Full Documentation Fiche 2008

composed by national working party of: Docomomo Chile

0. Picture of building/ group of buildings/ urban scheme/ landscape/ garden

depicted item:
Enrique Gebhard, architect. Marine Biology Institute, 1941-1959, Reñaca, Chile. View of the complex from the north.
source:
photographer unknown
Photographic archives, Centro de Información y Documentación, Facultad de Arquitectura, Diseño y Estudios Urbanos, Pontificia Universidad Católica de Chile.
date:
ca. 1980

1. Identity of building/ group of buildings/ group of buildings/ landscape/ garden

1. 1 Data for identification

current name:
Facultad de Ciencias del Mar, Universidad de Valparaíso (Faculty of Ocean Sciences, University of Valparaiso).
former/original/variant name:
Instituto de Biología Marina (Marine Biology Institute)
Estación de Biología Marina de Montemar (Marine Biology Station at Montemar)
Estación de Montemar (Montemar Station)
number(s) and name(s) of street(s):
16344, Borgoño Avenue
town:
Montemar, Viña del Mar
province/state:
Valparaiso
post code:
2540006

block: N/A
lot: N/A
country:
Chile
national topographical grid reference:
n/a
current typology:
Education (EDC)
former/original/variant typology:
Education (EDC)
comments on typology:

1. 2 Status of protection
protected by:
Not protected (note: included in the 2008 List of 100 Most Endangered Sites by the World Monuments Fund).
grade: N/A
date: N/A
valid for: N/A
remarks: N/A

1. 3 Visually or functionally related building(s)/site(s)
name(s) of surrounding area/building(s):
Caleta Montemar

visual relations:
The building stands in a rocky point in the place where the coastal road between the towns of Reñaca and Con-Con makes a curve between two long extensions of straight road, to the north and to the south, which makes its location a focal point in each direction. It's built between the ocean and the road, together with some singular buildings along the coastal area between the city of Valparaiso and the town of Con-Con. In its specific location, the building stands as an isolated complex, built over the rocks and the beach. At the other side of the road there is a big development of apartment buildings ranging from 5 to 12 stories high, mainly built in the 90s. The Institute owns a house nearby, where the administrative offices of the Faculty are located. The house was originally a guest house for the invited scholars who came from other countries to study at the Biology Station.

functional relations:
The most important functional relation is with the fishermen that use the beach beneath the building, as their operations center. This location has been in use by fishermen since the XIXth century, and it is, nowadays, one of the last active fishing points in the area. The building was designed considering the close relationship between the fishing activity and the scientific objectives of the Institute.

other relations:

2. History of building(s) etc.

2. 1 Chronology
Note if the dates are exactly known (e) or approximately estimated = circa (c) or (±)
commission or competition date:
1940 (c)
design period(s):
1940-1941 first stage (e); 1955-1956 second stage (c)
start of site work:
December 1941 first stage (e)

completion/inauguration:
July 28th, 1945 first stage (e); 1959 second stage (e).

2. 2 Summary of development

commission brief:
The initiative of Dr. Parmenio Yáñez of creating a Biological Research institution for the University of Chile dates from 1937. In that year, he was commissioned to travel to Europe to visit some Biological Stations, and there's confirmed information that he visited Helgoland Station. After his return, he obtained an university decree creating the Institute, and a commission for the search and definition of a suitable location was formed, with members coming from different institutions related to the scientific and the oceanic world. Dr. Yáñez started working closely with architect Enrique Gebhard in 1940 in defining the program and the shape of the complex.

design brief:
The complex consists of a series of buildings, disposed in a free distribution on the site, and related to each other by functional or visual relations. The main buildings of the complex are the administrative and the laboratories buildings, the library and the auditorium. Some public facilities, consisting of an aquarium, a museum and a botanical garden, were never built.

building/construction:
The construction system is rather traditional, consisting of reinforced masonry for the walls (brick walls contained in concrete columns and beams) and exposed concrete for the structure. Its most singular design elements are the diagonal pillars that keep the administrative building and the library suspended over the ground floor, freeing the site for the use of the fishermen.

completed situation:
The first stage was finished as an incomplete development of the whole ensemble. The funding for the construction of the Station was secured partially, so in the beginning only the laboratories body was built, together with the staircase volume. Further stages were planned and designed, and built in the mid 50s.

original situation or character of site:
Originally, the site was used as a recreational beach and a fishermen post. It was served by a restaurant, and it had facilities for the people who went there to swim in the beach. The restaurant was suspended with a wooden structure over the beach, and there was a stone staircase connecting the road with the sand level. After work on the Marine Biology Station started, only the fishermen stayed.

2. 3 Relevant persons/organisations

original owner(s)/patron(s):
Dr. Parmenio Yáñez, founder of the Institute. Universidad de Chile, original owner (rector and sponsor: Juvenal Hernández).
architect(s):
Enrique Gebhard
landscape/garden designer(s):
other designer(s):
consulting engineer(s):
Alvaro Alvarado first stage; Raúl Campusano second stage.
building contractor(s):
Petersen & Clavero first stage.

2. 4 Other persons or events associated with the building(s)/site

name(s):
María Martner, Eugenio Brito and Carlos González
association:
artists
event(s):
period:
1955-1959

2. 5 Summary of important changes after completion

type of change:
alteration, consisting on the closing of the open terraces on the laboratories building and auditorium roofs, elimination of the library balcony, and alteration of the windows in the administration and library buildings, adding window sills where there were floor to ceiling openings.
alteration/renovation/restoration/extension/other:
date(s): 1975 (c)
circumstances/reasons for change:
corrosion, filtration of water on the roof gardens; unknown reasons for the windows changes.
effects of changes:
loss of singular situations and visual relations from the interior to the context. Mainly, loss of the possibility to hold open air activities on the roofs or on the library's balcony, and loss of natural light gain by reducing the size of the openings.
persons/organisations involved:
unknown

type of change:
structural intervention. The diagonal pillars were widened, and concrete walls were added to the staircase volume. The brise soleil towards the ocean was replaced by prefabricated elements of fiber cement.
alteration/renovation/restoration/extension/other:
date(s): 1977 (c)
circumstances/reasons for change:
possible weakness of original structure.
effects of changes:
significant change on the aesthetic presence of the structure, specially on the diagonal pillars, that look rather bulky in their present state. in the staircase volume, the effects are mainly loss of transparency and the ability of relating the interior to the open space of the ocean while moving from floor to floor.
persons/organisations involved:
structural engineer: Santiago Arias

type of change:
extension. Addition of an extra floor over the laboratories building.
alteration/renovation/restoration/extension/other:
date(s): 1990 (c)
circumstances/reasons for change:
need of space.
effects of changes:
the addition of a floor to the laboratories building changed the rich movement of the ensemble's skyline. The poor design of the added floor incorporated strange aesthetic languages, breaking the original purity of the building.
persons/organisations involved:
architect: Guillermo Frías

type of change:
extension. Construction of a new wing in front of the administration building.
alteration/renovation/restoration/extension/other:
date(s): 2005 (c)
circumstances/reasons for change:
need of space.
effects of changes:
the ongoing (though stopped due to contractor's bankruptcy) extension threats the relationship between the building and the landscape, the beach and the views towards the ocean. The imitation of the diagonal structure provokes a confusion in the structure of the buildings, and the location of the extension, over the beach, endangers the activities of the fishermen, who have seen their area of action reduced considerably.
persons/organisations involved:

architect: Guillermo Frías

3. Description of building(s) etc.

3. 1 Site/building character

The Marine Biology Station is a group of buildings, disposed around an open space –the beach of Montemar- where the artisan fishermen operate, together with the specimen recollection activities of the institute. The buildings are built over a rock formation, in a site protected from the winds by a higher rock, running parallel to the coast. Three main branches conform a C-shaped structure, with its open side towards the north and the entrance channel from the ocean, where small boats can maneuver in protected waters to approach the coast.

This set of building is composed of an administrative building, a laboratories building, a library and an auditorium (see plan). As the architect's intention was to build the station without disturbing the previous uses of the site, and wityhout blocking the views towards the rocks and the ocean, the buildings and pathways are elevated over the ground. The first stage (1940-1945) used cylindrical pilotis, in a rather classical approach to the modern aesthetics, while the second stage (1955-1959) used diagonal planar pilasters, that provide a better resistance against earthquakes, and allows for a higher free space below the buildings.

The structure is made with reinforced concrete, and brick walls. A big importance was given to the glazed façades, to provide a open view through the buildings from the road.

3. 2 Current use

of whole building/site:

presently, the building is used as the seat of the Faculty of Ocean Sciences of the Valparaíso Univeristy. At the same time, the artisan fishermen still operate in the place, using the space below the structures to keep their boats, and the beach as their main working area.

of principal components (*if applicable*):

The entrance to the Institute of Marine Biology is commonly used by students, faculty, and fishermen to go their daily activities, which preserves the original intentions in a perfect way.

comments:

3. 3 Present (physical) condition

of whole building/site:

There's an ongoing addition being built (but stopped since 2005) that would jeopardize the purity of the ensemble, consisting of a new wing in front of the central space, closing the open side of the C-shaped distribution, reducing the work space of the fishermen, and getting dangerously near the original buildings. In fact, some details of the auditorium had to be demolished because of the nearness of one of the new walls.

of principal components *(if applicable)*:

All the other buildings have been intervened during time. The laboratories building received an extra floor in the 90s, covering what was originally an open terrace garden; the library lost its balcony and the glazed façade was half-block with a parapet and a normal window; the transparent bays of the administration building's façade, that permitted to see the ocean and the sky through it, were eliminated, and parapets were built, blocking the view; the garden on the roof of the auditorium was eliminated and replaced by a waterproof material, without any use. In general, the conservation of the buildings is very poor, due to a general lack of maintenance and to a poorly managed updating of the technical facilities.

of other elements *(if applicable)*:

of surrounding area *(if applicable)*:

comments:

3. 4 Note(s) on context, indicating potential developments

The building enjoys a very exclusive situation by being built on the space between the road and the ocean, which keeps it away from the real estate business, and secures its isolation.

4. Evaluation

Give the scientific reasons for selection for docomomo documentation

Intrinsic value

4. 1 technical evaluation:

The technical interest of this building resides in its unique structural system, its ahead-of-time configuration, and the close relationship between its physical fabric and the activities for which it was designed. The utilization of diagonal pillars to resist the horizontal forces of an earthquake were inventions that have proved its success with the years (even if they had to be reinforced in the 70s), and that prevented the use of walls to do that, which would have damaged the transparent and light presence of the building. Being a technical facility, the station has received many updates during its lifetime. However, it has been able to receive these updates without losing its original qualities, which speaks of the appropriate approach to the technical aspects designed by Gebhard.

4. 2 social evaluation:

The presence of the building in the coast, in a curve of the road between Reñaca and Concón, two very popular resorts, has given it a strong presence in the collective memory of the local inhabitants and the summer visitors, who normally see its appearance as an curious addition to the coastal landscape.

4. 3 cultural and aesthetic evaluation:

The Montemar Station is, undoubtedly, one of the most relevant modern buildings in Chile. The treatment of the structure and its relationship to the landscape are two issues with which this building deals in a strongly innovative way. This condition, currently closely associated to the contemporary tendencies of Chilean architecture, appear in this building as a very first proposal, inaugurating the idea of a dialogue between a modern form and its natural environment.

Comparative significance

4. 4 canonical status (local, national, international)

4. 5 historic and reference values:

The Marine Biology Station is the first building of its kind in South America. Inspired by the oceanographic stations built in Europe in the XIXth century, it's still the most relevant institution of its kind in the continent. Its location and the quality of its design make it a unique representative of the scientific considerations that promoted its creation, and the paradigmatic place that it occupies in the field of modern architecture. In both realms it's an obvious reference, and a

5. Documentation

5. 1 archives/written records/correspondence etc. (state location/ address):

5. 2 principal publications (in chronological order):

- w/a. "Se inauguró la Estación de Biología Marina". In Boletín Informativo de la Universidad de Chile. Year 1, Nº4. July-August 1945.
- Yáñez, Parmenio. "Organización y actividades de la Estación de Biología Marina de Montemar". In Revista de Biología Marina I (1), 1948, p. 5.
- Ojeda, David. "Montemar y la auténtica arquitectura moderna". In En Viaje Nº 296, June 1958.
- w/a. "Visita a la Estación de Biología Marina". In Boletín de la Universidad de Chile. Nº5, August 1959, p. 4-11.
- w/a. "Estación de Biología Marina de Montemar". In En Viaje Nº 314, December 1959.
- De Buen, Fernando. "La Estación de Biología Marina de Montemar". In Ciencia Interamericana, vol. 3,

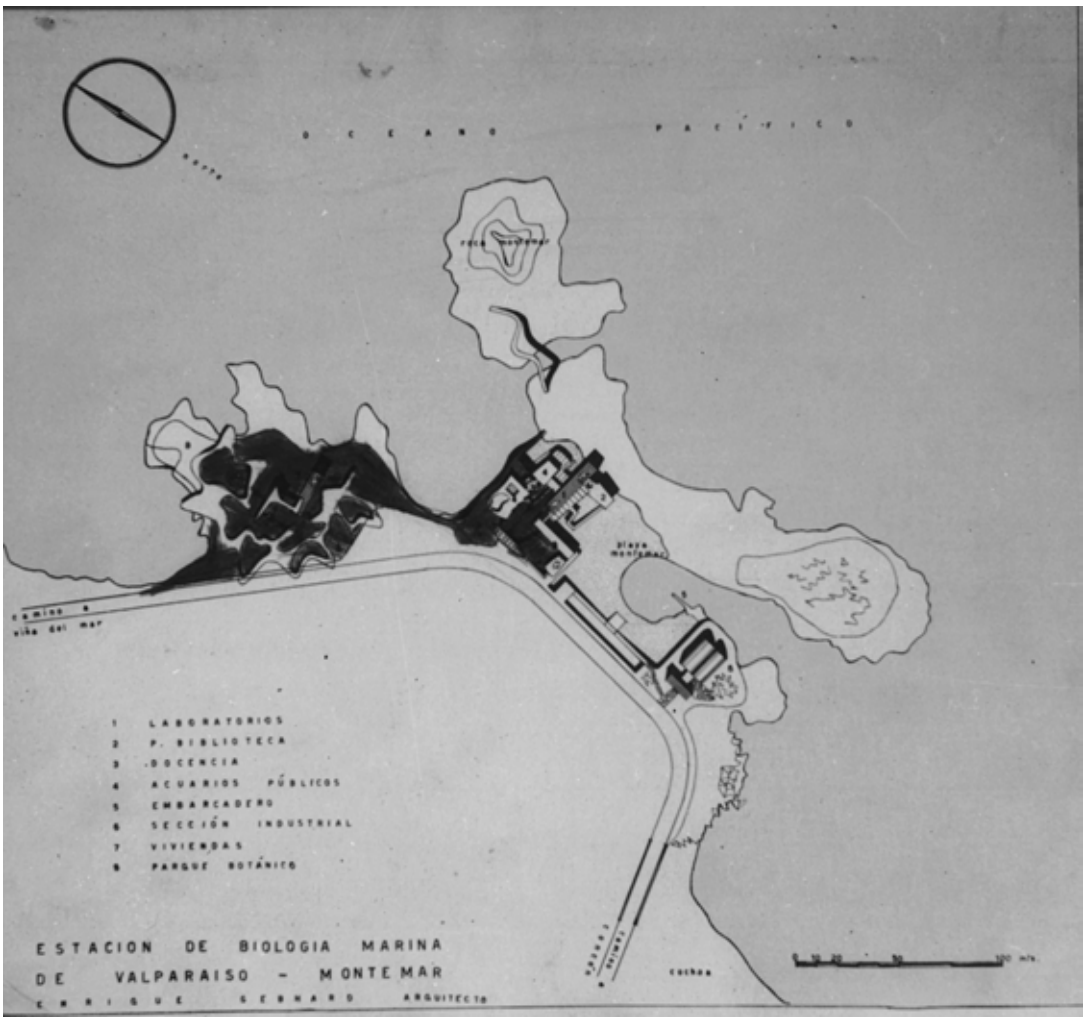
Nº2, March 1962 (separata). Revista del Departamento de Asuntos Científicos de la Unión Panamericana, Secretaría General de la Organización de Estados Americanos.
- Eliash, Humberto and Moreno, Manuel. Arquitectura Moderna Chilena 1930-1960. Cuadernos Luxalón, Santiago, 1985.
- Eliash, Humberto and Moreno, Manuel. Arquitectura y Modernidad en Chile 1925-1965: Una Realidad Múltiple. Ediciones ARQ, Santiago, 1989.
- Riesco, Hernán. “Un Nuevo Programa en busca de Emplazamiento”. In ARQ 18, September 1991, p. 24-29.
- Pérez Oyarzun, Fernando. “Un Edificio y Veinte años de Arquitectura Moderna 1940-1960”. In ARQ 18, September 1991, p. 30-31.

5. 3 visual material (state location/ address)

original visual
records/drawings/photographs/others: recent
photographs and survey drawings:
film/video/other sources:

5. 4 list documents included in supplementary dossier

Visual material attached



depicted item:
General plan
source:

Photographic archives, Universidad de Chile.
date:
ca. 1941

depicted item: Model of first project
source: (photographer unknown)
Photographic archives, Universidad de Chile
date: 1945

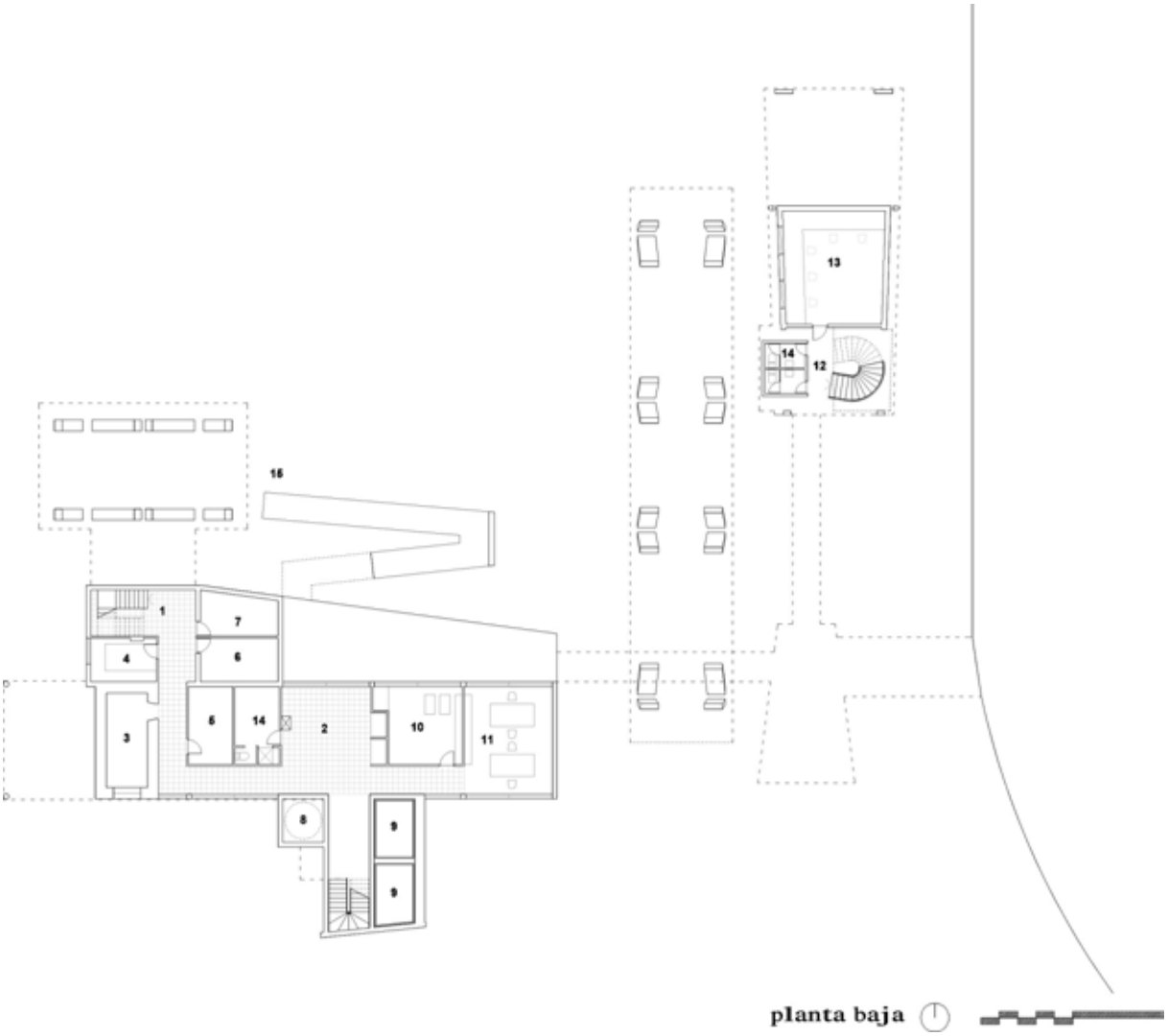
depicted item: First stage built (Dr. Parmenio Yáñez is seen standing in front of the newly inaugurated building).
source: (photographer unknown)
Photographic archives, Universidad de Chile
date: 1945

depicted item: The Marine Biology Station completed, seen from the north.
source: (photographer unknown)
Photographic archives, Universidad de Chile.
date: 1959

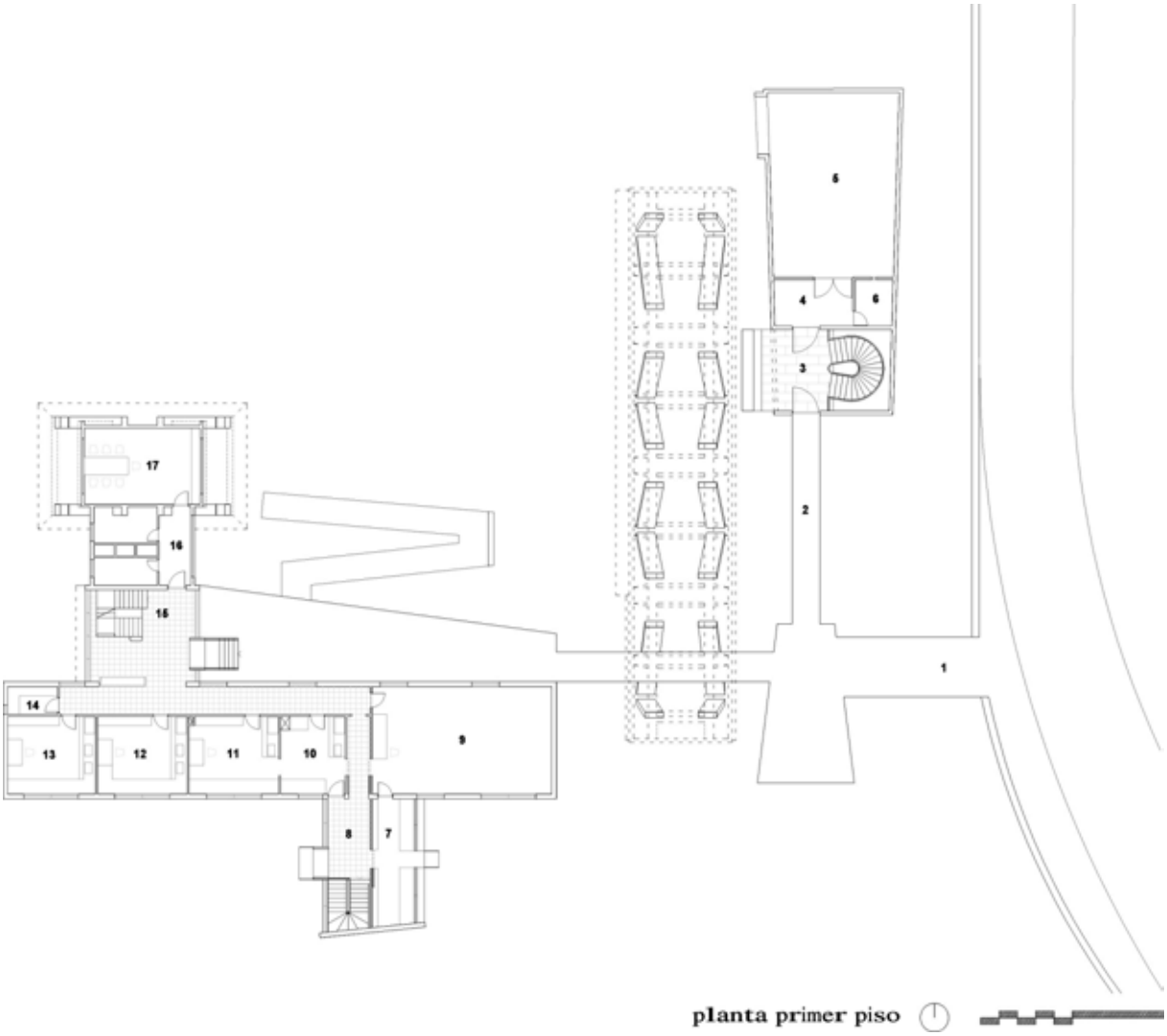
depicted item: The Marine Biology Station completed, the laboratories and library buildings.
source: (photographer unknown)
Photographic archives, Universidad de Chile.
date: 1959

depicted item: The space below the administrative building and the ramp towards the auditorium.
source: (photographer unknown)
Photographic archives, Universidad de Chile.
date: 1959

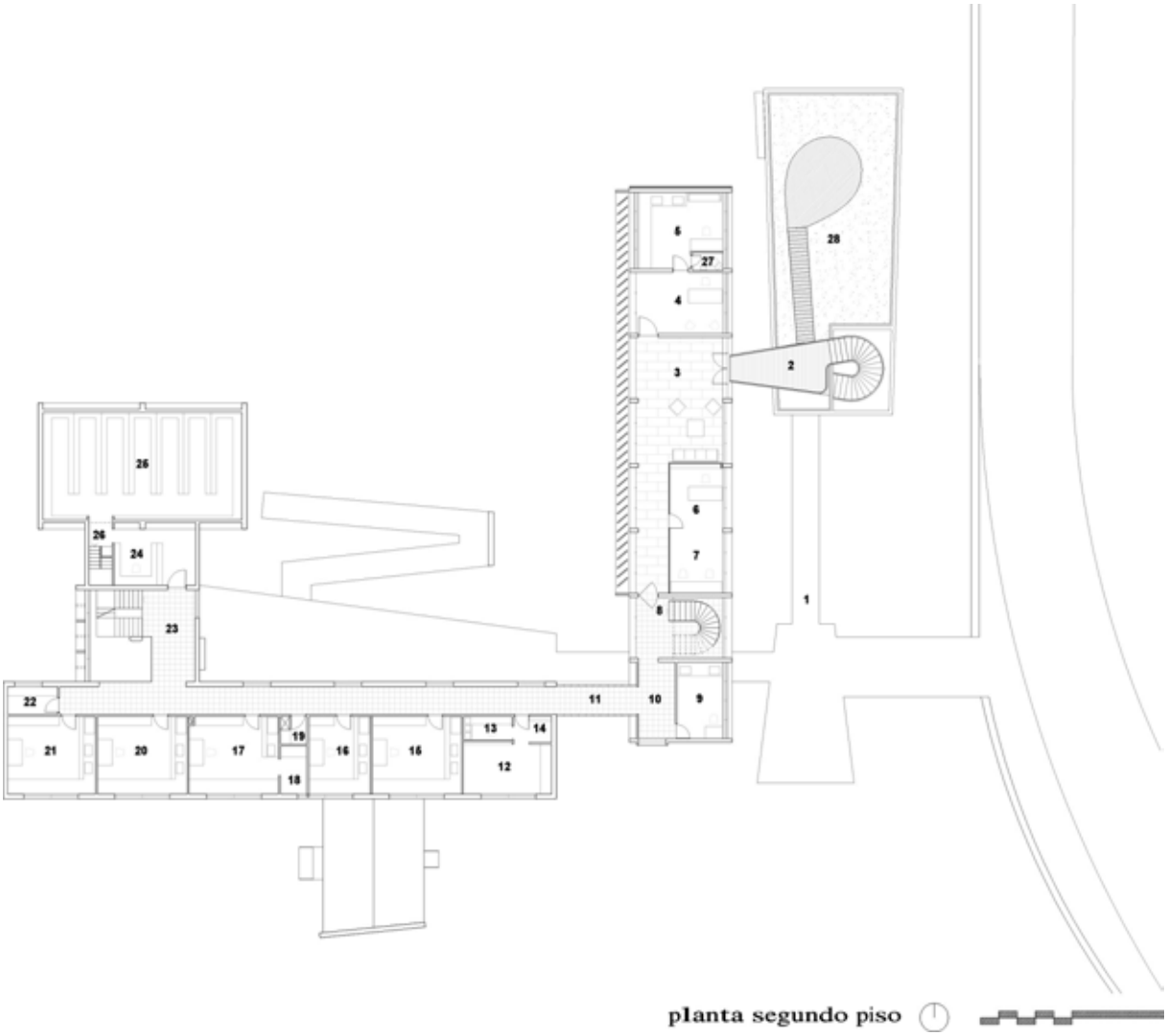
depicted item: The ongoing extension in its present state (as of October 2005).
source: photo: Maximiano Atria
date: 2005



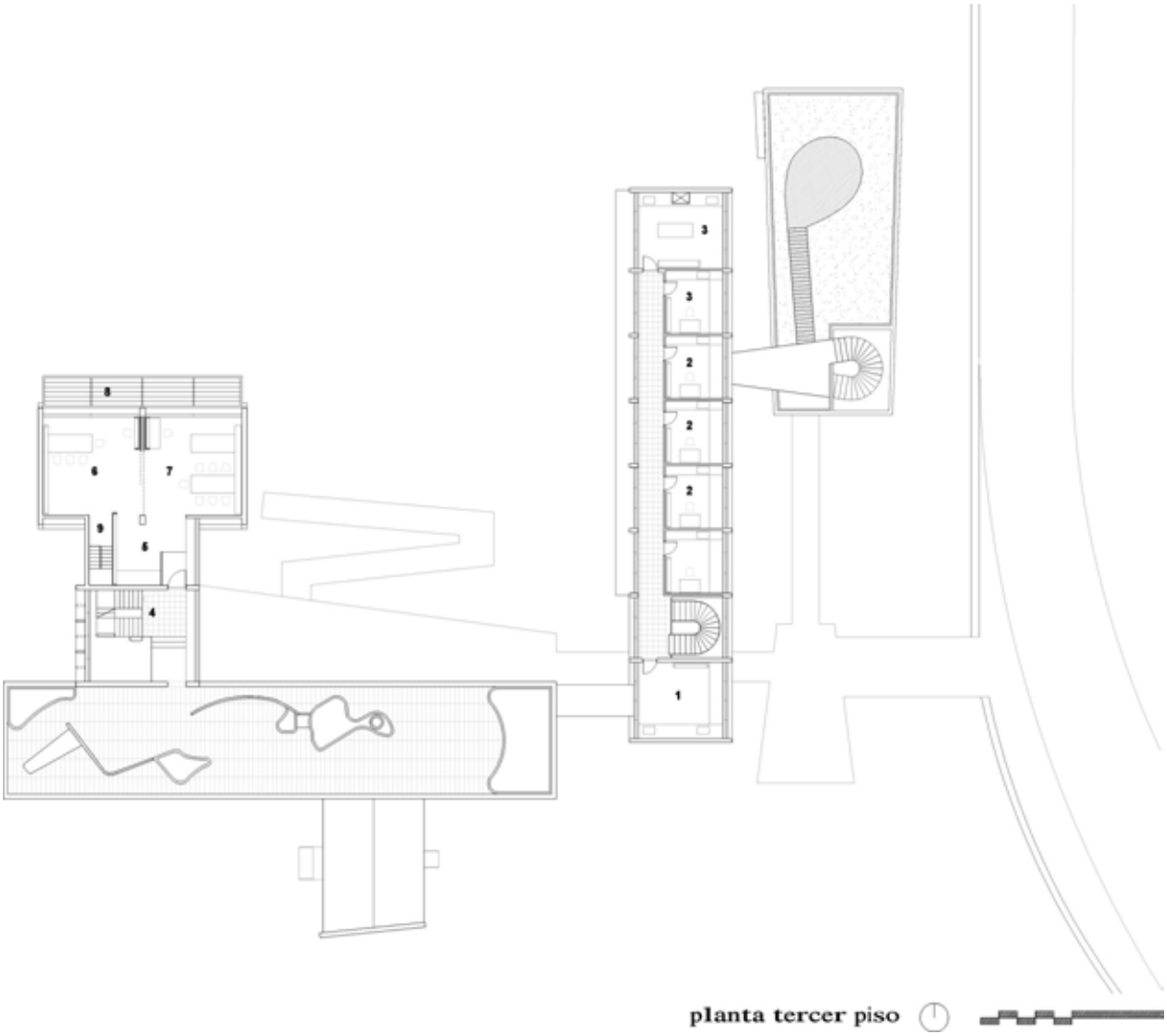
depicted item: Ground floor plan.
source: drawn by Maximiano Atria based on original drawings.
date: n/a



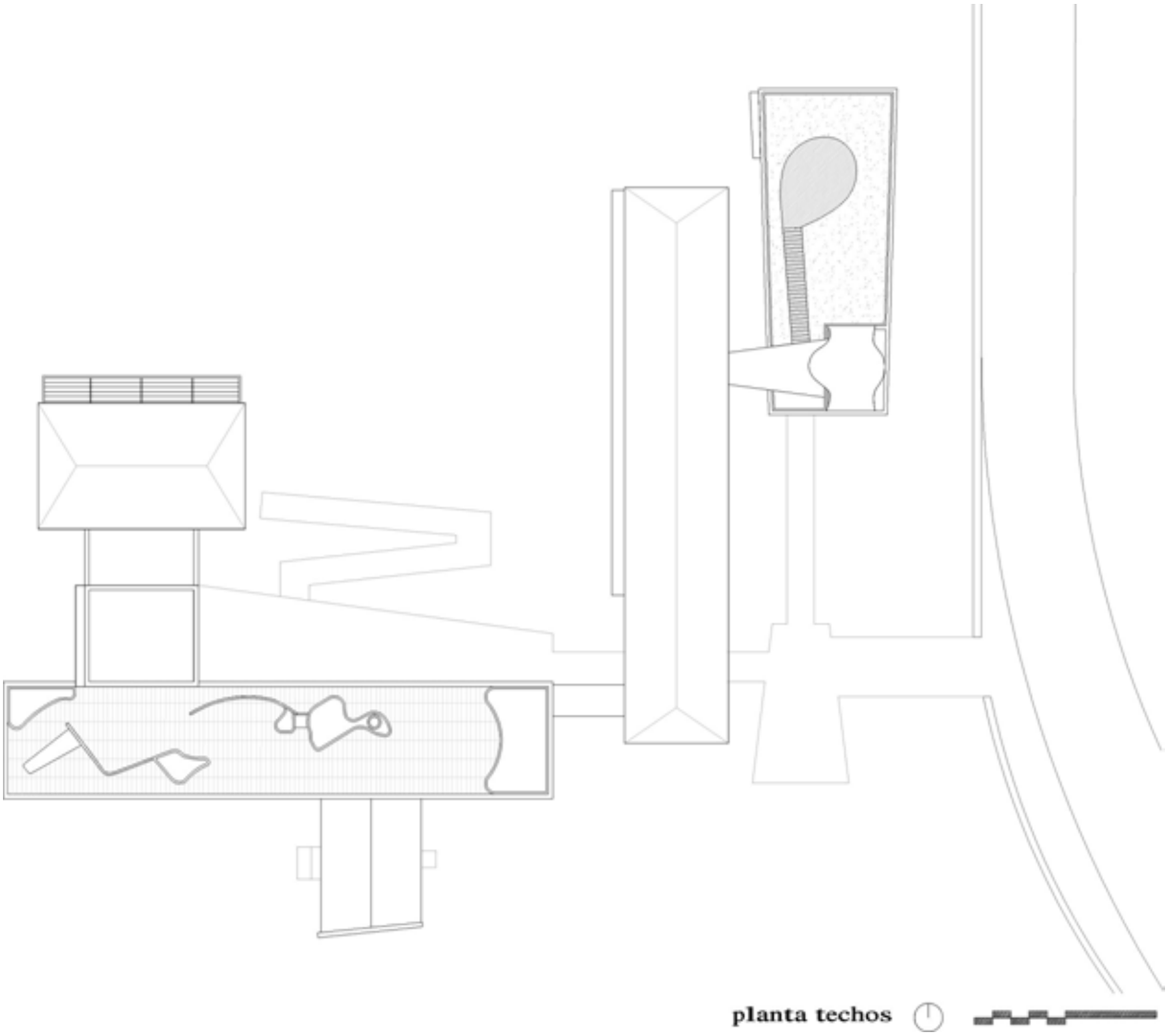
depicted item: First floor plan.
source: drawn by Maximiano Atria based on original drawings.
date: n/a



depicted item: Second floor plan.
source: drawn by Maximiano Atria based on original drawings.
date: n/a



depicted item: Thrid floor plan.
source: drawn by Maximiano Atria based on original drawings.
date: n/a



depicted item: Roof plan.
source: drawn by Maximiano Atria based on original drawings.
date: n/a

6. Fiche report

name of reporter: Maximiano Atria
address: Av. Ricardo Lyon 734
telephone: +56 2 785 5616
fax:
e-mail: info@docomomo.cl
date of report: April, 2008

examination by DOCOMOMO national/regional section
approval by working party co-ordinator/registers correspondent (name): sign and date:

examination by DOCOMOMO ISC/R
name of ISC member in charge of the evaluation:
comment(s):
sign and date:
ISC/R approval:
date:
working party/ref. n° :
NAi ref. n°: