



CHERNObYL

Revival In Postnuclear Era:
A Resilient Defensive Landscape For
Dark Tourism In Chernobyl

Country / City China, Wuhan
University / School Huazhong University of Science and Technology
Academic year 2019-2020
Title of the project Revival In Postnuclear Era: A Resilient Defensive System for Dark Tourism in Chernobyl
Authors Yazhe Liu, Peizhe Wang, Mengyao He, Xiaoyi Yuan

TECHNICAL DOSSIER

Title of the project	Revival In Postnuclear Era: A Resilient Defensive System for Dark Tourism in Chernobyl
Authors	Yazhe Liu, Peize Wang, Mengyao He, Xiaoyi Yuan
Title of the course	Landscape Architecture Planning Studio
Academic year	2019-2020
Teaching Staff	Fei Dai, Li Jingqi, Chen Wen, Chang Su
Department/Section/Program of belonging	School of Architecture and Urban Planning, Department of Landscape Architecture
University/School	Huazhong University of Science and Technology



Written statement, short description of the project in English, no more than 250 words

In April 2020, a forest fire near Chernobyl Exclusion Zone caught people's attention. Compared with the shadow of the historical incident of nuclear radiation leakage that broke out in 1986, the fire has also been a disaster factor that the site cannot be taken lightly. In addition to the basic hazards during and after disasters, the spread of fire is also likely to generate a surge and spread of radiation here, and cause serious consequences that are difficult to estimate. Under the sharp contradiction, we hope to enable the fire defense as the starting point and take tourism development as an opportunity to conduct an elastic defense mechanism for disaster factors such as floods and fires. This work intervenes in the three basic dimensions of Chernobyl Exclusion Zone II (the area from the 10-km boundary to the 30-km boundary outside the exclusion zone), I (10-km area) and the core industrial use area, put forward strategies such as the overall mechanism of coordination between the disaster prevention system and tourism resources, the landscape infrastructure with disaster prevention function, and the construction of a hydrological system that responds flexibly to multiple disasters, ultimately make positive imaginations about the future guarantee and revival of this special space.

For further information
Máster d'Arquitectura del Paisatge -DUOT - UPC

T: + 34 93 401 64 11 / +34 93 552 0842
Contact via email at: biennal.paisatge@upc.edu

Máster d'Arquitectura del Paisatge -DUOT - UPC
ETSAB- Escola Tècnica Superior
d'Arquitectura de Barcelona
Avenida Diagonal, 649 piso 5
08028 Barcelona-Spain



CLIMATE CHANGE AGAIN

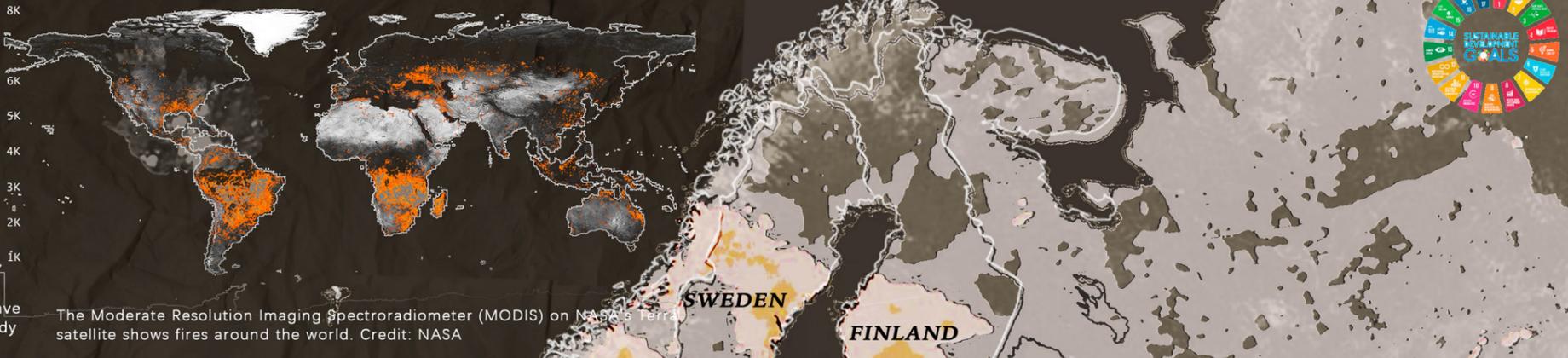
11th International Biennial Landscape Barcelona

Barcelona September 2020
SCHOOL PRIZE

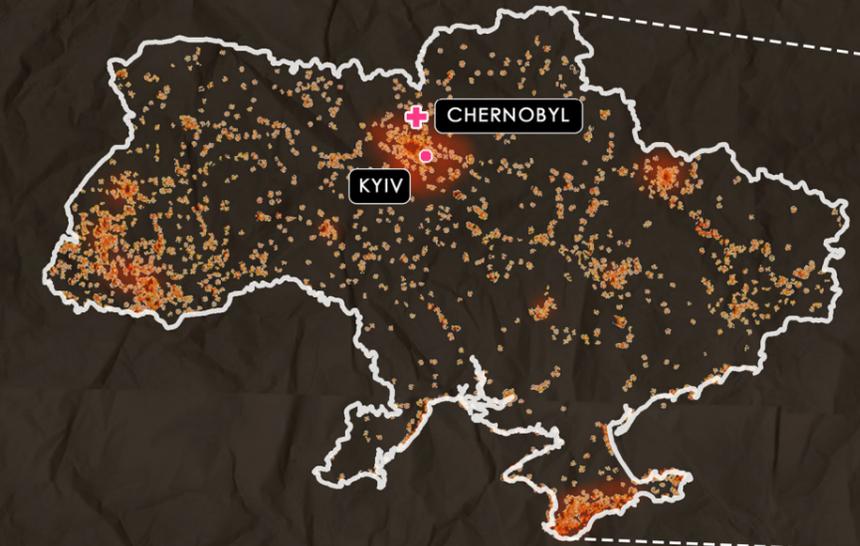


The effects of the Euromaidan Revolution, political turbulence, and economic instability have taken a heavy toll on Ukraine's entire economy, but some sectors such as tourism is already on the rebound.

12.38% Ukrainian tourism revenue increased from 2018

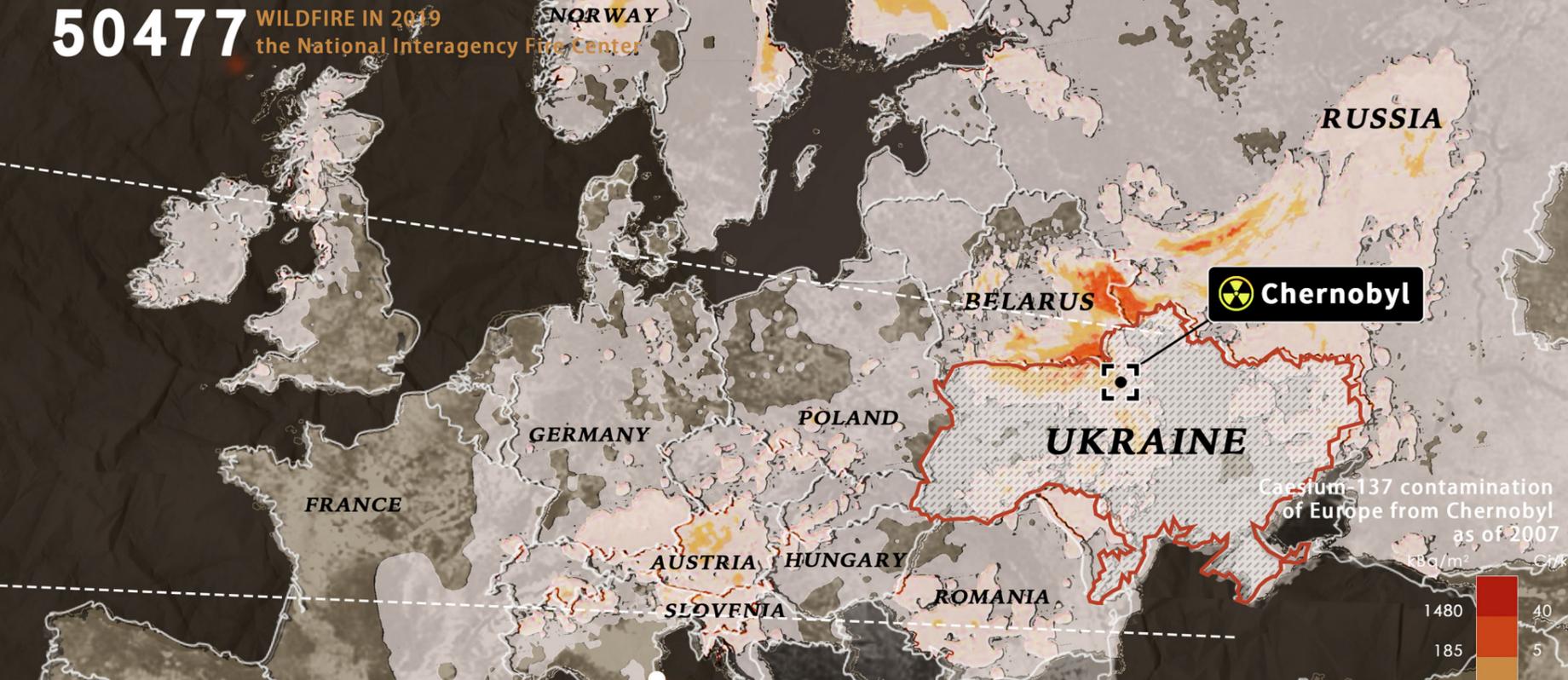


50477 WILDFIRE IN 2019 the National Interagency Fire Center



Point mapping of tourist objects on the map of Ukraine

8041 CHERNOBYL VISITOR IN 2014 **12591** CHERNOBYL VISITOR IN 2019



Caesium-137 contamination of Europe from Chernobyl as of 2007

The Chernihiv-Ovruch Railway is a partially electrified and partially operational single-track railway line that stretches between the town of Ovruch and the city of Chernihiv

Amusement Park The park has never received any tourists since the opening plan was held in May 1986.

POPULATION
150,000
100,000
50,000



1193 Town of Chernobyl founded

1922 Formation of Soviet Socialist Republic of Ukraine

1970 Construction begins on the V.I. Lenin Nuclear Power Satation(now known as CNPP)&of te town og Pripyat

26, April, 1986 An explosion in 4th reactor at CNPP causes a melt down

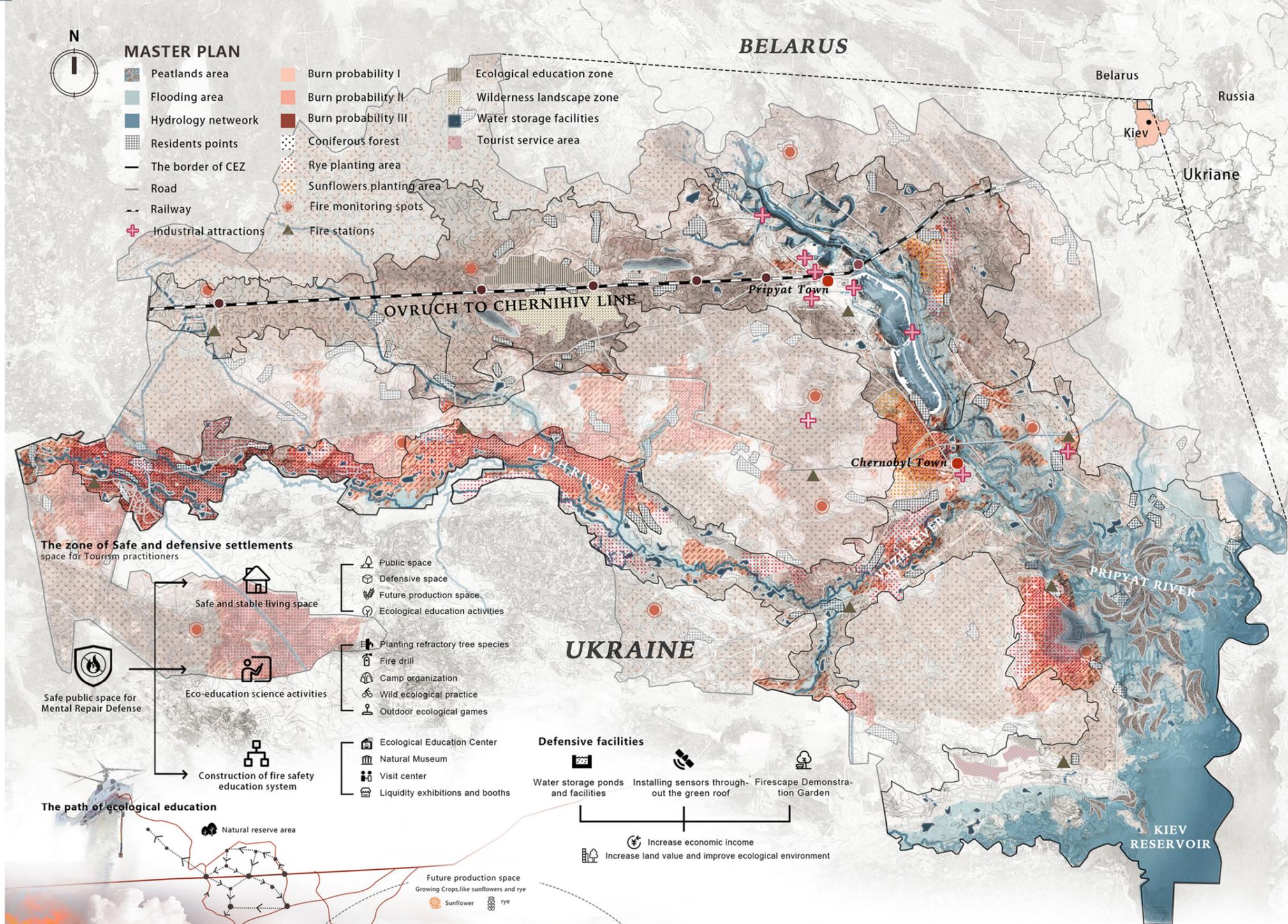
2011 Ukraine's Emergencies Ministry officially began licensing tourist trips

2020 The Chernobyl one is turning terribly which may cause nuclear radiation exposure



MASTER PLAN

- Peatlands area
- Flooding area
- Hydrology network
- Residents points
- The border of CEZ
- Road
- Railway
- Industrial attractions
- Burn probability I
- Burn probability II
- Burn probability III
- Coniferous forest
- Rye planting area
- Sunflowers planting area
- Fire monitoring spots
- Fire stations
- Ecological education zone
- Wilderness landscape zone
- Water storage facilities
- Tourist service area



The zone of Safe and defensive settlements

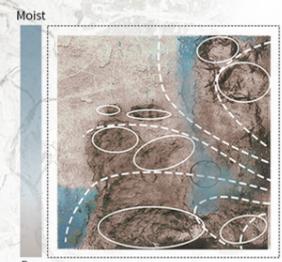
- Public space
- Defensive space
- Future production space
- Ecological education activities
- Planting refractory tree species
- Fire drill
- Camp organization
- Wild ecological practice
- Outdoor ecological games
- Ecological Education Center
- Natural Museum
- Visit center
- Liquidity exhibitions and booths

Defensive facilities

- Water storage ponds and facilities
- Installing sensors throughout the green roof
- Firescape Demonstration Garden
- Increase economic income
- Increase land value and improve ecological environment

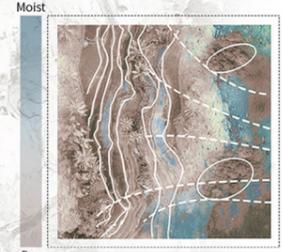
The path of ecological education

- Natural reserve area
- Future production space: Growing Crops, like sunflowers and rye
- Sunflower
- Rye
- Wilderness-landscape
- Visit center
- Wildfires risk
- Ecological Education Center
- Liquidity exhibitions and booths
- Wild ecological practice
- Tovstyi lys station: The end of the industrial landscape and the entrance to the natural section
- Rainwater collection pond



LAKE-PEATLAND

Leveling the land and shaping the terrain to reduce water loss, digging pools can also store water in the dry season, plant moss to fix water, cover straw to promote growth. As long as it remains moist, peatlands can serve as a natural fire escape between various parts of the forest.



PEATLAND-FILED

Reshape elastic terrain to adapt to seasonal changes. It is naturally submerged during high water periods, and lake water is stored during low water periods to ensure soil moisture.



FILED-STORAGE POND

Excavate small water storage lakes using traces to reduce forest fire threats and provide habitat for animals and plants.



CONIFEROUS FOREST AREA

Digging rainwater ditches in the forest will effectively reduce the density of coniferous forests and increase the humidity between forests, thereby reducing the risk of wildfires.



Natural wilderness landscape section

Ecological Education Center

Burakivka station
Entrance to the Eco-education Center

Shepelychi station
Park entrance instructions

Harvest & Winemaking

Local moonshine

Reservoir wall

Flooding ditches

FLOOD PLAIN AREA

Seasonal lake

WUZH RIVER

Wetland

Monitoring tower

Fire wall

Rainwater runoff

Irrigation

Rye planting

Farming ditches

Landscaping plank

Reservoir wall

Flooding ditches

Wetland

Seasonal lake

WUZH RIVER

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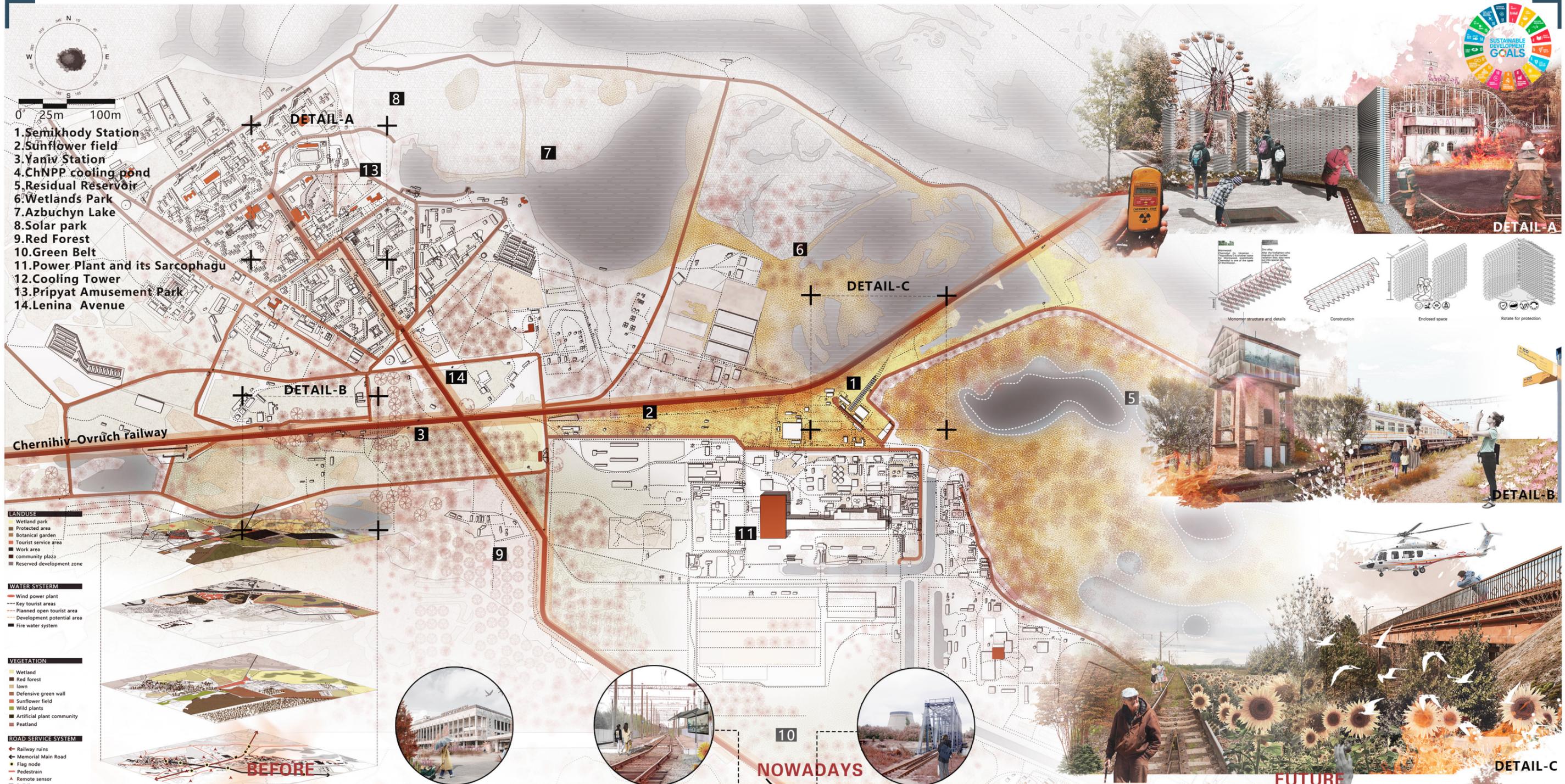
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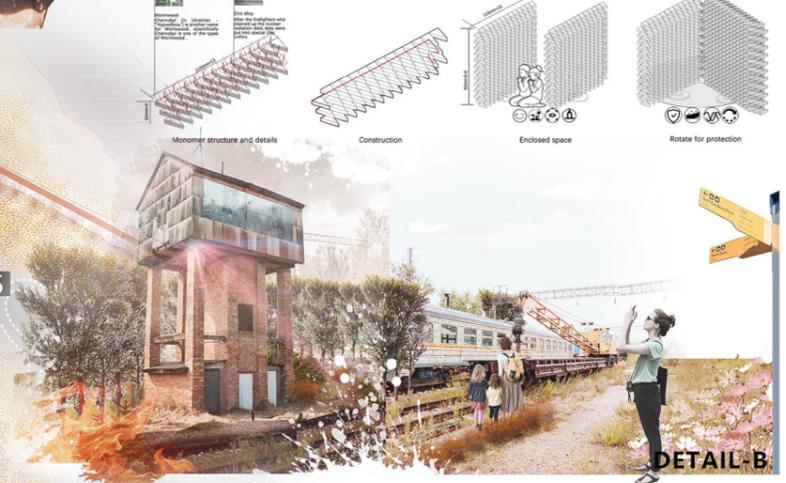
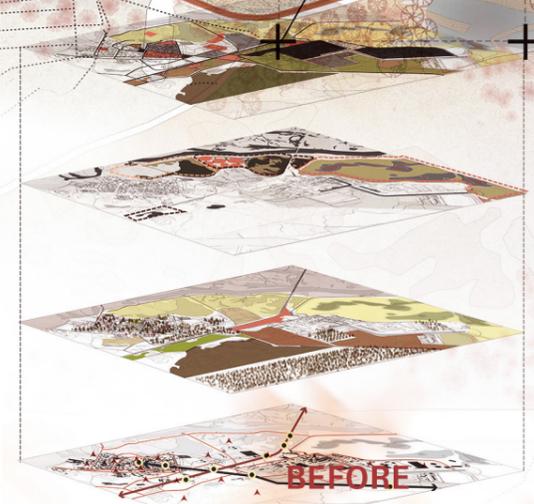
- 1. Semikhody Station
- 2. Sunflower field
- 3. Yaniv Station
- 4. ChNPP cooling pond
- 5. Residual Reservoir
- 6. Wetlands Park
- 7. Azbuchyn Lake
- 8. Solar park
- 9. Red Forest
- 10. Green Belt
- 11. Power Plant and its Sarcophagu
- 12. Cooling Tower
- 13. Pripjat Amusement Park
- 14. Lenina Avenue

- LAND USE**
- Wetland park
 - Protected area
 - Botanical garden
 - Tourist service area
 - Work area
 - community plaza
 - Reserved development zone

- WATER SYSTEM**
- Wind power plant
 - Key tourist areas
 - Planned open tourist area
 - Development potential area
 - Fire water system

- VEGETATION**
- Wetland
 - Red forest
 - Lawn
 - Defensive green wall
 - Sunflower field
 - Wild plants
 - Artificial plant community
 - Peatland

- ROAD SERVICE SYSTEM**
- Railway ruins
 - Memorial Main Road
 - Flag node
 - Pedestrian
 - Remote sensor
 - Bankings



PRYPJAT CITY WITHOUT VITALITY

DARK TOURISM SYSTEM

A REBORNING CITY

