

LOS ANGELES COUNTY ARBORETUM & BOTANIC GARDEN

Gate House Building Rehabilitation Study

Prepared for Los Angeles Arboretum and Botanic Garden Foundation

Prepared by Dunbar Architecture

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Previous Page: Los Angeles County Arboretum & Botanic Garden Gate House Building, southeast elevation (Dunbar Architecture, 2021)



Project Team

CLIENT

Los Angeles County Arboretum & Botanic Garden Foundation Richard Schulhof, Chief Executive Officer

REPORT PREPARED BY:

Architect

Dunbar Architecture 12314 La Maida St. Valley Village, CA 91607

Jen Dunbar, AIA, Principal & Project Manager Ashley Powell, AIA Project Architect

CONSULTANTS:

Structural Engineer

Structural Focus 19210 S. Vermont Ave. Building B, Suite 210 Gardena, CA 90248

Mechanical/ Plumbing Engineer

Kevin A. Smola and Assoc., Inc. 16025 Arrow Hwy Ste C Irwindale, CA 91706

Electrical Engineer

RBE Consulting Engineers 3016 East Colorado Blvd. Suite #5249 Pasadena, CA 91107

Fire, Life & Safety Engineer

Younghusband Consulting, Inc. 318 Avenue I, #466 Redondo Beach, CA 90277

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PART 1 PROJECT OVERVIEW



Previous Page: Los Angeles County Arboretum & Botanic Garden - Gate House, east elevation current view (Dunbar Architecture, 2021) Opposite Page: Gate House, date unknown (courtesy of Los Angeles County Arboretum Archives)



PROJECT SUMMARY

Dunbar Architecture prepared the following Building Rehabilitation Study to further the goal of preservation, restoration, and adaptive reuse of the Gate House Building located at the main entry to the Los Angeles County Arboretum and Botanic Garden. This study was completed at the request of the Los Angeles County Arboretum and Botanic Garden Foundation.

The Los Angeles County Arboretum and Botanic Garden is a 127-acre public garden and historic site, purchased by the County of Los Angeles and State of California in 1947 and opened to the public in 1955. It is significant for its association with the development of the San Gabriel Valley in the late nineteenth and early twentieth centuries. It is also significant as an excellent surviving example of large-scale, institutional, post-World War II landscape architecture and architectural design in Southern California.

The Gate House building, designed by the architectural firm Allison & Rible and constructed in 1956, was the second of three service structures located at the entry to the Arboretum. The first structure completed was the Restroom building, designed by the Department of the County Engineer in 1954. The award-winning Administration building, designed by Allison & Rible simultaneously with the Gate House, was completed shortly after the Gate House. These three structures plus the Library & Classrooms building (Allison & Rible 1959), the Peacock Café and Oak Room Classroom (Dept. of

the County Engineer 1967), and the Membership Building (1973) comprise the Entry Complex structures as identified in the 2014 Cultural Landscape Report prepared by Historic Resources Group.

All the buildings within the Entry Complex are in good condition and are identified as significant contributors to the Entry Complex district within the Arboretum. This Rehabilitation Study aims to summarize the historic significance of the Entry Complex, identify the character defining features of the Gate House, identify and assess areas of deterioration and make recommendations for the treatment of the building.

SCOPE & METHODOLOGY

Scope

The scope of this project includes an analysis of the Entry Complex Gate House. Although a description of the buildings and structures of the Arboretum Entry Complex are provided in this report, a comprehensive evaluation of the features were not within the project scope. This Rehabilitation Study consists of five parts: Part 1, Project Overview; Part 2, Development History; Part 3, Physical Description; Part 4, Conditions Assessment and Part 5, Treatment Recommendations.

Part 2, Development History, includes a summary Historical Background and Chronology of Development and Use of the Arboretum.

Part 3, Physical Description, provides a narrative and photographic descriptions of the property and its built features. The overall Entry Complex are described first, followed by a description of the exterior and interior of the Gate House. After each description is a summary of alterations. Lastly, a list of character-defining features of the site and building are included in this section.

Part 4, Conditions Assessment, summarizes existing conditions of the Entry Complex Gate House, describing materials used and identifying types and sources of deterioration. This section also includes a summary of structural and building systems (mechanical, electrical, plumbing) provided by the following subconsultants: Structural Focus (structural), KASAI (mechanical, plumbing), and RBE (electrical).

Part 5, Treatment Recommendations, includes recommendations for the appropriate treatment and maintenance of the Gate House building. In addition to architectural recommendations, a summary of structural and building systems recommendations is provided.

Structural conditions assessments can be found in the Appendix.

Methodology

This Rehabilitation Study meets the standards and requirements set forth in the following documents:

- The Secretary of the Interior's Standards for the Treatment of Historic Properties
- National Register Bulletin 39: Researching a Historic Property

The methodology used to prepare this study was based on numerous site visits between September 2018 and December 2021.

With nearly twenty years of experience working on historic structures throughout Southern California, Jen Dunbar exceeds The Secretary of the Interior's Professional Qualifications Standards in Architecture and Historic Architecture and has the appropriate skills and experience to prepare this report.

Research

The Los Angeles County Arboretum & Botanic Garden benefits from a significant collection of photographic, written, and architectural documentation. The Cultural Landscape Report and Treatment Plan issued in 2014 by Historic Resources Group, provided the basis for the historical recognition and evaluation of the Entry Complex and its individual structures, as part of a larger comprehensive study for the entire Arboretum site.

Original Allison & Rible drawings for the Gate House and Administration building provided details to the original design intent of the buildings. The Arboretum's archival collection of photos by William C. Aplin, a freelance garden photographer for Sunset Magazine, provided valuable insight to the construction of the first three buildings of the Entry Complex. LASCA Leaves, an early quarterly publication by the California Arboretum Foundation, provided valuable insite and additional visual documentation of the buildings.

Supplemental research was conducted using secondary source materials from the Los Angeles Public Library and the Los Angeles County Arboretum and Botanic Gardens Library.

Field Work

Fieldwork was completed over a course of multiple site visits between September 2018 and December 2021. During these site visits, written and photographic documentation was collected. On January 4, 2021, exploratory investigation was performed to allow for visual inspection and coring the existing concrete slab in two discrete locations inside the footprint of the Gate House. The site and the interior and exterior of the Gate House were assessed in the field and notes were taken regarding physical appearance, the presence of alterations or non-historic features, current conditions, and visible sources of deterioration.

SUMMARY OF SIGNIFICANCE

Previous Designations

The Cultural Landscape Report by Historic Resources Group surveyed and evaluated the entire Arboretum property for eligibility to the National Register as a designed historic landscape. Architectural features were identified and assessed for integrity as contributors to historic significance and included in this Report. The Entry Complex and specifically, the Gate House building, were deemed eligible for designation to the National Register.

Criteria of Significance

The Entry Complex and Gate House are currently recognized as significant at the national level under Criterion C for its association with significant architects and landscape architects of the post-war era, specifically architect Harry Sims Bent and the architectural firm of Allison & Rible. The Gate House retains a majority of contributing features from its period of significance and appears eligible for listing on the National Register of Historic Places at the local and state level.

Period of Significance

A property's period of significance is defined as the span of time in which it attains the significance for which it meets the Nation Register criteria. The Cultural Landscape Report identifies two periods of significance for the entire site; the Baldwin Era (1875-1936) and the Arboretum (1947-1978). The Entry Complex and Gate House fall under the Arboretum Period of Significance as it "represents the property's development as the Los Angeles State and County Arboretum (now the Los Angeles County Arboretum & Botanic Garden) until budget cutbacks in 1978 altered the facility's original mission of research, education, and propagation" (CLR, Historic Resources Group, pg 55-56).

PART 2 DEVELOPMENTAL HISTORY



Previous Page: Los Angeles County Arboretum & Botanic Garden, aerial view looking south (Los Angeles County Arboretum Archives)



Rendering of Entry Complex at Los Angeles County Arboretum & Botanic Garden (Allison & Rible, LASCA Leaves, 1956)

HISTORICAL BACKGROUND

Los Angeles County Arboretum - Entry Complex

ENTRY COMPLEX

In 1948, landscape architect George A. Kern ASLA prepared a formal Beaux Arts design for the masterplan of the Arboretum. It was rejected by the Foundation board in favor for a more modern garden concept that would embrace the unique nature and existing features of the site. Architect / landscape architect Harry Sims Bent was hired to develop a more informal, naturalistic design approach for the masterplan in 1950. This plan included a main entrance off Baldwin Avenue with designated areas for administrative,



Photo of completed Restroom Building and Gate House in construction, view looking north east. (photo credit: William C. Aplin, 1955 courtesy of Los Angeles County Arboretum Archives)

Entry Complex

research and service buildings. Bent's masterplan was approved and has generally been maintained since.¹

The site was formally opened to the public January 1955. The restroom structure along with a green house and service building were completed, allowing the Arboretum to be opened on a regular basis.²

The County hired local architects Allison & Rible to design the Gate House and Administration Building, which were dedicated in a public ceremony on December 14, 1956.³ The buildings were sited along a direct north/ south axis off the circular drive entrance into the park. Their design consisted of low concrete block massing and planes with low pitch overhanging roofs and exposed wood framing and rafters. While the earlier constructed restroom structure has not been attributed to Allison & Rible, its form, style, and construction were closely related to the design for the Gatehouse and the Administration Building with its use of concrete block, low pitched roof, and exposed ridge beam. The modern design was well received and received recognition by the Concrete

^{1 (}Historic Resources Group, 2015)

^{2 (}Spalding, 1973)

^{3 (}Stewart, 1957)

Masonry Association as "the best example of cement block structure in Southern California in 1956."⁴

The construction of the Gate House and Administration were highly anticipated milestones for the Arboretum. The winter 1956 issue of *Lasca Leaves*, the quarterly journal of the California Arboretum Foundation, Inc., featured construction photos of the entry site and a two-page description of both the Gate House and the Administration building.

"Features of the gatehouse include a public information office, a naturalist-guide office and electronically controlled entrance turnstiles. The information office will have two information wickets, a counter, and is so arranged that post cards, bulletins and books concerning the Arboretum, gardening and horticulture can be sold. Inside the gate will be a covered tour assembly area with wooden benches and an attractively filled planter."⁵

Allison & Rible were commissioned in 1958 to develop a masterplan of buildings for an anticipated twenty-year building program. The plan envisioned:

"twelve new buildings with display courts and related areas, including a new wing to the administration building, exhibit pavilion, lecture hall, education building,

4 (Spalding, 1973) 5 (Stewart W. , 1956)



Photo of Gatehouse and Administration Building in construction, view looking north. (photo credit: William C. Aplin, 1956 courtesy of Los Angeles County Arboretum Archives)



Rendering of 1958 Masterplan by Allison & Rible (LA Times, August 1958, pg E1)

conservatory, tropical greenhouse, plant curiosities building, orchid display building, mechanical services building, restaurant, waiting shelter and main gate, as well as an experimental garden, water plant pools, arbor, night lighting display, and outdoor dining area."⁶

The new administration wing, designed by Allison & Rible in 1959, served as additional office space for the Administration building, classrooms, and horticultural and floricultural library.⁷

The Peacock Pavilion (Dept. of the County Engineer, 1966) provided a much-needed dining facility with a gift shop and additional office space for the non-profit Arboretum Foundation at the lower level.⁸

By 1973, the entry complex was further modified to include a new Information Center building (currently referred to as the Membership Building). The new structure was designed in the concrete block and low-pitched roof style to be compatible with the earlier designed structures by Allison & Rible.⁹

^{6 (}Plans Made to Enhance Noted Area: Master Program of Development for Arboretum, 1958)

⁷ Ten colorful tile pictures by Mexican artist and tile maker Pedro Sanchez of Puebla, were fitted into the walls along the ramp progression on the south exterior of the building.

^{8 (}Arboretum's Peacock Pavilion Dedicated, 1967)

^{9 (}Spalding, 1973)

Allison & Rible

In 1944, Los Angeles architects George Boggs Allison and Ulysses Floyd Rible partnered to form the architectural firm of Allison & Rible. The firm was prolific in its work throughout the Los Angeles area, specializing in master planned developments and large buildings for both public agencies, school and higher education campuses, and corporate businesses.¹⁰

George Allison, nephew of the prominent architects David Clark Allison and James Edward Allison, moved out to Los Angeles in 1931 after earning architectural degrees from the University of Pennsylvania and working as a drafter in Philadelphia and New York.¹¹ He joined the team at Allison & Allison to assist with their recent commission to redevelop the Los Angeles City College masterplan and new campus buildings. The new planning and building project helped the school become nationally recognized as "one of the best terminal junior colleges" in 1941.¹² Allison's involvement on major higher education projects at his uncles' firm, which were driven by seismic upgrades under the 1933 Field's Act along with the need to build quickly and efficiently, may have played a major influence in the form and use of concrete and reinforced masonry in his later designed structures.

Ulysses Rible earned a bachelor's degree in architecture from the University of Southern California in 1928. After completing a Graduate Fellowship at the University of Pennsylvania (1928-1929), he came back to Los Angeles and was a drafter at Allison & Allison (1929-1930). He worked for a local architect, John C. Austin from 1930-1934. This was followed by a brief employment at the highly regarded Los Angeles firm of Parkinson & Parkinson from 1934 to 1935, before opening and running his own firm from 1935 to 1943.¹³ Rible was designated as an AIA Fellow in 1957 with a group of Southern California architects including Albert Frey, William H. Harrison, and Paul R. Williams.¹⁴

Building upon the George Allison's experience on the Los Angeles City College, Allison & Rible, began specializing in master planning projects, specifically for educational institutions. Claremont McKenna Men's College, University of California Riverside, Cal Poly San Luis Obispo, and Los Angeles City College were some of their largest commissions. Within their twenty-five years, the firm designed over a one hundred school projects and numerous higher education buildings.

Their corporate commercial work included a number of large office buildings designed for Pacific Telephone and Telegraph, Blue Cross, the Rand Corporation, and Wells Fargo to name a few. Public building projects included library branches, administration build-

^{10 (}Teresa Grimes and Christina Chiang of Christopher A. Joseph & Associates, 2009)

^{11 (}American Architects Directory, First Ed., 1956)

^{12 (}Kaplan Chen Kaplan, April 2002)

^{13 (}American Architects Directory, First Ed., 1956)

^{14 (8} AIA Members Are Advanced, 1957)

ings, and schools. By their fifteenth anniversary in 1959, the company had been involved in more than four hundred projects, based primarily within Southern California.

The firm was primed to develop a master plan and building program for the Los Angeles County & State Arboretum. By 1952, they had completed a new 15,000 square foot administration building for the Rancho Santa Ana Botanic Garden in Claremont that contained extensive libraries, laboratories, and administrative offices.¹⁵

Stylistically, Allison & Rible experimented with low pitched or flat roofs and concrete or brick masonry structures to capture a modern interpretation of traditional forms between 1951-1959, This can be seen in some of their early County and Library branch work. Of note, there is particular attention paid to the relationship between solid planes and voids, either with actual openings or glazing. When the Arboretum buildings are viewed alongside the San Dimas County Building (1958) and Temple City County Building (ca. 1956, now City Hall), a design vocabulary for their public work emerges.¹⁶ Both of these buildings incorporate a modern design direction similarly employed on the Arboretum buildings, using low slung, low pitched or shed roofs. The low roofs are supported by solid masonry walls set as distinct planes with windows and outdoor arcades composed as large, geometric voids.



Temple City County Building (1956) photo credit: Dunbar Architecture



West Los Angeles Regional Branch (1956) photo credit: Fred R. Dappich



San Dimas County Building (1958) photo credit: Dunbar Architecture

^{15 (}Botanic Gardens New Structure Completed, 1952)

^{16 (}County Office Building Rises at San Dimas, 1958)



Los Angeles County Arboretum & Botanic Garden (1957) photo credit: Julius Schulman, courtesy of the Getty Digital Archives

CHRONOLOGY OF DEVELOPMENT & USE

The following timeline is a condensed chronology of development focusing on the Entry Complex within the "Arboretum" Period as defined by the 2015 Cultural Resources Report. For the complete expanded timeline of the entire Arboretum site, refer to the 2015 Cultural Resources Report.

- 1947 The State of California and County of Los Angeles jointly purchase 111 acres from Rancho Santa Anita, Inc. to create an Arboretum.
- 1948 The California Arboretum Foundation is incorporated as a non-profit organization to sublease and administer the Los Angeles State and County Arboretum.
- 1950 A master plan created by Harry Sims Bent is adopted by the County of Los Angeles and the California Arboretum Foundation.



- 1951 The new Baldwin Avenue alignment is set; through access from Colorado Boulevard to Hunting Drive will be completed within the year.
- 1954 The Restroom building is completed at the Baldwin Avenue entrance.
- 1955 The Arboretum is formally opened to the public.
- 1956 The Administration Building and Gatehouse complex is completed. The Buildings are dedicated in December.



- 1958 Master plan by Allison & Rible is approved by Board of Supervisors. Its purpose is to guide development of Arboretum buildings for the next twenty years.
- 1959 The Administrative Wing (Library & Classrooms) is completed.
- 1963 The entryway project, consisting of the Bauer Fountain and Gateway (McFie) Pool is completed and lawns are planted between the pools and out to Baldwin Avenue
- 1964 More than seventy trees are moved from other areas of the Arboretum to the formal entryway near the Bauer Fountain and McFie Pool.
- 1967 Peacock Pavilion is completed with a coffee shop on the upper level and Gift Shop and offices for the California Arboretum Foundation offices below.
- 1973 A new Information Building (Membership) is constructed east of the entrance steps, and visitors are directed to enter the Arboretum through the Administration Building Rotunda.
- 1975 A new entranceway is completed off Baldwin Avenue with a curving drive around a new fountain and pool.
- 1983 The Gift Shop moves from Peacock Pavilion to an enclosed, remodeled Gate House.





CHRONOLOGY OF DEVELOPMENT & USE

- 1985 The Rotunda is remodeled and enclosed to accommodate four new ticket stations.
- 1986 An addition is built off the east side of the Library to add three new offices.
- 1990 Peacock Cafe is renovated with a new kitchen, new interior decor and construction of extended outdoor dining terraces.



PART 3 PHYSICAL DESCRIPTION







Previous Page: Inside the Gate House, view of Restroom Building, Julius Schulman (Los Angeles County Arboretum Archives) This page top and bottom: Gate House Building, dates unknown (Los Angeles County Arboretum Archives)

SITE

The Los Angeles County Arboretum and Botanic Garden is located at 301 N. Baldwin Avenue with the primary drive entrance at the intersection of Arboretum Way and Baldwin Avenue. The Gatehouse sits at the south edge of a cluster of buildings along the north side of the main parking lot. The cluster of buildings ("Entry Complex") consists of the Gate House, the Administration building, the Membership building, the Library, and the Restroom building. The Peacock Café sits further to the north beyond the Library and Restroom Building. The buildings are situated on a slope that rises to the north, with the Gate House and Restrooms at the lower grade, and the Administration Building, Membership Building, and Library at a higher grade.

The Gate House length runs along a north/south axis. A concrete plaza extends in front of the building along the east elevation and continues on the other side of the building along the west elevation. The parking lot currently extends to the edge of the paving and runs close to the south side of the Gatehouse building.

Along the east elevation of the Gate House, a low, painted concrete block wall runs perpendicular from the northeast building edge to the steps leading up to the Administration building. The low wall acts as terracing for a planter. A accessible concrete ramp has been inserted behind the low planter wall and between the Administration building steps. Along the southeast side of the Gate House, a sloped walk runs parallel to the building and rises up to a staff-only access door on the southwest corner. A wooden fence serves as a mechanical enclosure on the southwest corner beyond the walkway.

On the west side of the Gate House, a concrete plaza extends to the trolley access road. The Restroom Building shares this plaza space, along with a below grade entry to the Library Building classrooms and the original ramp up to the first floor of the Library. An inclined walkway branches off to the north to reach the lower level of the Peacock Café.

At the northwest edge of the Gate House, a screen wall built from concrete block in a perforated design aligns with the northwest wall of the Gate House, sitting slightly behind the Gate House wall.

GATE HOUSE - EXTERIOR

The Gate House is a one-story institutional building originally constructed in 1956. It is Midcentury Modern in style and forms an irregular hexagon in plan. It is constructed of concrete block (or concrete masonry units, CMU) and wood framing.

The building has a low-pitched gabled roof with flat fascia boards along the perimeter, which conceal recessed gutters. Open overhanging eaves expose the wood roof rafters and wood plank roof substrate. The wood ridge beam extends past the roof line on both the north and south of the building.

Clerestory windows on the south corner walls are framed in wood and follow the roof pitch. The exterior concrete block walls and exposed wood framing elements are painted. The building sits on a flat concrete slab that rises above grade on the south end and becomes flush with grade as it extends to the north.

Alterations to the Gate House - Exterior

In 1983, the Gate House was remodeled to serve as the Garden and Gift Shop.

- The entrance turnstiles and original decorative metal fencing were removed
- The large open area under the overhanging roof was enclosed with wood paneland-batten partitions around its perimeter
- Lower windows below the clerestory windows along the south corner were covered with wood panel-and-batten siding.
- A wood display case was mounted to the concrete block along the east elevation.
- The original gravel roof was replaced with asphalt composition shingles and skylights were added.
- The open framework of the north end of the roof was covered by the new roof.
- A steel post was added at the north end of the building to support the over hanging roof rafter and glass covered roof of the Library. It is not clear if the post was installed during the construction of the Library or at a later date.



View of existing condition looking southward at east elevation of building



Views of existing condition looking west elevation of building

GATE HOUSE - INTERIOR

In its current state as the Gift Shop, the space consists of an entry vestibule along the north concrete block wall, a large open room which was the previously open-air space under the roof, and a concrete block enclosed space for an office, storage, staff restroom, and an unfinished mechanical room accessed from the exterior of the building. The storage space, office, and restroom are accessed from doors along the northeast and northwest walls. Cabinetry and shelving are placed against the concrete block walls. All interior concrete block and exposed wood are painted. Three steel posts supporting the roof within the gift shop space are painted. Carpet covers the concrete floor.

Inside the storage area, the original ticketing counter and cabinets runs along the northeast and southeast walls. The original wood ticketing window along the northeast wall is intact and visible. Concrete block walls further divide the space into additional rooms: a small storage closet, a single use restroom, and an office. Doors into the interior rooms are fixed into wood blocking within the concrete block openings. The original 8x8 acoustic tile is attached to directly to the main ceiling, which follows the pitch of the roof framing.

The restroom walls tiled at a wainscot height with 4x4 blue ceramic tile. The floor is tiled with 2x2 gray ceramic tile and is flush with the hallway flooring indicating a recessed slab at the bathroom.

Alterations to the Gate House - Interior

- Rolled carpet directly adhered to the original exterior exposed slab. Rolled carpet directly adhered to vinyl composite tile (VCT) in the original ticketing room.
- Batten and panel ceiling with recessed can lighting was applied directly to the roof framing.
- Roll-up security door was added to separate the gift shop from the entry vestibule, which contained doors on the east and west sides to allow a pass through option during times that the gift shop was closed.
- Two vents (supply and return) were added into the northeast and northwest concrete block walls for an HVAC system to control temperature in the gift shop.



Above: view of gift shop entrance Right: views of existing interior condition - stock room (original ticketing office)



CHARACTER-DEFINING FEATURES

plan drawing showing existing layout of Entry Complex

Site

- Cluster of buildings following a north-south axis layout
- Concrete plaza space in front of Gate House connecting to Administration Building stairs
- Concrete plaza space between Gate House and Restroom Building
- Low concrete block retaining wall extending from east wall of Gate House and connecting to Administration stair/ ramp sequence
- Landscaped terracing between Gate House and Administration Building

Gate House - Exterior

- Low sloped gabled roof with recessed, concealed gutters
- Exposed wood rafters and extended ridge beam
- Painted concrete block walls. Concrete block walls are set in a running band pattern with raked horizontal joints and concave vertical joints
- Free standing concrete block walls supporting the roof at the north end (indicated in yellow on diagram below)
- Exposed roof framing at north end that was not covered with roofing material. Opening was in the shape of a diamond
- Wood framed fixed windows with solid paneling between the frames at the lower level
- Door openings are inset with wood framing



Gate House - Interior

- Open height ceiling in main ticketing office
- Concrete block interior walls within core building (indicated in yellow on adjacent diagram)
- Slab panel interior doors. Slab panel exterior doors with single glass window in upper half of door
- Framed windows above counter height on the northeast, southeast, and southwest walls
- Door openings are inset with wood framing

Opposite Page: View of roof ridge beam, south side PART 4

ARCHITECTURAL CONDITIONS ASSESSMENT



GATE HOUSE ARCHITECTURAL ASSESSMENT

The following architectural conditions assessment has been provided for both the exterior envelope and interior finishes at the Los Angeles County Arboretum and Botanic Garden Gate House. The focus of the assessment is on the original features of the building. Modifications to the building due to its current use as a gift shop are identified when discussing conditions of the original features.

Exterior conditions have been broadly grouped into the following categories: Exterior masonry (concrete block or concrete masonry units [CMU] and concrete, exterior woodworking (framing and trim), openings (windows, doors, and vents), roofing and drainage, and site work. Interior conditions have also been grouped into broad categories, rather than addressing them room by room, since the building is so small. These categories include: floors, walls, ceilings, cabinetry, fixtures and fittings.



Section of carpet removed at gift shop floor for concrete core sampling

Exterior Masonry

The building is supported by a concrete slab on grade with spread footings at all concrete block wall locations. Posts are supported with concrete pads. The original exterior slab under the roof was identified in the drawings as colored concrete and scored in a grid pattern of approximately thirteen by thirteen feet squares.

An opening in the slab under the roof to the northwest of the concrete block enclosure allowed for an in-ground planter feature. It appears from preliminary investigation that this planter opening was later infilled. Due to the existing and on-going use of the gift shop, the carpet covering the original exterior slab has not been removed. The condition of the concrete slab appears to be in good condition but will require further examination once the carpet has been completely removed.

Conditions Assessment

The concrete block walls are eight-inch reinforced concrete masonry units (CMU) stacked in a running bond pattern. The CMU walls are painted and have raked horizontal joints and flush vertical joints. The block walls create a building enclosure on the south end of the building. On the north, two free-standing block walls support the roof over the open space below. The concrete block walls appear to be in good condition.

The CMU wall along the north side of the building has been performing with some retaining capacity for the landscaped slope between the Gate House, Administration Building, and the Library. Water intrusion has been noted along the current Gift Shop entry side of this wall and the low retaining wall where soil sits against. Some efflorescence has been seen on the concrete floor that is likely the result of this intrusion.



Northwest concrete block wall



Backside of northeast concrete block wall



low concrete block wall off Gate House

Conditions Assessment



South end of extended ridge beam



example of bubbling at wood facia



interior view of "cement asbestos" panels

Exterior Woodwork

The building is currently clad with wood panel and batten siding that infills the original openings of the Gate House building. This includes paneling over the original windows along the southeast and southwest corner. A large wood display cabinet is attached to the southeast CMU wall. These elements are not original to the building.

Original exterior woodwork consists of the exposed wood roof rafters, ridge beam, and roof facia along the perimeter of the roof. The eaves are exposed and reveal tongue and groove roof sheathing. There are multiple locations of wood rot at the exposed rafters and ridge beam. The south end of the ridge beam is capped with metal flashing but requires repair work. The north end of the ridge beam is also capped and topped with bird deterrent spikes. It appears to be in better condition.

The majority of the wood damage occurs along the wood perimeter roof facia where it appears water from the recessed gutter has permeated into the wood and become trapped behind paint.

There are some small bird nests located under the roof eaves.

Original wood framed windows are still intact along the upper level of the south corner. The wood is painted and appears to be in good condition. The lower level infill paneling beneath the windows is intact along the north side and identified on the drawings as half inch thick "cement asbestos" panels.
Openings

There are three original exterior door openings within the CMU of the main Gate House enclosure. The door along the north wall is situated within a framed opening in the CMU wall that contained the original ticketing windows. The door along the west wall was the original second entry into the main building. The third original opening along the south wall provides access to the mechanical space. A fourth door was added to the south wall within the original window framing at a later date and is not original to the building.

According to the original drawings, the three original exterior doors were Kalamein slab doors with no openings.¹ They have since been altered so that the primary door can act as a Dutch door and the secondary door has a square opening at the top with wire-glass. Door hardware on original doors is commercial grade stainless steel knobs.

The original windows are still in place within the north wall and the southeast and southwest corner. The original sliding ticketing window is still in place and visible from the interior of the block building. The sliding window located along the southeast wall is covered on the exterior by siding and on the interior by shelving at the lower windows and canvas covered frames at the top windows. It is not certain that the operable ticket window is still in place at this location. The glazing that is visible in the upper windows is fixed within the framing and is a clear float glass.





West Exterior Door





South Exterior Door

Covered windows



Covered north windows

¹ Kalamein is a term often used to describe any architectural element that involves the cladding of wood with sheet metal. Often used on wood doors to prevent the passage of fire.



There are some mechanical openings for vents in the CMU along the south wall to the exterior. Two large square openings were added along the northeast and northwest walls to provide ventilation for the gift shop.

HVAC vent at CMU wall



Recessed gutter



Downspout along west side

Roofing & Drainage

The roof is low pitched with extended eaves over the concrete block walls. Due to the placement of the walls below, which are turned on angle to the roof axis, the edge of the roof cuts away to create a hexagonal form. This form was further cut back in the original design to create a diamond shaped opening over the roof framing on the north side. The original covering was a composite and gravel roof system that was later replaced by an asphalt tile system.

Concealed metal gutters sit inboard of the roof edge and are open to the top along the roof perimeter. They are concealed by the wood fascia along the perimeter and supported by a secondary wood fascia at the edge of the tongue and groove sheathing.

A PVC downspout attaches to the bottom of the gutter along the northeast wall and distributes runoff into the planter behind the Gate House. Along the west side, a downspout kicks back to the south end of the freestanding CMU wall and follows down to the grade. However, the downspout daylights and does not connect with



Downspout at northeast side

Sitework

Multiple exterior slab expansions have tried to extend the original grid pattern and but have not matched the original slab color. Additional sloped walkways were placed at the exterior of the west gift shop exit door and the south exterior staff door to accommodate the change in grades and accessibility.

The mechanical enclosure is bounded by two different fencing systems. A chain link across the east and south side and a wood picket on the west side. The HVAC unit for the gift shop sits within the mechanical enclosure.



sloped walk at southeast side



concrete and HVAC enclosure at southwest side



ACT at Ticketing Floor



Interior Floors

The original interior floors at the ticketing office and first aid room were identified on drawings as "a.c. tile" or asphalt composite tile. The first aid room tile is still intact and is a gray 9x9 tile.¹ Rolled goods carpeting covers the original tile in the ticketing room and hallway.

The bathroom floor is a 2x2 gray tile floor inset flush with the adjacent floor. An inset floor drain is located below the sink. A gray marble threshold runs across the door opening. The floor tile has some crack locations and is in fair condition.

The storage room and mechanical room floors are smooth finish, exposed concrete slab floors. The mechanical room floor has an open floor drain.

1 sold in 1955 by Armstrong as Asphalt Floor Tile. Most likely Gray Taupe No. C-947 or Pearl Gray No. C-946

Restroom floor



Interior concrete block wall

Interior Walls

The interior of the original perimeter walls are exposed concrete block walls. Two additional interior walls are exposed concrete block walls extending to the ceiling and providing additional structural support for the roof: The south wall along the hallway and the west wall of the ticketing office.

Openings to the restroom and small storage closet are formed along the south wall. The walls enclosing a small office (previously the first-aid room) are wood framed with

painted gypsum wallboard. This wall connects to the concrete block wall and creates a small hallway off the main ticketing room.

The bathroom walls are tiled to a wainscot height with a light blue 4x4 square tile in a stacked bond pattern. The cove base tile is flush with the floor tile. The tile bullnoses at the top of the wainscotting and at the corners. The tile is in fair condition as there are some large cracks and previous patching.



Bathroom wall tile

Ceilings

The underside of the roof outside of the original enclosure is currently covered with a wood batten and panel ceiling. Two sky-lights have been inserted over the area.

The ceiling inside the original enclosure is acoustic tile attached directly to the 2" x 3" stripping along the underside of the roof framing. There is some staining and evidence of previous minor water damage in areas near the perimeter walls. The tile is original. The ceilings at the hallway and small office are lower with the acoustic tile attached to framing. A ceiling hatch is framed out in the office ceiling.

The ceiling in the bathroom is painted plaster and level with the hallway ceiling. The ceilings in the storage room and mechanical room are the exposed wood framing members of the roof. The wood appears to be Douglas Fir and in good condition.



Acoustic ceiling tile at ticketing office



Dropped ceiling at hallway



Built-in cabinetry at ticketing office



Built-in cabinetry at ticketing office

Cabinetry & Fixtures

The original built-in ticketing desks and cabinetry are still intact but in rough shape. A wood countertop runs along the north and east walls with drawers and open shelving below. Original metal drawer pulls are still intact on most of the drawers.

Light fixtures in the main ticketing space and small office are surface mounted rectangular metal boxed florescent lights with 1x1 troffers. Lighting in the restroom and hallway consists of a surface mounted incandescent fixture. The hallway is missing the lens. The mechanical room contains an industrial pendant with an incandescent bulb.

The bathroom contains a single ceramic wall-mounted sink with an integrated splash. The faucet has been replaced with a newer model. The toilet is a floor mounted tankless fixture with a flush valve. PART 5

ARCHITECTURAL TREATMENT RECOMMENDATIONS



Previous Page: View of Gate House, west elevation (Dunbar Architecture, 2020)

GATE HOUSE TREATMENT RECOMMENDATIONS

The following architectural treatment recommendations for the Los Angeles County Arboretum Gate House are based on deficiencies noted in the previous section "Conditions Assessment." Like the previous section, recommendations have been broadly grouped into the following categories: Exterior masonry (concrete block or concrete masonry units [CMU] and concrete, exterior woodworking (framing and trim), openings (windows, doors, and vents), roofing and drainage, and site work. Interior conditions have also been grouped into broad categories, rather than addressing them room by room, since the building is so small. These categories include: floors, walls, ceilings, and cabinetry and fixtures.

Exterior Masonry

- Remove carpeting and adhesives at the exterior (previous gift shop enclosure) and interior (ticketing office and hallway) floors to identify crack locations and level of repair work.
- Clean and repair existing colored concrete slab-on-grade.
- Repair cracks and spall repairs as needed.
- Identify where previous planter infill occurred.
- Repoint cracks or voids in grout at CMU walls; match existing grout.
- Surface preparation and repainting at concrete block walls.
- Prep and waterproof the back side of the north concrete block wall to prevent material deterioration.

$\mathsf{Exterior}\ \mathsf{W}\mathsf{oodwork}$

- Remove non-original wood panel wall enclosures at original openings under Gate House Roof.
- Remove wood paneling from south corner windows and assess conditions of existing wood window framing.
- Remove wood display case from east CMU wall.
- Remove peeling paint and decayed areas of wood and debris, old patching materials, corroded fasteners, etc.
- Localized wood repair of deteriorated and split wood components. Use wood-compatible epoxy fills where possible; if new wood is required, use dutchman repairs rather than full board replacement to retain as much historic fabric as possible.
- Repair original wood ridge beam, rafters, and fascia trim.
- Repair original roof sheathing T&G as needed.
- Provide new cap flashing with drip edge at all exposed framing.
- Repair exposed ends of existing ridge beam.
- Generalized cleaning and repainting.

Openings

- Repair and restore original windows (wood frames, glazing) at south corner walls. Provide new UV films and shades.
- Repaint wood surfaces at sash, frame and trim.
- Remove non-original door at south corner. Rebuild window condition to match existing.
- Clean, repair existing original exterior and interior doors. Reuse where possible.
- Retrofit door hardware to accommodate new ADA lever hardware.
- Rehabilitate original ticketing windows at north wall.
- Remove skylights in roof.
- Uncover roof framing at north end to match original configuration.
- Clean vents in north side CMU walls.
- Remove old, unused equipment from mechanical openings in south CMU walls. Reuse existing mechanical openings for new infrastructure, where possible.

Roofing & Drainage

- Repair existing built-in gutter, replace existing downspouts, and connect to drainage system.
- Retrofit gutters with new mesh debris screens.
- Remove existing non-original skylights. Infill openings with new framing, ceiling panels/trim, and roof system to match existing.
- Return roof to original exposed structure.
- Install new structural sheathing over existing T&G.
- Install new composite roofing system.

Sitework

- Remove non-original sloped concrete at southwest side of Gate House.
- Remove non-original sloped walkway to south corner door.
- Add new slab off mechanical room door for mechanical equipment.

Interior Floors

- Remove non-original carpet.
- Remove loose VCT tile and replace with matching.
- Clean and repair existing tile at restroom. Regrout floor.
- Clean and prep exposed concrete slab floors.

Interior Walls

- Prep and repaint interior walls.
- Clean and repaint wood base throughout.
- General cleaning, stain and mineral deposit removal of ceramic wall tile.
- Repoint cracks or voids in grout; match existing grout.
- Replace broken/ missing tile with new to match.

Interior Ceilings

- Clean existing acoustic tile to remain. Secure or re-attach any loose tiles.
- Prep and repaint.

Cabinetry & Fixtures

- Salvage and reuse as much original casework and hardware as possible.
- Where materials are reused, clean and repair.
- Replace broken fixtures.



Photo of Gate House in construction. (photo credit: William C. Aplin, 1955 courtesy of Los Angeles County Arboretum Archives)

BIBLIOGRAPHY

8 AIA Members Are Advanced. (1957, May 12). Los Angeles Times, p. G21.

American Architects Directory. (First Ed., 1956). R.R. Bowker LLC.

Arboretum's Peacock Pavilion Dedicated. (1967, April). LASCA Leaves Vol. XVII No. 2, p. 43.

Botanic Gardens New Structure Completed. (1952, February 03). Los Angeles Times, p. E3.

County Office Building Rises at San Dimas. (1958, May 11). Los Angeles Times, p. F13.

Historic Resources Group. (2015). Cultural Landscape Report.

Kaplan Chen Kaplan. (April 2002). LA City College Historic Resources Survey Report. Los Angeles, CA.

Plans Made to Enhance Noted Area: Master Program of Development for Arboretum. (1958, August 31). Los Angeles Times, p. E1.

Spalding, G. H. (1973, March). A History of the Los Angeles State and County Arboretum: The First 25 Years. p. 31.

Stewart, W. (1956, Winter Vol VI No 2). Arboretum Administration Building. LASCA Leaves, pp. 2-3.

Stewart, W. S. (1957, Winter). Arboretum Dedication Program. LASCA Leaves, pp. 2-3.

Teresa Grimes and Christina Chiang of Christopher A. Joseph & Associates. (2009). Modernism Context Statement. City of Riverside, CA.

APPENDICES



PROJECT LA Arboretum Gate House	DATE 1.08.20	
PROJECT NO. 19221	SECTION	STRUCTURAL
BY VLR CHECKED BY	PAGE 1 OF 1	FOCUS
SUBJECT Structural Observations		

Structural Observations

Date of Site Visit:	10.31.19
In Attendance:	Wayne Chang, Structural Focus
	Vickey Rogers, Structural Focus
	Jen Dunbar, Dunbar Architecture
	Daniel Solis, RBE Consulting
	Richard Amado, KASAI Engineers
<u>Areas Observed:</u>	Existing gift shop: roof framing, sheathing, wood beams, wood posts, CMU
	building walls, exterior planter wall

Observations:

Existing gift shop has light-framed walls enclosing the area between the original CMU building as built in 1955 to the original freestanding CMU walls to the north. The added enclosed space has a ceiling which conceals the roof framing. The longitudinal wood beams at the center and sides of the building are spliced at each wood post with a steel plate and lag screws. Roof framing visible outside the building, on the underside of the eaves have some water and termite damage. One location has an additional 2x member sistered to the existing framing. Where the roof framing bears on CMU walls, there is a sloped sill plate on the stepped CMU wall. Method of anchorage of sill plate to CMU wall was not observed during this visit. CMU walls are reinforced with #4 bars. Spacing was estimated to be approximately 24 in. on center.

The existing building appears to be in fair condition with no sign of major structural distressed. There are some signs of deterioration on the existing wood fascia and exposed roof rafter tails due to water exposure. It is recommended further investigation be perform during construction and repair with epoxy or replace in kind.



February 4, 2020

Jen Dunbar Dunbar Architecture 14314 La Maida Street Los Angeles, CA 92618

Reference: SEISMIC EVALUATION REPORT & RECOMMENDATIONS LA ARBORETUM GATE HOUSE BUILDING ARCADIA, CALIFORNIA [SF PROJECT #19221]

Dear Ms. Dunbar:

We have completed our seismic evaluation of the former Gate House building (presently the Gift Shop) at Los Angeles County Arboretum and Botanical Gardens. We have based our study on information gathered during our October 31, 2019 site visit, and our review of the original architectural and structural drawings dated March 1, 1957. It is our understanding that the additional wood stud walls of the renovated Gift Shop building will be removed with the design intent to convert the building back to resemble the original Gate House building.

The purpose of this study is as follows:

- Provide an overall assessment of the condition of the building's structure;
- Provide a seismic evaluation of the building identifying structural deficiencies;
- Develop a structural strengthening scheme to bring the building to a performance level consistent with the California Historic Building Code;
- Provide an estimated number of existing structural elements requiring repair and provide conceptual repair details.

Building Description

Constructed in 1958, the former Gate House building was a single-story square building, approximately 26 feet wide and 26 feet long. The original building footprint was approximately 650 sf. The roof is hexagonal and set 45° to the building, spanning from the building to two freestanding walls approximately 40 feet north of the building, creating a covered outdoor area in between the building, approximately 38 feet wide by 76 feet long. The building footprint is approximately 2000 sf. Light-framed, non-bearing walls were added to enclose the area between the original building and the freestanding walls (see Fig. 1).

Gravity Load Resisting System

The roof consists of 4x10 joists at 4 ft on center, spanning between a 5"x 14 5/8" glue laminated ridge beam and, at the renovated enclosed space, 6x14 perimeter beams. The beams are supported by built-up steel columns consisting of two welded angles, creating a 4" square tube. At the original building and freestanding walls, the joists span between the ridge beam and 8" reinforced CMU walls. At the CMU walls, the roof joists were connected to a sill plate that is anchored to the CMU wall with 5/8" diameter bent bars at 4 ft on center. The foundation consists of continuous strip footings below the walls and a thickened slab below the columns.

Lateral Force-Resisting System

General Building Condition

The existing lateral system consists 8" reinforced CMU shear walls with #4 reinforcing bars at 24" on center. The roof diaphragm consists of 2x straight-sheathing (see Fig. 2).



Figure 1 - Gift Shop exterior

The existing building appears to be in generally fair condition with no sign of major structural distressed. There are some signs of deterioration on the existing wood fascia and exposed roof rafter tails due to water exposure. At one rafter, which had water and termite damage, was previously



Figure 2 - Straight sheathing at roof

repaired by sistering an additional 2x member to the original rafter.

Seismic Evaluation Methodology

Since the design intent is to convert the building back to resemble the former Gate House building, our analysis only considered the building in the original 1958 configuration. We have performed a seismic evaluation of the building based on 2019 California Historic Building Code (CHBC), Part 8, Section 8-7 "Structural Regulations". The former Gate House building is part of a collection of buildings that comprise the LA County Arboretum, one of which is Queen Anne's Cottage and Coach Barn, No. 80000804 on the National Register of Historic Places. The evaluation included an analysis of lateral base shear forces on the existing diaphragm and CMU shear walls, and the out-of-plane seismic forces on the CMU walls. Lateral forces were determined with the R-value for Ordinary Reinforced Masonry Bearing Walls and did not need to exceed 75% of current code forces per CHBC

Section 8-706.1. For the former Gate House building, seismic forces outlined in Exception 3 governed, where the maximum seismic force for Risk Category I or II structures is 0.30W, or 30% of the seismic weight of the building. The seismic forces were compared to lateral wind forces and the seismic forces governed.



Overall Building Seismic Performance & Summary of Deficiencies

Based on our site visit, review of as-built drawings and analysis, the building in its original 1958 configuration meets the requirements of CHBC with the respect of lateral load resistance.

<u>Load Path</u>: The structure has a well-defined load path from the roof joists and roof beams to columns and CMU walls with positive connections.

<u>Diaphragm</u>: When analyzed in the directions orthogonal to the CMU walls, the existing 2x straight sheathing was confirmed to be adequate in resisting seismic lateral forces in both directions.

<u>Shear Walls</u>: The CMU shear walls were confirmed to be adequate in resisting lateral forces orthogonal to the walls in both directions.

<u>Out-of-Plane CMU Walls</u>: The CMU freestanding walls to the north of the original building span vertically between the roof joists and foundation, and were confirmed to be adequate in resisting out-of-plane seismic forces. The CMU walls of the original building span horizontally between wall anchors and were confirmed to be adequate in resisting out-of-plane seismic forces.

<u>Out-of-Plane Wall Anchorage</u>: The existing wall anchorage at the roof sill plate to CMU freestanding and building walls were confirmed to be adequate in resisting out-of-plane wall anchorage forces.



Figure 3 - Roof rafter tail deterioration

Additional Findings & Recommendations

Roof Joists Deterioration

There are some signs of deterioration on the existing wood fascia and exposed roof rafter tails due to water exposure (see Fig. 3). We recommended further investigation to be performed during construction to determine the extent of water deterioration and possible termite damage. Members may be repaired with epoxy or replaced in kind.

It is our sincere pleasure to be a part of this exciting and challenging project. If you have any questions or comments regarding our findings and recommendations, please feel free to contact us. Thank you.

Sincerely, Structural Focus

Vickey Rogers, P.E. Design Engineer

Wayne Chy

Wayne Chang, S.E. Principal



















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TOTAL WINTYS TO	\sim	X	2800	-		-	5.	350
TOTAL	X	~	X				15	8.50

KRY NEW AND

	2.8		-		-	FLOOR I	PLANS
						APPROVED BY Conting ARBORETUM DIRECTOR Mallian S. Steevilit DATE JULY 10-55	L.A. STATE ADMINIST LOS CAPITA
						CONSULTING ENGINEER	ALI
/No.	3- 1-57 DATE	CORRECTED TO AS-BUILT DRWG. REVISIONS	MADE	Г-5 Снк.	APP.	Maprilland tile	





A ASLATCANE BASE MATCHNU, IVER A, HEA L.A. COUVER TOTAL DEMI STANDARDS MAIL T. A. Martine Content $= \begin{pmatrix} y_i A_i & \Theta_{i} \in \Gamma_{i,0}(G_i), \Box_{i,0} \\ & \Theta_{i} \in \Gamma_{i,0}(G_i), \Box_{i,0} \\ & \Theta_{i,0}(G_i), \Box_{i,0} \in \Gamma_{i,0}(G_i), \\ & \Theta_{i,0}(G_i), \\ & \Theta_{i,0}(G_i)$ 142-Associate Barry Martine a state of the second state of the second state of the TO LE 7 (FB 1678-225 10 Max OC. TYPICAL ROADWAY SECTION Nor To Scale 6. APPROVED: DU RETORT LOS ANGELES TIME & COUNTY ARBORETUM CITER MECHANICAL ENGINEER-MECHANICAL SERVICES DEPARTMENT OF THE COUNTY ENGINEER SURVEY DIVISION COUNTY OF LOS ANGELES DATE SEPT. 1956 JOB CAPTAIN R.E.S. DRAWN BY J.A.P. CHECKED BY Str. H. Kinght 936-57 APPROVED: AS BUILT CORRECTIONS 1 A TO TCHIEF ARCHITECT

