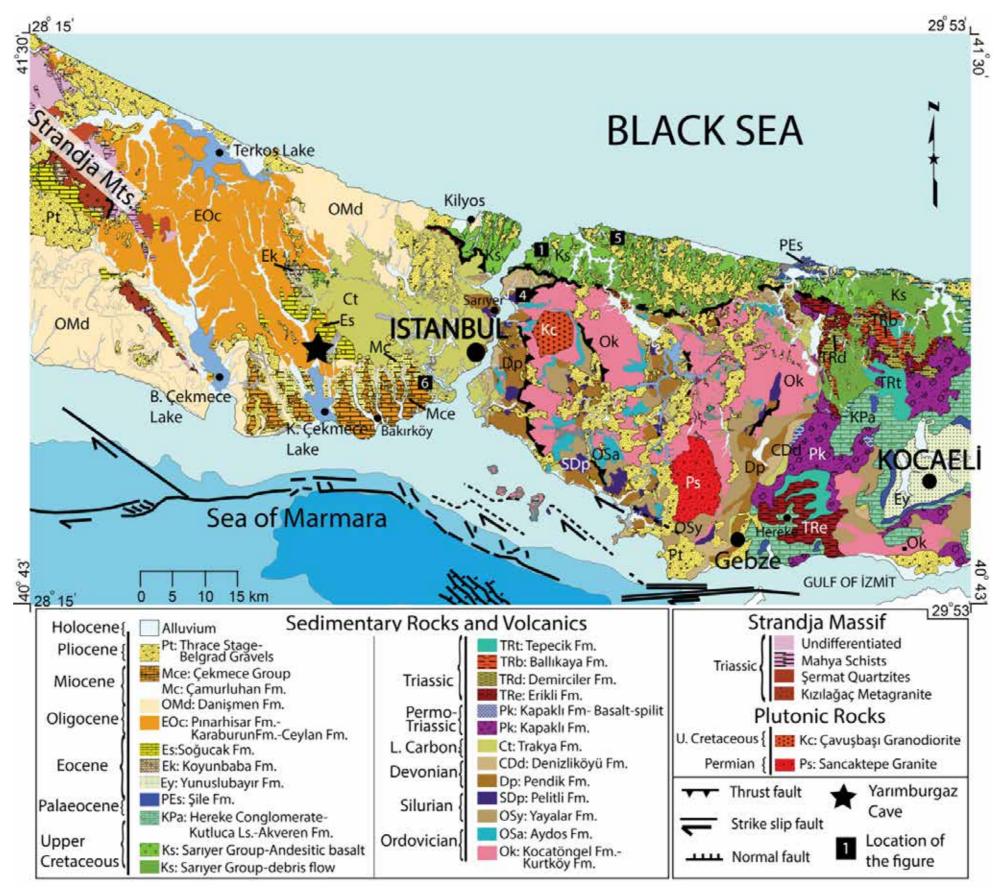
1. Introduction | Exploring Istanbul's soil

- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- 4. Projection | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- 6. Object 2 | Water treatment facility
- 7. Object 3 | Highway rest stop

Region | North Anatolian Fault (NAF)



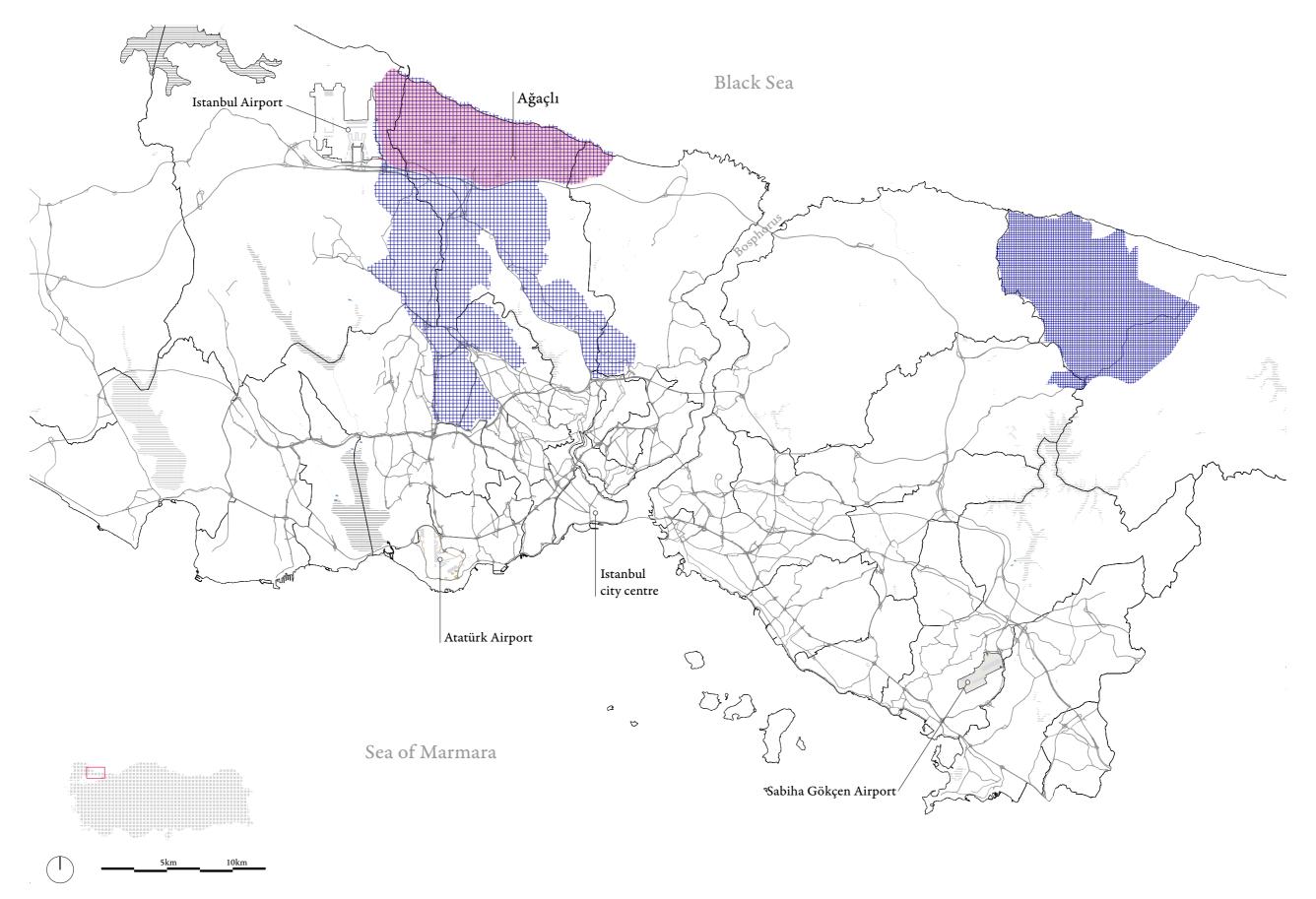
Istanbul | Exploring the soil



Lom et al., 2016

6

Istanbul | Exploring the soil



- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- **6. Object 2** | Water treatment facility
- 7. Object 3 | Highway rest stop

Ağaçli | Hinterland in transition



1985

Ağaçli | Hinterland in transition

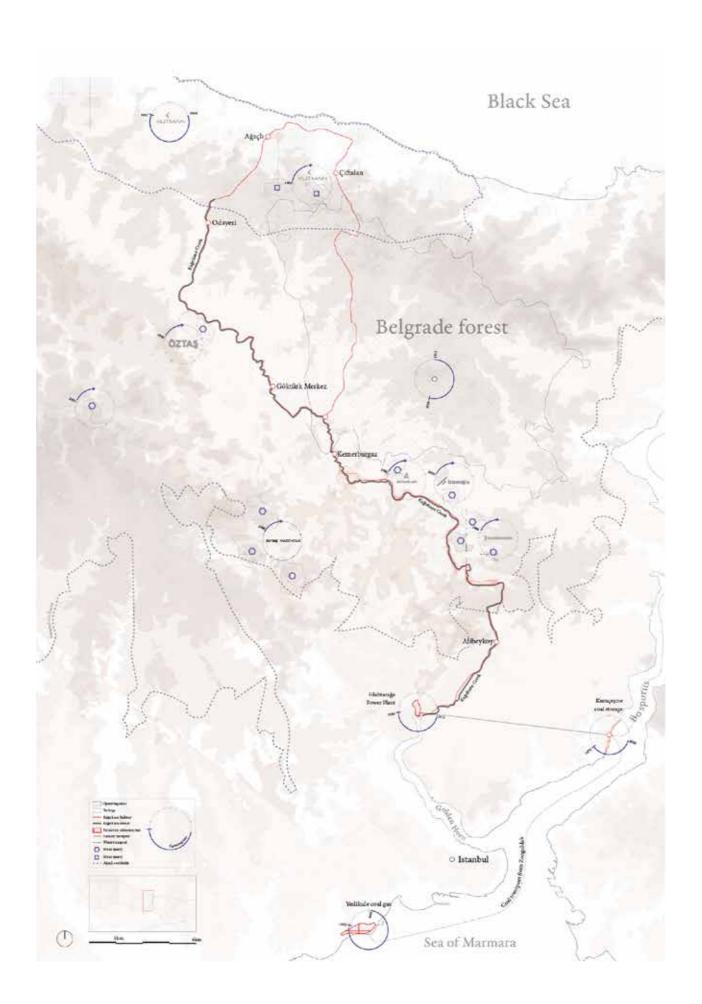


2017

Ağaçli | Hinterland in transition



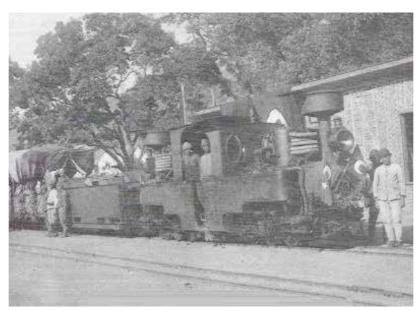
2023



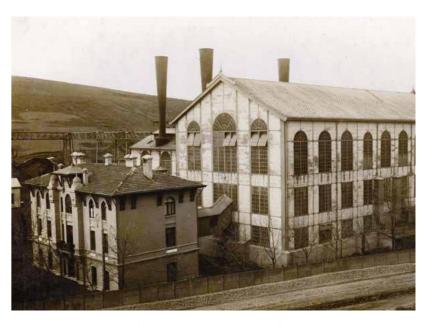
Ağaçli | Heating Istanbul



Ağaçli coal fields



Kağıthane Railway



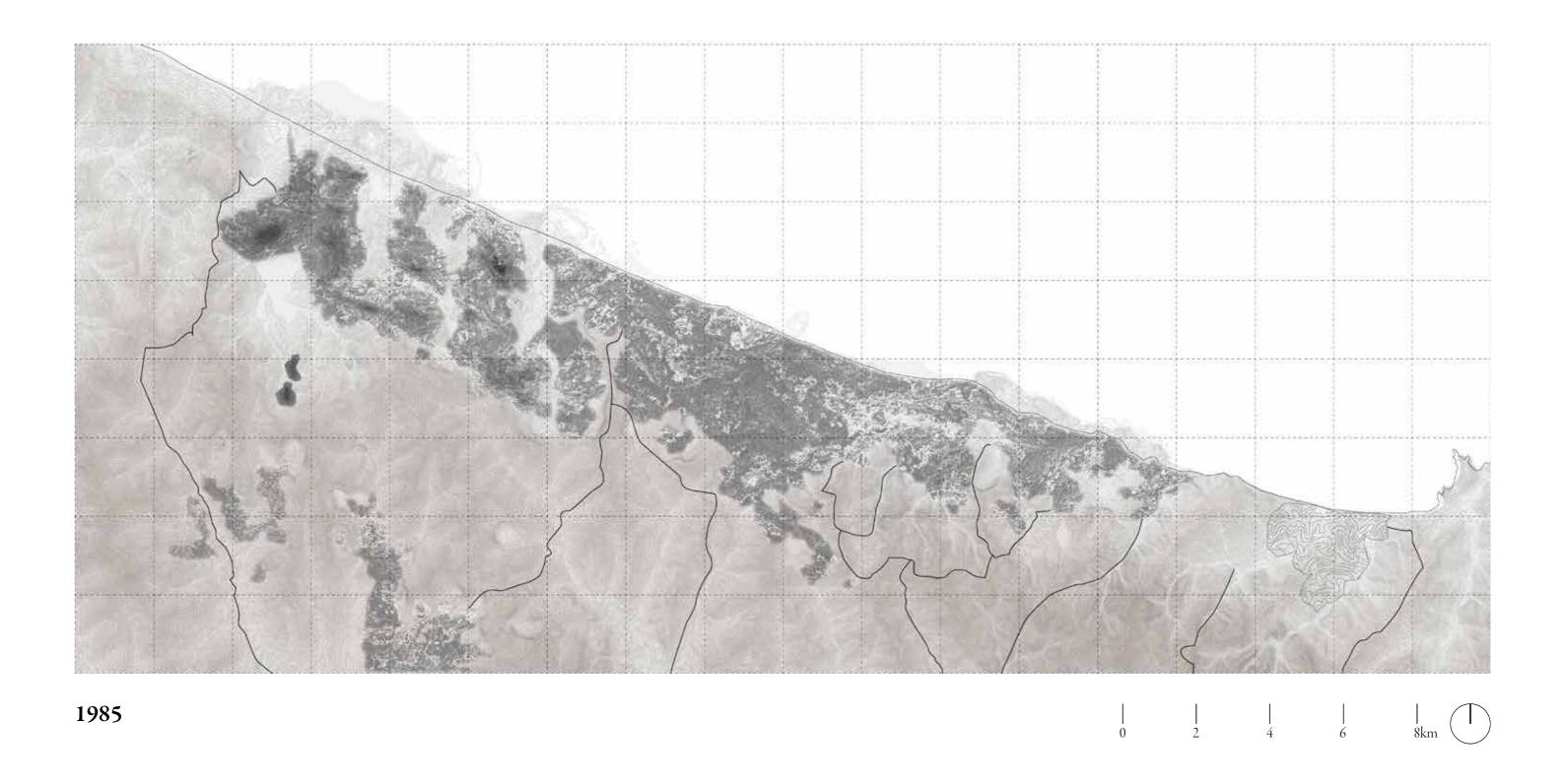
Silahtarağa Power Plant

Dölen & Sandalci, 2005

Ağaçli | Coal fields

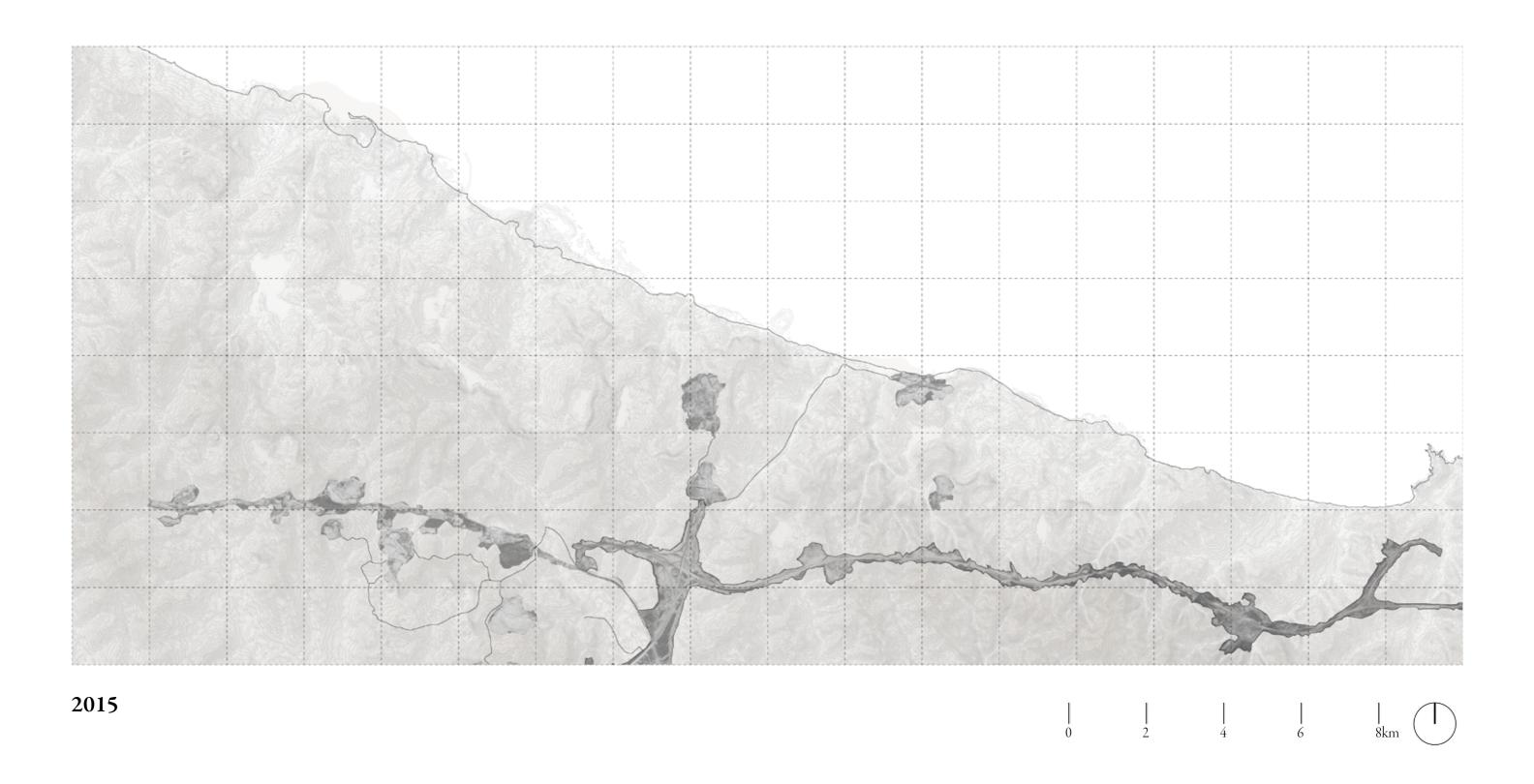


Ağaçli | Coal fields





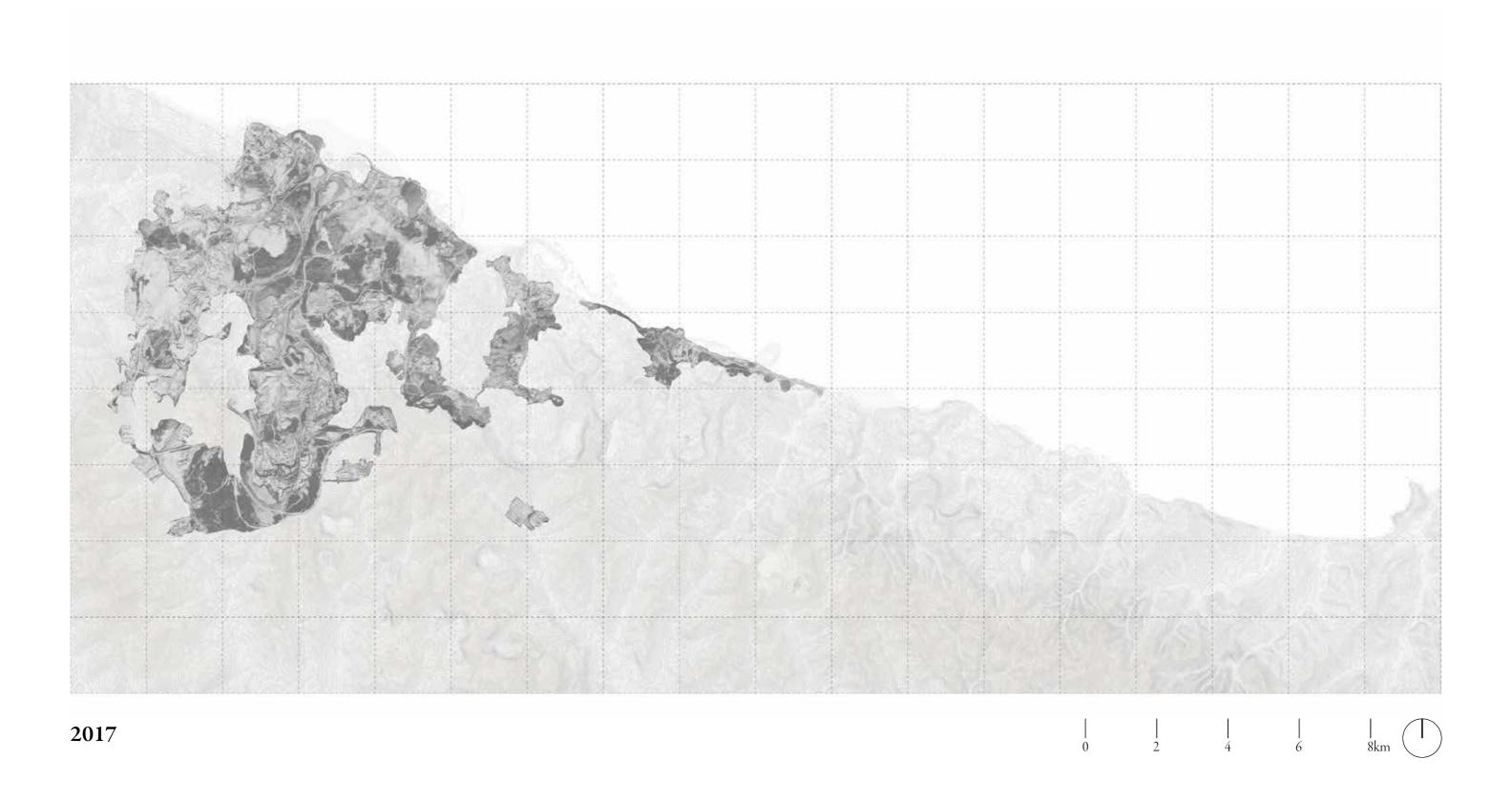
Karayolları Genel Müdürlüğü, 2017





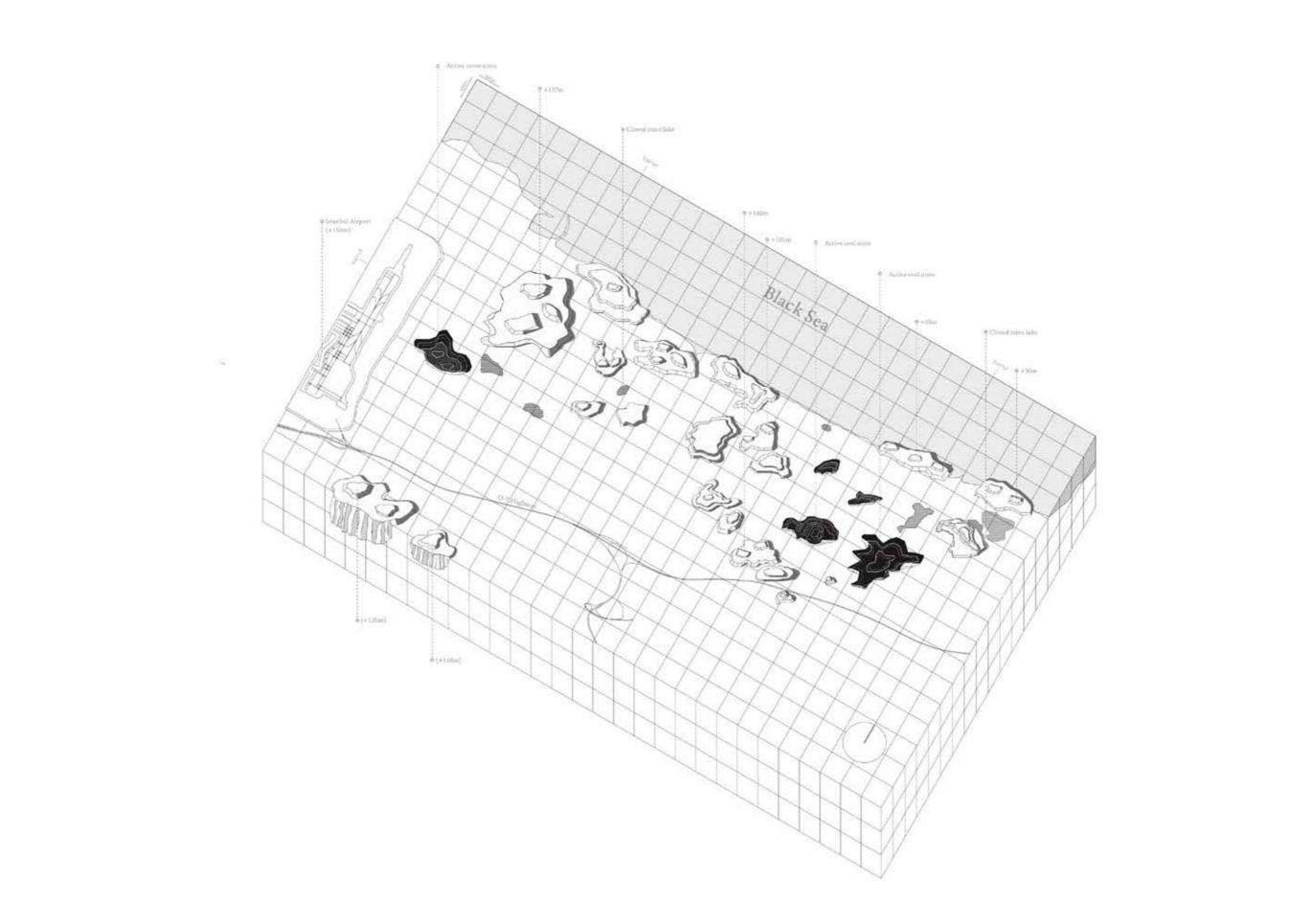
Kutman, 2017

Ağaçli | New Istanbul Airport

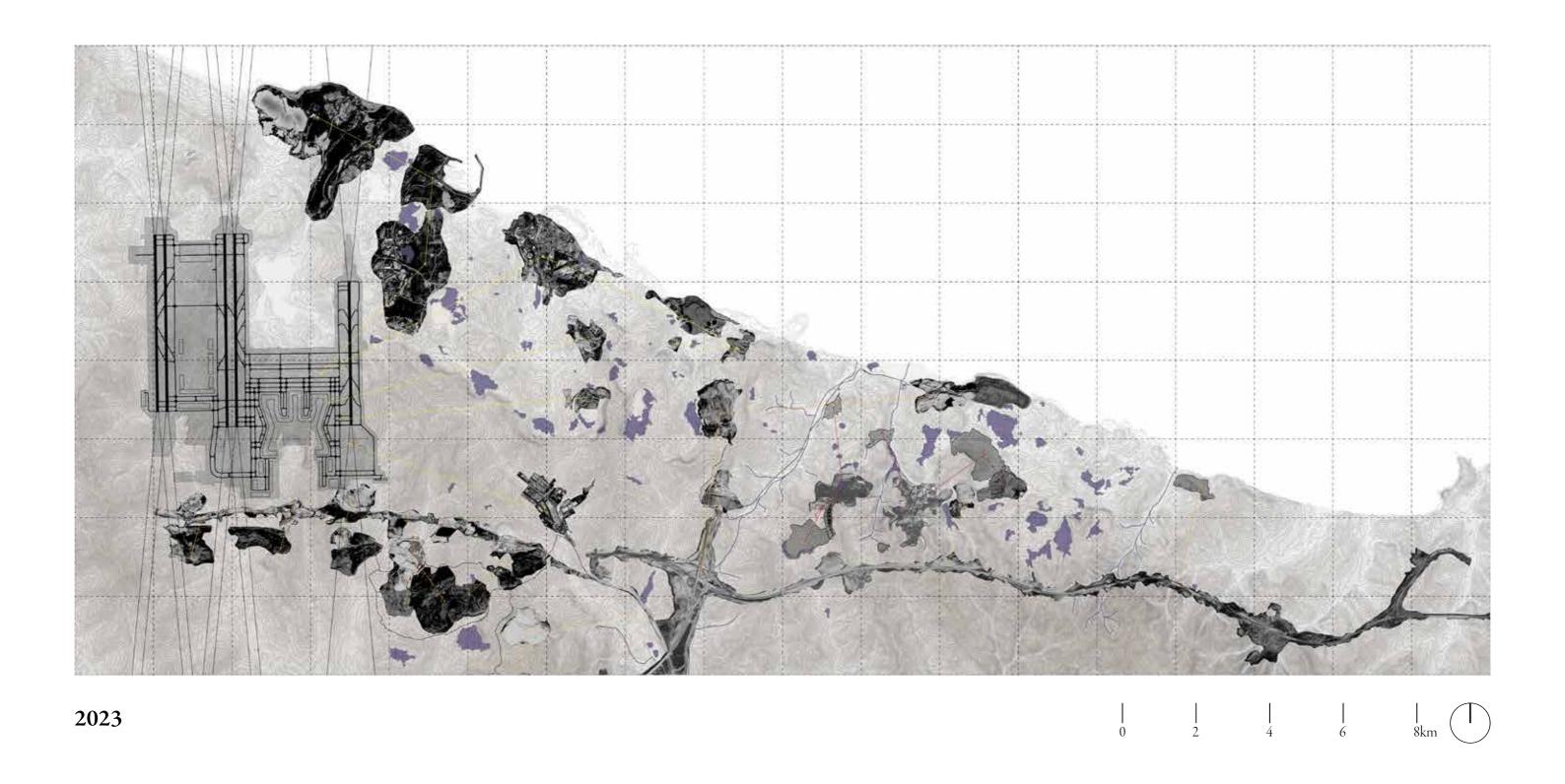




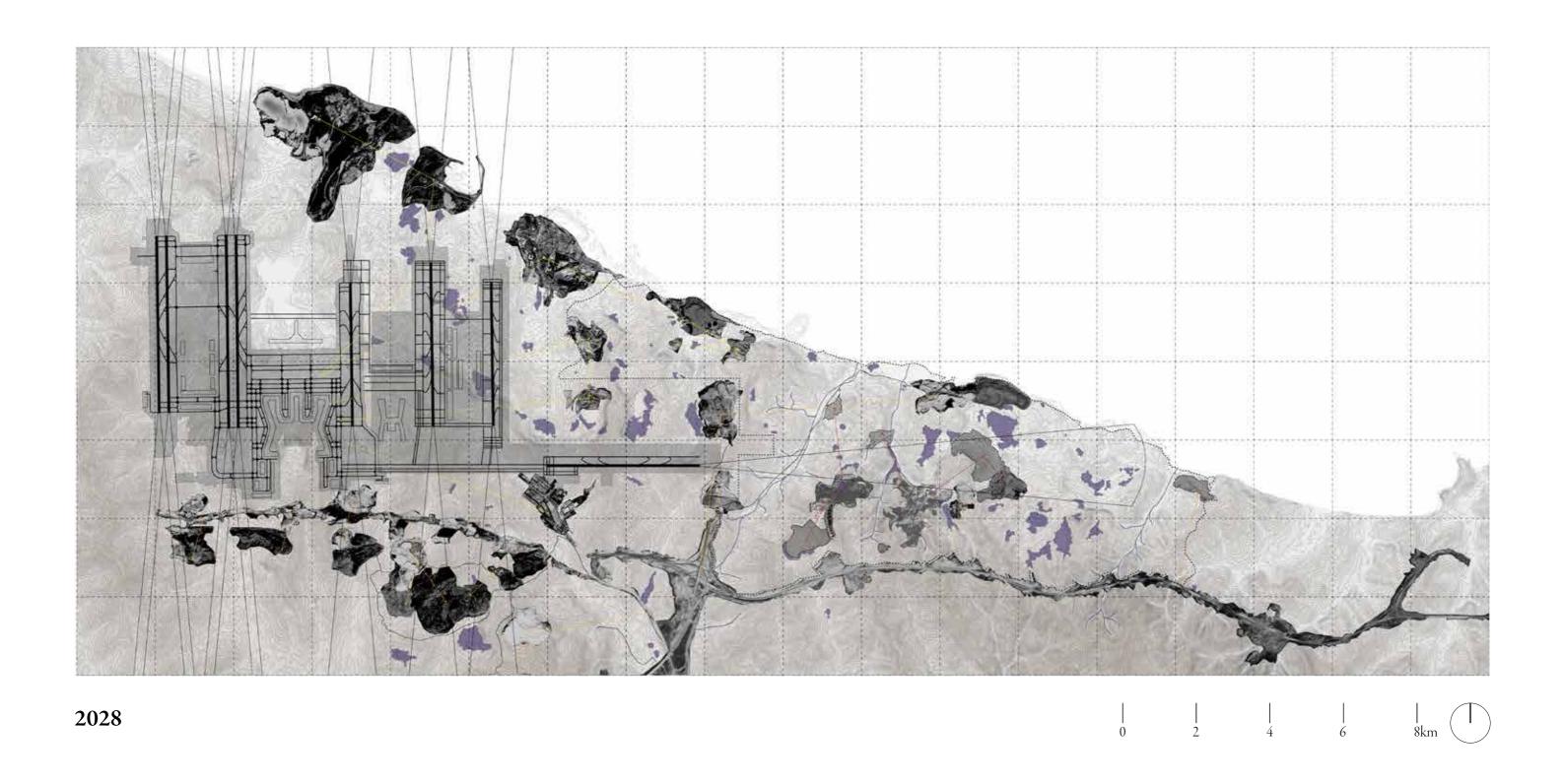
Google Earth, 2023



Ağaçli | Current condition



Ağaçli | Future condition



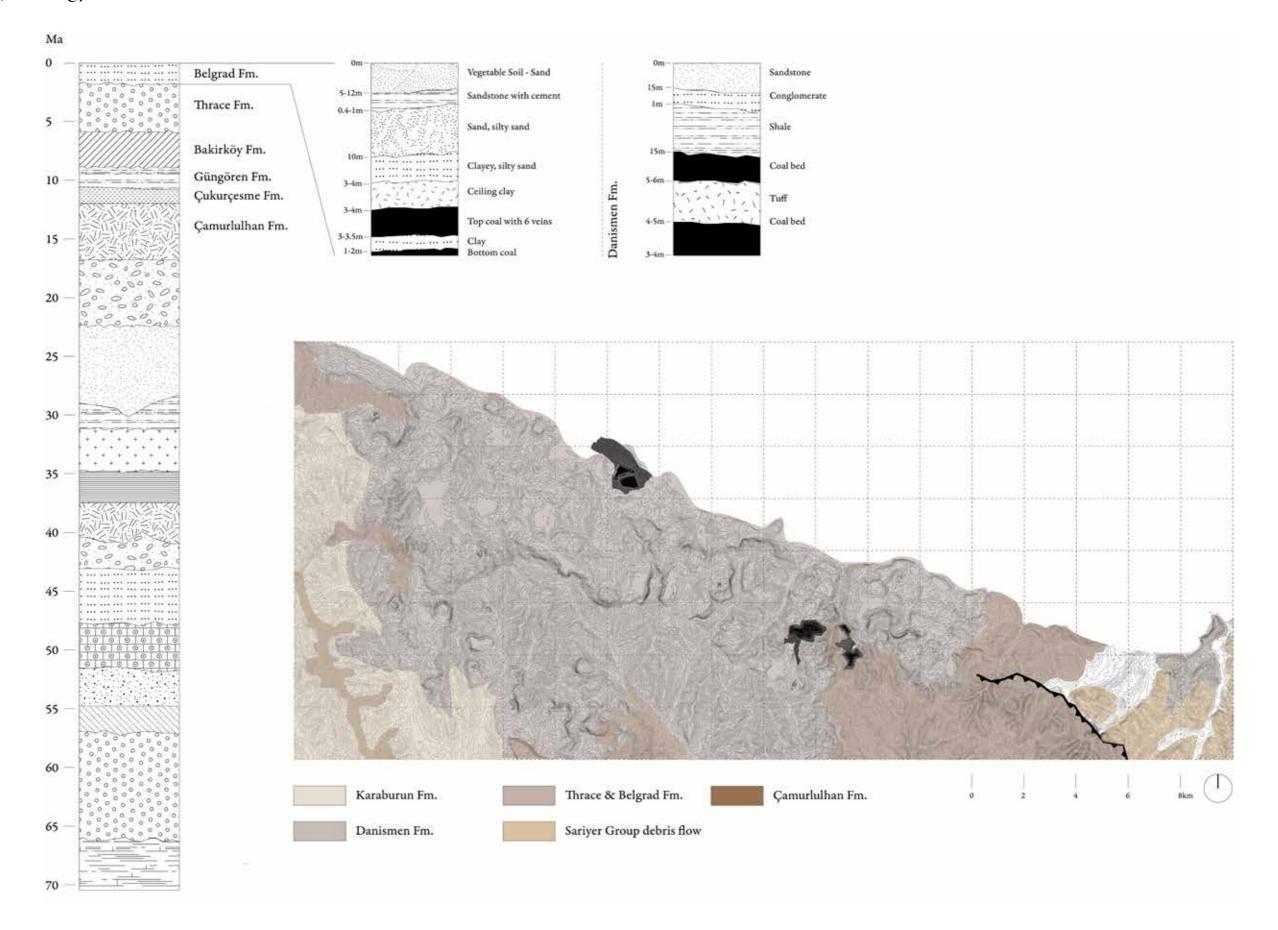
- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- **6. Object 2** | Water treatment facility
- 7. Object 3 | Highway rest stop

Architecture of (post) extraction in the Ağaçli coal fields

Possibilities of remediating the (post)-extraction landscapes of the Ağaçli coal fields.

An alternative occupation, seeing soil not as a static being,
but as a a medium in transition,
resulting in concepts and procedures of maintenance and modification.

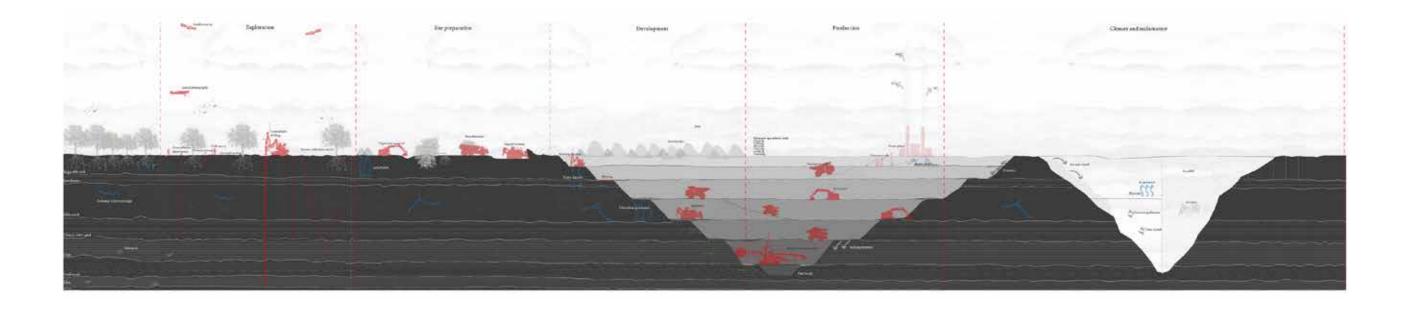
Survey | Geology



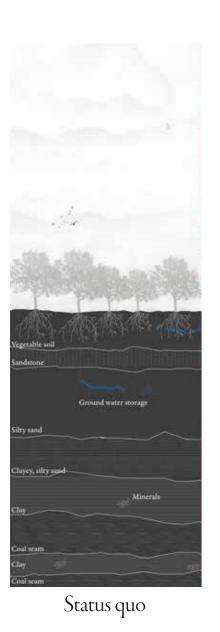
P5

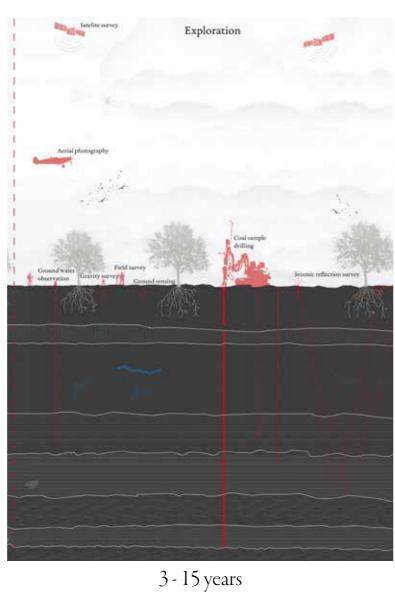
26

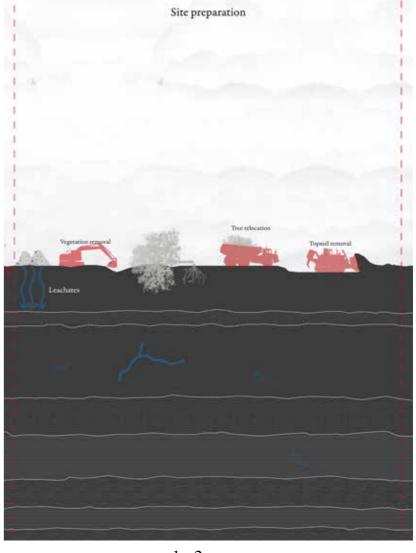
System | Modes of extraction



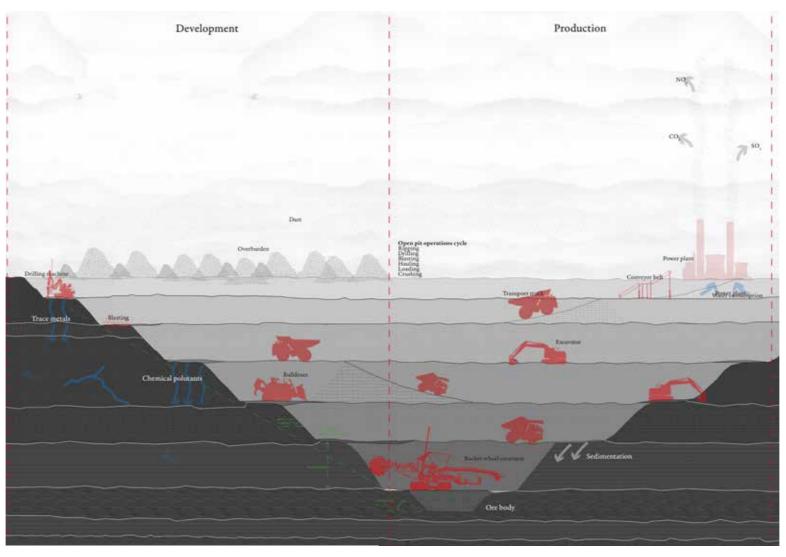
System | Modes of extraction





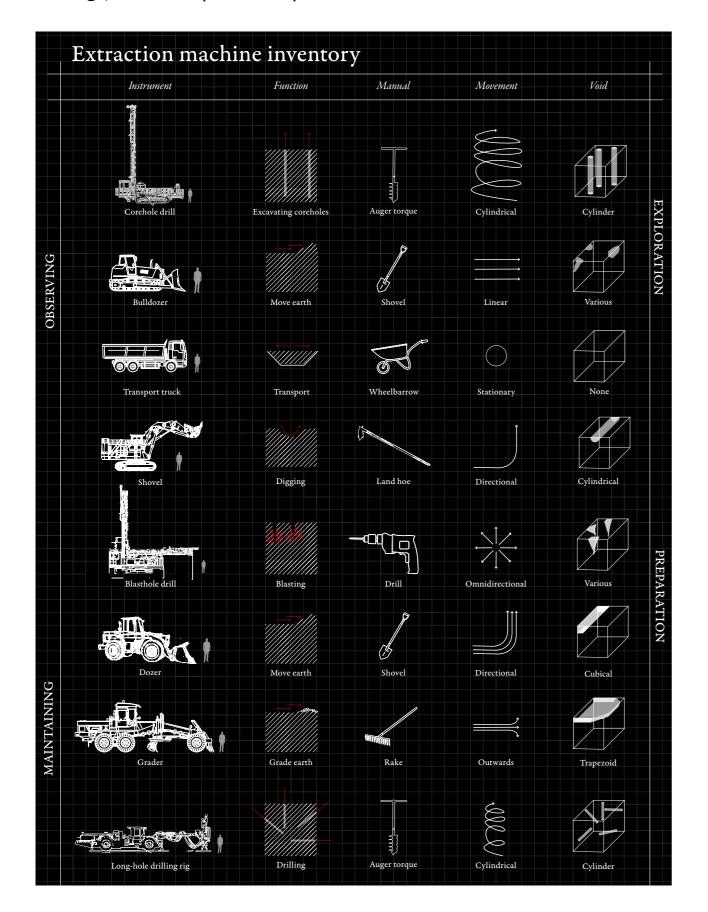


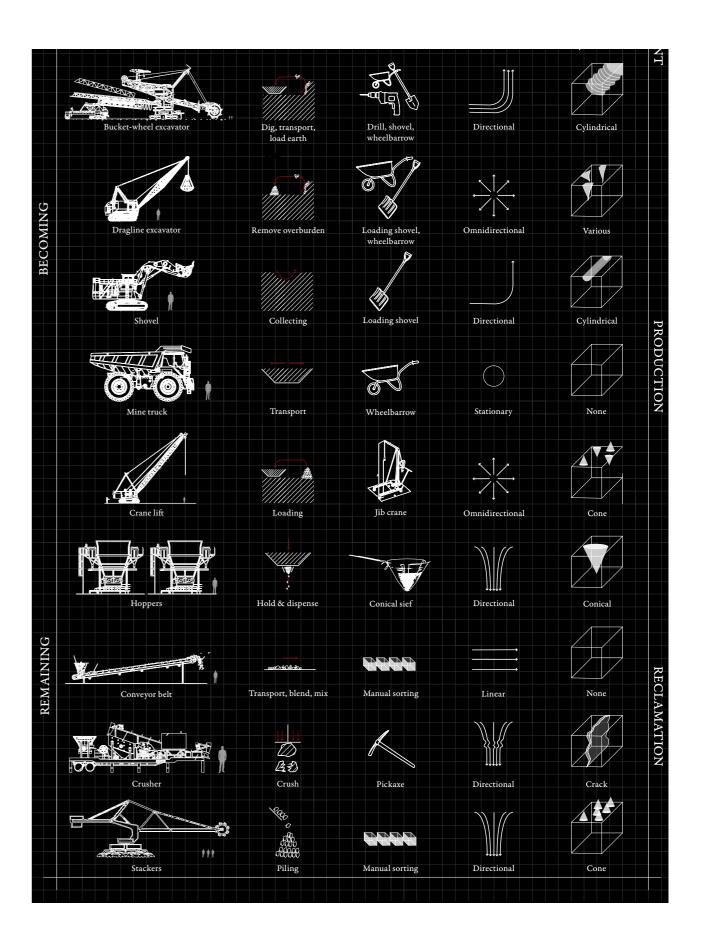
years 1 - 2 years



10 - 20 years 10 - 50 years

Thing | Machinery inventory

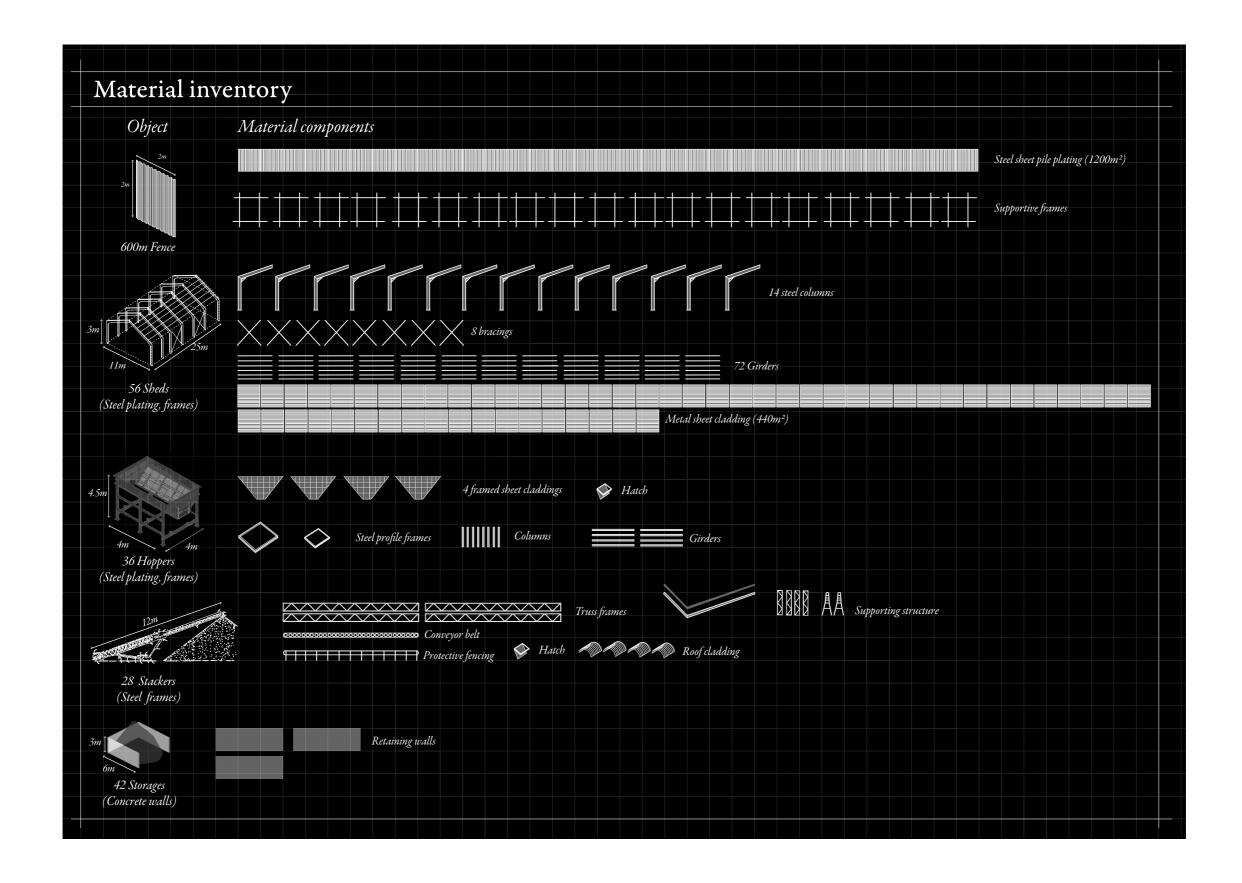




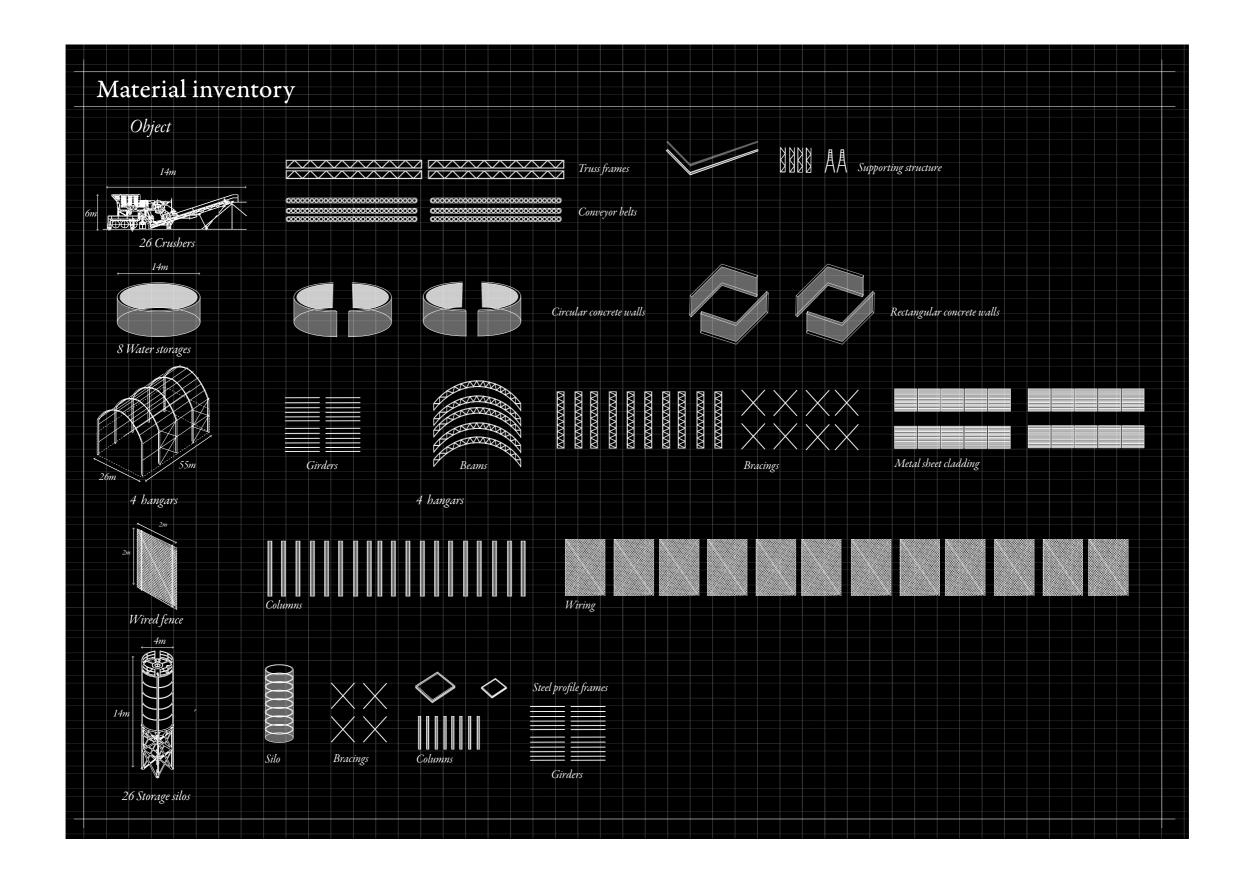
Thing | Material recovery



Thing | Material recovery



Thing | Material recovery

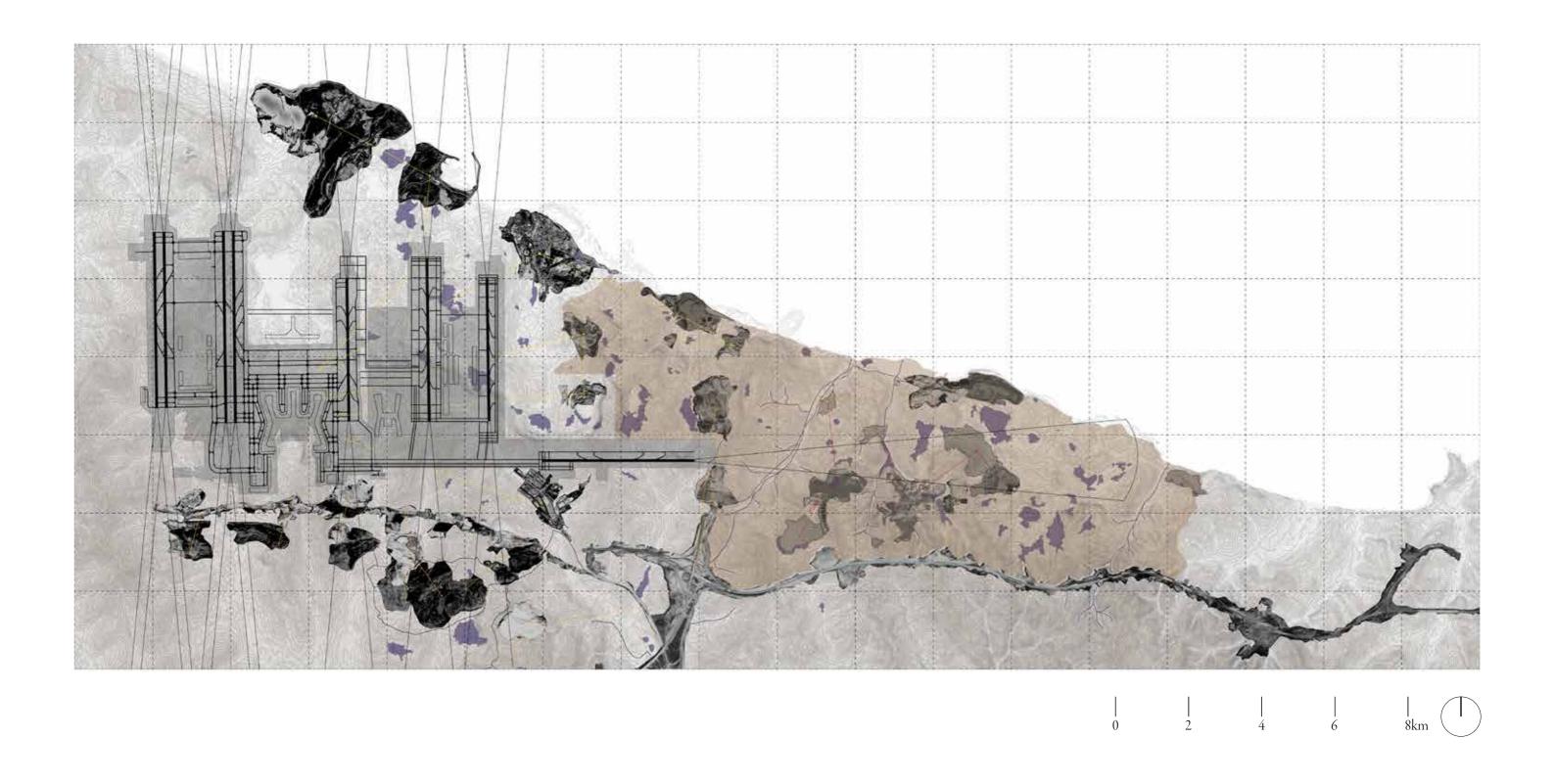


- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- 6. Object 2 | Water treatment facility
- 7. Object 3 | Highway rest stop

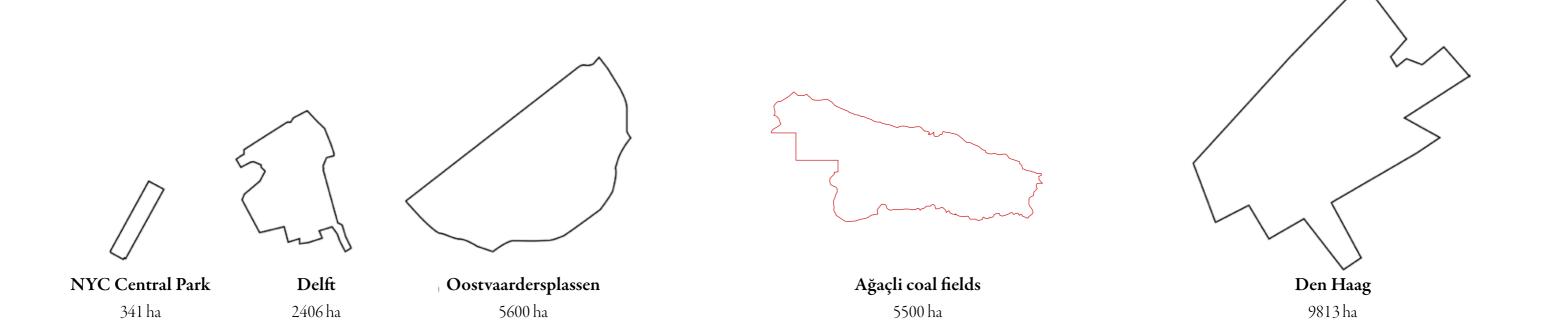
Remediation

Ecological systems are understood as a transformation of fields and flows. One cannot design or control the landscape or environment completely, a more symbiotic approach to landscape processes is necessary.

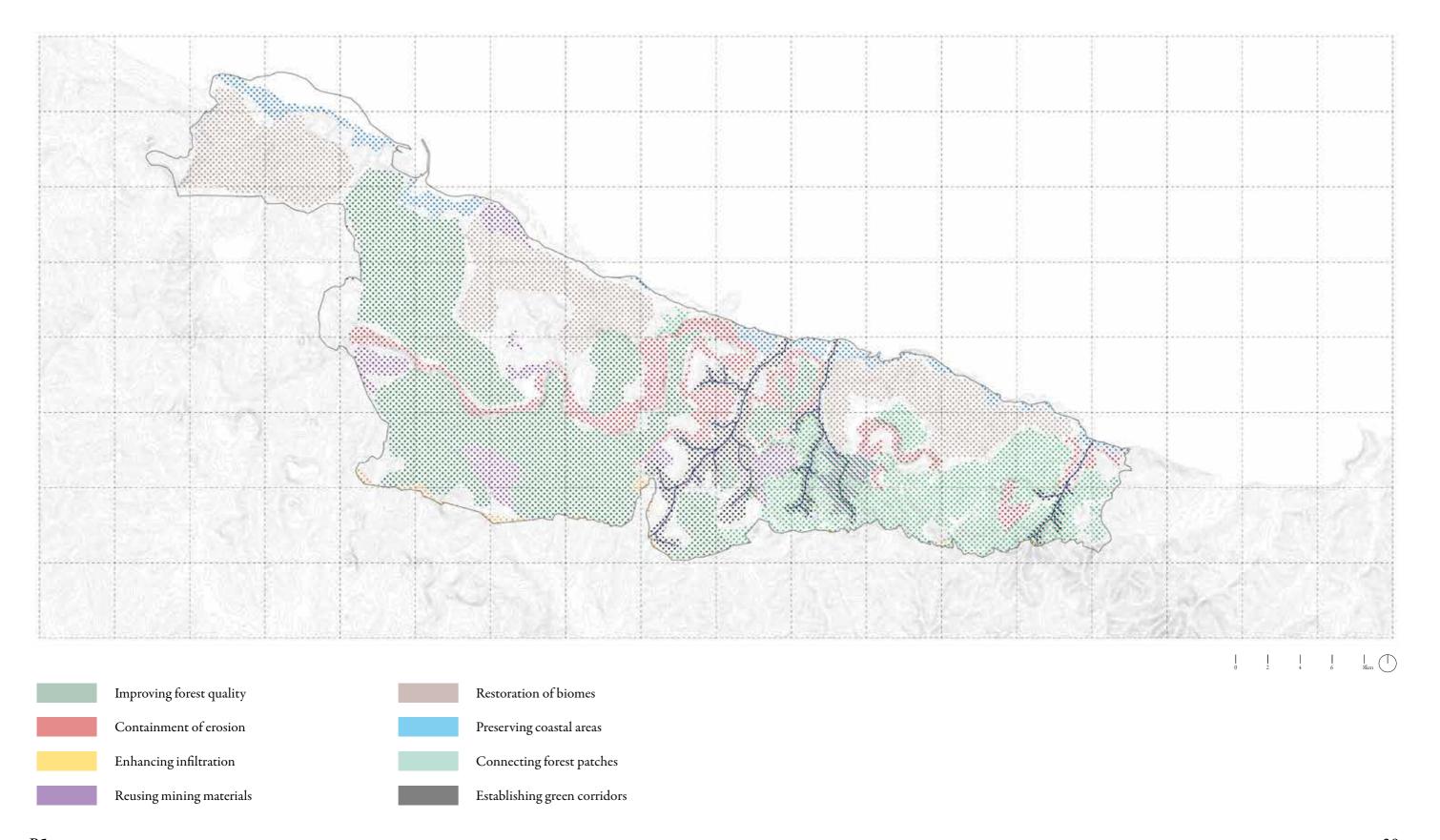
Projection | Site demarcation



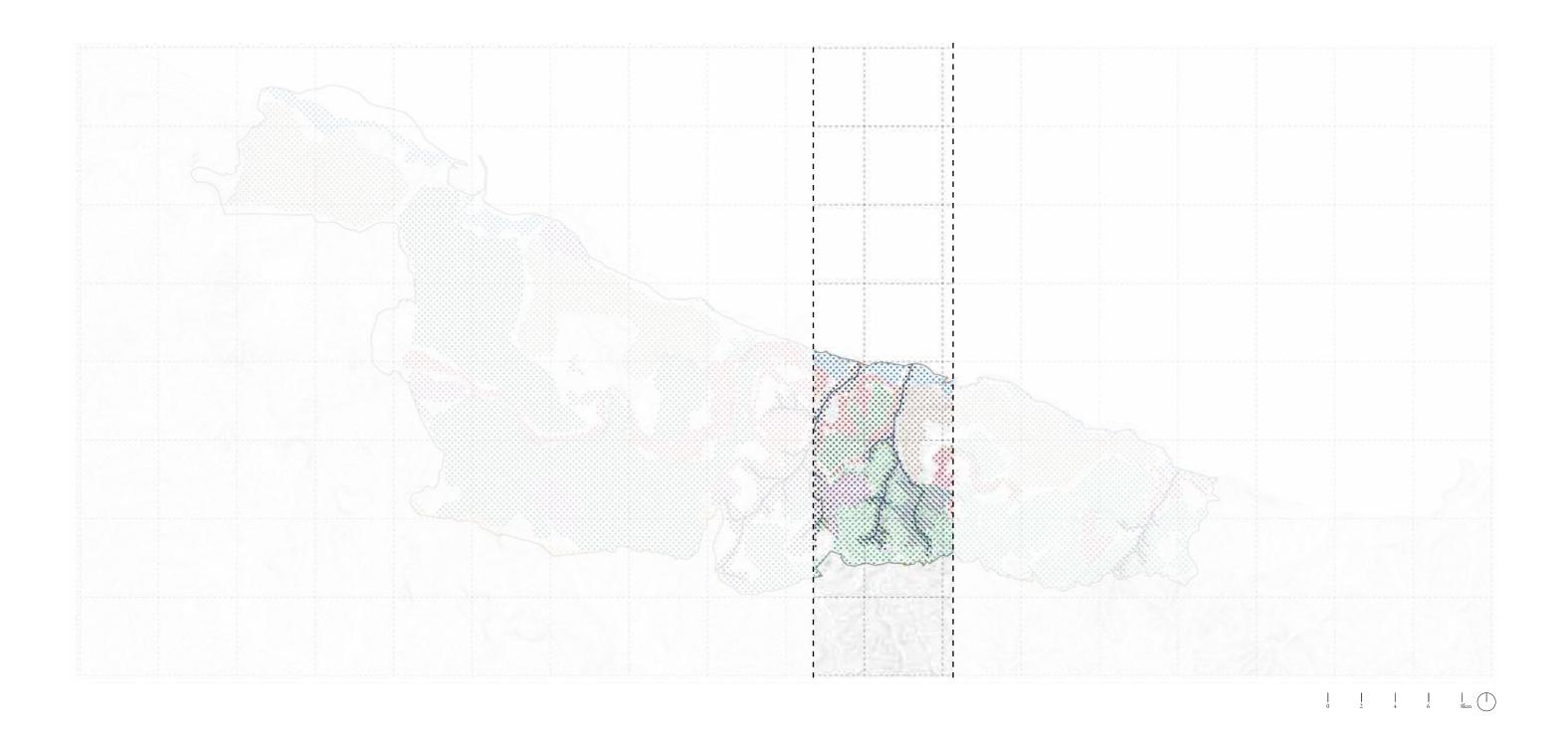
Projection | Site scale



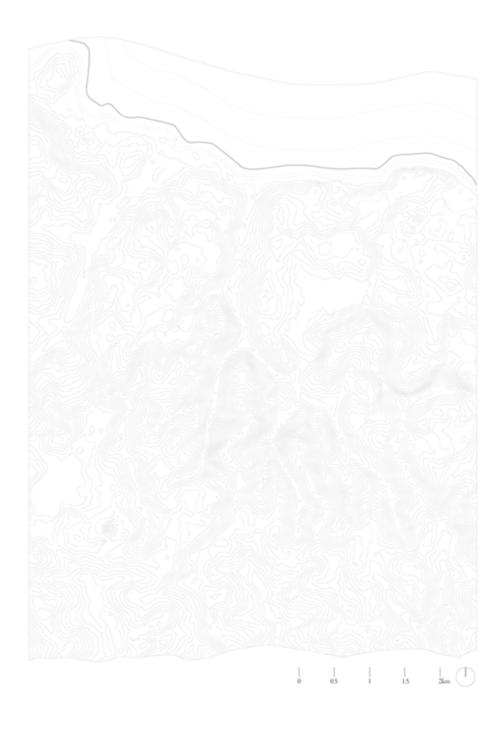
Projection | Intervenions on the (sub)surface



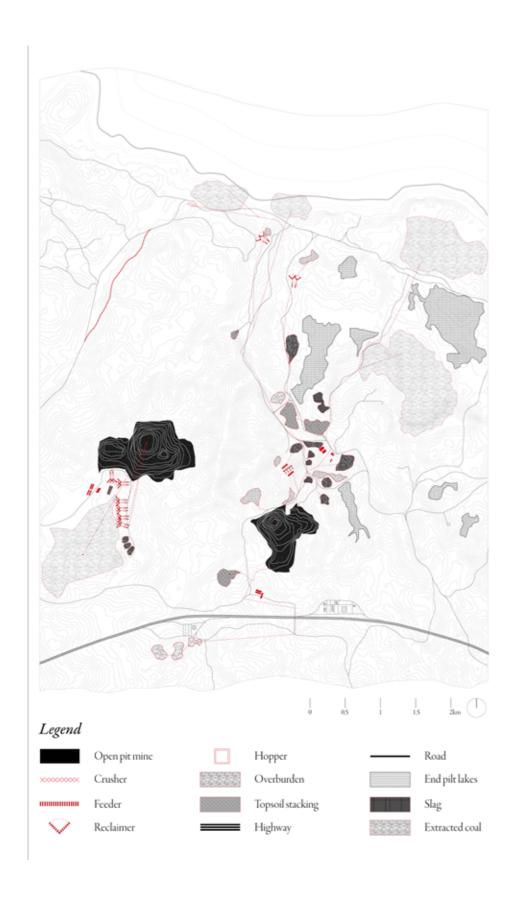
Projection | Section



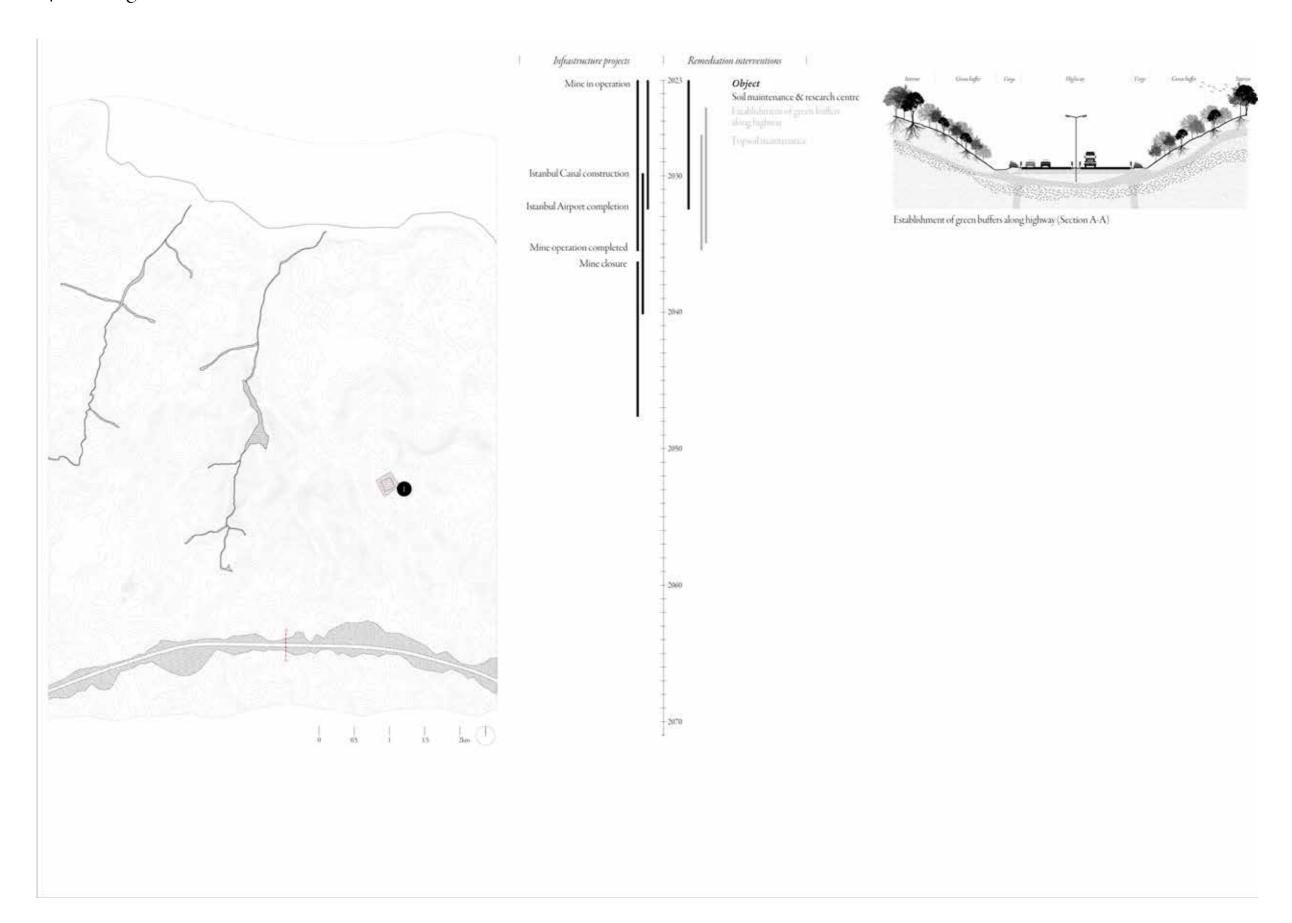
Projection | Section



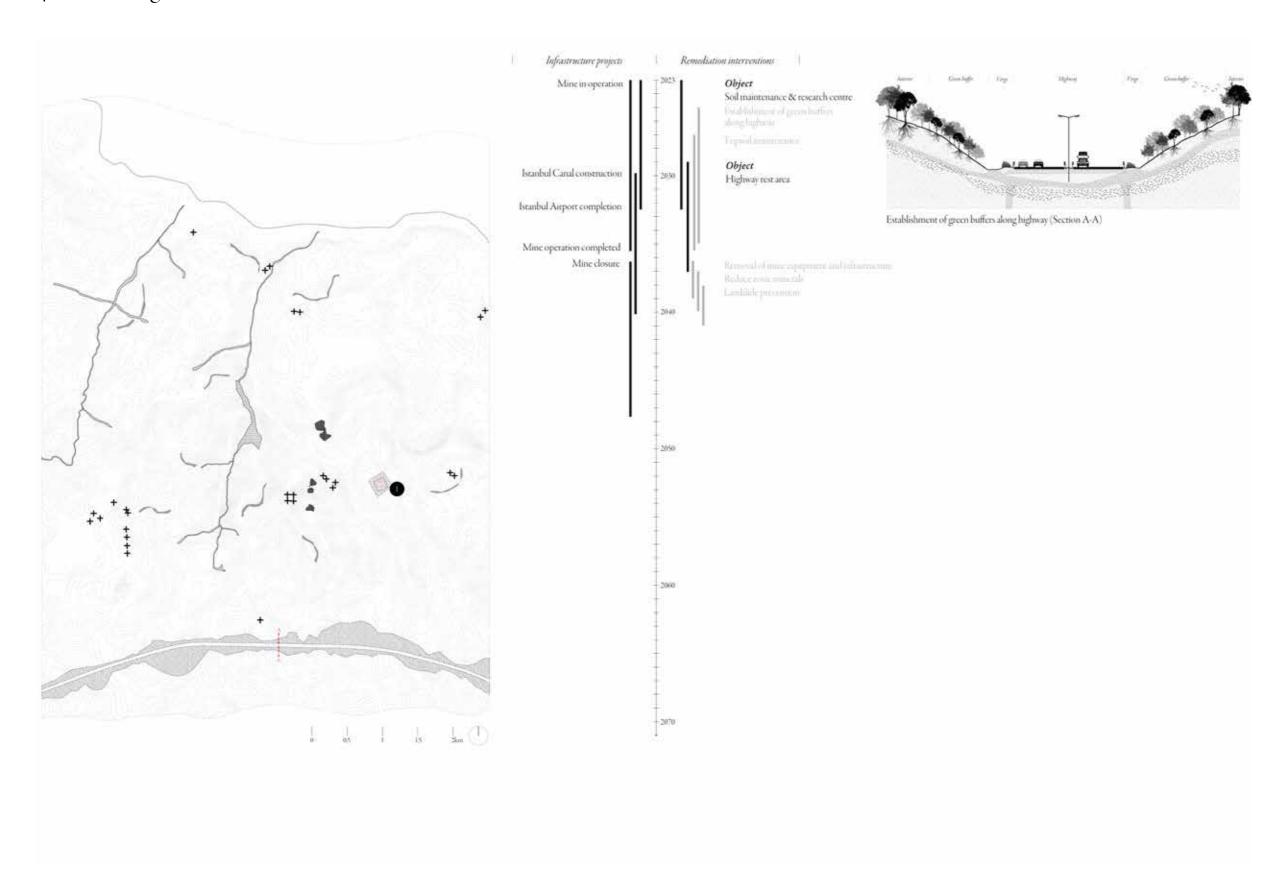
Projection | Current logic



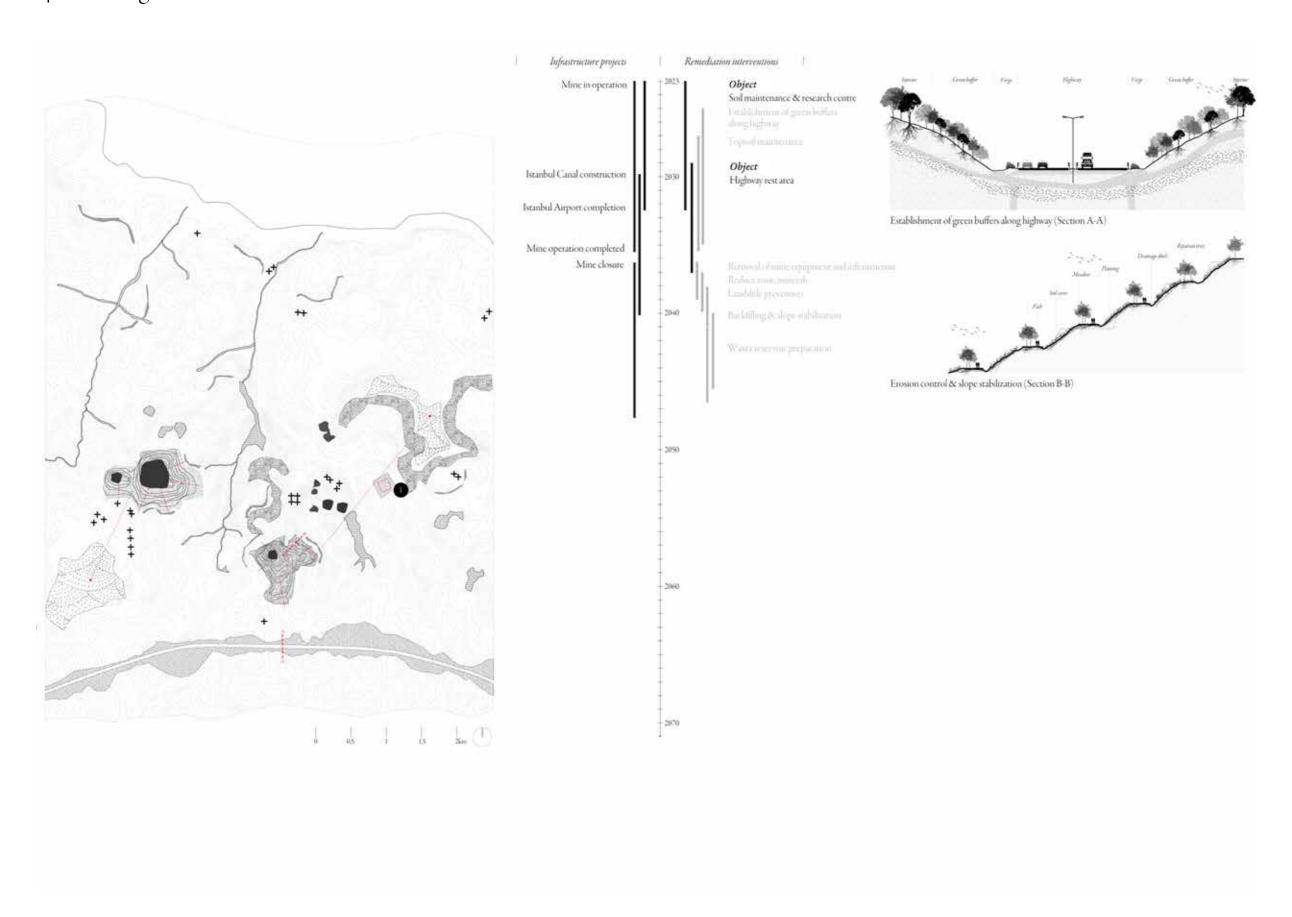
Projection | Forming



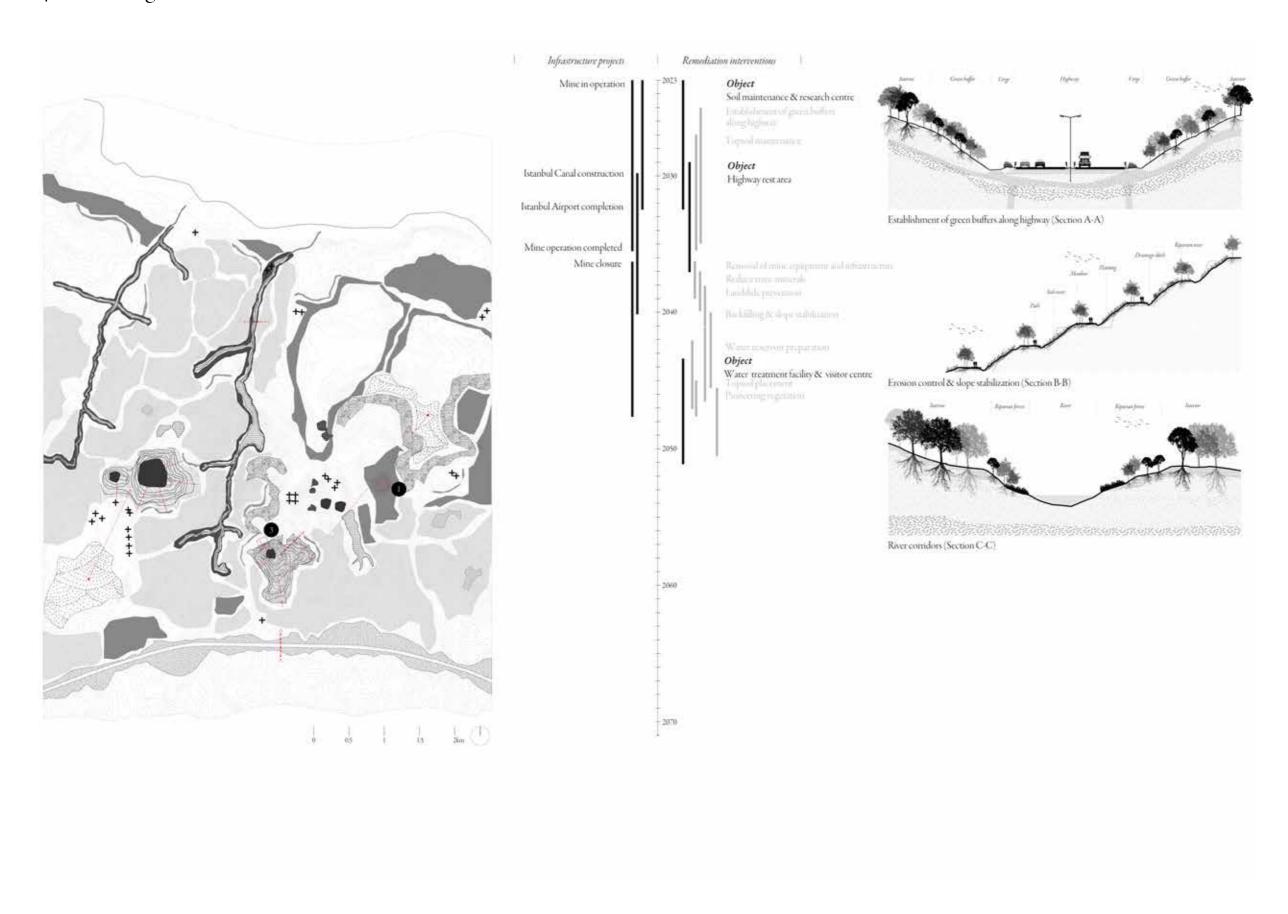
Projection | Connecting



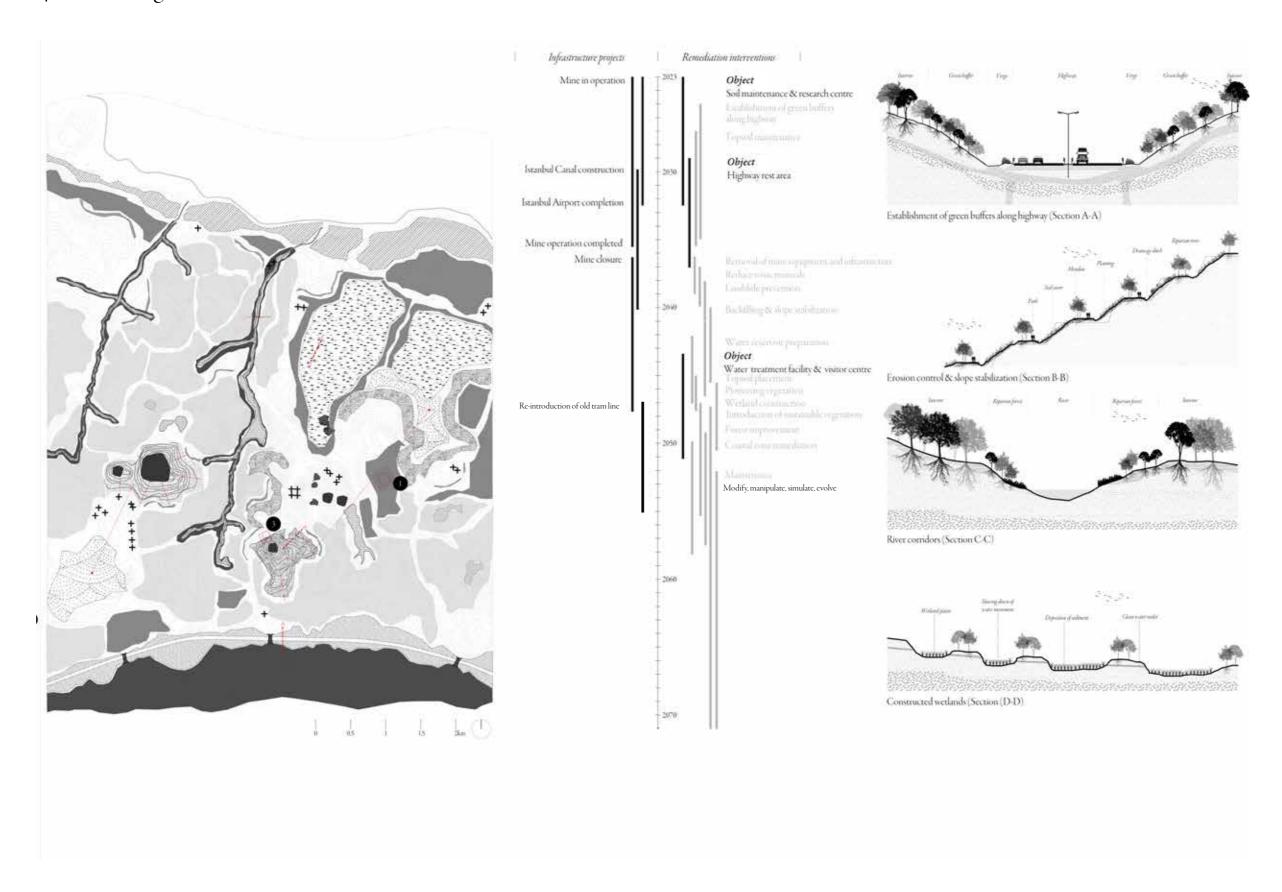
Projection | Stabilizing



Projection | Reclaiming



Projection | Maintaining



Architectural translation

Designing the unfinished

Architectural translation | Underground logic



Architectural translation | Excavating architecture

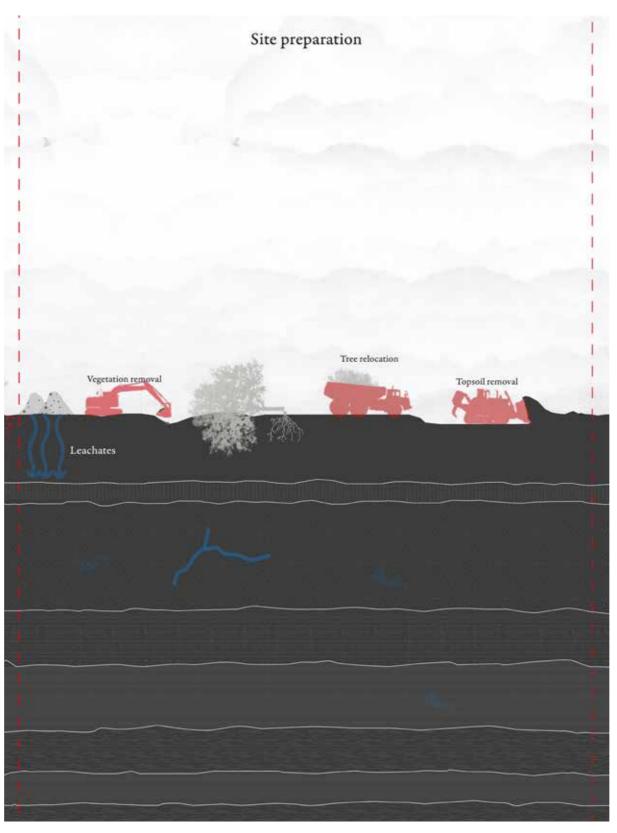


Architectural translation | Theatre of earthworks



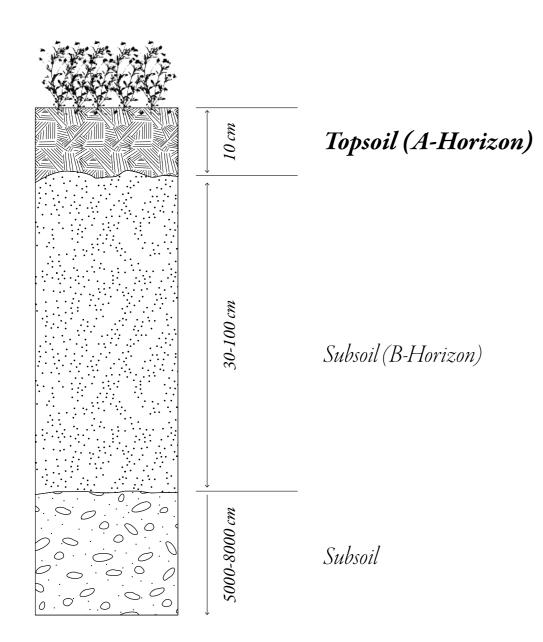
- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- 4. Projection | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- 6. Object 2 | Water treatment facility
- 7. Object 3 | Highway rest stop

Topsoil maintenance centre | Mine preparation



1 - 2 years

Topsoil maintenance centre | Topsoil

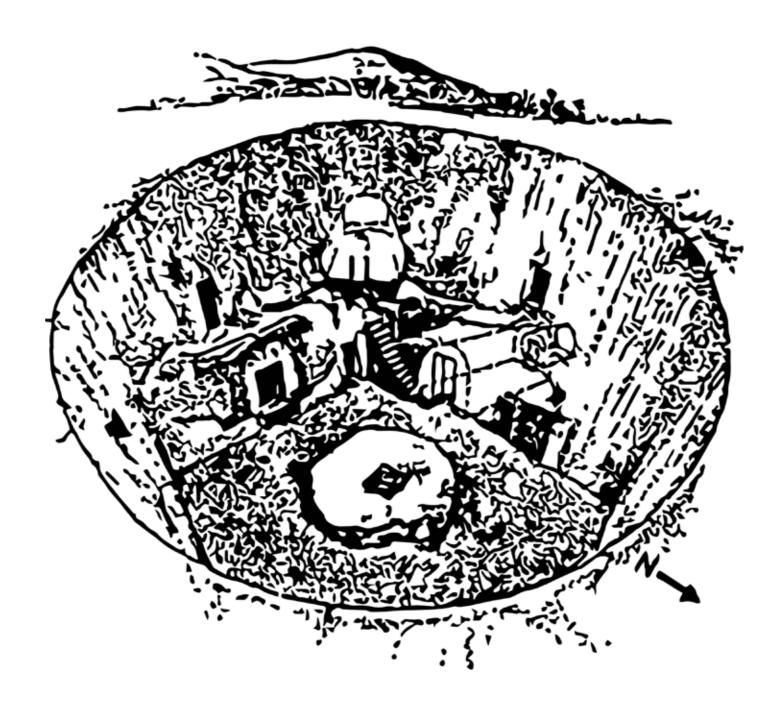




Topsoil maintenance centre | (Un)inhabitable zone



Topsoil maintenance centre | Hortus conclusus



Vernacular sunken courtyard in Matmata (Aseem A, 2010)

Topsoil maintenance centre | Temporal landscapes

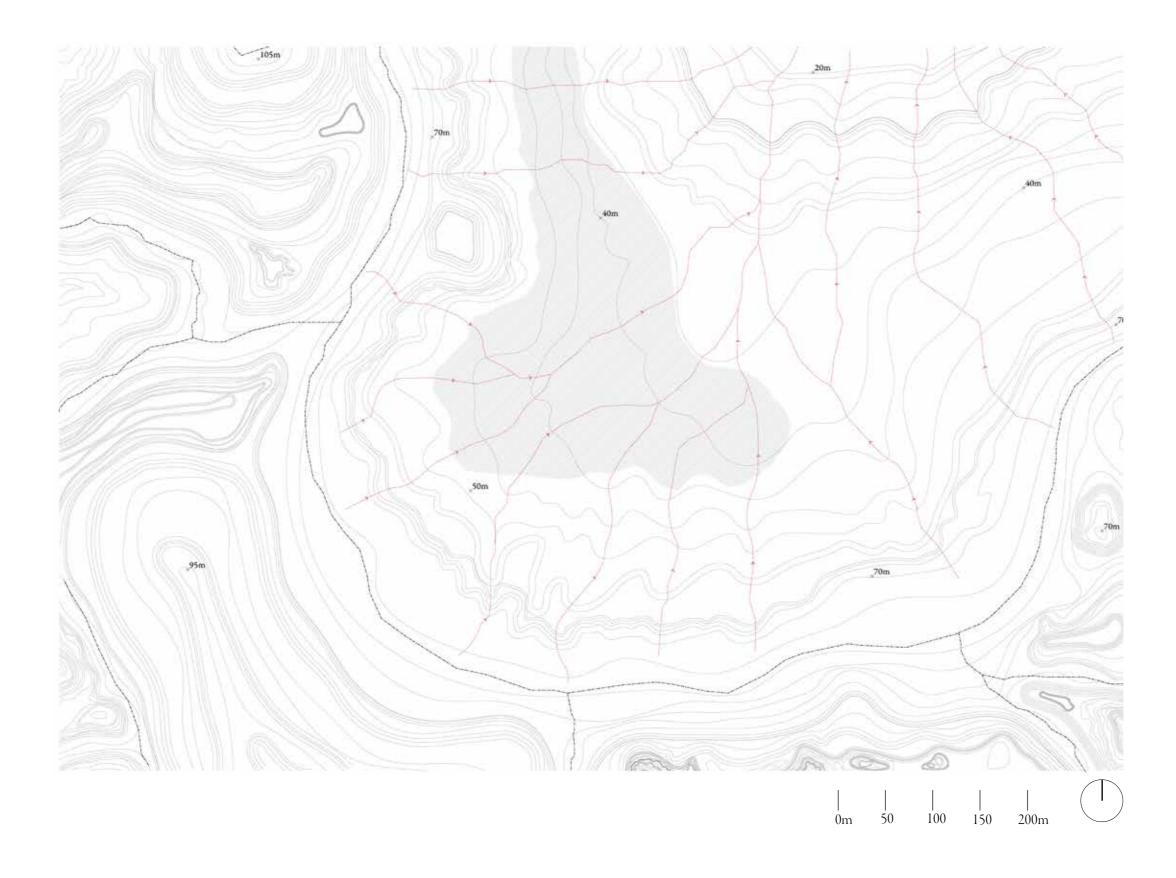




Topsoil maintenance centre | Site



Topsoil maintenance centre | Morphology



P5

Topsoil maintenance centre | Intervention



P5

Topsoil maintenance centre | Taking measure

Mine surface area 240.000m²

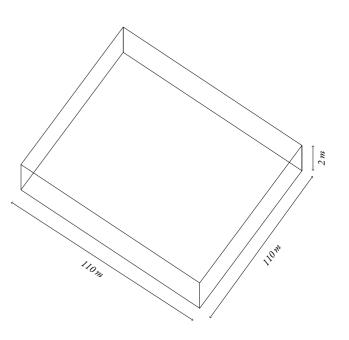


Topsoil volume
24.000m³

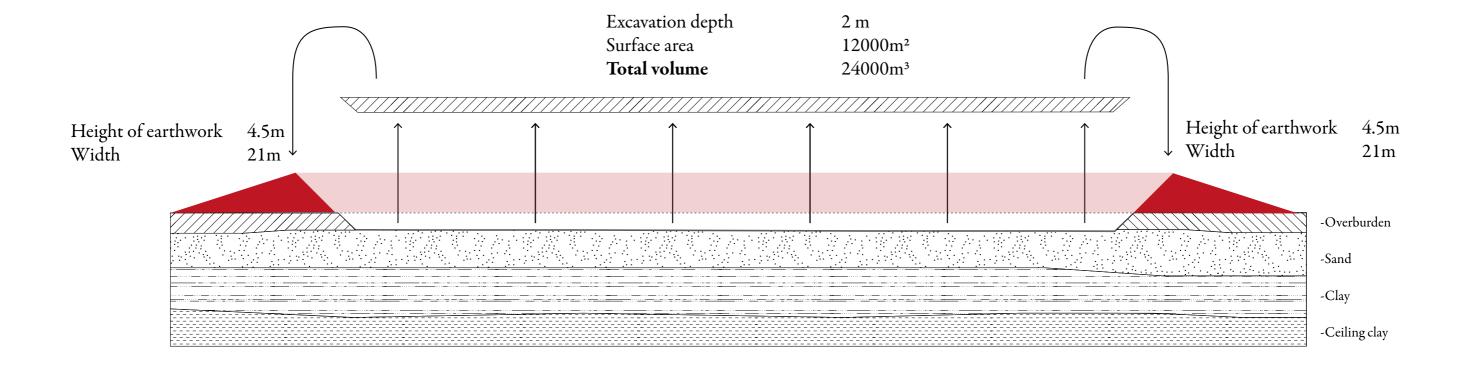
Topsoil (A-Horizon)

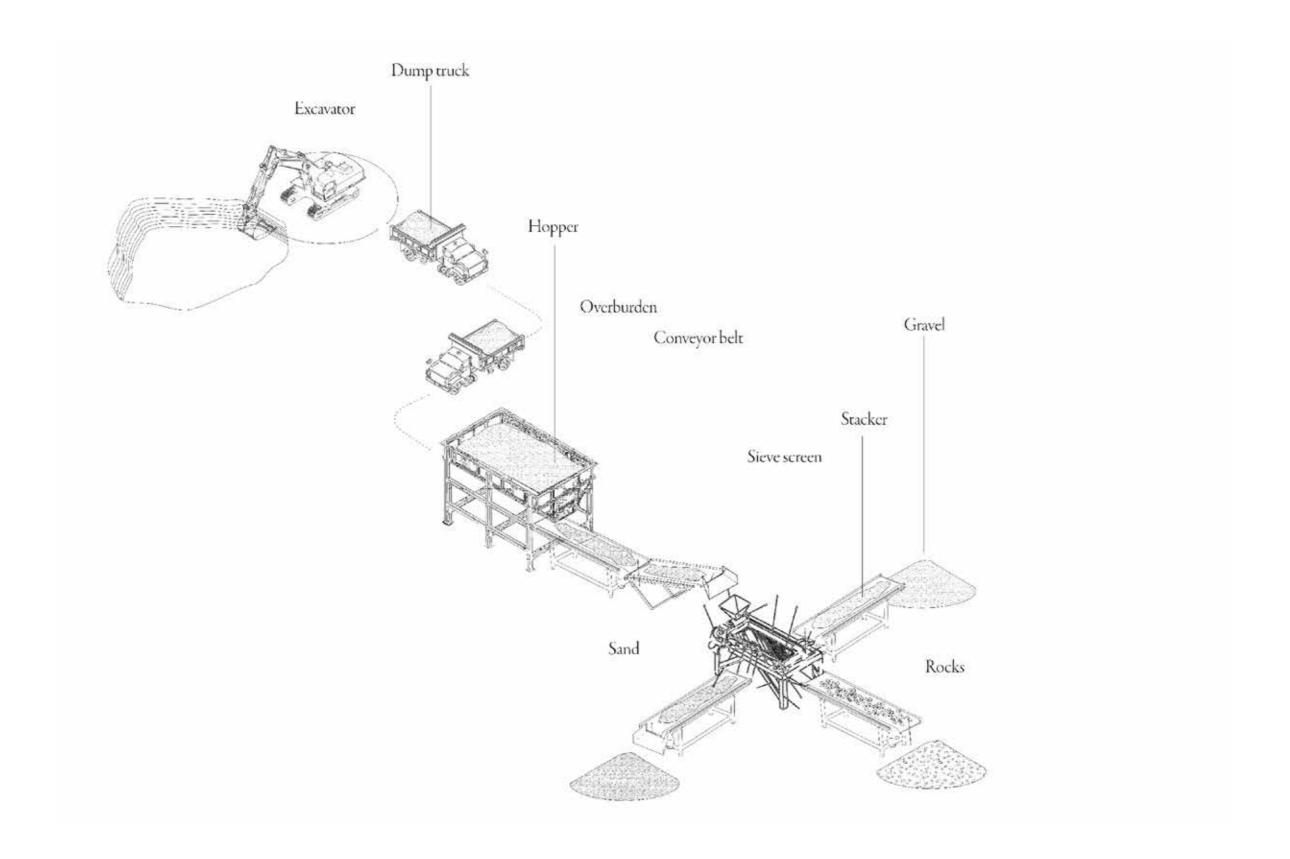
Subsoil (B-Horizon)

Topsoil storage surface 12.000m²

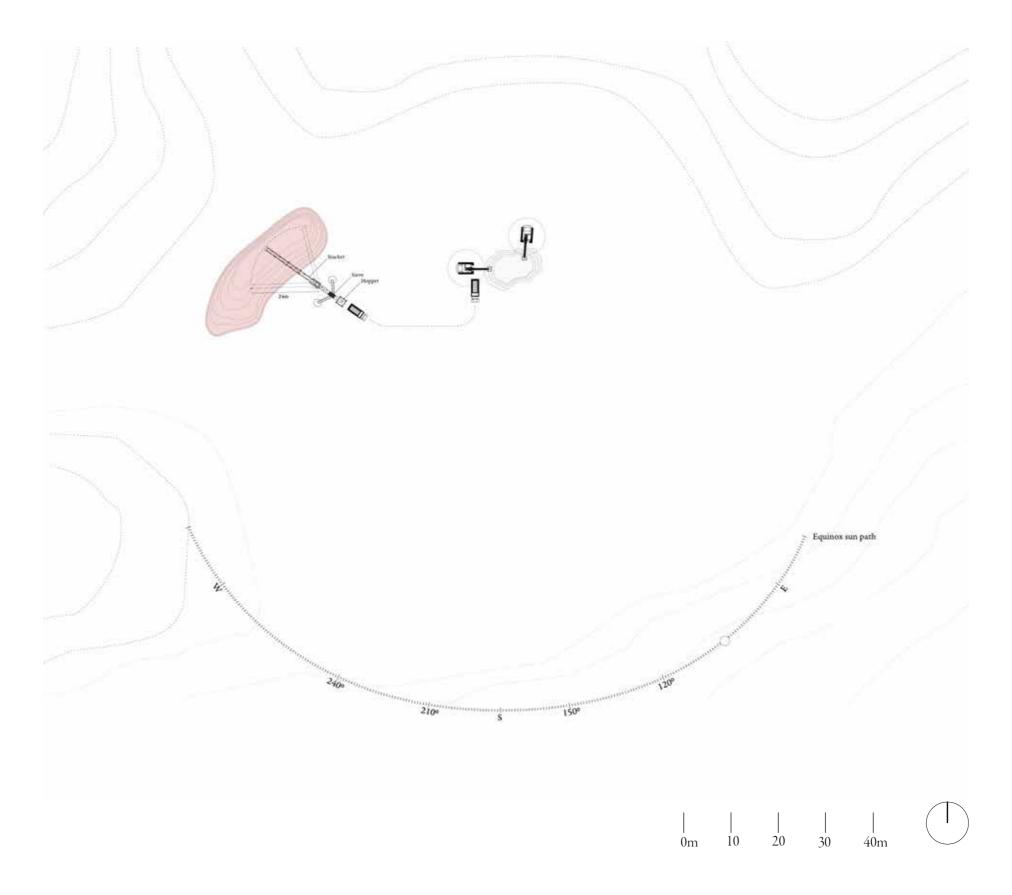


Topsoil maintenance centre | Taking measure

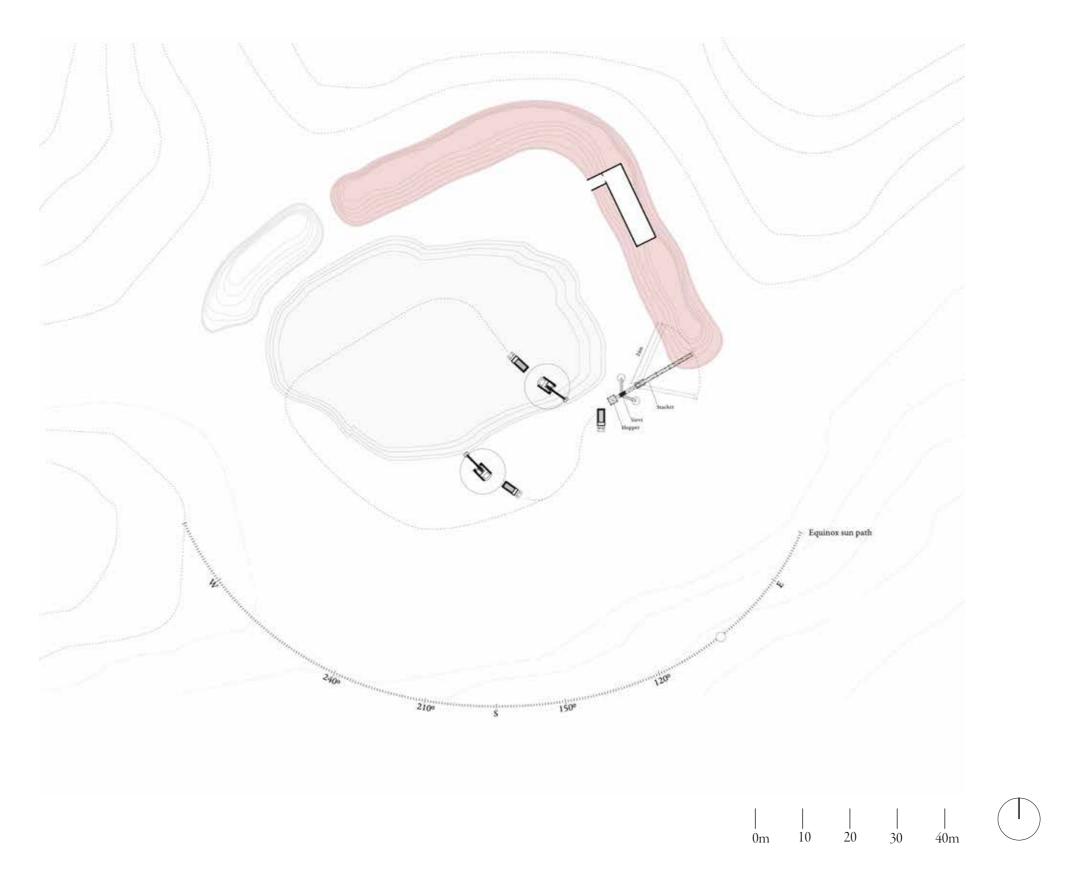




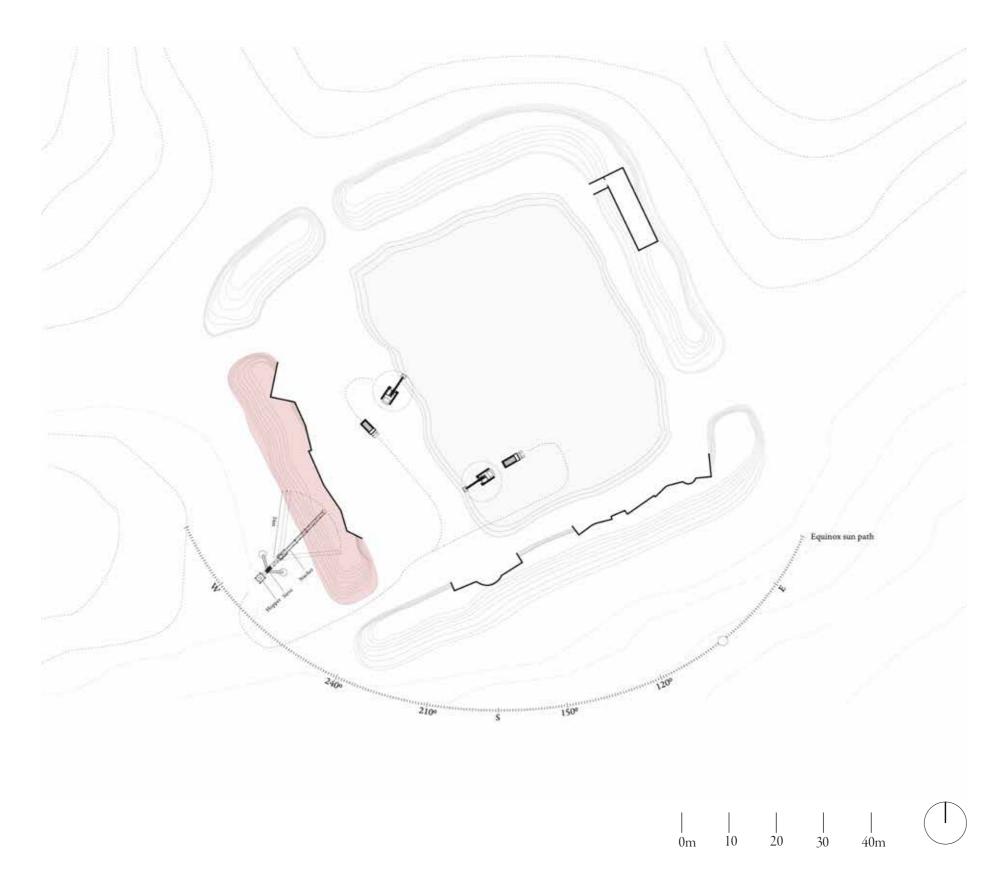




P5



P5

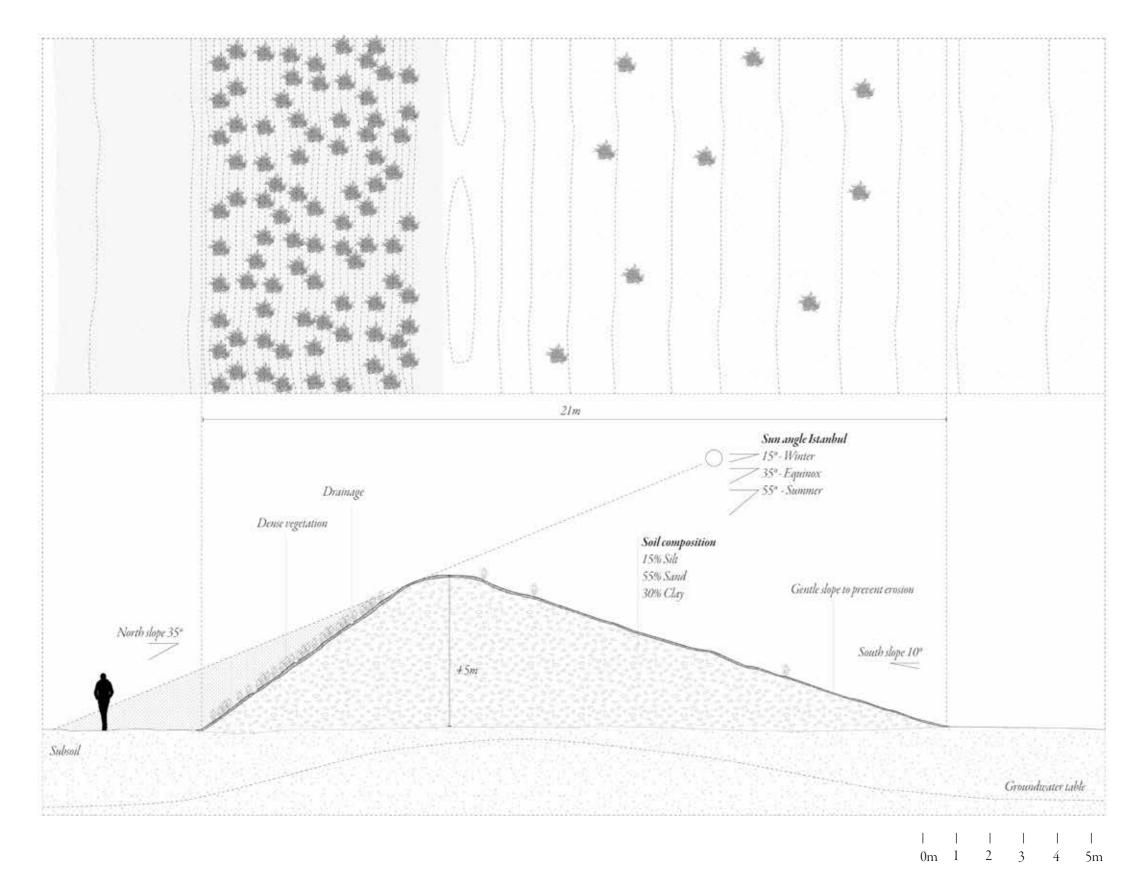


Topsoil maintenance centre | Oasis



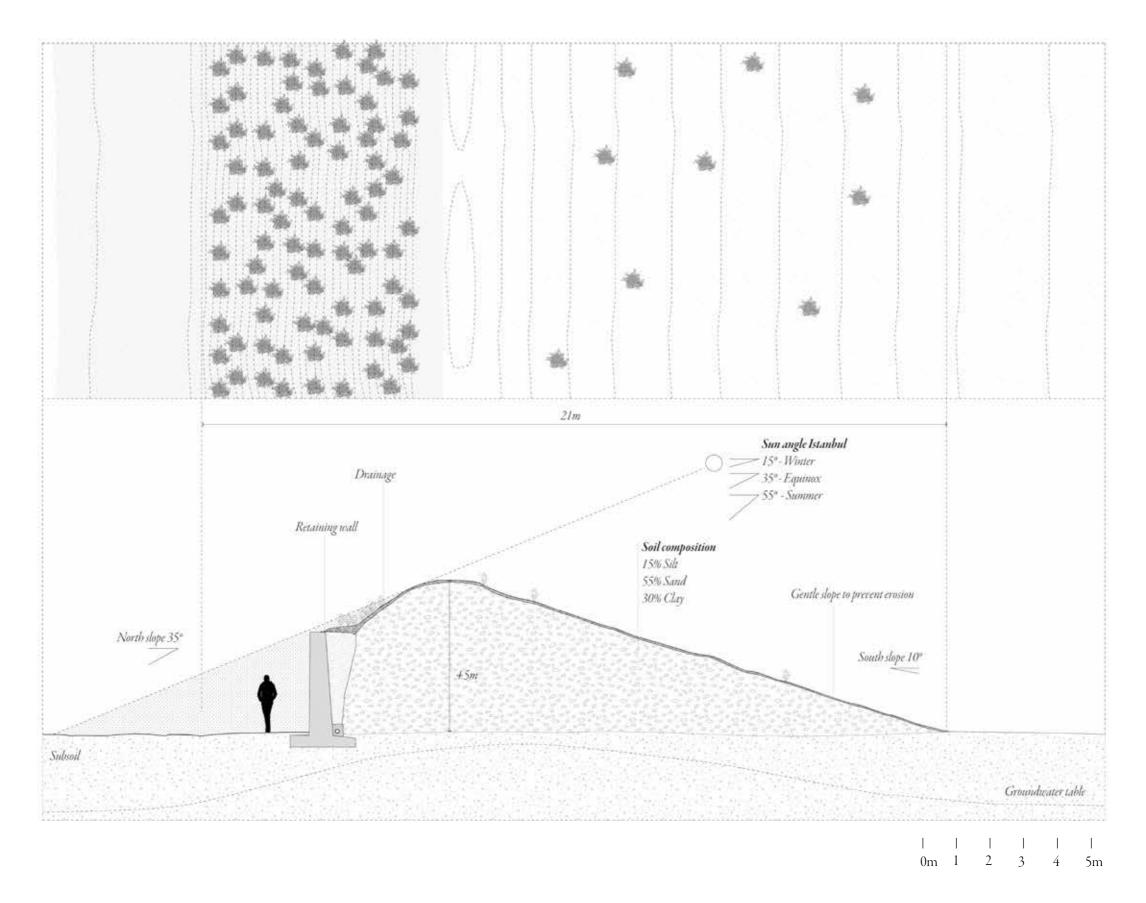
P5

Topsoil maintenance centre | Boundary



P5

Topsoil maintenance centre | Boundary



P5

Topsoil maintenance centre | Plan

Legend

- Topsoil heaps
 Walking paths

Seed bank

- 3. Entrance
- 4. Reception
- 5. MEP room
- 6. Access air lock
- 7. Seed archive

Maintenance

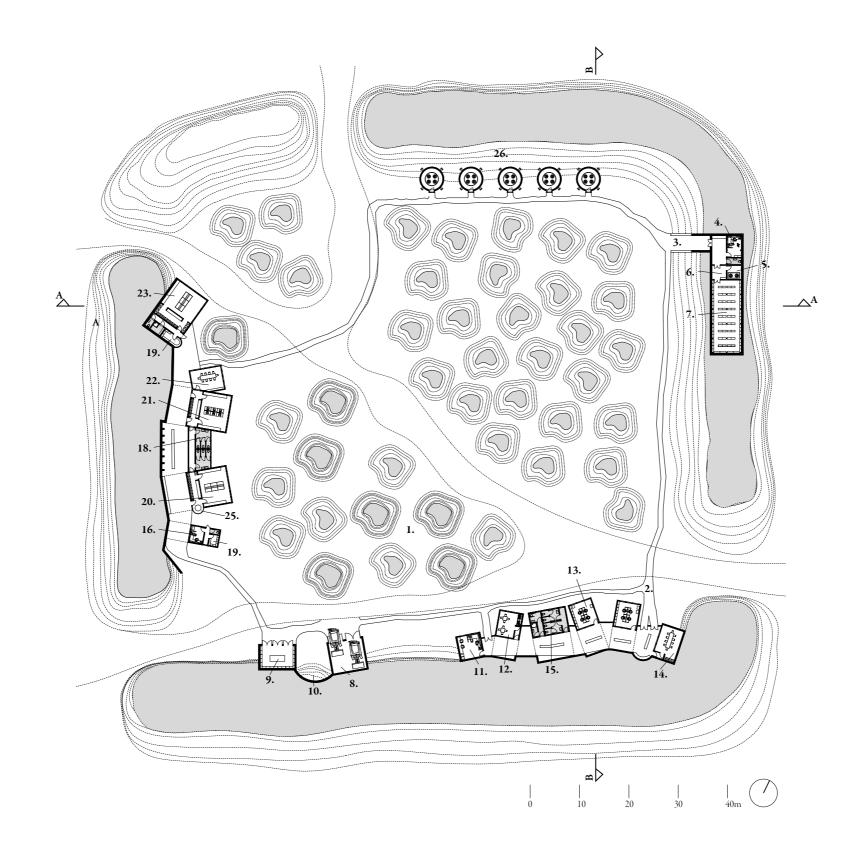
- 8. Machine garage
- 9. Workshop 10. Residu soil

Office

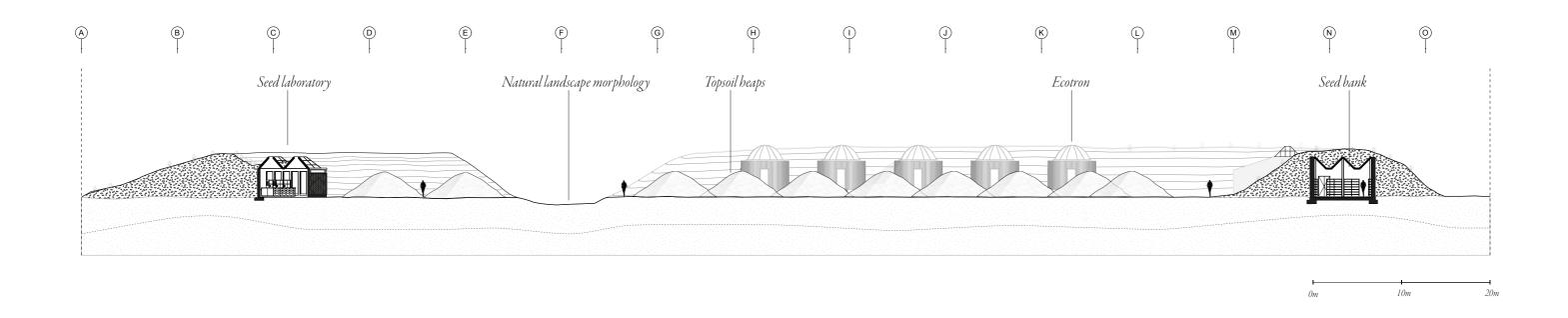
- 11. Administration
- 12. Canteen
- 13. Office space
- 14. Meeting room
- 15. Toilets

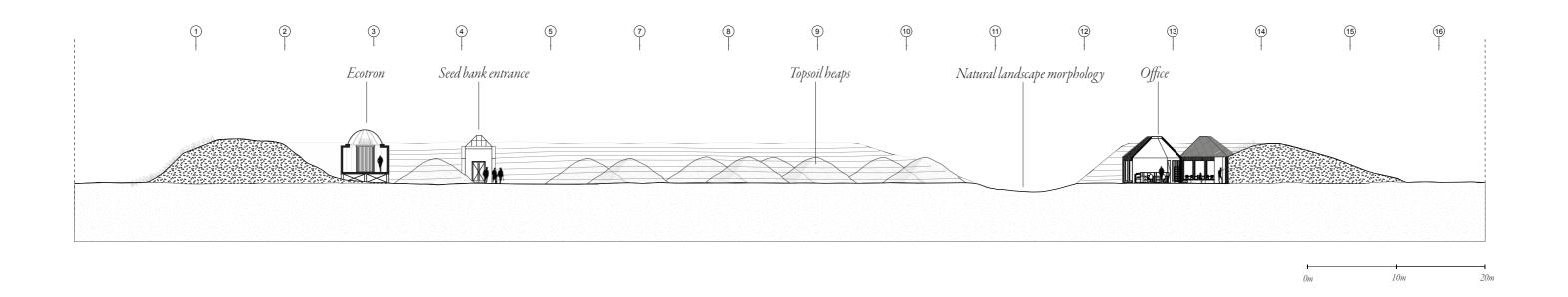
Laboratory

- 16. Reception
- 17. MEP room
- 18. Toilet
- 19. Storage & Server room
- 20. Microscopy
- 21. Germination laboratory
- 22. Meeting room
- 23. Seed laboratory 24. Cleaning room
- 25. Growth room
- 26. Ecotrons

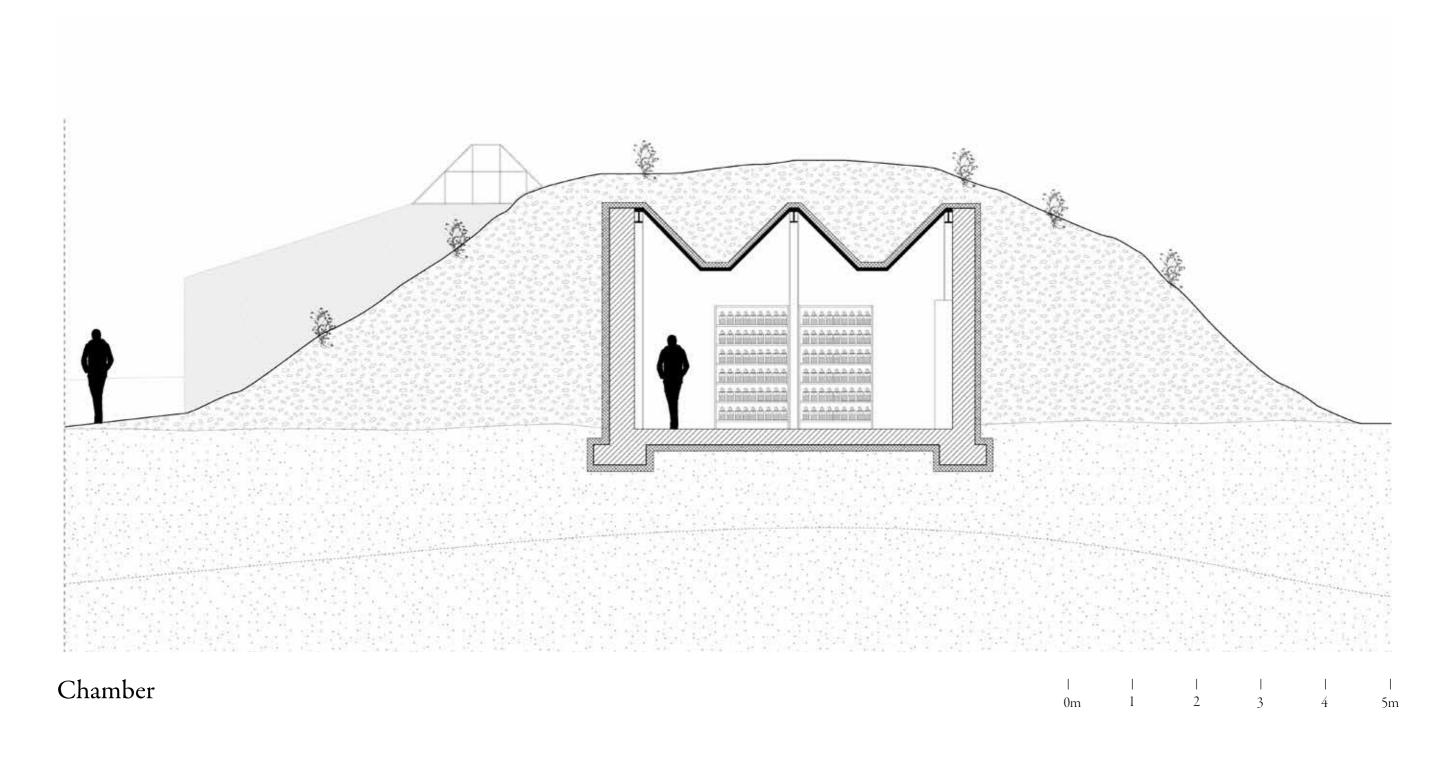


Topsoil maintenance centre | Section

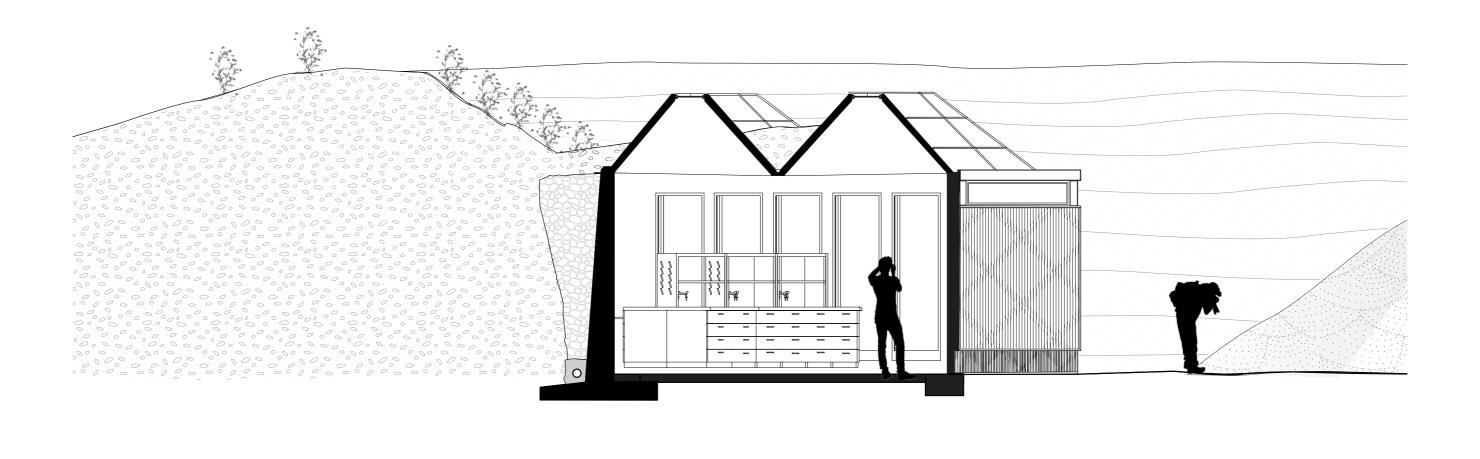




Topsoil maintenance centre | Relating to earth



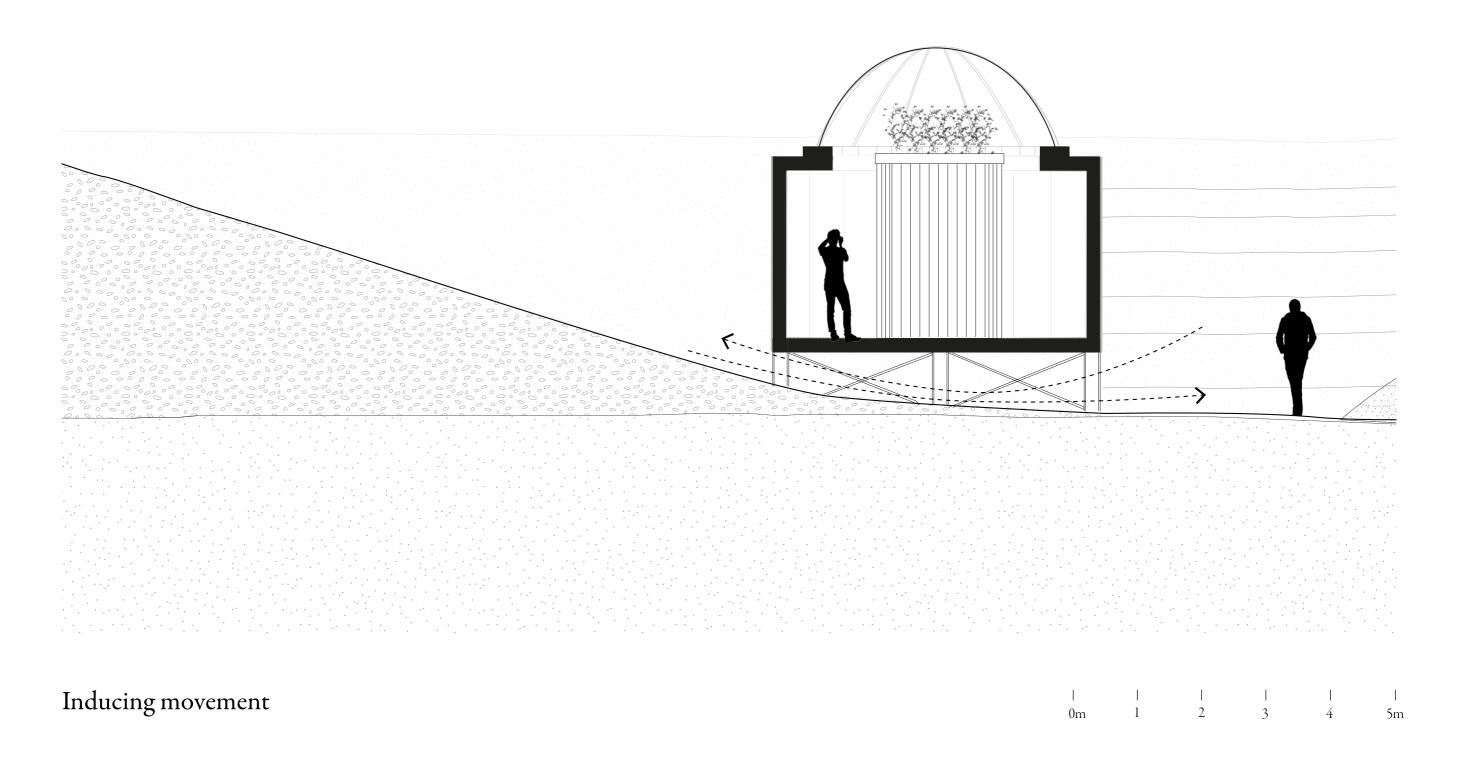
Topsoil maintenance centre | Relating to earth



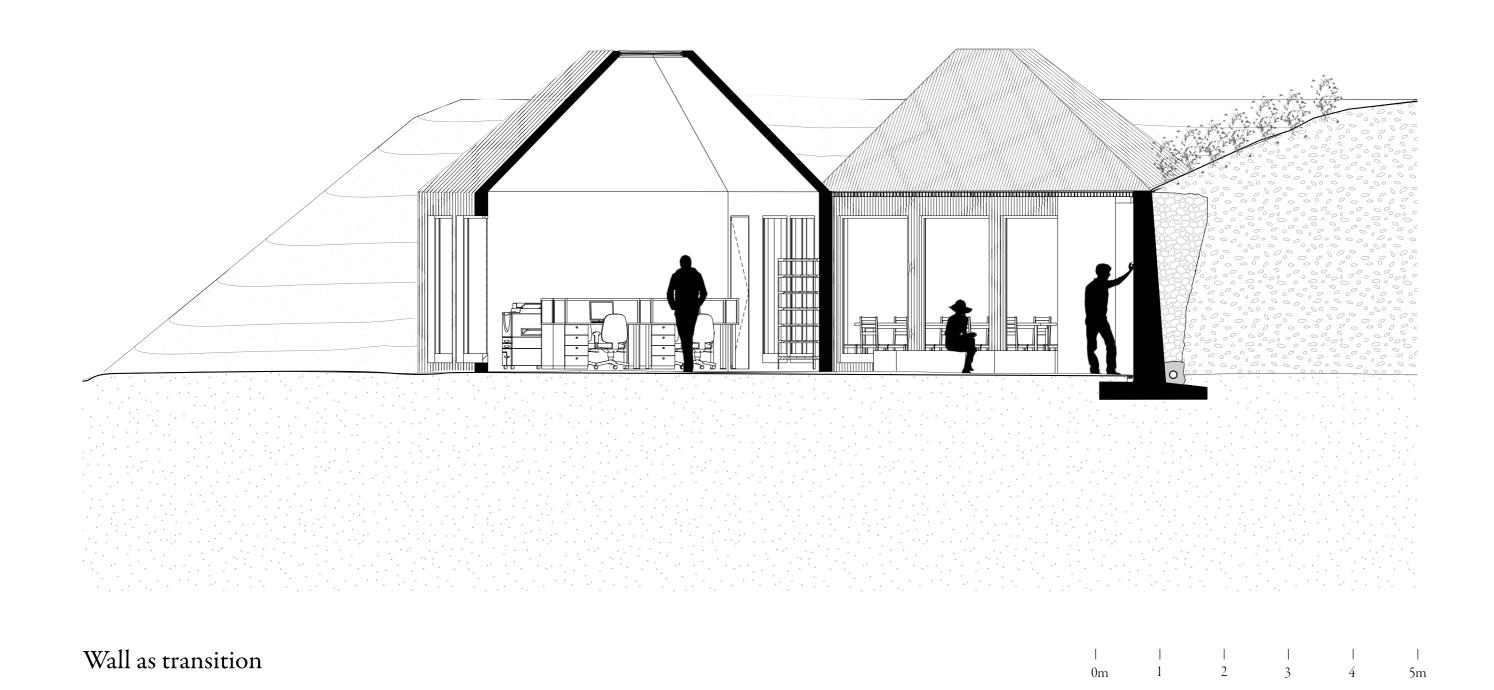
P5

73

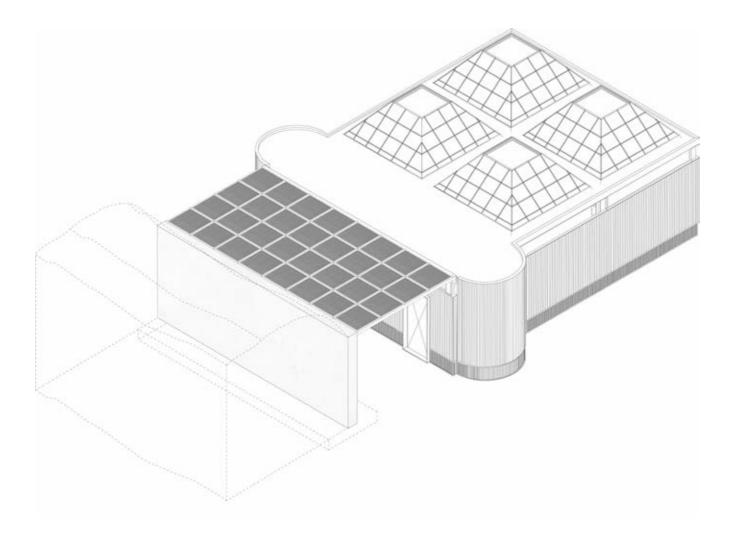
Topsoil maintenance centre | Relating to earth



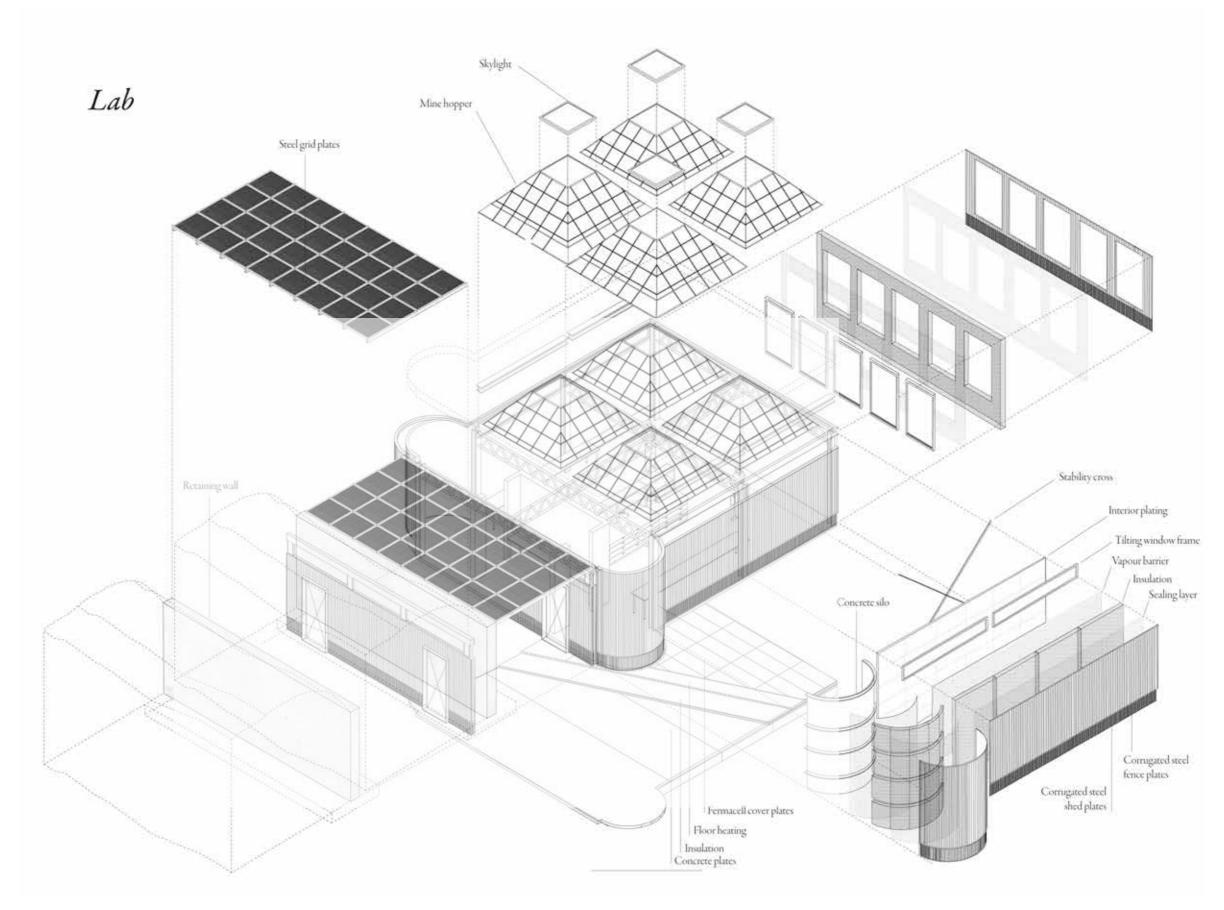
Topsoil maintenance centre | Relating to earth



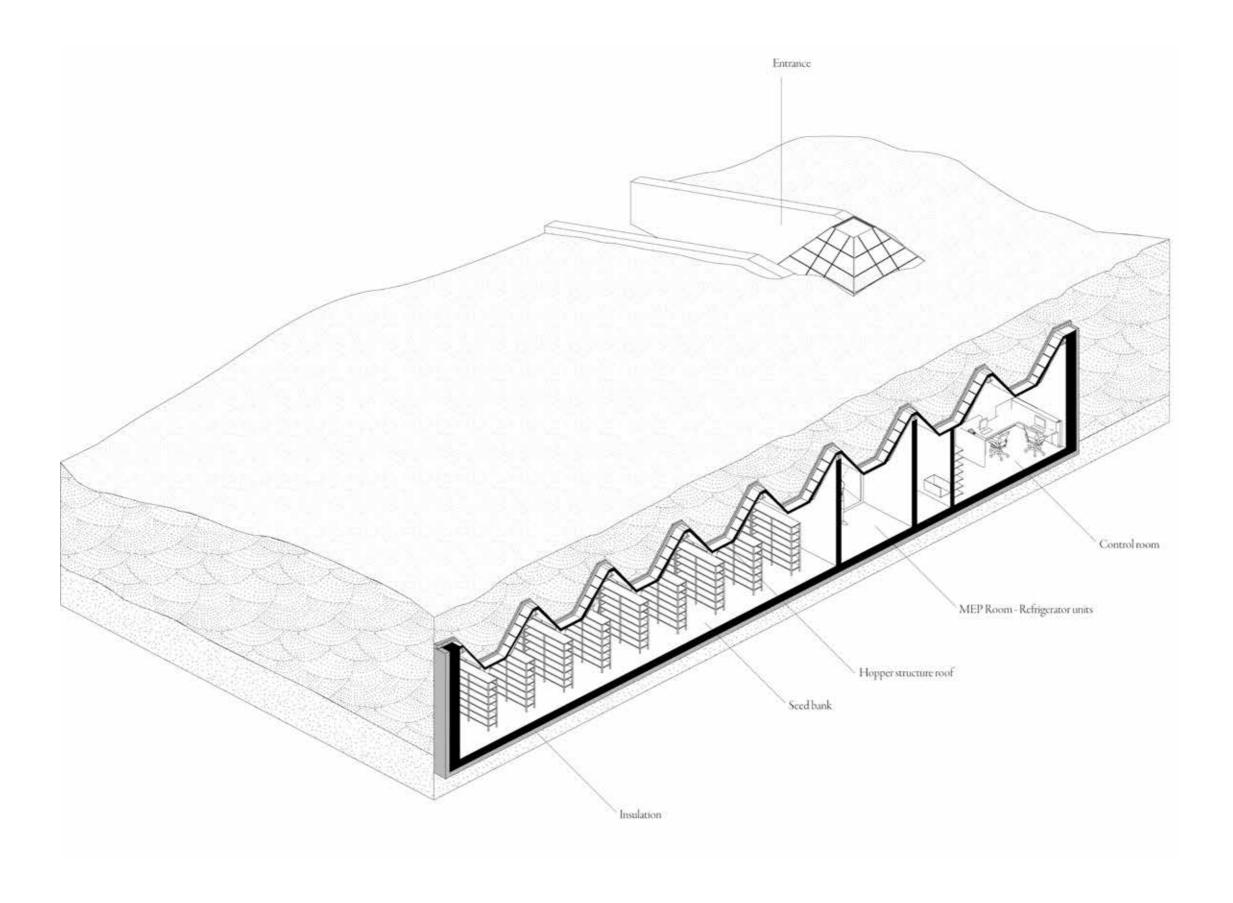
Topsoil maintenance centre | Lab



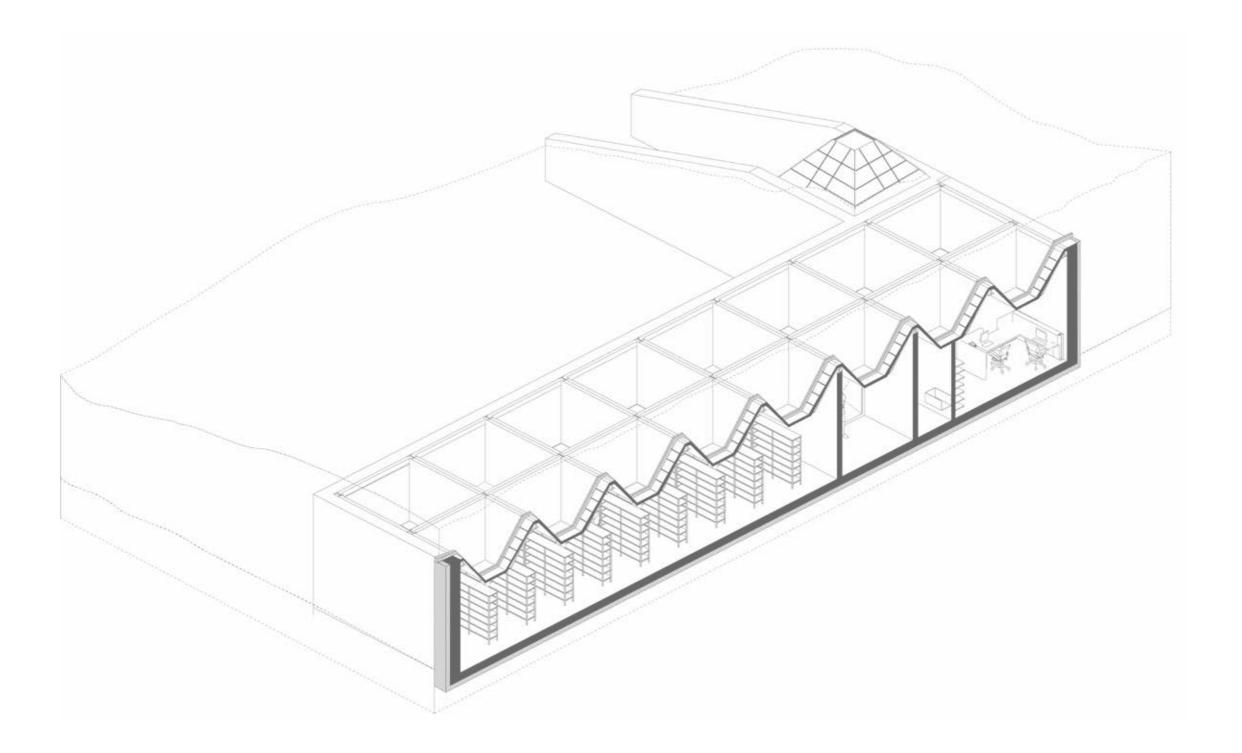
Topsoil maintenance centre | Lab



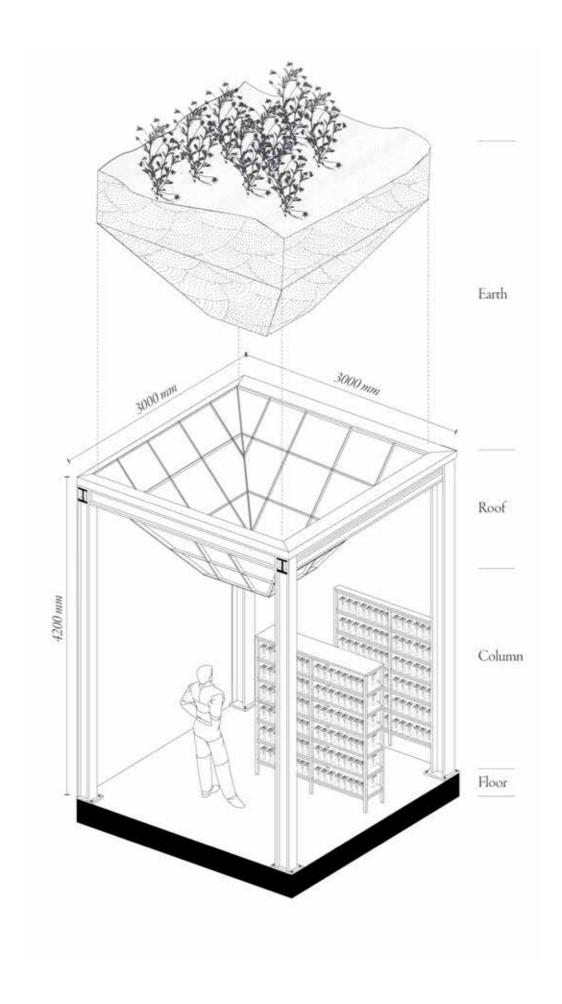
Topsoil maintenance centre | Seed bank



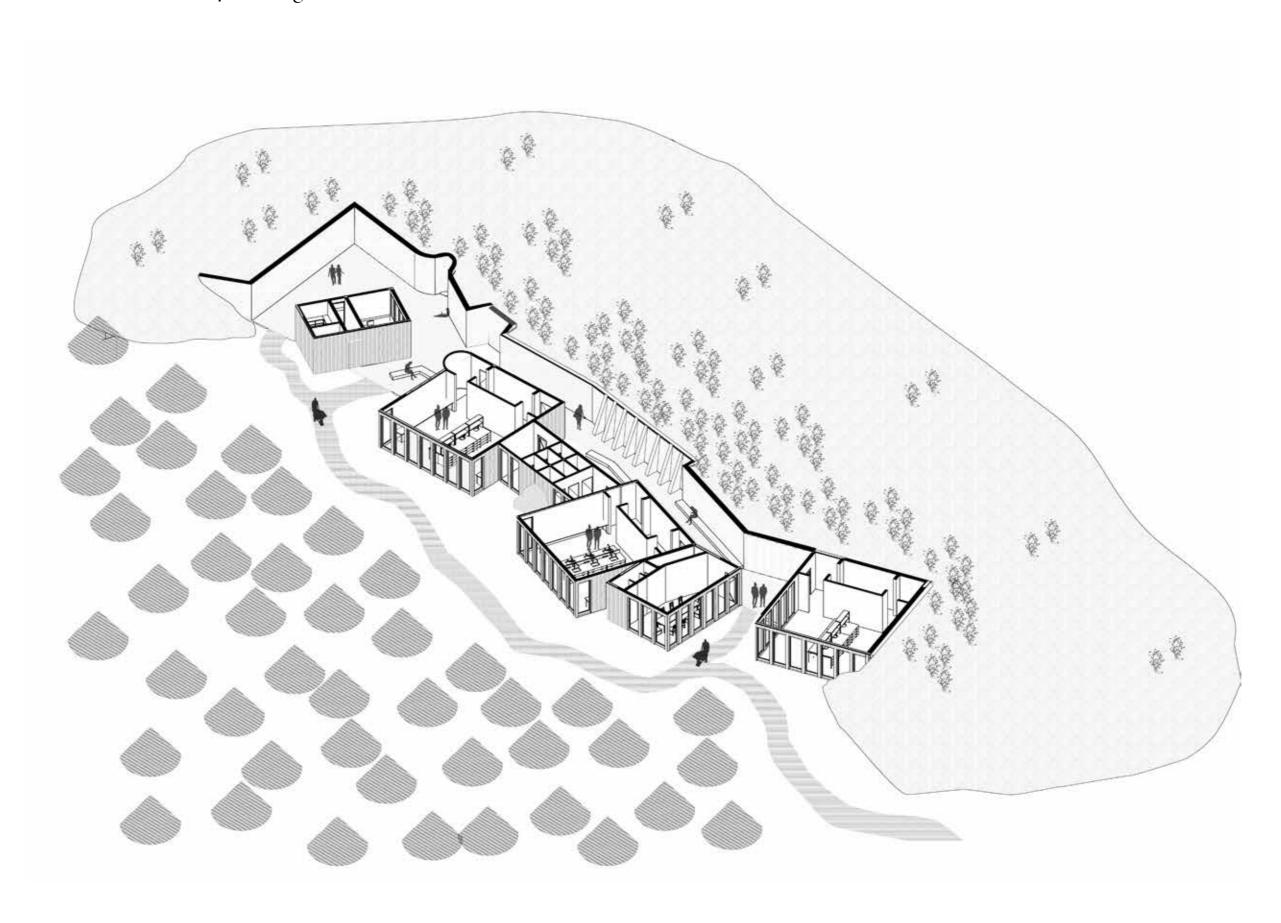
Topsoil maintenance centre | Seed bank



Topsoil maintenance centre | Seed bank



Topsoil maintenance centre | Relating to the wall



P5

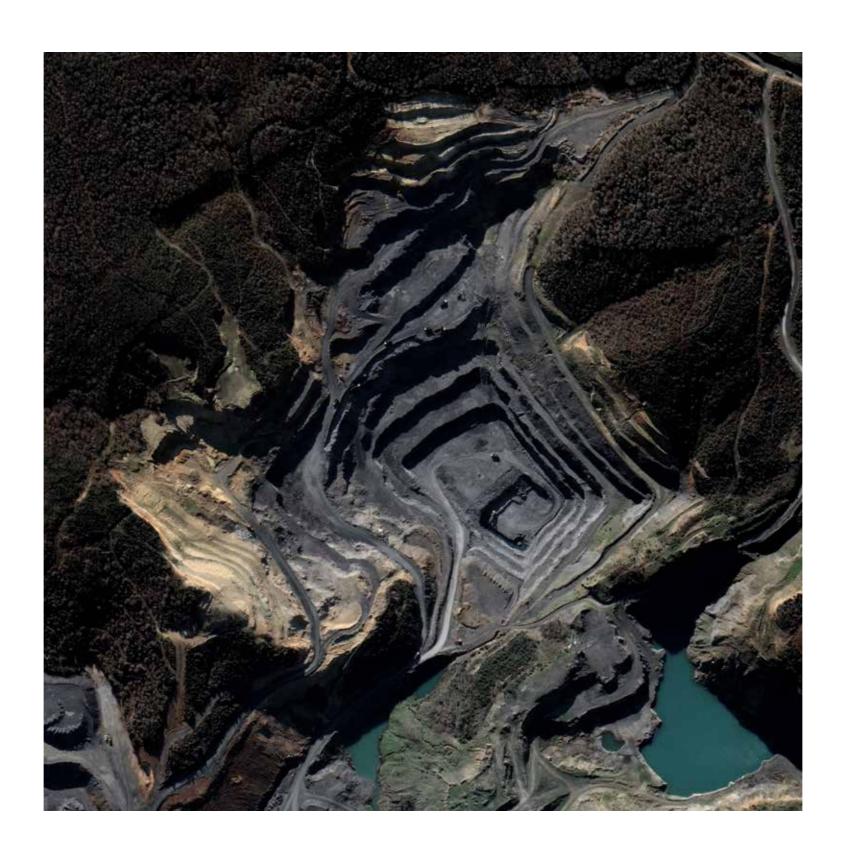
81

- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- **6. Object 2** | Water treatment facility
- 7. Object 3 | Highway rest stop

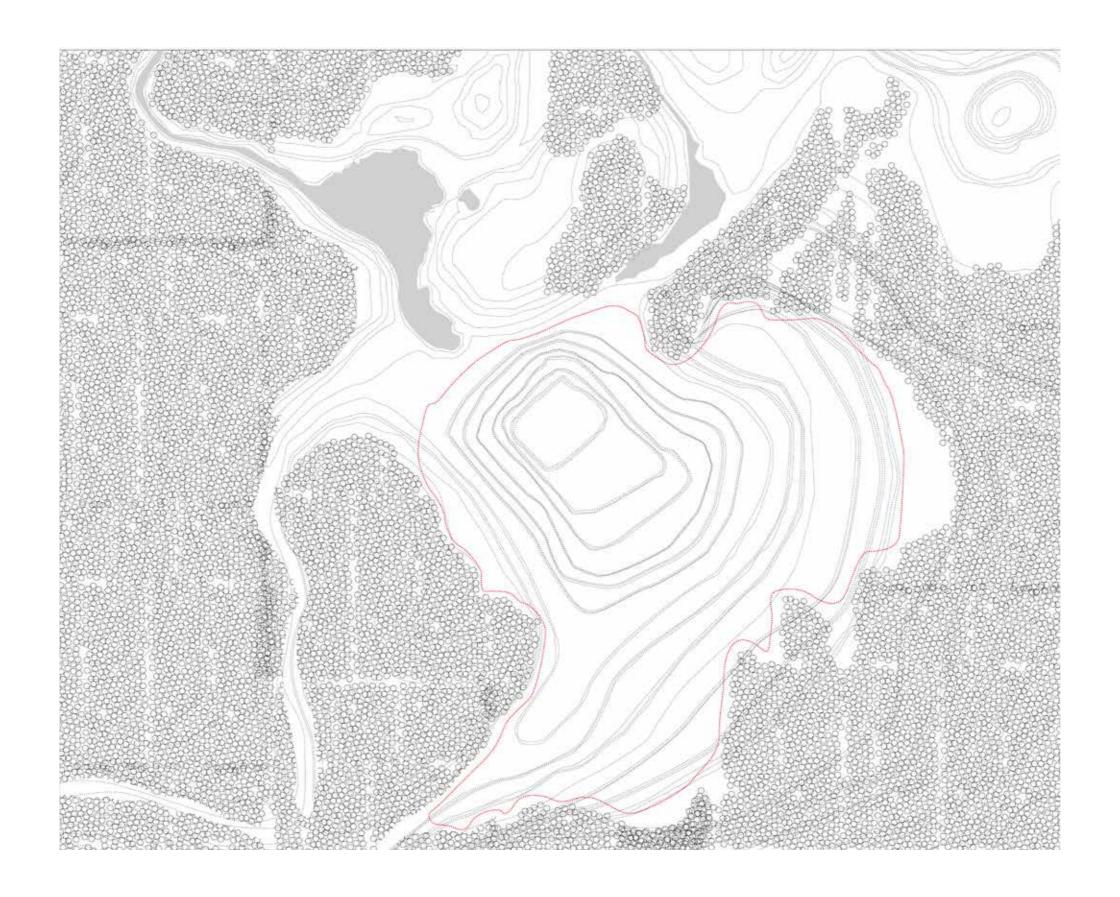
Water treatment facility | Post-extraction



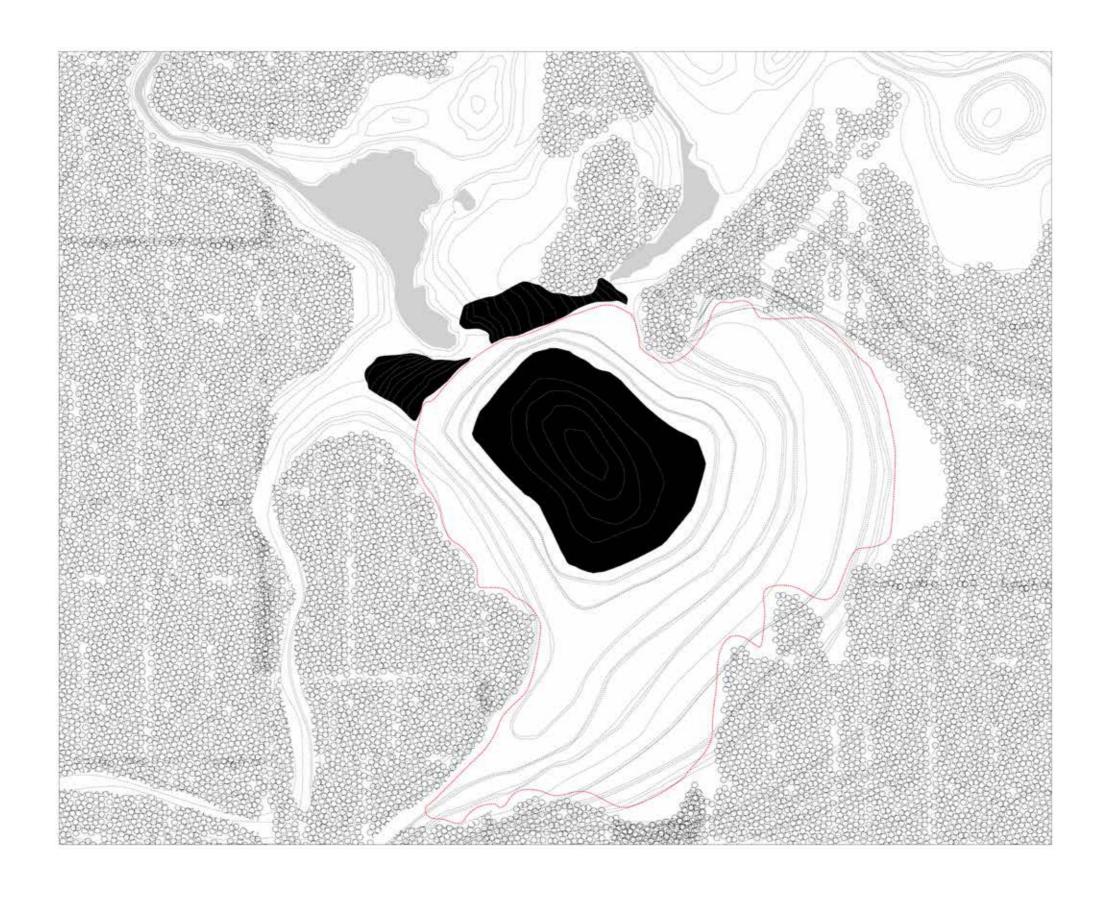
Water treatment facility | Post-extraction



Water treatment facility | Current condition



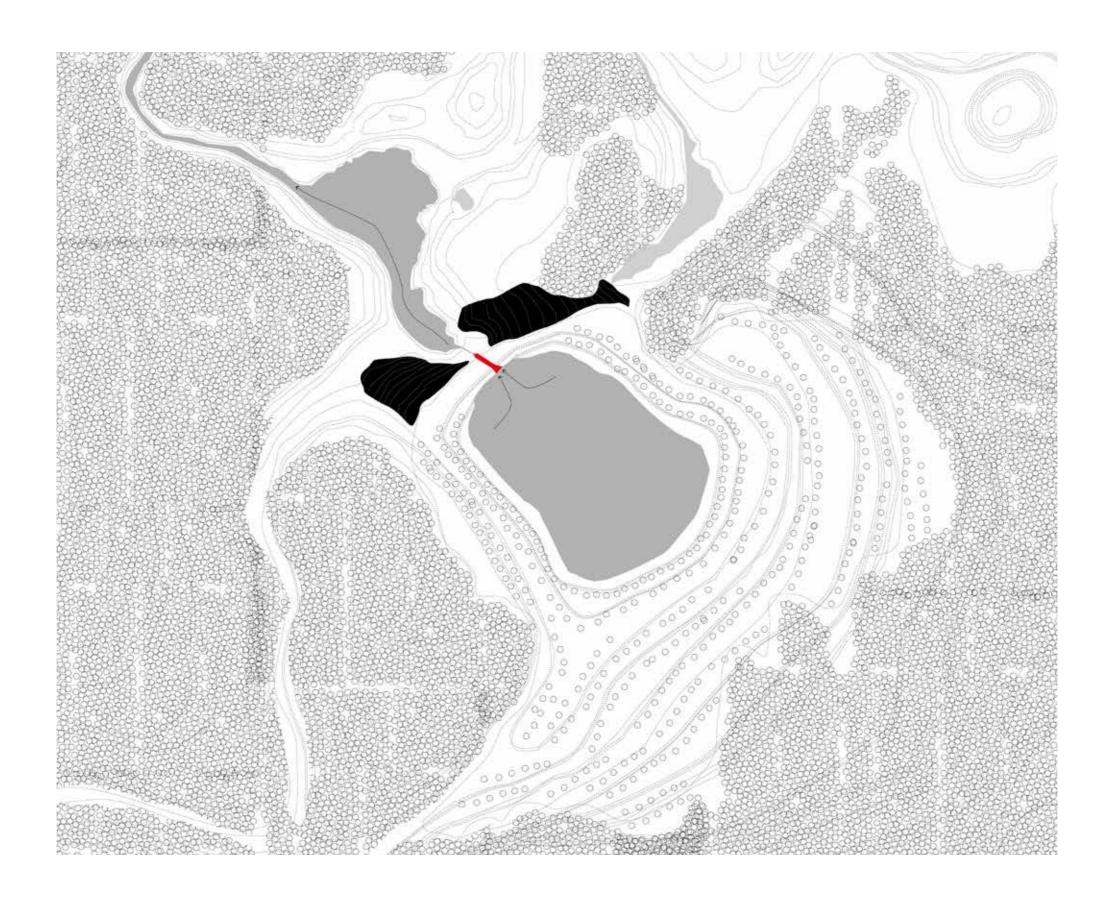
Water treatment facility | Partial backfill



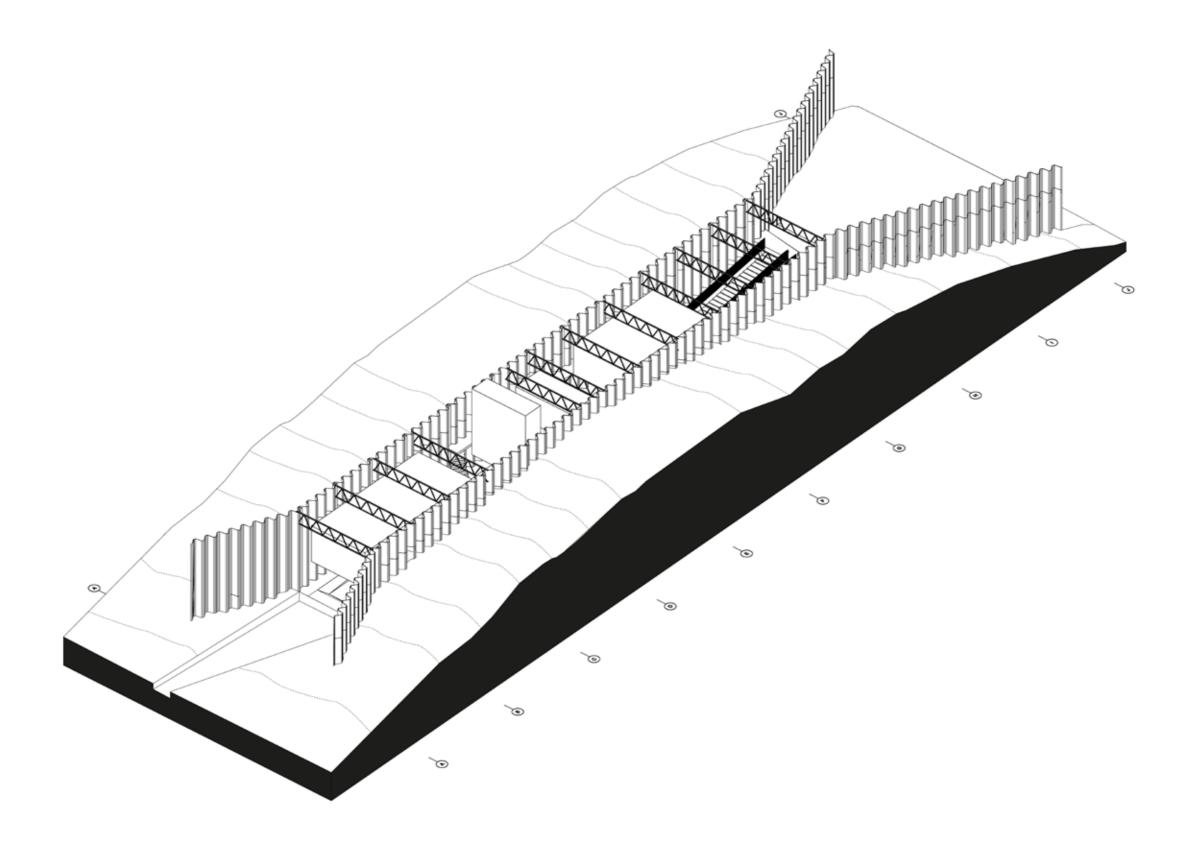
Water treatment facility | End pit lake



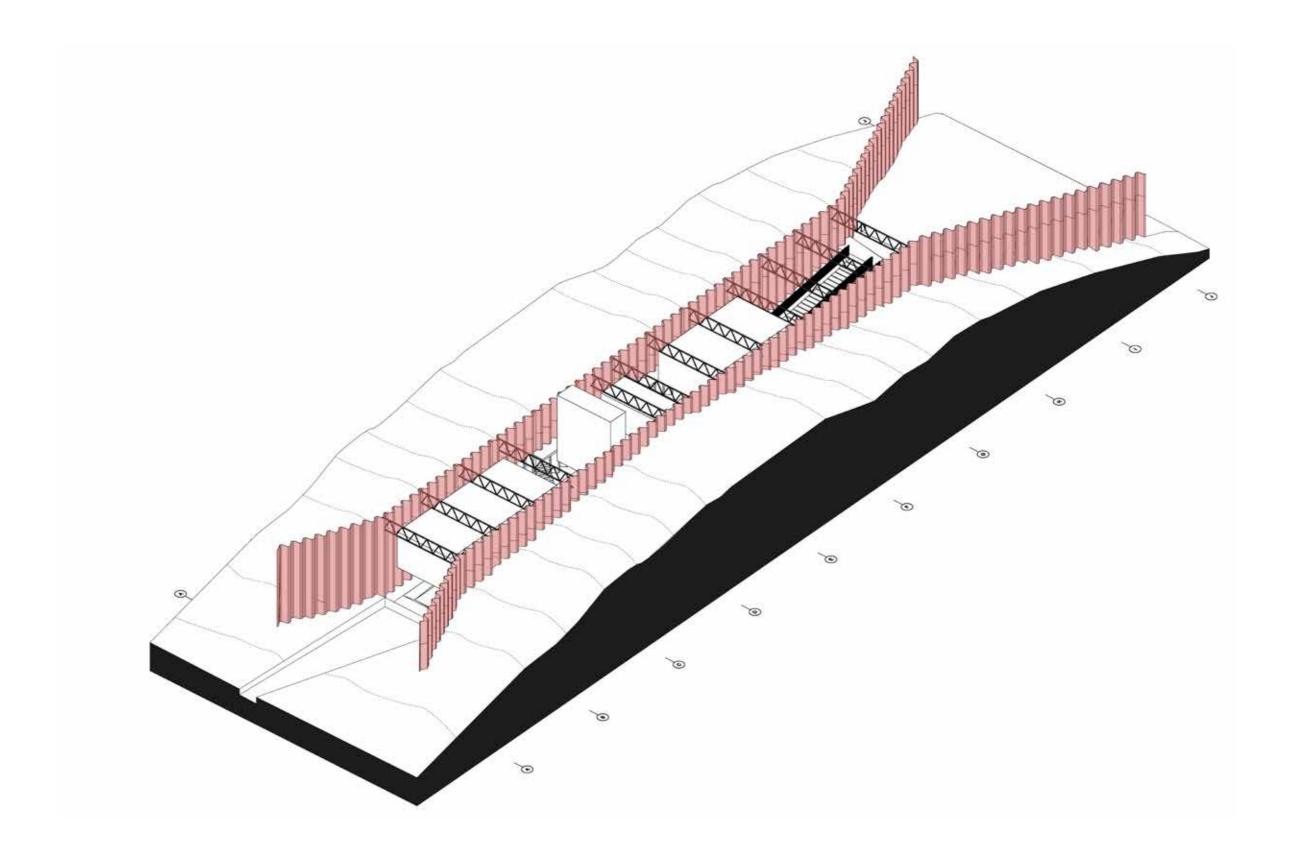
Water treatment facility | Intervention



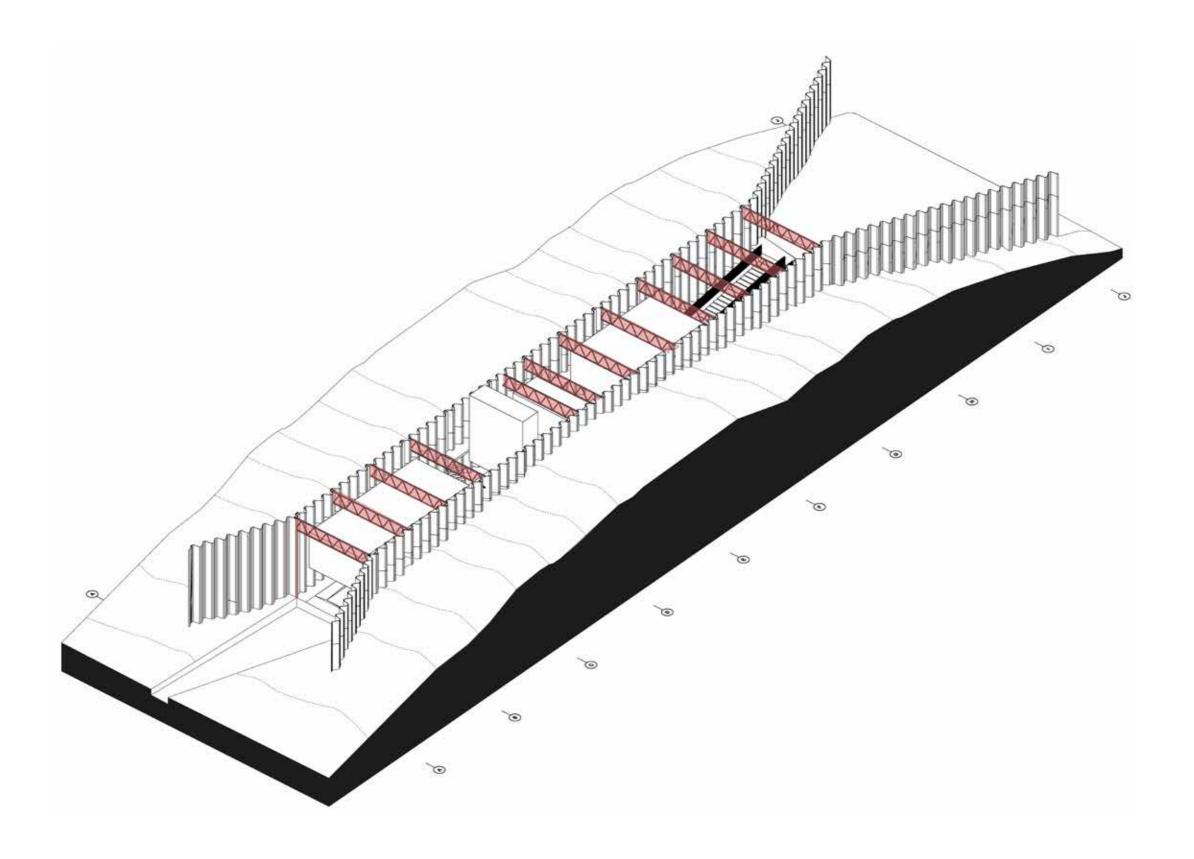
Water treatment facility | Design principles



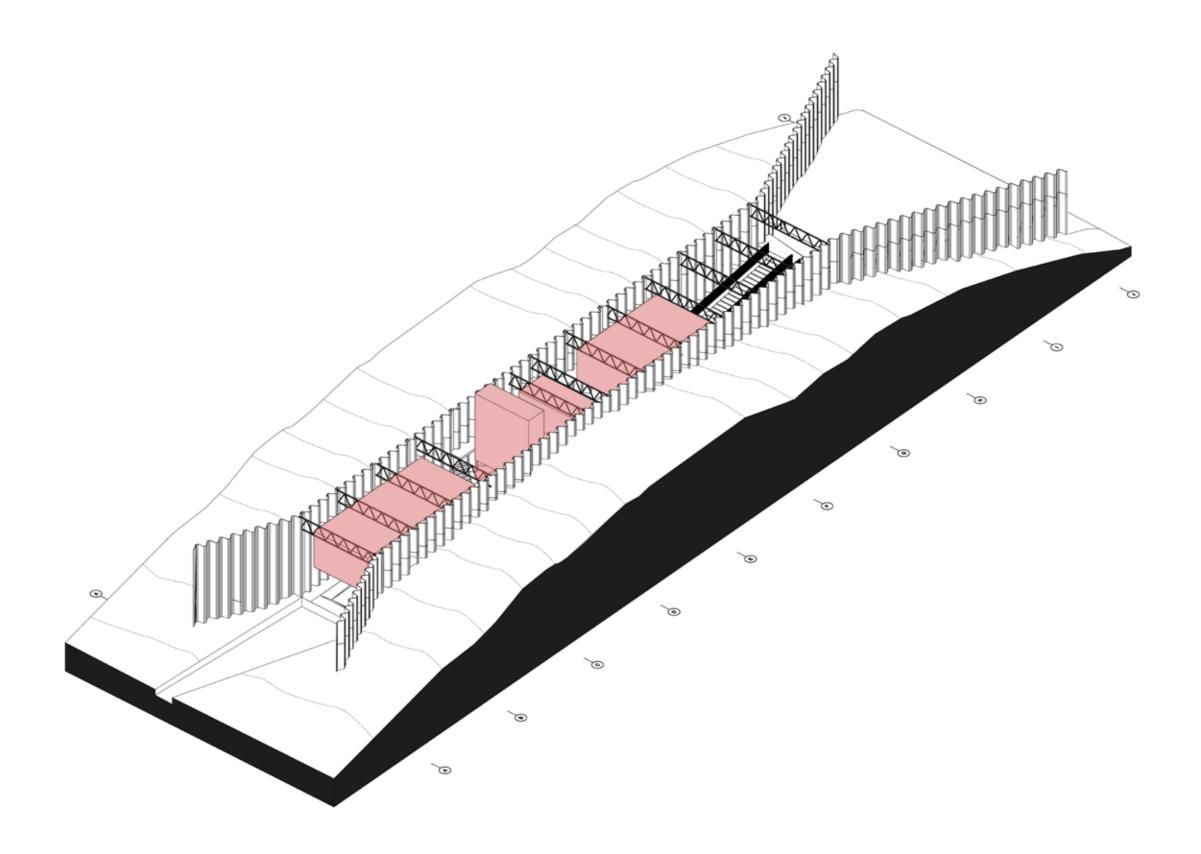
Water treatment facility | Design act



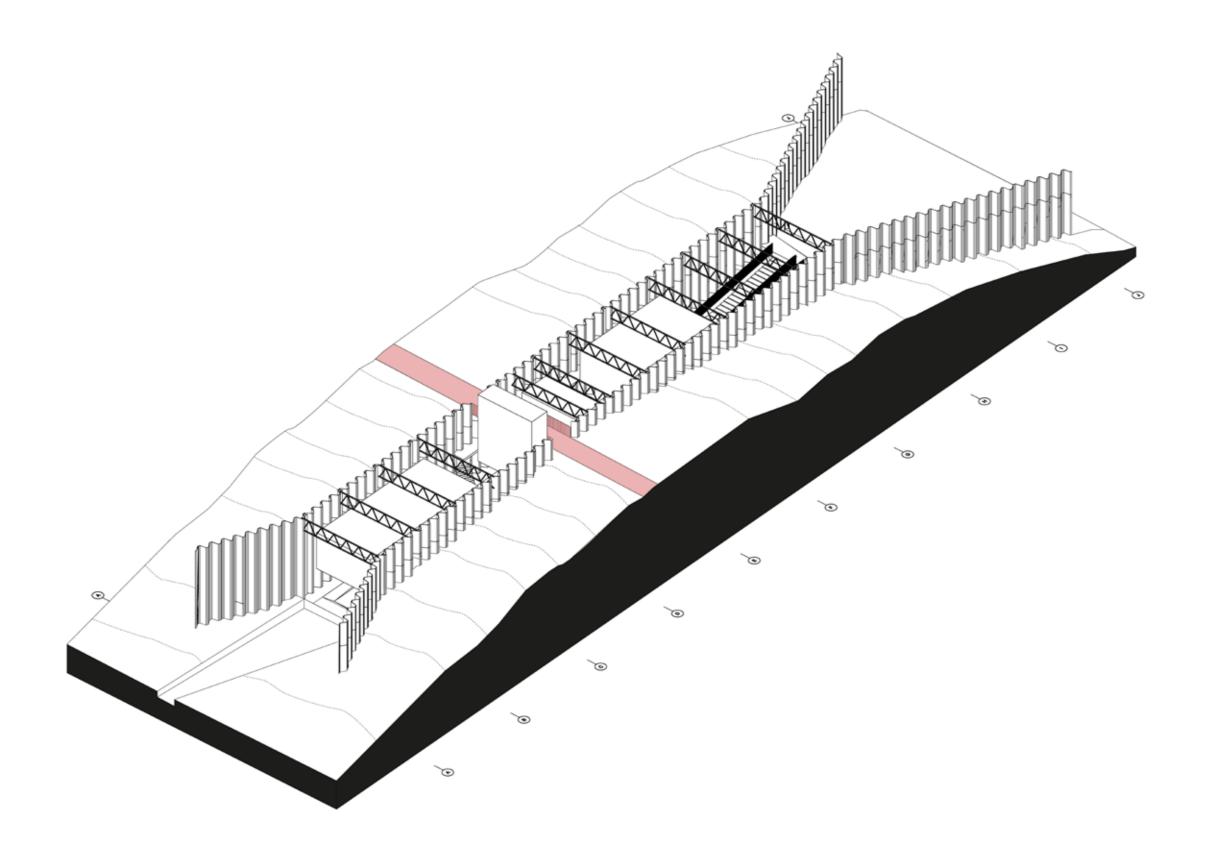
Water treatment facility | Load bearing structure



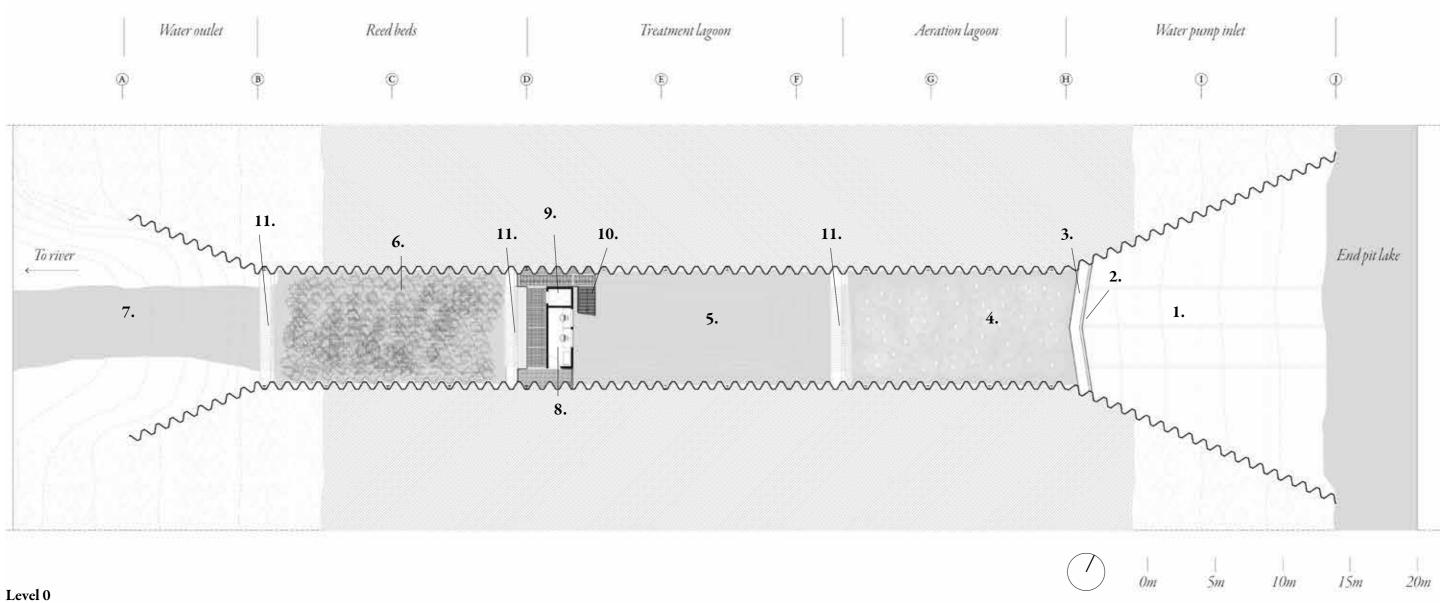
Water treatment facility | Programmatic volumes



Water treatment facility | Access



Water treatment facility | Level 0 - Water treatment

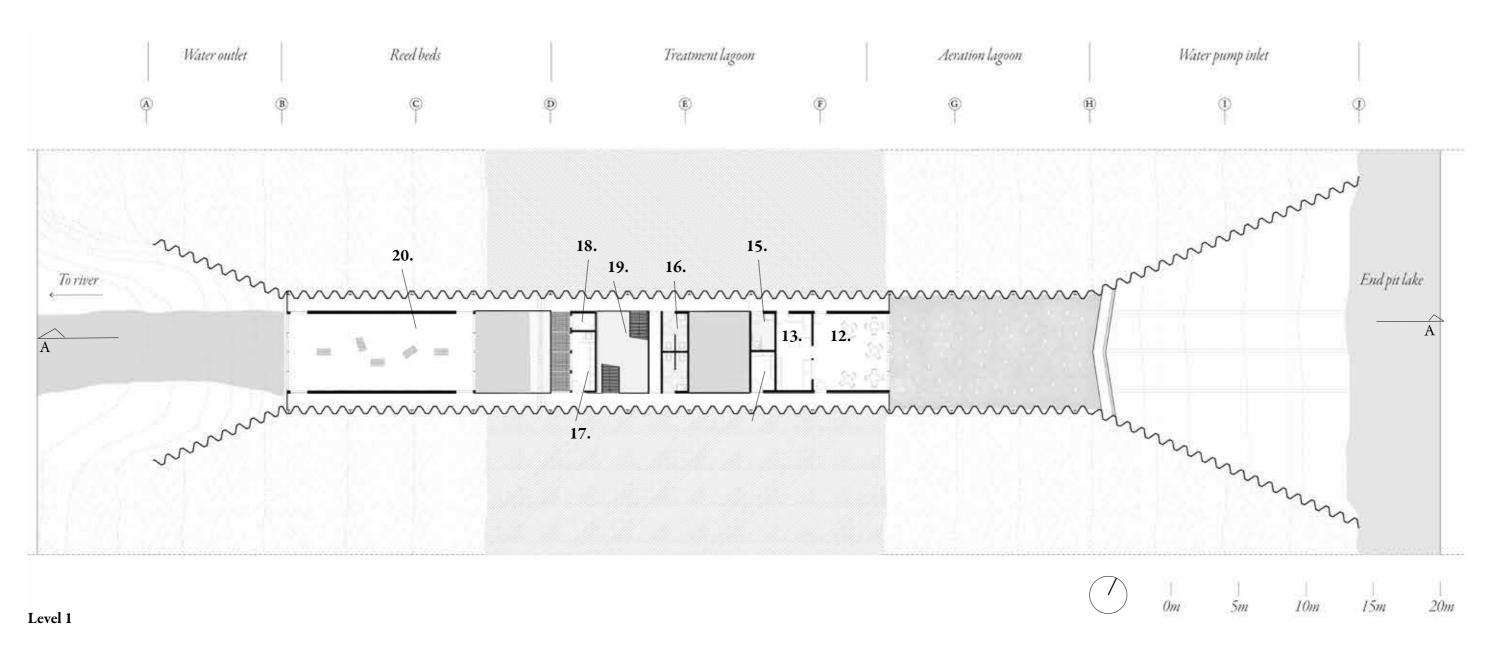


7. Outlet 1. Water pumps 8. Control room 2. Inlet 3. Retaining wall 9. Lift

4. Aeration 10. Stairs 11. Filter 5. Treatment

6. Reed beds

Water treatment facility | Level 1 - Visitor Centre



12. Cafe

18. Lift

13. Kitchen14. Storage

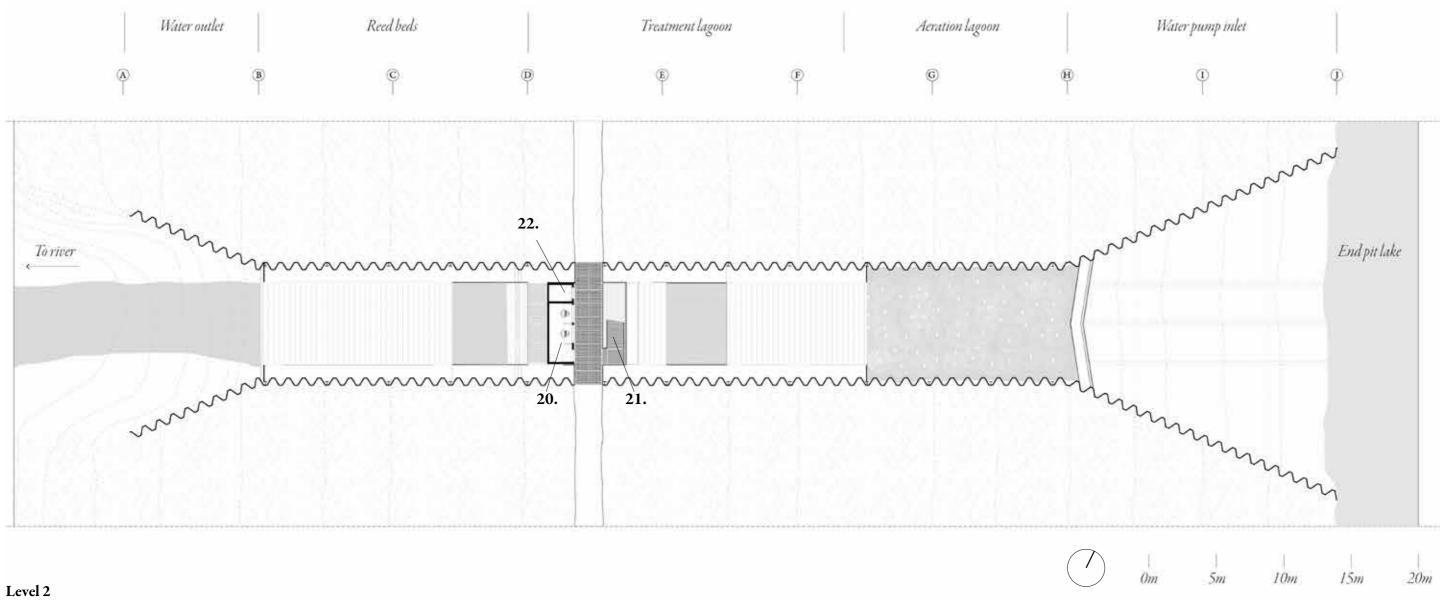
19. Stairs20. Exhibition

15. Disabled toilet

16. Toilet

17. Shop

Water treatment facility | Level 2 - Entrance

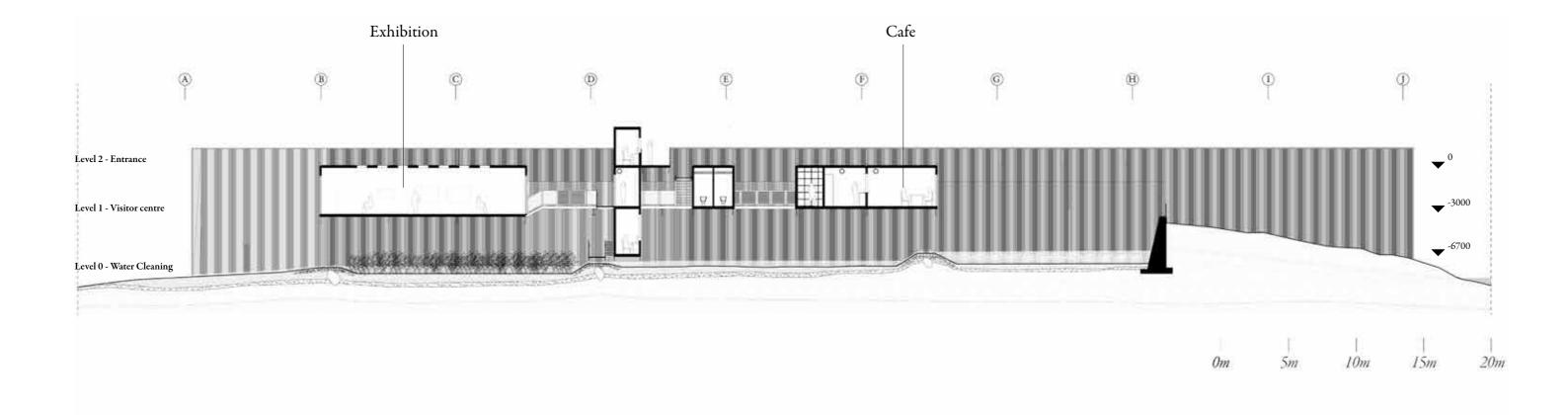


20.Reception

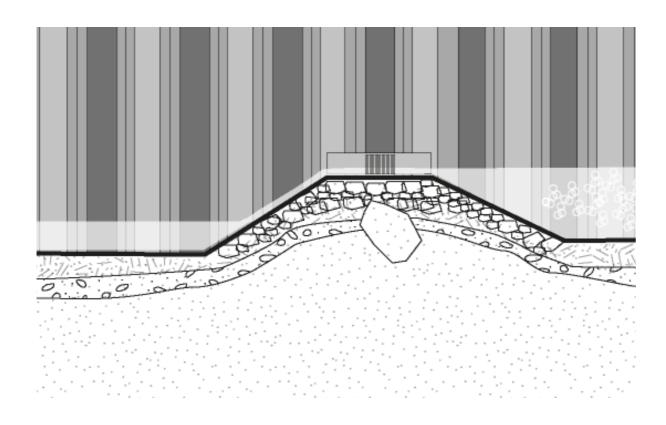
21. Stairs

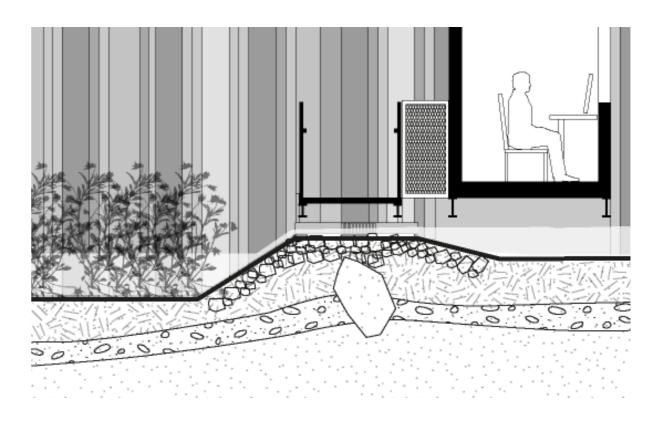
22. Lift

Water treatment facility | Section

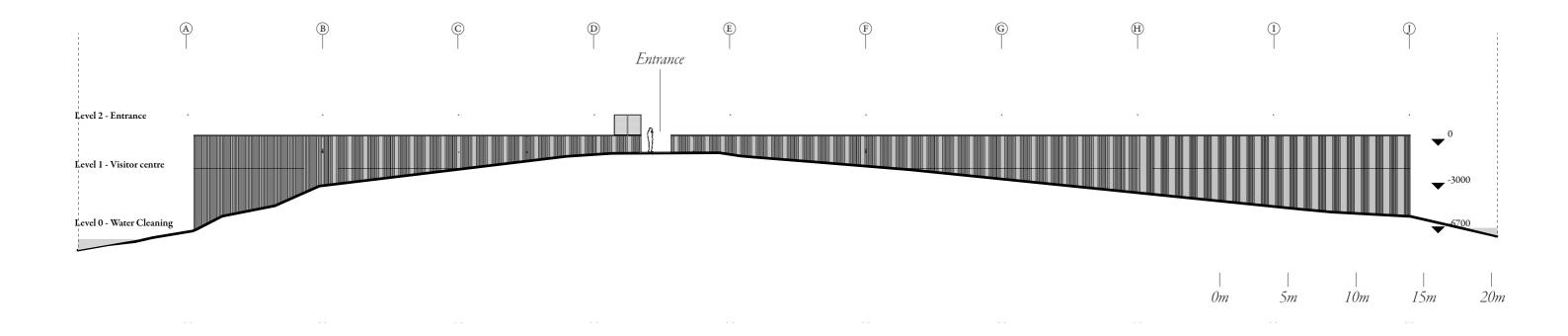


Water treatment facility | Filters

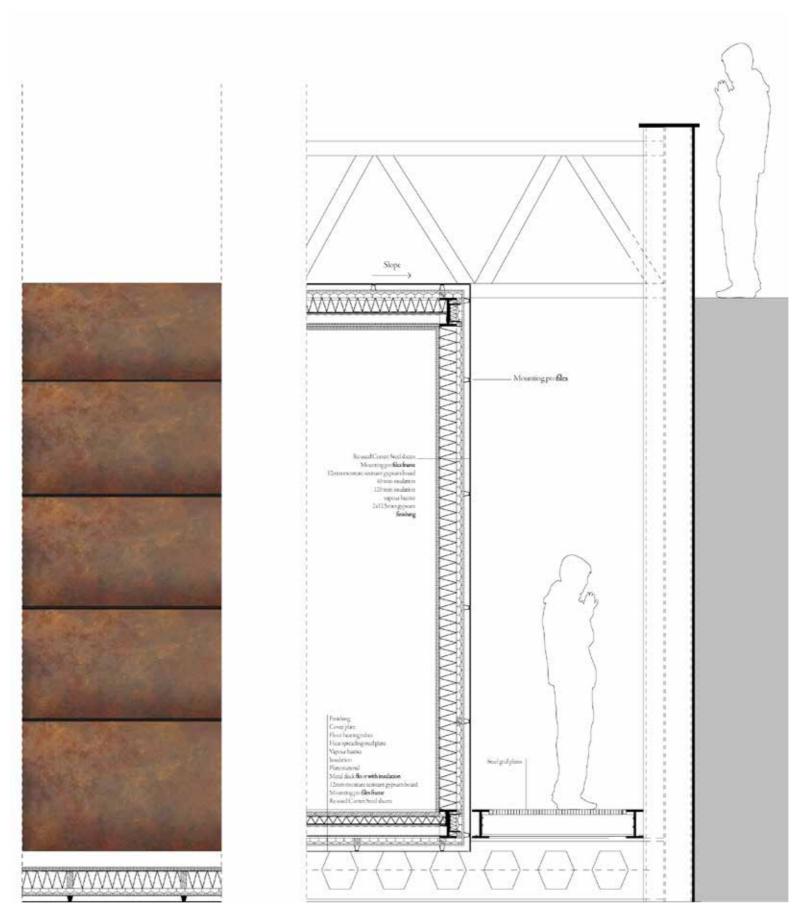




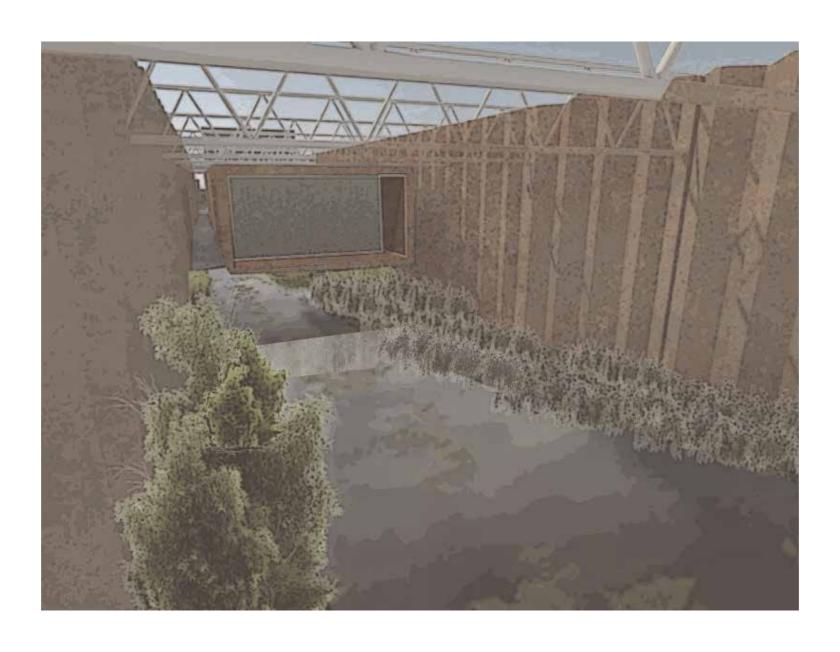
Water treatment facility | Elevation



Water treatment facility | Detail

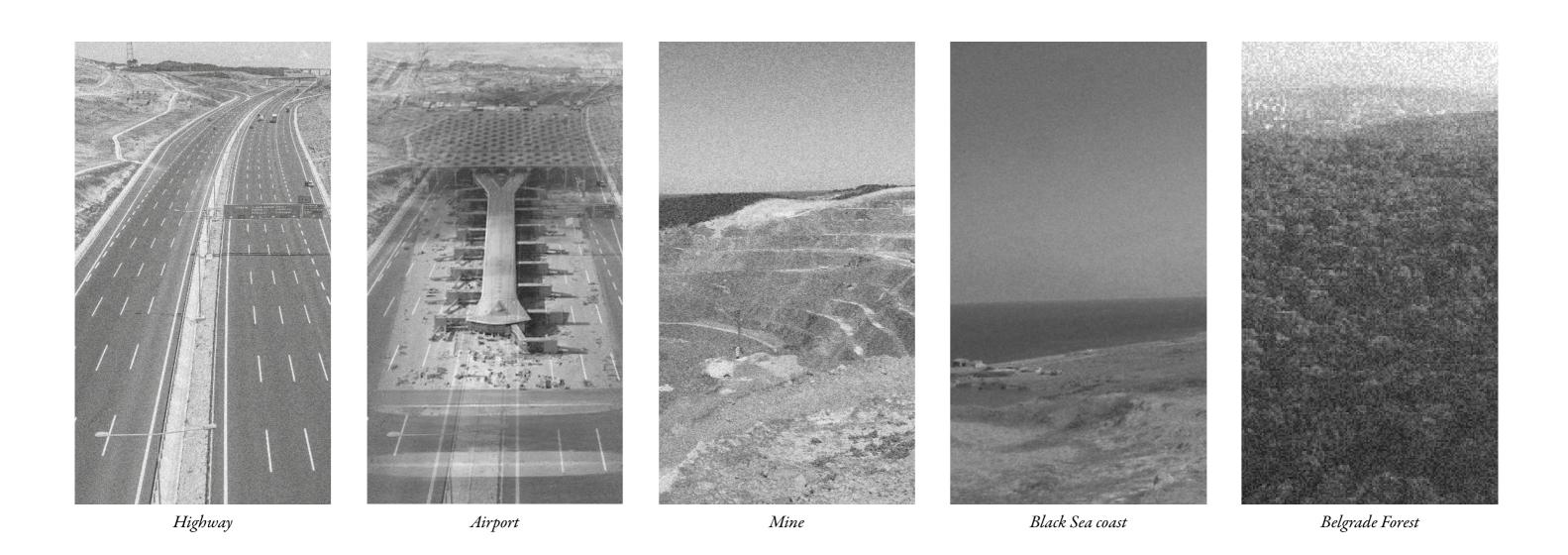


Water treatment facility | Void

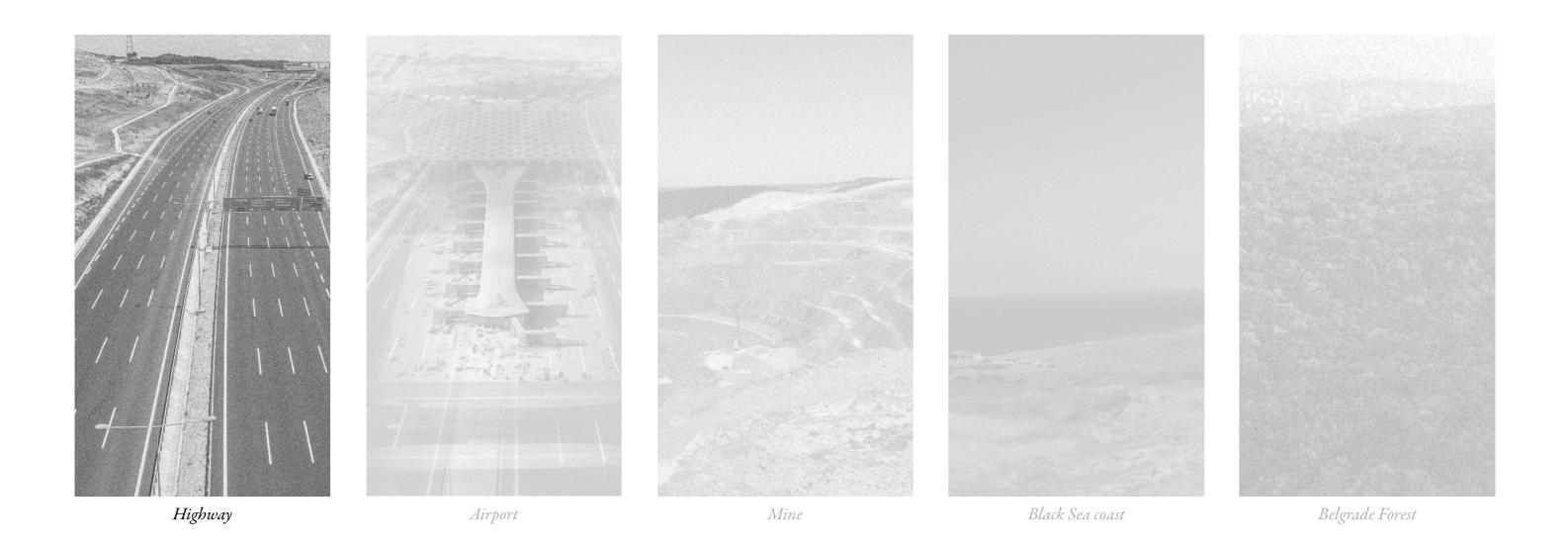


- 1. Introduction | Exploring Istanbul's soil
- 2. Ağaçli | Hinterland in transition
- 3. Research statement
- **4. Projection** | Remediating the territory
- 5. Object 1 | Topsoil maintenance centre
- **6. Object 2** | Water treatment facility
- 7. Object 3 | Highway rest stop

Highway rest stop | Panorama of different ecologies



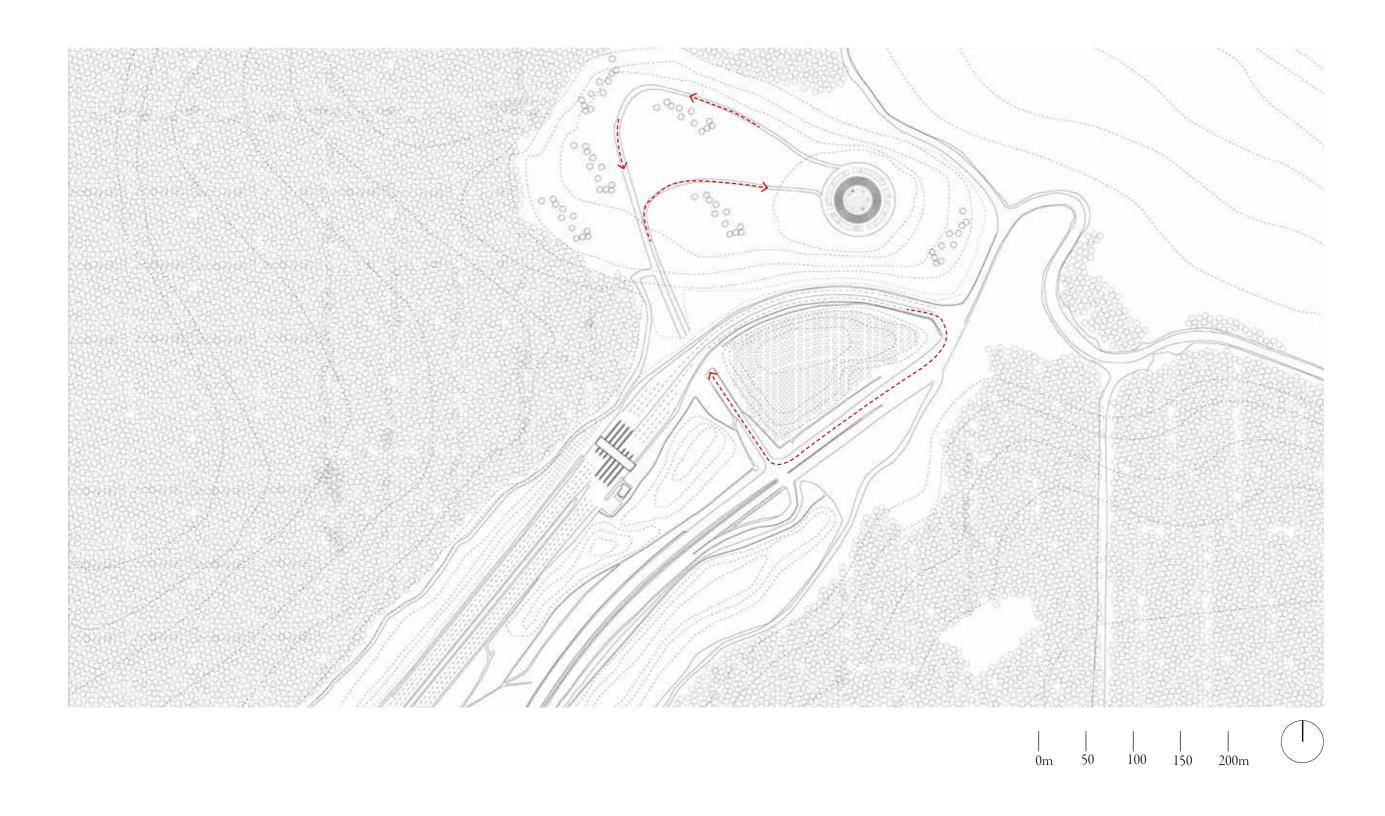
Highway rest stop | Panorama of different ecologies



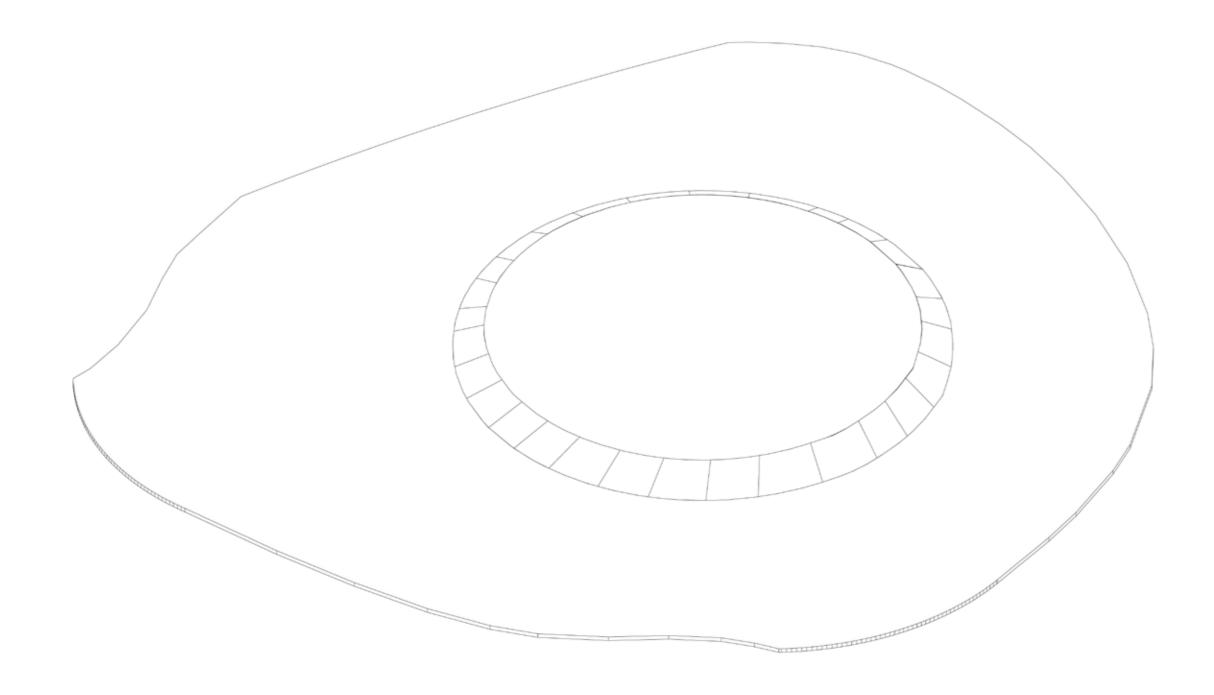
Highway rest stop | Current site condition



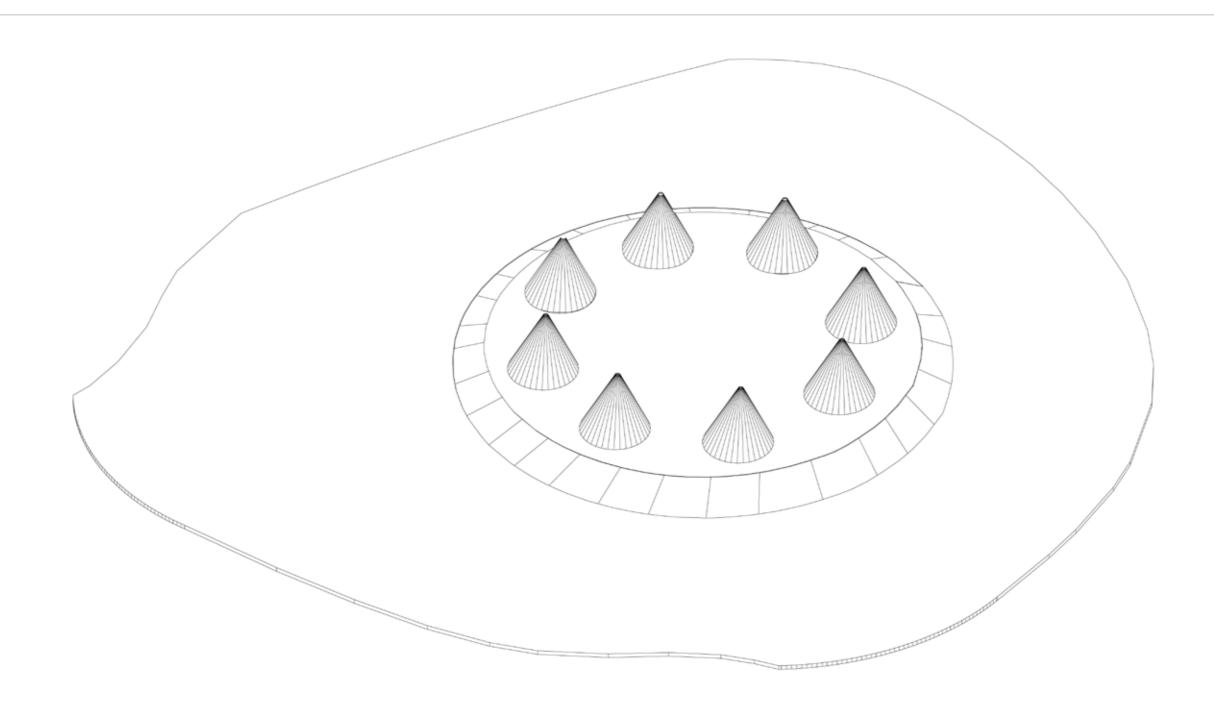
Highway rest stop | Intervention proposal



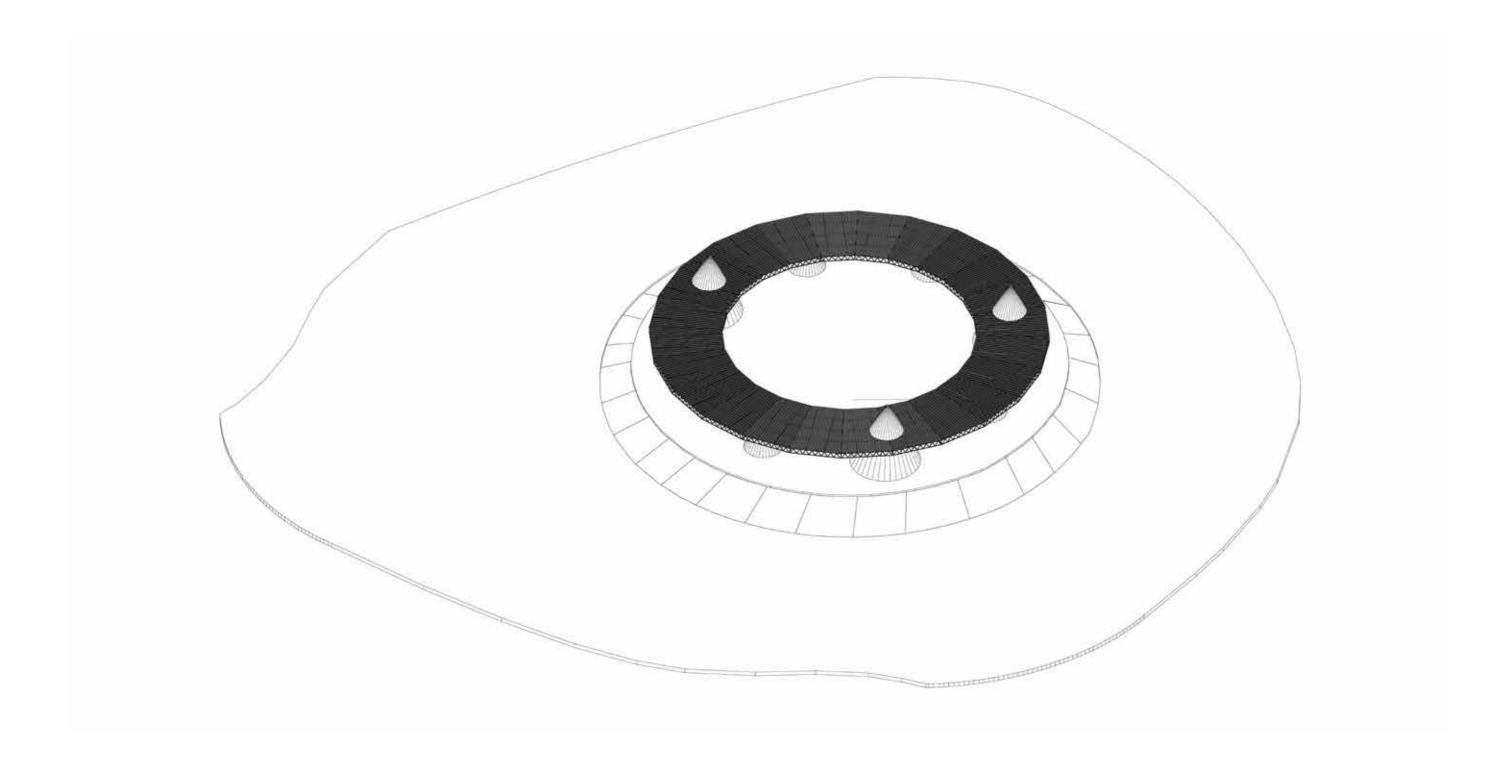
Highway rest stop | Elevated soil foundation



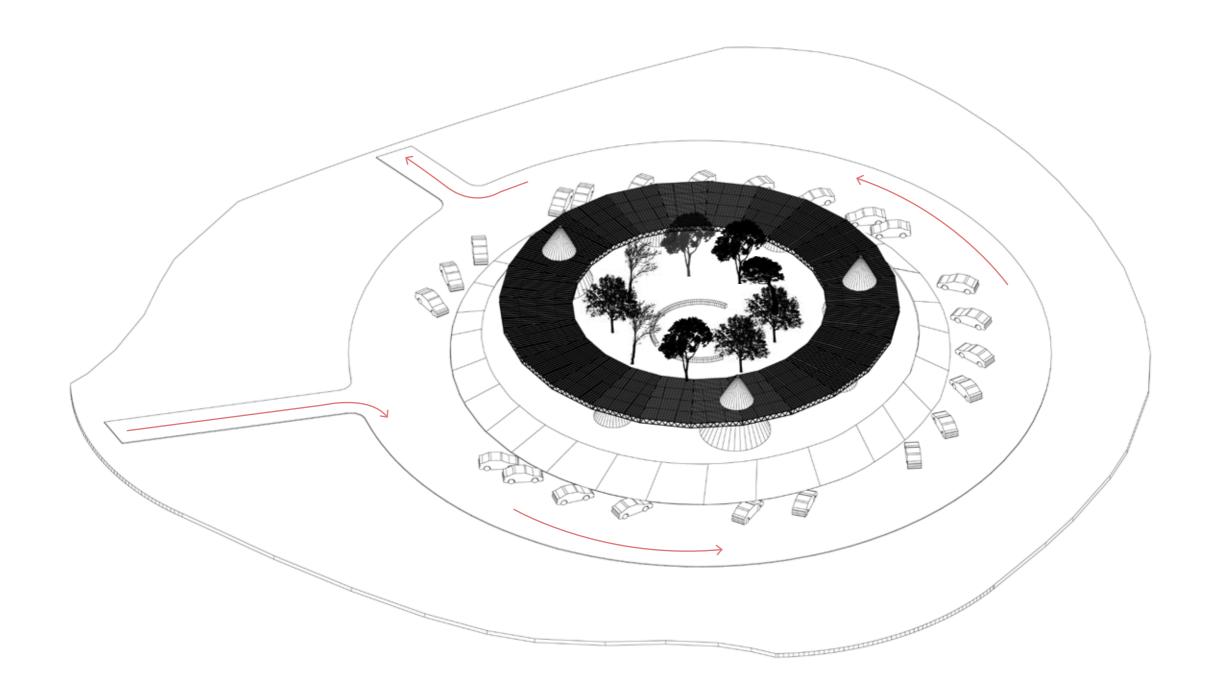
Highway rest stop | Earthworks



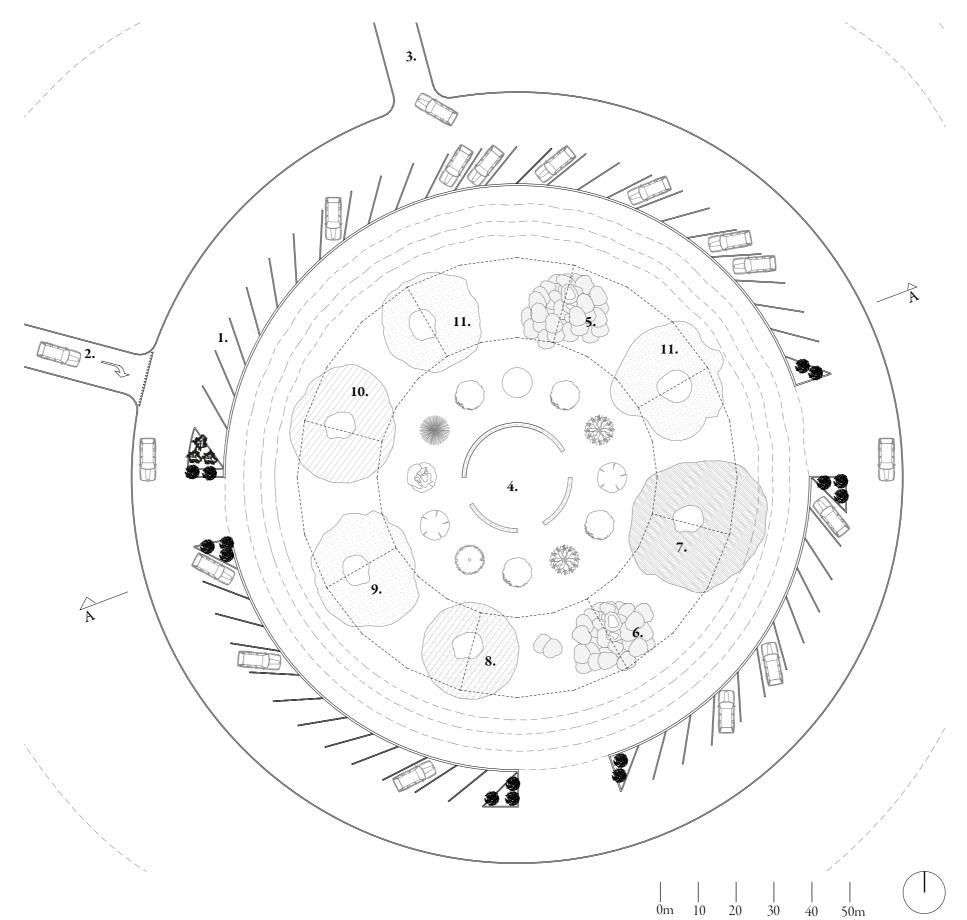
Highway rest stop | Roof



Highway rest stop | Access



Highway rest stop | Plan



Legend

- Parking
 Entrance road
- 3. Exit road
- 4. Seating

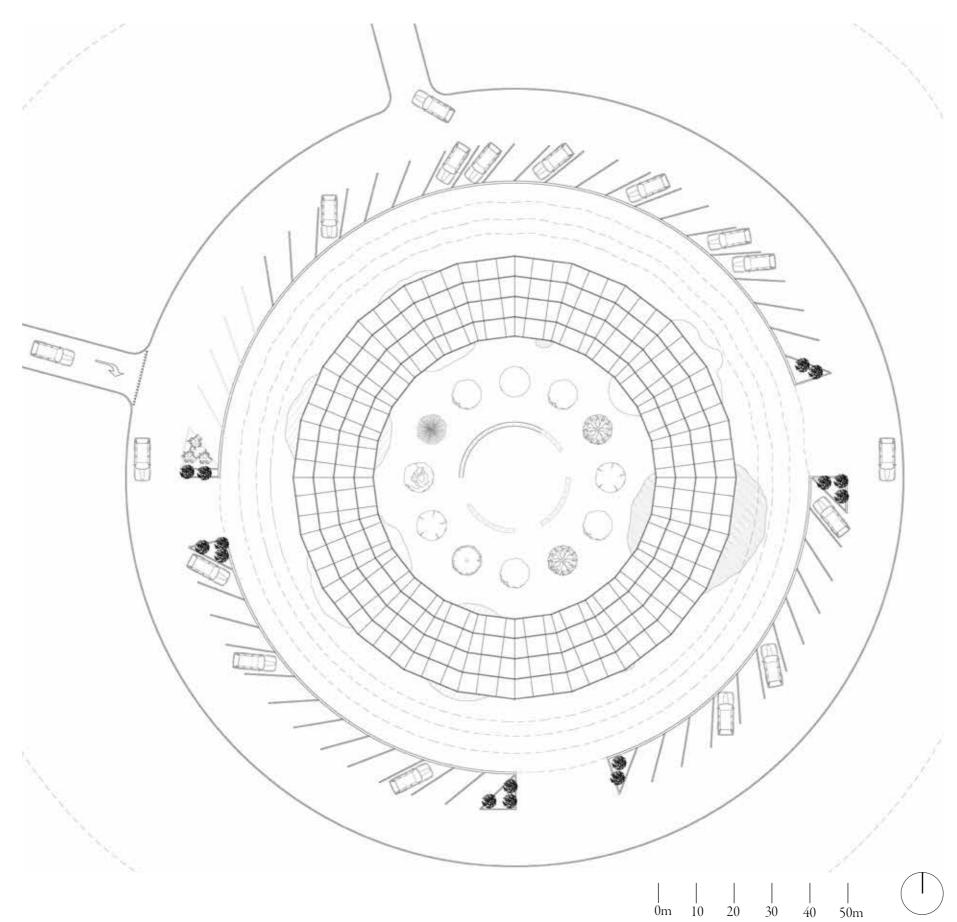
Soil columns

- 5. Sandstone
- 6. Crushed concrete
 7. Sand-silt mixture

- 8. Chippings
 9. Clayey sand
 10.Gravel
- 11. Gravel sand

111

Highway rest stop | Roof



Legend

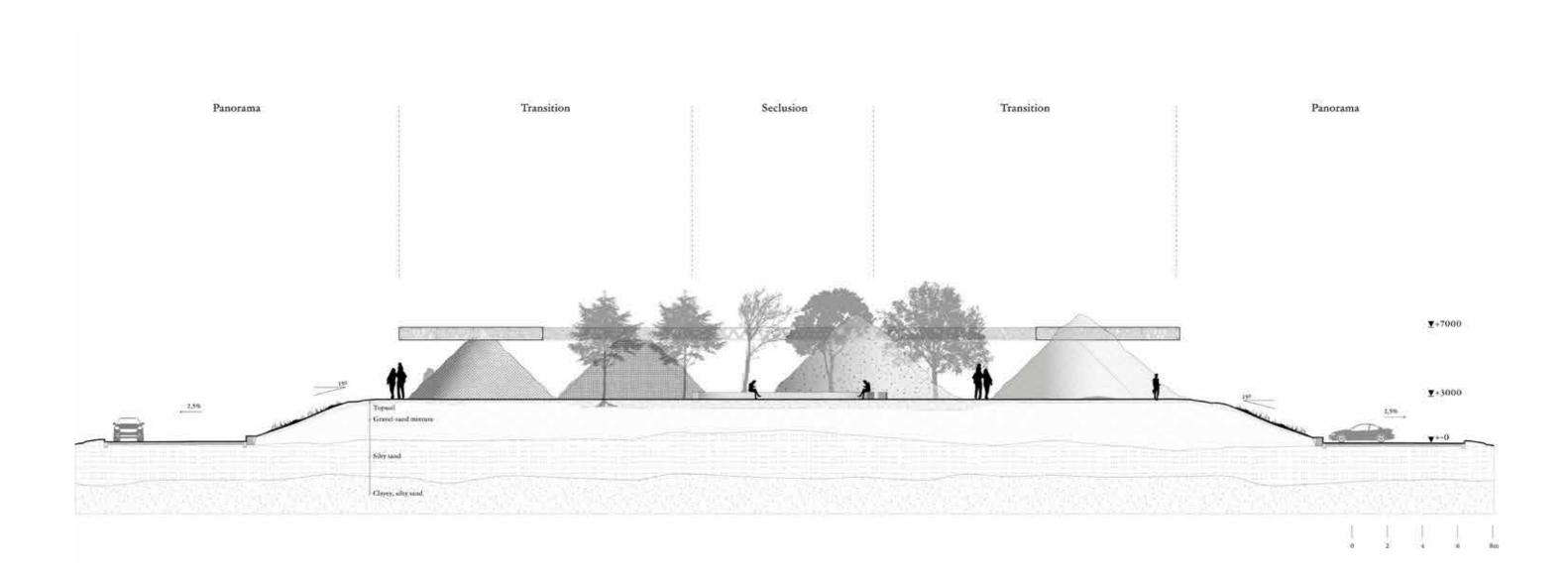
- Parking
 Entrance road
- 3. Exit road
- 4. Seating

Soil columns

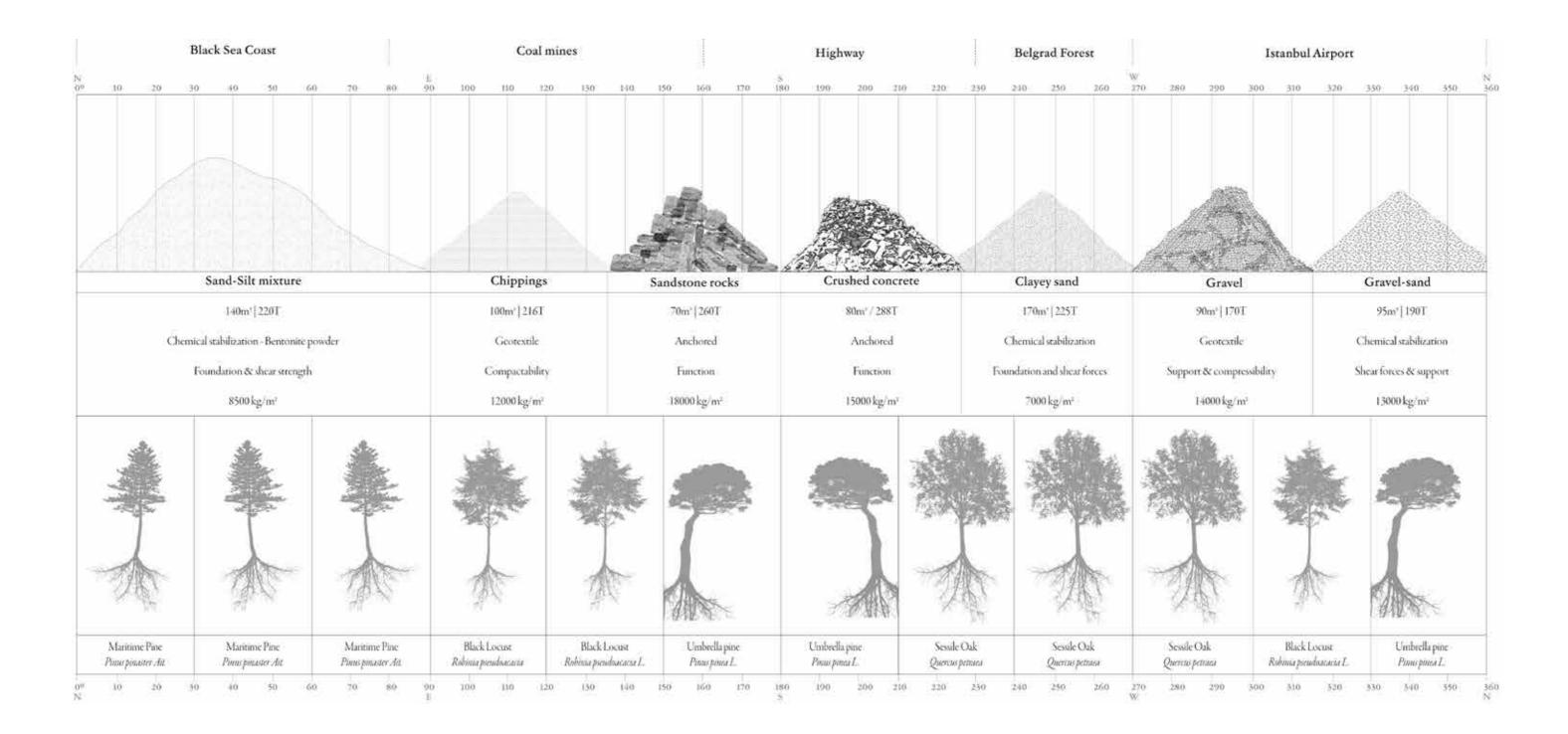
- 5. Sandstone
- 6. Crushed concrete
 7. Sand-silt mixture

- 8. Chippings
 9. Clayey sand
 10.Gravel
- 11. Gravel sand

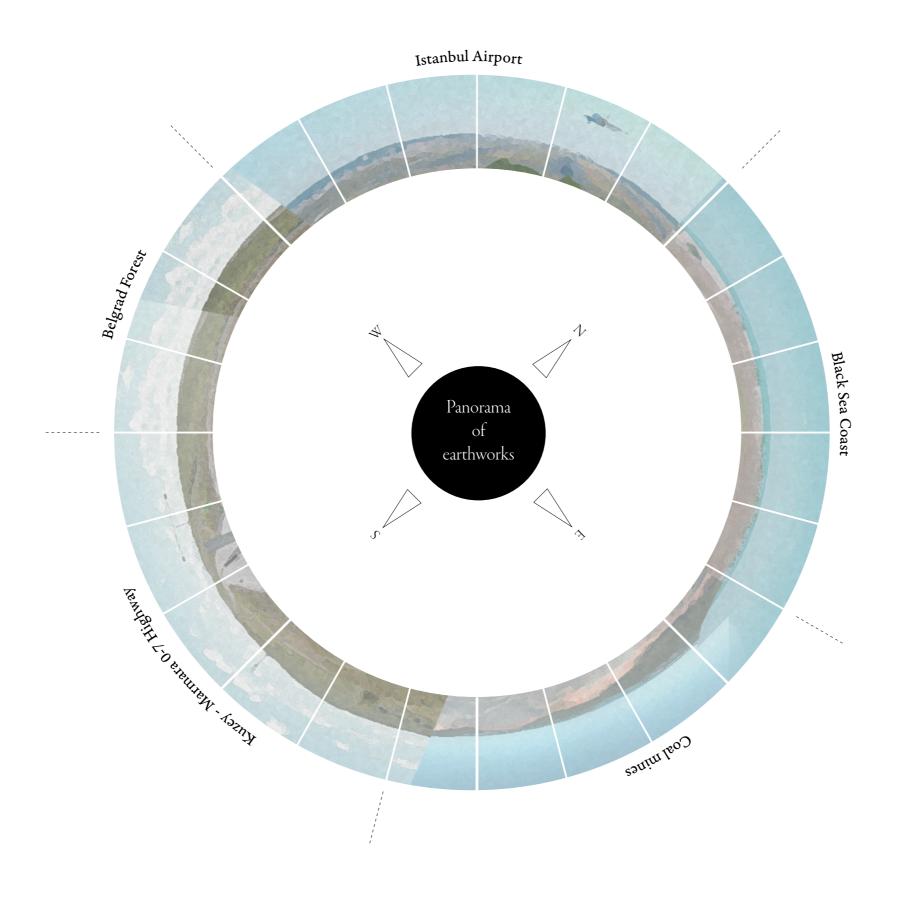
Highway rest stop | Section



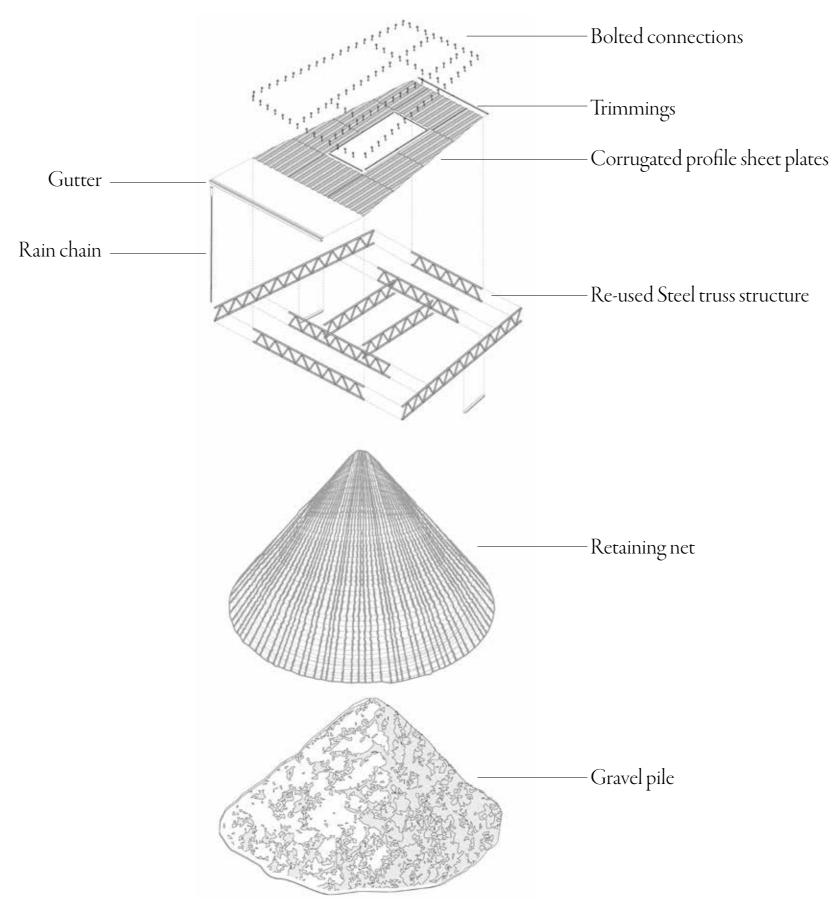
Highway rest stop | Panorama



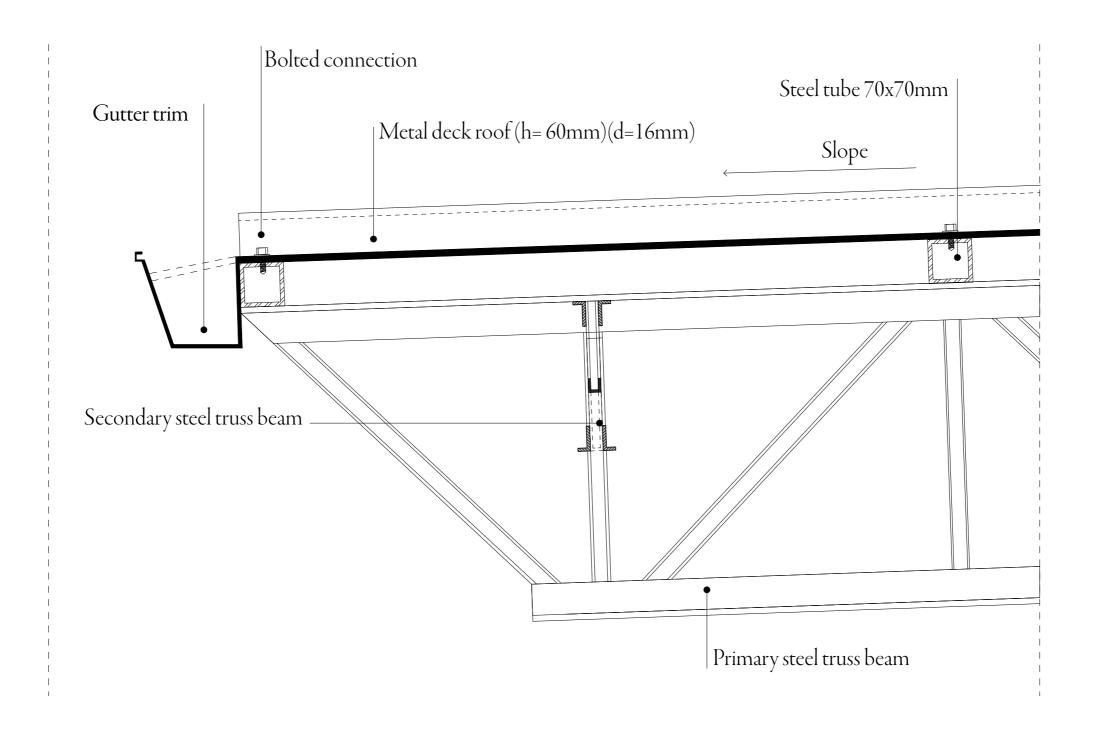
Highway rest stop | Panorama of different ecologies



Highway rest stop | Column



Highway rest stop | Roof detail



Highway rest stop | Seclusion



Highway rest stop | Panorama

