

APPLICATION FOR REGISTRATION OF HISTORICAL LANDMARK

Architectural Supplement

Name of Landmark Nomination:

Forestiére Underground House and Gardens

Location:

502 1/2 W. Shaw Avenue
Fresno, Calif. 93711

Summary of Statement of Significance (see requirements of Statement of Policy):

The significance of the underground house and garden complex lies in its uniqueness, its ecological sophistication and its statement of exceptional individual creativity. It has educational value, which derives from all three of these dimensions.

The environment is sculptural, but creates definite spaces with architectural merit. It uses an indigenous in-place medium rather than processed and deliverable materials, which are manipulated by hand and other simple technologies (wheelbarrel and shovel). Sun, space, and gardens are incorporated into a coherent entity for human habitation.

Stylistically it has no precedent in architecture in the U.S.; it can be compared with troglodite structures in North Africa, Chinese underground houses and houses from the Southern Italian trulli. What all these areas have in common is the use of hand-labor and indigenous on-site materials to develop housing solutions appropriate to life in extremely hot and dry climates.

This work is in the tradition of the work of naive folk artists whose work expresses widely shared intellectual beliefs, but which are translated into a unique solution for a local problem in design and building.

Foresterie used earth, vegetation, heat, water and light to provide an economic, habitable and ecologically unharmed solution that offers lessons to school children, architects, and all citizens facing the prospect of living in an energy-conserving world.

He was able to think in terms of first principles, and was therefore able to reason through to new solutions. He was able to recognize that in Fresno the standard house was not an adequate solution to the problem. Because Fresno is so hot, he felt that building underground was practical, and he had the determination to do this in earth inhospitable to other uses. He used bridge building skills acquired in Sicily to realize his ideas. He was interested in new things, for example, airplanes and automobiles. Scientific knowledge appealed to him; the primitiveness of the underground house is not the sign of a romantic reaction against industrialism, but the solution proposed by a curious, inventive, experimental mind.

His design capacities evolved, and then declined, when a hernia made excavation difficult. He worked into the night when not in pain, so his later handling of light is not as sensitive as in most of the environment. Thus, the gardens are a study in the maturation of design and construction ability in an individual artisan and designer.

Part I. HISTORICAL INFORMATION

A. Physical History:

1. Original and subsequent owners:

Baldasare Forestiere
Gluseppi Forestiere
Joseph C. Forestiere
Rosario R. Forestiere

2. Date of erection:

Approximately 1906
thru 1946

3. Architect (name if possible):

Baldasare Forestiere

4. Alterations and additions:

Basically unaltered, except for deterioration due to age, rain erosion and periods of neglect.

5. Photographs (past and present):

Enclosed

B. Historical Events Connected with the Structure (if any):

None of historical significance.

C. Sources of Information (bibliography and surveys – governmental, private, H.A.B.S., local, etc.):

The Fresno Bee 1923/1924. Heritage Fresno (a Bicentennial Survey of Historic Homes in Fresno County)

Jan Wampler

Malcom Wells, etc. (Additional Bibliography Attached)

D. Drawings (if data known), location, availability, attached, etc.:

Jan Wampler, Assoc. Professor
School of Environmental Design
Department of Architecture
Massachusetts Institute of Technology
Cambridge, Massachusetts

1. Original (date):

Unknown - (Refer above)

2. Measured (date):

Unknown (Refer above)

Part II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The environment is a series of vaulted chambers, excavated below grade but open to the sky, connected by dramatic, dark, curved passage-ways. Seventy rooms carved out of the hardpan earth with some man-made construction (reinforcing materials) have been incorporated into one single environment reflecting basic human needs and comfort. The garden and dwellings become one; architecture and earth interpenetrate; the self-conscious inside-outside game of the post-modernists is absent.

Its ecological and architectural characteristics link it stylistically (and formally) to historic architectural examples. Restaurant and bar were completed after his death by his brother in more conventional configuration and materials.

2. Condition of fabric:

The building material is hardpan, subject to erosion. The basic structure is still sound; however, problems with erosion and maintenance threaten the soundness of the basic earth fabric:

- a. The drainage system originally designed by the builder-owner has not been maintained, with the result that floors and other underground areas are damaged during the rainy season.
- b. Edges, openings from the vaults to the sky, and other outdoor area are eroding; they require preservation through maintenance of the gardening and planting system, which provides an interlocking root system that serves as reinforcement for the earth-building material. Without extensive maintenance of planting and tending of garden, the root structure decays, and with it the integrity of openings and areas exposed to the outdoors. (The present owners' solution of covering the openings with plastic roofs requires study to determine its effectiveness in providing protection; a return to the original planting and gardening system will be necessary to capture its ecological, cultural, and horticultural significance.)

B. Description of Exterior:

1. Overall dimensions:

The greater portion of a 10 acre parcel (less streets, roads, easements, etc.).

Existing complex (minus destroyed surface luke and pergola covered promenades) (400 ft. x 600 ft.)

2. Foundations (material): Foundations, wall construction, and framing:

Material throughout is indigenous hardpan; foundations, walls, and roofs are created by subtraction--carving out of spaces. Vault geometry for the most part provides the structure necessary to maintain the voids. Within this general approach to construction, a number of electrical construction decisions were made, for instance, the use of steel angles for reinforcing and the use of cement mortar mixed into the hardpan to provide a shell for a large vaulted space. Windows are curved out of earth, openings to the sky, or openings into adjacent cells. Only those windows in the central living spaces (Baldesere's living room, dining, and bedroom) are framed with wood.

3. Wall construction:

4. Framing:

5. Appurtenances (special features):

- a. Pergola by entry;
- b. Auto tunnel access to would-have-been motel rooms
- c. Restaurant

6. Chimneys:

Located in the central living area, it is carved out of the hardpan, and extends above ground.

7. Openings:

a. Doorways and doors:

The structure of the hardpan does not allow thin walls; therefore, the doorways become tunnel-like corridors between the rooms.

b. Windows:

Openings to the sky are the only possible source of light; they are circular apertures, without glass, usually about 1/3 the diameter of the floor area.

8. Roof:

a. Shape, covering:

The roof is the horizontal ground plane, its covering is natural earth, vegetation, and planting.

b. Cornice, eaves:

Not relevant

C. Description of Interior:

1. Floor plans:

See attached drawings

2. Stairways:

See attached drawings.

3. Flooring (material):

The floor is compacted clay and hardpan, in some areas finished with concrete; the floor of restaurant is imported Italian marble.

4. Walls and ceiling:

Sculptured clay, hardpan (native sedimentary rock), unfinished.

D. Environmental (brief description of site and surroundings):

1. General setting and orientation: The general setting is an industrial area next to a main highway (originally intended as an orchard on the outskirts of town). Orientation is more complex and important than for normal buildings. The design goes underground to avoid most direct sunlight, but uses sunlight selectively. Sun angles have been calculated to provide light for each vault according to function, and to minimize heat gain in the summer. Vaults and passages have been laid out to provide tapestry of dark and light spaces, visible throughout the complex.

2. Accessory structures (outbuildings, enclosures, etc.):

Restaurant and restrooms.

3. Landscaping:

Landscaping is central to the entire design, spatially, structurally, aesthetically. For-estiere made an important contribution by combining horticulture and agriculture. Citrus trees grow out of the skylites providing shade and fruit in summer. Different climactic regions within the building (due to the varying size of openings to the sky) allowed planting different kind of fruit trees, which would mature at different times, extending the supply of fresh fruit.

Grapes were planted around the edges of the apertures, hanging down within easy reach for picking. White and purple planted next to one another for their dramatic color contrast.

Prepared by Galen Crazz, Marck Mack, Friedner Wittman

Affiliation Department of Architecture, U.C. Berkeley

Title, if any Assistant Professor

Date June 17, 1977

State Historic Resources Commission
Department of Parks and Recreation
Post Office Box 2390
Sacramento, California 95811

Honorable Members:

I hereby certify that I am familiar with the established criteria that govern your evaluation of landmark applications.

This is to confirm that Foresters: Underground cottage and
(insert name of landmark)
Gardens

does qualify for architectural significance on the basis of one of the following criteria: (check one or more)

- 1. The first, last, only or most significant structure of a type in a region (underline one and identify type and region), and
- 2. Architectural prototype of a period, style, architectural movement or method of construction, or
- 3. Outstanding example of a period, style, architectural movement or method of construction, or
- 4. The most notable work, or the best surviving work in a given region, of a pioneer architect, designer or a master builder.
- 5. Other comments, if any The Underground House and
Garden complex is unique. Emphasizes
hand labor and on site materials
Sculptural construction methods are
used creating spaces with
Architectural statements

Respectfully submitted,

JAMES J. NARGIS A.I.A. ARCHITECT
Name

Chairman - Historical Preservation Comm.
Title (Preservation Officer or President)

San Joaquin
AIA Chapter

10-6-77
Date