strategies for a sustainable urban planning

Francesca Sorricaro architect
sustainability make sense if it is perceived as widespread planning
EXAMINATION PAPERS OF THE DETAILED PLAN REQUESTED FROM THE REGULATIONS

Territorial framing, cadastral, aereofotogrammetric, General Town-planning

Altimetry survey plan

Planimetry of the volumes

Project of the ground

Technological net:
- Hydric study
- Electric energy
- Waste water
- Gas metan
- Telecommunications
- Public illumination
- Ecological "islands"

Study of acoustic climate

Technical geological study

Gas Radon report
Luminosity pollution report
Electromagnetic field report

Dominant winds
Solar Mask 1. Shadows of buildings on the 21st of June
Solar Mask 2. Shadows of buildings on the 21st of December
Shadows of vegetation
Mobility
Vegetation

Solar Mask 1. Shadows of buildings on the 21st of June
Solar Mask 2. Shadows of buildings on the 21st of December
Shadows of vegetation
Mobility
Vegetation
minimum distance between buildings requested from the regulations

standard road section requested from the regulations
planning with principles of sustainability means to adopt a new way of designing the city and the buildings
the urbanistic parameters and the quantitative data of the traditional urban design are respected as well

project: PPE Appennini Alta, Jesi
new analyses and new indicators are added to the traditional planning and are combined with it.
planning in a sustainable way implies different uses of the territory
any type of urban area can be planned in a sustainable way

the residence  the industry  the park
project: Zipa Verde, Jesi
it is possible to plan in a sustainable way even if specific laws and regulations do not exist
agreement with private owners

compensation of urban planning costs

it depends on the political will to carry out a different planning and realizable approach
control of the environmental characteristics
project: PPE Appennini Alta, Jesi

winds
Diagramma del comfort

LEGENDA
- Sapone di massimo impatto degli edifici
- Zone degli edifici alla sera 8 del 21 giugno
- Zone degli edifici alla sera 12 del 21 giugno
- Zone degli edifici alla sera 16 del 21 giugno

Project: PPE Appennini Alta, Jesi

humidity and temperature
project: Zipa Verde, Jesi

bioclimatic approach
control of the territorial characteristics
elements of architectural composition of the street

project: border street, Monte San Vito

landscape
differentiation of road axes

buffer zone

windbreak barrier

antinoise barrier

project: PPE Appennini Alta, Jesi

vegetation
project: Zipa Verde, Jesi

vegetation and water
project: Zipa Verde, Jesi

water treatment
project: BIOPEP, Nonantola

electromagnetic pollution
project: BIOPEP, Nonantola

acustic pollution
control of the technological components and systems
project: PPE Appennini Alta, Jesi

mobility
project: Zipa Verde, Jesi

mobility
project: BIOPEP, Nonantola
energy
project: BIOPEP, Nonantola

energy
Posizione dell’unità di controllo.

Schema dei collegamenti.

project: Appennini Alta, Jesi

public illumination
ecological “islands” behind vegetation hills

project: BIOPEP, Nonantola

waste management
project: PPE Appennini Alta, Jesi

materials for urban works
control of building performance characteristics
Functional characteristics of low-cost buildings:

1. Walls with windows
2. Passive solar systems and direct gains
3. Alternative energy
4. Reduction of energy consumption
5. Energy efficiency
6. Use of rain water
7. Reduction of hydrical consumption
8. Electrical installation
9. Calculation of useful surface
10. Ecological materials
project: BIOPEP, Nonantola

building performance characteristics
general planimetry