

Country / City Firenze - Italy

University / School University of Florence - School of Architecture

Academic year 2015/2016

Title of the project Carrara marble-scapes. A landscape project for the Quarry Park.

Authors **Stella Fabbrì**





PERFORMATIVE NATURE

Barcelona International Landscape Architecture Biennial

September 2018 **Barcelona**

SCHOOL PRIZE

X International Landscape Architecture Biennial

Máster d'Arquitectura del Paisatge -DUOT - UPC
ETSAB- Escola Tècnica Superior
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TECHNICAL DOSSIER

Title of the project Carrara marble-scapes. A landscape project for the Quarry Park.
Authors **Stella Fabbri**
Title of the course ARCHITECTURAL DESIGN
Academic year 2015/2016
Teaching Staff Thesis Advisor: Prof. Anna Lambertini. Co-Advisor: Prof. G. Giovannoni and Prof. G. Ridolfi.
Department/Section/Program of belonging DIDA - Department of Architecture - ICad Architectural Design
University/School University of Florence - School of Architecture

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

Carrara it's well known all around the world for white marble quarries, from which famous pieces of art were made. Over the centuries the city has resolved all his economy around excavation, and exploitation of marble basins. Activity subjected to few regulations based almost on the concept of immediate profit: bad politics which risks to erase centuries of history and the naturalistic and geological heritage. Starting from analysis of critical issues and potentials of current quarry landscape, the thesis suggests a reinterpretation of the area as a place for new possibilities. The thesis explore the potential of an alternative management and use strategy for the whole basin, trying to overcome the traditional opposition between necessity of economical development and natural conservation, truth a multifunctional set of integrated quality objectives. Considering available resources and the scenic quality of the site, the proposal is concentrated on the institution of a Quarry Park, developing routes to visit both the active and inactive quarries and strategic projects to attract a widely users target and to start new sustainable regenerative mechanisms.

For further information

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Consult the web page <http://landscape.coac.net/>

TIMING PHASES



FASE 0_ CURRENTLY ACTIVATABLE

- » LANDSCAPE RESTORATION AND ACTIVE CONSERVATION OF INACTIVE QUARRIES AND SAFETY MEASURES
- » PROMOTION OF CAVE DI BACCHIOTTO as central attraction in that first fase, recently recovered by PIUSS European funds
- » VALORIZATION OF EXISTING PUBLIC INFRASTRUCTURAL SYSTEM AND TRANSPORT clarifying informations and rest areas in strategic viewpoints
- » CREATION OF AN ORGANIC SYSTEM OF CURRENT ACTIVITIES to ensure high quality services and common goals around Quarry Park general strategy
- » VALORIZATION OF VIEWPOINTS AND INFOGRAPHIC DISPOSITION
- » PONTI DI VARA VISITORS CENTRE as integration of Park facilities
- » PROGRAMMED QUARRY EVENTS Improving facilities and accessibility for current activities



FASE 1_ 0-5 YEARS

- » LANDSCAPE RESTORATION AND ACTIVE CONSERVATION OF INACTIVE QUARRIES AND SAFETY MEASURES
- » RECONNECTION BETWEEN CAI TRAILS AND VIE DI CAVA tracking and signalisation of connection trails
- » LOOP DISCOVERY TRAIL IN CAPOCECINA valorization of meditative character of the vast natural area
- » INACTIVATION OF CIRESUOLAS' QUARRIES Improving infrastructural connection quality
- » MULTIFUNCTIONAL MANAGEMENT OF ACTIVE QUARRIES For organized guided tours and weekend accessibility
- » VIE DI CAVA ACTIVATION AS WEEKEND WALKING TRAILS
- » IL SERRONE realization as integration of Park facilities



FASE 2_ 5-15 YEARS

- » LANDSCAPE RESTORATION AND ACTIVE CONSERVATION OF INACTIVE QUARRIES AND SAFETY MEASURES
- » WEEKEND ACCESSIBILITY OF STRADA DEI MARMI TUNNEL
- » CAVA DELL'OLMO FACILITIES INTEGRATION FOR EVENTS big amphitheatre quarry along public road already used for concerts
- » RAVACCIONE TERRACE viewpoint above Ravaccione tunnel quarries system from Fantiscritti quarry area
- » SUSPENDED TENSEGRITY TERRACE IN
- » FOSSA CARDELLINO WILD CAMPING AREA facilities integration in a renaturalized inactive quarry

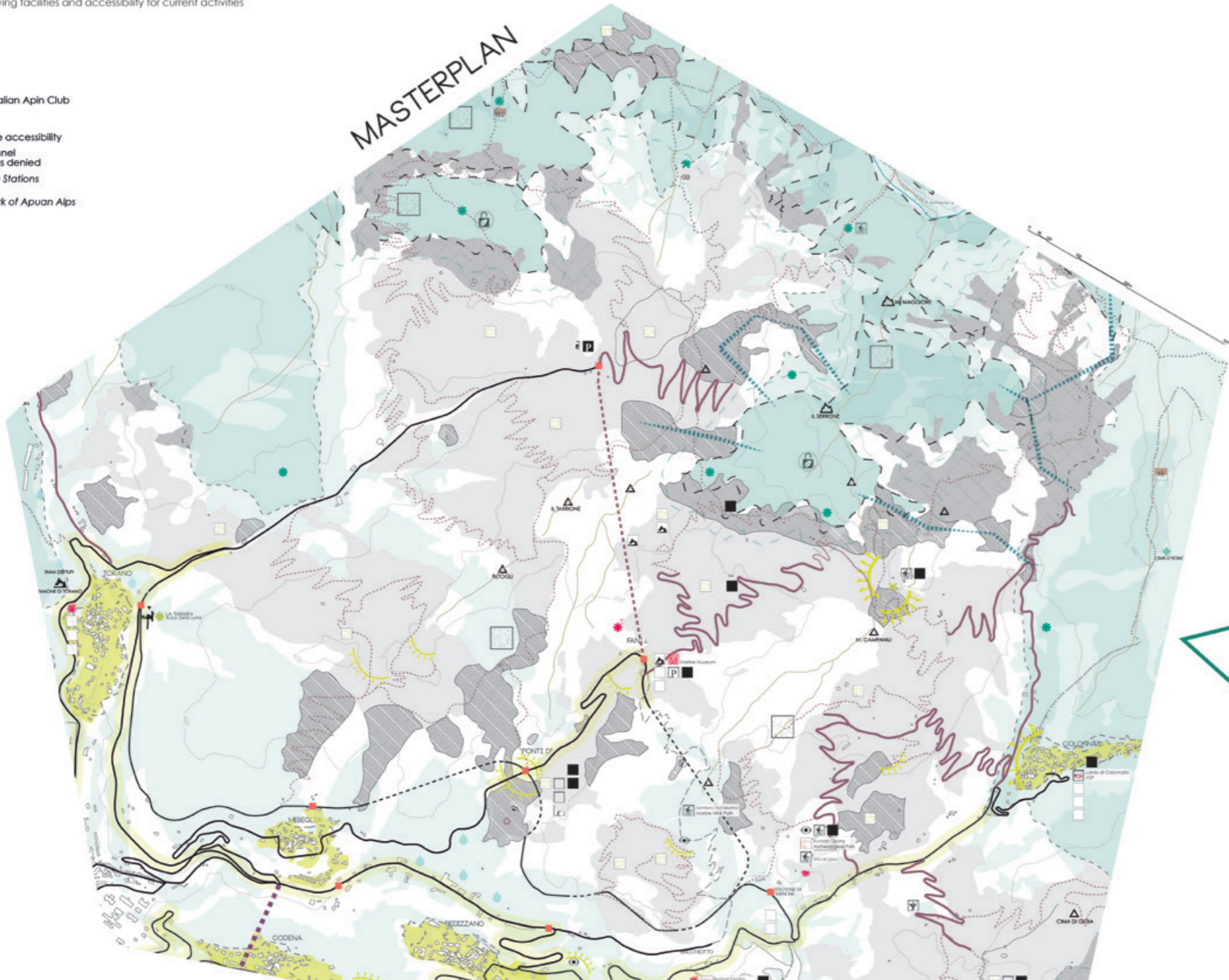


FASE 3_ AFTER 15 YEARS

- » LANDSCAPE RESTORATION AND ACTIVE CONSERVATION OF INACTIVE QUARRIES AND SAFETY MEASURES
- » FREE ACCESSIBILITY OF STRADA DEI MARMI TUNNEL
- » PROMOTION OF ACTIVITIES TO IMPROVE PARK FACILITIES AND OPPORTUNITIES Climbing quarry front, fly suspended cable, steel cable, hang gliding...
- » CLIMBING AREA CIRESUOLA A INSIDE
- » LA TASSARA RESTORATION AS INTERACTIVE MUSEUM OF MARBLE TECHNOLOGIES

- 48 Hiking Trail_CAI Italian Apin Club
- Vie di Cava
- Public road // free accessibility
- Via del Marmi Tunnel // currently access denied
- Marmifera Privata Stations
- Archeological Park of Apuan Alps
- Excavated areas
- Inactive quarry
- To inactivate AFTER 15 YEARS
- green areas
- Apuan Alps Parks buffer zone
- Apuan Alps Parks
- Sic area
- Natural species

MASTERPLAN



1/4 ITINERARIES

1 Sentiero del Marmo, Fossacava and Bacchiotto Roman Quarries

2 Bacino di Fantiscritti Galleria di Ravaccione and Cave di Michelangelo

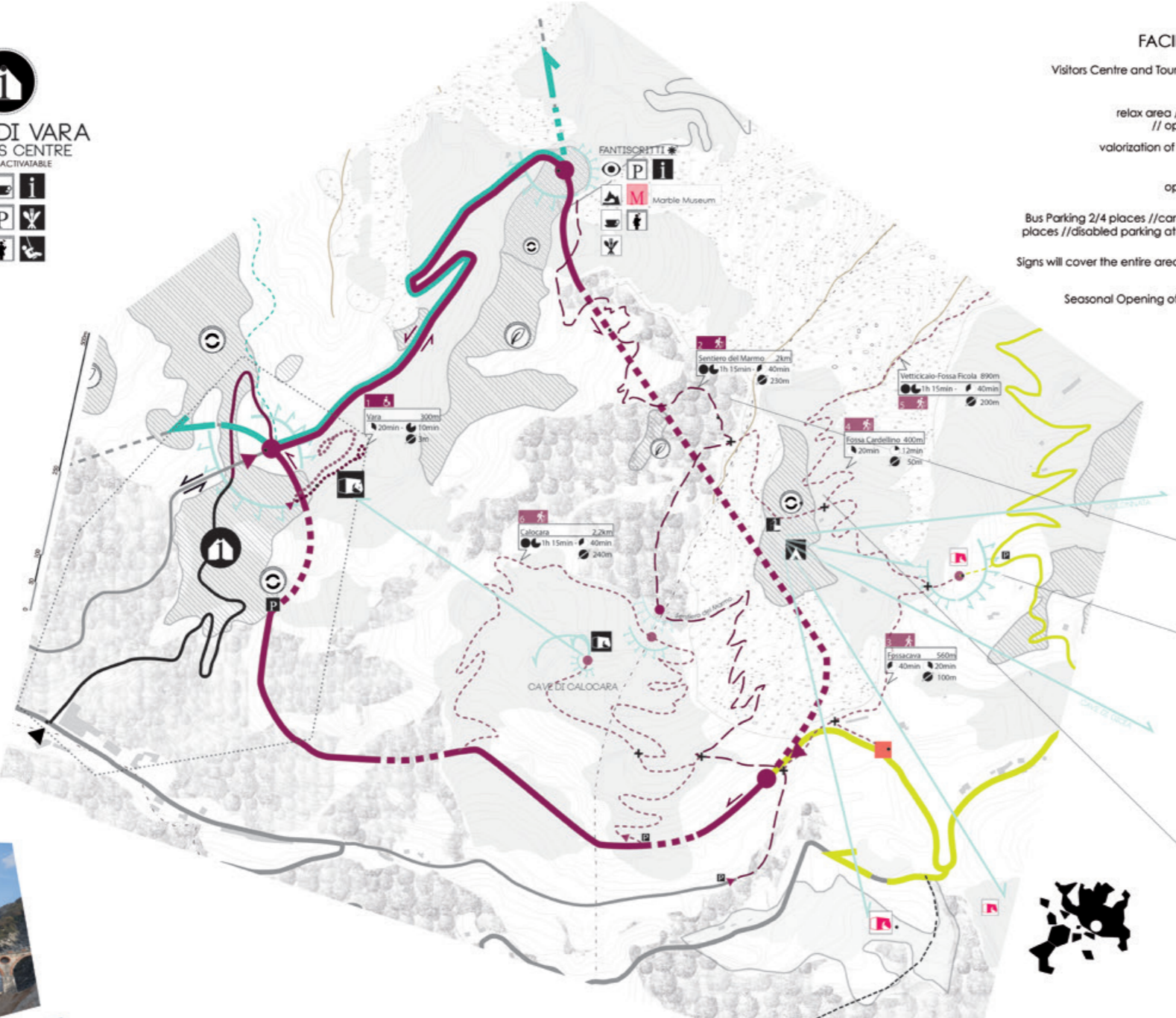
3 Colonnata, Miseglia, Torano, Codena and Bedizzano

4 Parco delle Alpi Apuane Campocecina



- ROUTE 1// PONTI DI VARA**
- Public road // free accessibility
 - Route 1// Main Path
 - Panoramic Road // free accessibility
 - Public road // free accessibility excepted pedestrian
 - Access to Route 1// Existing
 - new direct access from Carrara 519 YEARS
 - Node
 - Secondary Path
 - Private road // quarry workers accessible
 - public accessibility 0-5 YEARS
 - Primary road accesso Ponti di Vara
 - public accessibility 5-15 YEARS
 - Via di Cava // quarry workers accessible
 - // free accessibility
 - // in working days by organized tours
 - weekend accessible as Hiking Path 0-5 YEARS
 - Easy Trail // free accessibility
 - Climax view // direct
 - Intersection // signposts 0-5 YEARS
 - Small Parking (2-3 places) // in trail's access 0-5 YEARS
 - Key Issues of the Route 1
 - Inactive Quarries
 - Area to re-programme // permanent
 - Re-naturalization area // permanent
 - Event// Theatre // Concert // occasional
- Identification path number**
- Path hardness**
- Canal Piccinino 650m
1h 15min - 40min
240m
Slow duration 2.5 KM/H
Fast duration 4.5 KM/H
- Slope**
- M to evaluate the LES (Linear Equivalent Stress), it express influence of slope on the duration of a pedestrian path.

PONTI DI VARA VISITORS CENTRE
CURRENTLY ACTIVABLE



- FACILITIES PROVIDED**
- Visitors Centre and Tourist Information Point
 - cafeteria // relax area // small events // open air terrace
 - valorization of site and views
 - open air terrace
 - Bus Parking 2/4 places // car parking 10/30 places // disabled parking at least 2 places
 - Signs will cover the entire area of the quarry
 - Seasonal Opening of Visitor Centre

EXISTING RESOURCES VALORIZATION

- SENTIERO DEL MARMO**
Historical quarryman path used to reach quarries from Carrara, restored as a panoramic long trail for medium expert hiker. Cliffs, woods and rocks, filtered and wide views.
- FOSSACAVA**
The rests of an ancient Roman Quarry shows the antique techniques of excavating marble blocks. In the site there is an '800 cent' via di Cava and a dry well of about 10m. The lazzera is the technique used by quarrymen. In Apuan Alps, to get down blocks from quarries to the valley, they used to build shafts (via di Cava) and dry wells to enable their work.
- FOSSA CARDELLINO**
WILD CAMPING AREA inactive quarry disposed for re-naturalization, with the possibility to backpacking with bedroll or small tent in a wild environment to have a rest in short journey. Campsite will be served by toilet facilities allows refreshment.

TOPICS APUAN ALPS BASIN 800 QUARRIES TOT

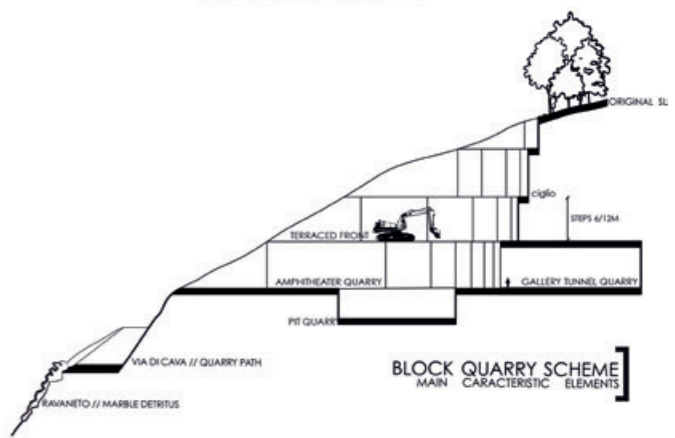


APUAN ALPS BASIN 800 QUARRIES
CARRARA BASIN 189 QUARRIES
ACTIVE_134 // INACTIVE_35
1 ton marble = 3 ton debris
1 block in 5h
15.000 ton / day
330.000 ton / month

EXCAVATION RESULTS



Primary buyers are United States (2014 - 37.5%), Arab countries and China
70% of sold marble is marmettola
In 2014, 1.6 millions euros of tons of natural stones has been sold in Italy
The Apuo-Venetan area has the national export primacy for 481 millions euros
Masa-Carrara exports 339 millions euros
Ma-Ca has the regional primacy of youth unemployment rate by 64%



INACTIVE - PONTI DI VARA'S QUARRY - NOW



SITE VALORIZATION AND INTEGRATION WITH VISITORS CENTRE
CURRENTLY ACTIVABLE
INACTIVE - VARA'S QUARRY





UNDERGROUND FANTISCRITTI
RAVACCIONE TUNNEL

CURRENT CONFIGURATION
Interior of the Ravaccione tunnel sequence of underground quarries (around 30 quarries) supported by gigantic pillars of 6-12m filtering areas of around 30m. Called the Marble Cathedral. It has a double access from Fantiscritti yard and from Ravaccione.



DESIGN SUGGESTIONS
Carière Lumière - Beaux de Provence, France - Gianfranco Iannuzzi
Daily configuration.
Temporary videomapping art show.



IL SERRONE
FANTISCRITTI



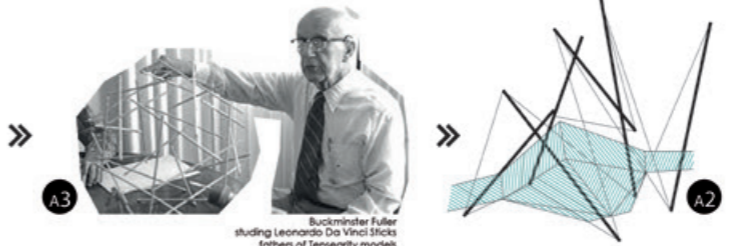
flexible net, above the Carbonara quarry
0-5 YEARS
IL SERRONE SUSPENDED TERRACE
FANTISCRITTI BASIN



SUSPENDED
TERRACE
IL SERRONE
0-5 YEARS



FANTISCRITTI BASIN SECTION



DESIGN SUGGESTIONS
_1 Tennessee Quarry, engraving - Arthur - 1880
_2 Floating Landscape - Hasselt - Nomen/For Use
_3 Kurilpa Bridge - Brisbane, Australia - Cox Rayner + Arup

SITE VALORIZATION: IL SERRONE Landscape Atelier
0-5 YEARS
FANTISCRITTI BASIN

