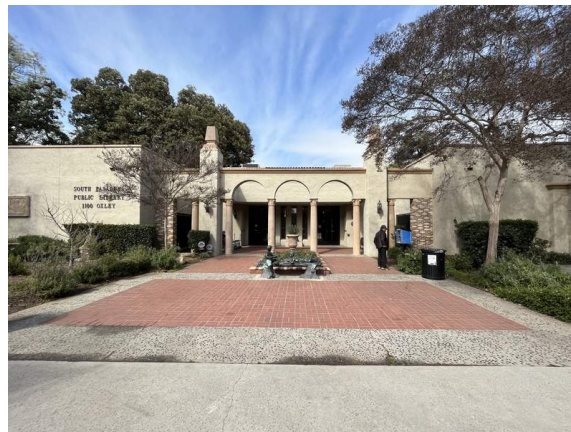


FACILITY CONDITION ASSESSMENT

SOUTH PASADENA PUBLIC LIBRARY

1100 Oxley Street
South Pasadena, California



Prepared for:

City of South Pasadena
1414 Mission Street
South Pasadena, CA 91030
Attention: Mr. Ted Gerber
tgerber@southpasadenaca.gov

Marx|Okubo Job No. 23-5038

May 11, 2023

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DISTRIBUTION

Mr. Ted Gerber, City of South Pasadena (Electronic copy - tgerber@southpasadenaca.gov)

Ms. Cathy Billings, City of South Pasadena (Electronic copy - cbillings@southpasadenaca.gov)

SOUTH PASADENA PUBLIC LIBRARY
South Pasadena, California

1.0 FACILITY SUMMARY

Facility Information	
Facility Type	Library
Year Constructed	1930/1982
Site Area	2 acres = 87,120 s.f.
Building/Facility Access	Street parking and pedestrian access are located along Oxley Street, Fairview Avenue, Diamond Avenue, and El Centro Street.
Legal Description	The legal description was not provided.

South Pasadena Public Library	
Building Data (provided by Marx Okubo measurement and Architectural Drawings)	
Gross Building Area	24,000 s.f. (provided by FCA by Faithful+Gould)
Year Constructed	The original library was constructed in 1930, with the addition to the library constructed in 1982.
Building Expansion Potential	Not applicable.
Building Dimensions	Approximately 127'-6" x 132'-6"
Library Area	12,025 s.f. = 53% of total area
Office Area	3,264 s.f. = 14% of total area
Support Area	1,606 s.f. = 7% of total area
Historic Area	Community Room - historic portion of the library 2,977 s.f. = 13% of total area
Building Systems	
Roof Type	Multi-ply, built-up asphalt roofing membrane that has been overlaid with a spray polyurethane foam (SPF) roofing system over plywood sheathing and tapered single-piece clay tiles fixed in place with wire hangers over underlayment over plywood sheathing.
Skylights	Circular dome and pyramid-type skylights.
Exterior Wall Type	Masonry, stone veneer over wood framing, and exterior cement plaster over a water barrier over wood framing.
Windows/Storefront Type	Window systems include wood-framed fixed and operable windows and aluminum-framed storefront entry with dark bronze anodized frames.
Interior Lighting	Recessed canister, recessed 2'x4' or 1'x4' strip, decorative hung, and surface- or wall-mount strip fixtures with light-emitting diode (LED) or fluorescent lamps.
Exterior Lighting	Wall- or pole-mounted fixtures with LED lamps.
Sprinkler Type	No sprinkler system is provided for the facility.
Additional Fire Alarm Protection System(s)	Radionics fire alarm system with central station monitoring, smoke/heat detection, elevator monitoring, manual pull station monitoring, and audible/visual alarms.
Electrical Capacity/No. of Splits	1,200-ampere, 120/208-volt, 3-phase, 4-wire.

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HVAC System	Rooftop packaged units with direct expansion cooling and natural gas-fired heat and through-wall mounted air conditioners.
Emergency Generator(s)	No emergency power generation equipment is provided. Battery backup lighting inverter system rated for 3,000 watts and 90-minute runtime.
Exhaust Fans	Ceiling and cabinet exhaust fans are located in restrooms, kitchenettes, and the janitor's closet.
Elevator	One 2-stop hydraulic elevator.
Security	Security systems include security cameras, door monitors, keyed locks, and security control panels.
<i>Passenger Vehicle Parking</i>	
Number of Passenger Vehicle Drives	None provided, other than the access drive to service yard.
Passenger Vehicle Parking Spaces	None provided. All parking on the public streets.
Parking Ratio - Overall	Not applicable; no parking provided.
No. Car Parking Required as per Local Code	48

2.0 EXECUTIVE SUMMARY

Project Description

The subject facility is a two-story, 24,000-square-foot library building, adjacent to the South Pasadena Senior Center, on a two-acre site located in South Pasadena, California. The site is bordered on the north by a future mixed-use property, east, west, and south by single- and multi-family residential properties, and by commercial retail to the northwest. The building was reportedly constructed in 1930, with an addition and renovation in 1982. Overall, the property is in fair condition.

A review of the South Pasadena Senior Center is not included in this Facility Condition Assessment.

Site

Landscaping consists of mature trees, lawns, shrubs, ground cover, and grass. A mature Moreton Bay fig tree is located to the east of the library. Brick and concrete paving is utilized at the building's north and south entrance plazas and outdoor seating areas. Repainting of the site metals and resealing the asphaltic concrete at the service yard, and the replacement and addition of park lighting should be anticipated during the term.

[Link to Site](#)

Structure

The building is a two-story unreinforced masonry (URM), shotcrete, steel- and wood-framed structure supported by a shallow foundation system. The building contains portions from two construction dates: the original 1930 portion retrofitted in 1982 and additions constructed in 1982. The vertical support system of the original 1930 portion consists of a wood truss roof framing system and a sawn lumber elevated floor system supported by URM perimeter walls. In 1982, a retrofit was performed to install shotcrete overlays at the URM and steel framing at the elevated floor framing. The vertical support system of the 1982 addition portion consists of a prefabricated wood I-joist and sawn lumber joist roof and an elevated floor framing system supported by wood stud walls. At the 1930 portion, the lateral load-resisting system consists of the roof and floor diaphragms that transfer loads to the URM walls with shotcrete overlays. At the 1982 additions, lateral loads are distributed by the flexible roof and floor diaphragms to wood stud shear walls and chevron-orientation concentric braced frames.

At the original 1930 Community Room, the bottom chords of three trusses were noted to have splits along the bottom and/or side faces. Periodic monitoring of these splits is recommended, as they presently are not a significant structural concern.

[Link to Structure](#)

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Envelope and Exterior

The building's low-slope roofs consist of a multi-ply, built-up asphalt roofing membrane that has been overlaid with a spray polyurethane foam (SPF) roofing system. Pitched roofs consist of tapered single-piece clay tiles fixed in place with wire ties. Low-slope roofing should be replaced during the term. Pitched roof clay tile should be reinstalled over a new underlayment. Any damaged roof sheathing should be replaced as required. Drainage across the lower low-slope roof should be installed on sleepers to allow for water flow.

Exterior walls consist of masonry, stone veneer over wood framing, or exterior cement plaster. Select walls are provided with a brick veneer. Below-grade waterproofing should be replaced to address water infiltration into the northeast corner of the basement. Deteriorated wooden windows that were installed in 1982 and historic window sashes should be replaced. Review of the work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.

[Link to Envelope and Exterior](#)

Interior Improvements

The building is largely used for library purposes with support, office, and conference spaces. The Community Room is part of the historic South Pasadena Library structure built in 1930; its interior finishes consist of commercial carpeting on the floors, wooden ceilings with decorative trusses, decorative vaulted plaster ceilings, and plaster walls. The restrooms are provided with tile walls and floors and painted gypsum board ceilings. The main library interiors consist of commercial carpet flooring and painted gypsum board walls and ceilings. The Children's Library and Reading Room interiors include commercial carpeting, painted gypsum board walls, and coffered acoustical tile ceilings.

[Link to Interior Improvements](#)

Mechanical/Electrical

Mechanical systems consist of packaged rooftop heat pump units (RTUs), wall-mounted air conditioning units (ACs), and exhaust fans. RTU systems are controlled by digital programmable thermostats. Mechanical systems are in overall poor to fair condition. Major replacements during the term include four package units. Various deferred maintenance items are identified from site observations and a 2022 HVAC System Performance Analysis report provided by the Client that should be completed during the term to extend the life of the HVAC equipment.

Plumbing systems consist of copper water lines, cast iron or plastic waste, vent, and storm drain lines, storage-type water heaters, and a water pressure booster system. Plumbing systems appear to be in overall fair to good condition. Replacement of the water heater and installation of a seismic shut-off valve for the natural gas service should be anticipated during the term.

Electrical systems consist of a metered 1,200-ampere, 120/208-volt service fed from a pad-mounted utility company transformer. Electrical distribution is through distributed low-voltage panels throughout the facility. The electrical systems appeared to be in overall fair condition.

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Infrared testing and electrical maintenance on the main switchboard were not able to be verified and are recommended as a part of routine maintenance. Per the library management request, a cost for an emergency power system has been included in the Capital Reserve Schedule.

A fire alarm system is present that serves both the library and the adjacent senior center. The annual inspection of the fire alarm system is current, but issues were noted on the 2021 inspection that should be corrected if they have not yet been addressed. The fire alarm control panel (FACP) is approximately 26 years old and should be anticipated to be replaced during the term.

The facility functions as a cooling center and area of emergency assembly for the community. As part of the Client's efforts to extend the effectiveness of the facility during power outages, an emergency power system is a targeted upgrade for the future. An estimated cost for a portable diesel-powered generator, manual transfer switch, and electrical system integration has been included in the Capital Reserve Schedule.

[Link to Mechanical/Electrical](#)

Building Equipment

The building is provided with one hydraulic elevator manufactured and installed by Westinghouse Elevator Company in 1982. Overall, the systems are in fair condition. The elevator serves the ground and upper levels and was in service at the time of the survey. The elevator is equipped with microprocessor controls, and the maintenance provided is considered average when compared to the industry standard. Major replacements during the term include the replacement of controller/car and hall fixtures and wiring and interior elevator cab modernization. Additionally, annual no-load and five-year load tests are past due and should be completed.

Telephone and fiber internet service by local providers was observed at the facility. The Community Room is equipped with a multimedia system including speakers, a projector, a wall-mounted control panel, and a drop-down projector screen system. The telecommunications systems appeared in overall good condition, with no significant issues noted or reported.

[Link to Building Equipment](#)

Security

Security systems for the building include security cameras, door monitors, security system panels, and keyed locks on the exterior doors. The security system appeared to be in overall good condition, with no significant issues noted or reported. Per the library management request, a cost for security system upgrades has been included in the Capital Reserve Schedule.

Per the client's request, a cost has been included for an upgraded security system and upgraded site lighting in the surrounding park. The security upgrade includes security cameras, a duress alarm, electronic access control for interior staff area doors, and access control for one exterior door. The site lighting upgrade includes the replacement of 14 existing fixtures and an addition of 14 new pole-mounted light fixtures for the surrounding park area, and additional fixtures at the accessible ramp leading to the east balcony. Physical upgrades include metal security fencing and gates at the balcony arched openings. Please refer to the **Security** section of this report for additional details on both of these upgrades.

[Link to Security](#)

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Accessibility

A limited review of the facility for compliance with the Americans with Disabilities Act (ADA) was performed. Based on the reported construction dates of 1930 and 1982, the facility was not required to comply with ADA standards at the time of construction but is subject to program compliance under the ADA. Refer to the **Accessibility** section of this report for additional information and a list of issues identified.

[Link to Accessibility](#)

3.0 OBSERVATION INFORMATION

3.1 INTRODUCTION

Marx|Okubo Associates, Inc. (Marx|Okubo) has completed a Facility Condition Assessment of South Pasadena Public Library, located in South Pasadena, California, for City of South Pasadena (Client). This survey consists of a review of the physical conditions; architectural, structural, mechanical, and electrical components accessible or visible during the site visit; and the quality of construction. Marx|Okubo's assessment and this report generally conform with and/or exceed the technical requirements of ASTM E2018-15.

The purpose of this project review is for Marx|Okubo and its consultants to provide an overview for Client, and it is in no way implied that every aspect of the facility has been reviewed. The sole purpose of this report is to observe the major aspects of the facility and evaluate their condition. The use of this report is limited to the client to whom it is addressed.

Limited construction drawings were made available and were used as reference material and as a basis for take-offs. These drawings were not reviewed for accuracy, completeness, or conflicts.

Opinions of costs are based upon quantity take-offs and a unit pricing method to arrive at line item totals. Unit prices are based upon historical data compiled by this office and in no way imply that bids were received from trade subcontractors. No bid documents or corrective drawings were produced.

It is not the intent of this office to assume any part of the design responsibility, but rather to report our findings to the client to whom this report is addressed.

The scope of this review is to provide a general overview of building components, as well as related accessibility and code requirements. It should be noted that a detailed compliance survey related to accessibility, building codes, and zoning issues was not performed.

3.2 SITE OBSERVATION

The project observation was conducted by a Marx|Okubo team comprised of Jason E. Morris, AIA, BEC-2, Assistant Vice President; Adam C. Umber, AIA, Associate; Keri Yin, P.E., Associate; Cody Jackson, P.E., Associate; and Audrey Kane, Project Coordinator. The site observation took place on March 8, 2023, and the walk-through incorporated a review of site improvements, building structural components as observable, building shell components, fire protection systems, plumbing, heating, ventilating, and air conditioning (HVAC), electrical systems, and interior spaces, as well as a cursory review of accessibility requirements. Marx|Okubo retained HKA Elevator Consulting to evaluate the elevator systems.

The Library Director is Cathy Billings (626.403.7352). The team met with and was given access to the facility by Cathy Billings, South Pasadena Library Director, and Anteneh Tesfaye, Deputy Director of Public Works.

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3.3 OTHER CONSULTANTS' REPORTS

Marx|Okubo was provided with the following:

- South Pasadena Library Masonry Evaluation, prepared by RKA Consulting Group, undated.
- Facility Condition Assessment, prepared by Faithful+Gould, Inc., dated June 26, 2017.
- HVAC System Performance Analysis, prepared by Inland Mechanical Services, Inc., dated February 22, 2022.
- South Pasadena Public Library Critical System Upgrades and Enhancements for Life Safety, prepared by Cathy Billings, dated October 28, 2021.

3.4 DOCUMENTS UTILIZED

Refer to the **Exhibits** section for a list of the documents that were provided or to which we were given access during the execution of the work.

4.0 SITE

Back to Executive Summary

4.1 UTILITY SERVICE PROVIDERS

Water:	City of South Pasadena
Sanitary/Sewer:	City of South Pasadena
Electric:	Southern California Edison
Gas:	Southern California Gas Company
Telephone:	Spectrum
Cable:	Spectrum
Trash/Recycling:	Athens Services

4.2 STORM DRAINAGE

Description:	Stormwater flows over the ground surfaces to the street, to landscape drains, and to trench drains in the service yard. All lead to the underground municipal storm drainage system.
Condition:	A large amount of debris was observed at egress exit stairwells. A maintenance program is recommended to avoid debris buildup. Removal of debris is recommended on a monthly basis. Costs are considered part of routine facility maintenance and are therefore not included in the Capital Reserve Schedule.

4.3 TRAFFIC CONTROL

Description:	There is no vehicular access to the site, other than the access drive to the service yard.
Signalization:	No signals are provided. Stop signs are located at the corners of El Centro Street, Fairview Avenue, Oxley Street, and Diamond Avenue. The nearest traffic signal is located at the intersection of Mission Street and Meridian Avenue.
Interior Access:	On-site vehicular access is not provided, other than the access drive to the service yard.
Condition:	No significant issues were noted or reported.

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4.4 PARKING

- Description:** Public street parking is provided outside the perimeter of the property. There are no on-site parking spaces provided.
- According to Marx|Okubo's observation, four accessible parking spaces are provided at adjacent street parking.
- Parking spaces are configured as single-loaded parallel and single-loaded angled with respect to the one-way and two-way streets.
- Lighting:** Lighting for the site is provided by a combination of pole-and building-mounted LED light fixtures.
- Adequacy:** Parking is inadequate based on information provided by facility management.
- A nighttime survey was not performed; however, the management interview indicated that the distribution of light fixtures is insufficient for current facility use. Park light fixtures should be replaced and additional fixtures are required. See the **Building Equipment** section of this report for additional information.
- Lighting at the accessible ramp to the Community Room is inadequate based on the information provided by the facility management. See the **Security** section of this report for additional information.

4.5 PAVING AND SIDEWALKS

- Paving/Curbing:** Cast-in-place concrete curbs and gutters are provided along the property perimeter. Streets adjacent to the property consist of asphaltic-concrete paving. The entrance plaza near the main entrance of the building on the south side of the site has red brick pavers and exposed aggregate concrete paving. The outdoor plaza near the Community Room entrance of the building on the north side of the site has multi-toned brick pavers and concrete paving. The service entry near the senior center on the east side of the site has concrete pavers, asphaltic, and concrete paving.
- Sidewalks/Paths:** The on-site pathways throughout the park consist of cast-in-place concrete pavement.
- Condition:** Re-sealing of the asphaltic concrete paving should be anticipated during the term.

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4.6 LANDSCAPE/IRRIGATION

- Landscape: Primarily mature landscaping, consisting of a variety of trees, shrubs, and flowering plants, is located throughout the site. Areas of grass are present surrounding the building and the overall property. Planters are located at the south. A mature Moreton Bay fig tree is located on the west side of the property.
- Irrigation: Landscaped areas utilize automatically-controlled irrigation systems with spray sprinkler heads.
- Condition: No significant issues were noted or reported.

4.7 EARTHWORK/GRADING/EROSION CONTROL

- Description: The property is generally graded with rolling slopes. The property has a moderate slope from the northeast corner to the southeast corner of the property.
- Condition: No significant issues were noted or reported.

4.8 RETAINING WALLS

- Description: An approximately 4' tall concrete planter retaining wall is located on the east side of the building adjacent to the service yard. The planter retaining wall is holding back soil for planted trees. The retaining walls at the basement level observed are part of the building's structural system. See the **Structure** section for further information.
- Condition: Water intrusion was reported and observed along the perimeter of the basement wall at the northeast corner of the building. See the **Envelope and Exterior** section for further information.

4.9 FENCING

- Description: Ornamental metal fence and a hollow metal gate is located at the service yard. Fencing is approximately 8' tall.
- Condition: A broken hinge was observed at the service yard entry gate. Gate hinge repair is recommended as a part of routine building maintenance; costs are anticipated to fall below the cost threshold and are therefore not included in the Capital Reserve Schedule. A need for new metal security fencing and gates has been included per the client's request; see the **Security** section of this report for further information.

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4.10 SIGNAGE

Description: The property utilizes monument signage to identify the library's Community Room and address on the north side of the building. Building identification is provided by building name and address numbers mounted on the exterior walls on the north and south-facing façades.

Condition: No significant issues were noted or reported.

4.11 EXTERIOR AMENITIES

Description: Cast-in-place concrete benches with decorative brick seats and an outdoor paved plaza are provided at the south side of the property. An outdoor seating area with metal picnic tables and benches is provided to the east of the main library entrance at Oxley Street. A concrete outdoor seating area is provided at the entrance to the Community Room on the north side of the building. Metal benches are provided throughout the site.

Condition: Minor spalling and cracking were observed at the historical seating area at the entrance to the Community Room. Patch and repair of spalled stairs are recommended. Review of work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.

4.12 TRASH SYSTEMS/ENCLOSURES

Description: A trash bin is located at the service yard.

Condition: No significant issues were noted or reported.

4.13 ALTA SURVEY

Marx|Okubo was not provided with an ALTA survey for our review.

5.0 STRUCTURE

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5.1 DESIGN CRITERIA

No documentation was provided indicating the design criteria of the original 1930 construction. The 1982 drawings indicate that the 1979 Uniform Building Code (UBC) was utilized in the retrofit and addition design. Basic loading conditions were not provided on the drawings.

5.2 FOUNDATION SYSTEM

Description: Based on prior experience with similar structures, the original 1930 portion of the building is likely supported by a shallow foundation system. Continuous reinforced concrete footings are likely used at the perimeter walls.

Based on available Structural drawings, the 1982 portions of the building are supported by a shallow foundation system over ground improvements. Continuous reinforced concrete footings are used at wall locations, and reinforced concrete spread footings are used at individual column locations. Spread footings vary in size from 2'-0" square to 6'-0" square. Continuous footings are generally 1'-4" wide.

Based on the 1982 drawings, the ground floor slab throughout the entire building was constructed in 1982. The ground floor slab typically consists of a 4"-thick concrete slab-on-grade reinforced with 6x6, W1.4xW1.4 welded wire fabric at the mid-depth of the slab.

Condition: The foundation systems and ground floor slab were not observable; however, no significant signs of settlement or damage to the structural systems attributable to overall or differential foundation movement were reported or noted at the locations observed. The foundation systems appear to support the existing loads with no significant issues.

5.3 VERTICAL LOAD-RESISTING SYSTEM

Description: At the original 1930 portion of the building, the roof framing consists of 2"-thick wood sheathing over wood trusses supported by URM bearing walls. Elevated floor framing consists of 2x sawn lumber joists supported by the URM bearing walls. In 1982, new 1/2"-thick plywood sheathing was added at the roof, steel wide-flange beams supported by steel tube columns were added at elevated floor framing, and 4-1/2"-thick shotcrete overlays were added to the URM walls.

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At the 1982 addition, the roof framing consists of 1/2"- to 5/8"-thick plywood sheathing supported by steel wide-flange beams and pre-engineered wood I-joists or sawn lumber joists at 24" to 30" spacing that spans to steel wide-flange columns and wood stud-bearing walls. The elevated floors consist of steel wide-flange beams and sawn lumber wood joists supported by steel wide-flange columns and wood stud-bearing walls.

Building evaluations are limited by the available construction documents and by the level of access possible for the observation of the structural elements of the building. In general, floor, roof, column, and wall systems were covered with architectural finishes.

Condition: No significant issues, such as signs of excessive deflection or structural distress, were noted or reported. The structure appears to be in fair overall condition, consistent with its type of construction, age, and current use, except as noted below.

At the original 1930 Community Room, the bottom chords of three trusses were noted to have splits along the bottom and/or side faces. Presently, the splits are not a structural concern based on the width, depth, and location of the splits. Periodic monitoring for the widening or deepening of the splits is recommended.

5.4 LATERAL LOAD-RESISTING SYSTEM

Description: Lateral loads result primarily from wind pressure or earthquake inertia forces acting on structural and non-structural elements. At the original 1930 portion, based on visual observation and available retrofit drawings, lateral loads are distributed by the flexible roof and floor diaphragms to unreinforced masonry shear walls retrofitted with reinforced shotcrete overlays. In 1982, the roof truss-to-wall connections were also retrofitted to provide anchorage between the roof and wall via a reinforced shotcrete ledger.

At the 1982 additions, lateral loads are distributed by the flexible roof and floor diaphragms to wood stud shear walls with 3/8"-thick wood structural panels rated for shear resistance. Additionally, at Gridlines 10 and 14 shown on the drawings provided, two bays of chevron-orientation concentric braced frames with steel double-angle braces and wide-flange beams and columns are present at the southern portion of the building in the north-south direction.

Condition: See the **Vertical Load-Resisting System** subsection above for further information.

In general, floor, roof, column, and wall systems were covered with architectural finishes. However, no significant issues, such as signs of excessive deflection or structural distress, were noted or reported. The lateral load-resisting system appears to be in fair overall condition, consistent with its type of construction, age, and current use.

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The major mechanical and electrical equipment generally appears to be laterally braced. Lateral bracing of life-safety controls and systems should be continued as a part of long-term maintenance as future improvements to the property are made.

6.0 ENVELOPE AND EXTERIOR

Back to Executive Summary

6.1 ROOFING

Description:	<p>The building's low-slope roofs consist of a multi-ply, built-up asphalt roofing membrane that has been overlaid with a spray polyurethane foam (SPF) roofing system over plywood sheathing. The overlay system is covered with an acrylic protection layer set with fine white granules. Storm drain water exits the roof via internal primary and overflow drains and is discharged to a below-grade storm drain system; polyvinyl chloride (PVC) pipes direct water from the upper roofs over lower roofs and directly to the lower roof internal drains.</p> <p>Pitched roofs consist of tapered single-piece clay tiles fixed in place with wire ties over asphalt-saturated underlayment over plywood sheathing. Select areas of asphalt shingles are also provided. The pitched roofs drain to eave-mounted gutters that discharge to a below-grade storm drain system.</p> <p>Roof access is provided to the upper low-slope roof through a roof hatch. Access to the lower low-slope roof is provided by a permanent ladder at the adjacent senior center.</p> <p>The roof mechanical screen consists of exterior cement plaster over wood framing with accents of terra cotta pipe and painted steel channels.</p> <p>An exterior awning is provided adjacent to the service yard.</p>
Flashing and Sheet Metal:	<p>The parapet and wall flashings consist of the same materials used in the roofing field. The roofing membranes terminate under a prefinished sheet metal coping. Roofing is terminated to walls with a reglet and metal counterflashing which has been covered by an acrylic coating. Mechanical unit curbs are flashed with the same materials as described above. Penetrations at the roof typically consist of field materials.</p>
Venting:	<p>No venting was observed.</p>
Expansion / Contraction:	<p>No means of expansion/contraction are provided within the building. An expansion cover is provided between the library and the adjacent senior center (not part of the review scope); according to the drawings provided, the buildings are separated by 2".</p>
Manufacturer's Warranties:	<p>Warranties were requested but not available for review. Low-slope, multi-ply built-up roofing was reportedly installed in 1982, and SPF roofing was reportedly installed between 2009 and 2011.</p>

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Condition: The roofing was noted to be in fair to poor condition. Building management reported leaks in multiple locations, and damaged ceiling finishes were observed on the building interior. The low-slope SPF overlay was noted with significant blisters, peeling, and deterioration with select completely ruptured blisters; the roofing membrane should be replaced during the term, along with any deteriorated roof sheathing observed during membrane replacement. Sleepers should be installed below PVC pipes directing water from the upper roof across the lower roof to allow for water drainage below the pipes. The roof hatch should be replaced during the roofing membrane installation.

Pitched roofs should receive a new underlayment below clay tiles and new asphalt roofing where provided; replacement of broken clay roof tiles should be completed as required. Clay tile should be reinstalled to match the existing condition with wire ties on each tile. Per the client's request, underlayment replacement is broken into two phases: to replace areas currently experiencing leaks initially and to replace remaining areas at a later date.

A large amount of debris was observed on the west side of the roofs as a result of the fig tree overhanging the building. A roofing maintenance program is recommended to avoid debris buildup and associated pooling water. Removal of debris is recommended on a monthly basis. Costs are considered part of routine facility maintenance and are therefore not included in the Capital Reserve Schedule.

6.2 EXTERIOR WALLS

Description: Exterior walls consist of masonry, stone veneer over wood framing, or exterior cement plaster over a water barrier over wood framing. Select walls are provided with brick veneer. Cast concrete accents are provided on items such as columns and pediments. Below-grade waterproofing is provided around the west, north, and east perimeters of the original building footprint, which was installed in approximately 1998, according to the documents provided.

Condition: Exterior walls were noted to be in fair to poor condition. Building management reported that leaks occurred on the east side of the building where the original building and new building meet; a crack in the exterior cement plaster was observed. Installation of a control joint is recommended at this location to prevent future cracking.

As reported by building management and observed on-site, water is intruding through the basement wall at the northeast corner of the building, and a sheet of plastic is being used as a temporary measure to reduce water intrusion through the wall.

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Evidence of water intrusion was observed on the building interior at the northeast corner of the basement, and moisture meter readings were taken, which were up to 51% on the walls and up to 68% on the floor, which indicates potential material saturation.

Replacement of below-grade waterproofing includes an estimated repair scope that includes soil removal for approximately 50' linear feet from the east side of the Community Room entry around the building corner to 4' away from the building, new fluid-applied elastomeric waterproofing and drain board, 4" perforated PVC subdrains, gravel base, soil backfill and compaction, and new planting material. A termination bar and counterflashing are included for the entire length of the below-grade waterproofing. Irrigation rework does not appear to be required within the work area. The preliminary cost assumes an average excavation depth of 7' based on waterproofing drawings dated September 23, 1998.

Repainting of the building exterior's painted elements should be anticipated during the term, and minor crack repair should be completed as required.

6.3 EXTERIOR BUILDING MAINTENANCE EQUIPMENT

Description: No building maintenance equipment is provided.

Condition: No applicable.

6.4 THERMAL INSULATION

Roof: Thermal insulation was not observed at the roofs, as the architectural finishes obstructed the view of any roof insulation.

Exterior Walls: Thermal insulation was not observed at the walls, as the architectural finishes obstructed the view of any wall insulation.

Condition: No significant issues were noted or reported.

6.5 WINDOWS

Description: Window systems include wood-framed fixed and operable windows and aluminum-framed entry with dark bronze anodized frames. Vision glazing is clear and is single- or dual-pane.

Skylights: Five acrylic skylights are provided with translucent glazing, four with a pyramid shape, and one that is a circular dome.

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Condition: Windows were noted to be in fair to poor condition. Select original windows were observed with rotted and deteriorating sashes at the western window of the Community Room; replacement of individual sashes should be anticipated during the term.

Windows installed during the 1980s renovation were observed with various levels of deterioration, including warped sashes that would not close, rotted window sashes and sills, failed gaskets, and cracked and deteriorated paint. Replacement of windows installed during the renovation should be anticipated during the term, and repair or replacement of window sills should be completed as required.

A preservation architect should be consulted for appropriate treatments of historic windows and the selection of replacement wooden windows; however, those fees are not estimated due to the undefined total scope of work.

Cracked sealant was observed at the circular skylight. Replacement of all skylights should be anticipated during the term based on expected useful life.

6.6 EXTERIOR DOORS/FRAMES

Description: Glazed aluminum storefront doors are provided at the main entry and are set within the building's exterior wall system. The Reading Room entrance doors consist of painted metal.

Secondary egress and utility doors include painted flat panel metal doors in metal frames. Egress doors are typically fitted with closers, push hardware at the interior, and exterior pull hardware.

Painted wooden access panels are provided at the penthouse structure for the circular dome skylight.

Weather Tightness: Exterior doors are equipped with weather stripping, thresholds, and sweeps. Metal doors are installed without head drip flashings.

Condition: Doors were noted to be in good to fair condition. Repainting of hollow metal egress and Community Room doors should be completed concurrently with building exteriors.

Wooden access panels at the circular skylight penthouse are rotting and deteriorating. Replacement should be anticipated as a part of the roofing scope of work.

6.7 EXTERIOR SOFFITS AND TRIM

Description: Exterior building soffits consist of exterior cement plaster.

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Condition: Soffits should be painted concurrently with building exteriors.

6.8 EXTERIOR LANDINGS, STAIRS, AND RAILINGS

Description: Exterior balconies are provided on the east and west sides of the building with a fluid-applied waterproof traffic coating; egress is provided by steel-framed stairs on the west and a steel-framed accessible ramp on the east. A cast-in-place concrete landing and stairs are provided at the Community Room entrance. Guardrails and handrails are steel with a painted finish.

Condition: Exterior landings, stairs, and railings were noted to be in good to fair condition. Balcony fluid-applied waterproof traffic coatings should be reapplied during the term. Guardrails and handrails should be repainted during the term concurrent with building exteriors.

Per the library management request, a cost has been included for metal security grills and gates at each balcony. See the **Security** section of this report for additional information.

7.0 INTERIOR IMPROVEMENTS

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7.1 INTERIOR WALLS

- Description: Interior walls generally consist of gypsum board over wood stud framing. The historic Community Room walls consist of plaster over masonry.
- Finishes: All interior walls are painted.
- Condition: Water damage was observed in the basement/ground floor walls on the north side of the building, including staining, blistering paint, and efflorescence. Removal of the damaged section of the walls and repainting is recommended. See the **Envelope and Exterior** section for additional information.

7.2 INTERIOR DOORS/FRAMES

- Description: Doors are generally solid-core wood set in wood frames with brass lever-type hardware. Select doors are provided with orbital hardware.
- Finishes: Wood doors are stained and set in painted frames. Metal doors are painted and set in painted frames.
- Condition: A broken door closer was observed at the upper-level ramp entrance. The closer should be repaired as part of routine maintenance; costs are anticipated to fall below the cost threshold and are therefore not included in the Capital Reserve Schedule.

7.3 CEILINGS

- Description: Common area ceilings are coffered acoustical tile set in a suspended metal grid and surface-applied acoustical tile. The circulation desk ceiling consists of a large coffered light fixture. The atrium ceiling consists of a coffered gypsum board with a large historic skylight. The staff area ceilings are painted gypsum board.
- Condition: Various locations of water damage/stains were observed in the reading rooms, staff area, staff offices, and breakroom. Repair of damaged ceilings should be anticipated during the term.

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7.4 FLOORS

Description: The main entrance lobby flooring consists of vinyl tile planks and commercial-grade carpeting. The common library area and the Community Room flooring are provided with commercial-grade carpeting. The staff workroom is provided with vinyl composition tile (VCT).

Condition: No significant issues were noted or reported.

7.5 ACOUSTIC INSULATION

Walls: Acoustic insulation could not be verified in person due to wall finish materials; 1982 renovation drawings indicate acoustic insulation for all interior walls.

Ceilings: Insulation could not be verified due to wall finish materials.

Condition: No significant issues were noted or reported.

7.6 RESTROOMS

Description: Multi-user men's and women's restrooms are provided on the ground floor. The men's restrooms are provided with two urinals and one accessible toilet stall. The women's restroom is provided with two toilet stalls, one of which is accessible. Single-user men's and women's restrooms are provided on the upper level of the building. The men's and women's restrooms on the upper floor are each provided with one semi-ambulatory toilet stall. The staff offices and workroom are each provided with a single restroom.

Interior finishes generally consist of a combination of painted gypsum board and ceramic tile walls, ceramic tile floors, and painted gypsum board ceilings. Wall-mounted porcelain lavatories, floor-mounted porcelain toilets, and floor- and wall-mounted plastic laminate toilet stall partitions are provided.

Condition: Restrooms were noted by facility management to be inadequate to meet the current needs of the facility. Voluntary expansion of the restrooms has been requested by the Client and included in the Capital Reserve Schedule.

7.7 KITCHENS

Description: Breakroom finishes generally consist of painted gypsum board walls, surface-mounted acoustic ceiling tile, and VCT flooring.

Condition: Water damage was observed at the acoustic ceiling tiles. Repair of damaged ceiling tiles should be anticipated during the term.

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7.8 UTILITY ROOMS

Description: Utility rooms are generally provided with painted gypsum board walls, concrete flooring, and painted gypsum board ceilings.

Condition: No significant issues were noted or reported.

7.9 INTERIOR STAIRS

Description: The sole stairwell consists of painted gypsum board walls and ceilings with commercial-grade carpeting on treads and risers and painted stainless-steel tube handrails.

Condition: No significant issues were noted or reported.

7.10 INTERIOR AMENITIES

Description: A bookstore is provided on the upper level.

Condition: No significant issues were noted or reported.

7.11 WINDOW COVERINGS

Description: Window coverings consist of horizontal blinds.

Condition: No significant issues were noted or reported.

8.0 MECHANICAL/ELECTRICAL/PLUMBING

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8.1 HEATING, VENTILATION, AND AIR CONDITIONING

Overall Description: The primary HVAC system consists of five RTUs with natural gas heat, two wall-mounted server room AC units, and ceiling or cabinet-style exhaust fans.

Air Supply Systems: Heating and cooling to the main library spaces are provided by five RTUs with direct expansion air conditioning circuits and natural gas-fired heat sections ducted to the space served. RTUs are manufactured by Carrier or Bryant, have capacities ranging from 5 to 20 tons, and utilize R-410a refrigerant. Cooling for the server room is provided by two Freidrich wall-mounted AC units.

The facility is utilized by the City of South Pasadena as a community cooling center during extreme heat event.

Refrigerant Air conditioning systems at the building use refrigerant R-410a, which is currently scheduled for a production phase-down of 85% over the next 15 years by the Environmental Protection Agency (EPA), which will increasingly limit the supply. An initial 10% reduction started in 2022, with an overall 40% reduction beginning in 2024 and an overall 70% reduction beginning in 2029. Prices are anticipated to increase as availability decreases. The EPA could implement a sector transition mandate as early as 2025. This mandate would set a Global Warming Potential (GWP) limit of 750 for all new unitary systems. Since R-410a exceeds this limit, some manufacturers have started transitioning away from its use.

System Capacity: To determine the adequacy of air conditioning systems, engineers commonly utilize cooling load check figures that compare the square footage of the building to the overall cooling capacity. The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) provides industry-standard check figures for cooling capacities. The cooling load check figures for libraries show 340 square feet per ton as a low cooling capacity, 280 square feet per ton as the average cooling capacity, and 200 square feet per ton as a high cooling capacity. The figures are "rules of thumb" numbers and do not account for the local weather conditions.

Based on a reported floor area of approximately 24,000 square feet, the building provides an area-to-cooling system capacity ratio of approximately 380 square feet per ton. This should be considered marginal for general office use in the South Pasadena, California area. Additionally, library personnel provided a 2022 HVAC System Performance Analysis report that indicated that most units in the building were not producing at their rated cooling capacities. The HVAC report indicated a number of corrective measures that have been included and noted in the Condition below.

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- Controls:** Each building zone is provided with a digital programmable thermostat that provides start/stop and temperature control of the main equipment.
- Ventilation:** Toilet, kitchenette, and janitor's closet exhaust are provided by ceiling-mounted exhaust fans ducted to the roof or sidewall vents. Ventilation outside air for the main library areas is conditioned by the RTUs and supplied through the ductwork distribution system.
- Age:** Except as noted, the HVAC equipment is generally original with some component replacement as needed and is about 41 years old. The RTU units vary in age from 7 to 17 years old.
- Maintenance:** Maintenance is completed by in-house staff or outside contractors as needed.
- Condition:** The mechanical equipment appears to be in poor to fair condition, with all equipment reportedly functioning. Replacement of four RTUs totaling 55 tons should be anticipated during the term.

The facility is utilized by the City of South Pasadena as a community cooling center during extreme heat events. The proper functioning of the HVAC equipment is required during these events, and the below-recommended items should be completed to ensure proper equipment function. See the **Electrical** section for additional information.

HVAC maintenance appears to be below average, with various items requiring corrective action to prolong the effective useful life of the HVAC equipment. A 2022 HVAC System Performance Analysis report was provided that recommended replacing RTU filters, cleaning cooling coils, cleaning blower motors, adjusting motor sheaves, adjusting fan belts, repairing sensors, and repairing economizers. A cost to complete the work identified in this report has been included and should be completed during the term.

Additionally, it was observed on site that natural gas and condensate piping serving the RTUs was corroded and should be painted, condensate drains were out of alignment and not draining correctly, water was ponding on exposed ductwork, RTU disconnect enclosures and exposed ductwork were corroded and should be painted, and organic material was collecting around the units that should be removed. A combined maintenance cost has been included for all of this work to be completed during the term.

The server room AC units will likely need to be replaced during the term due to condition and expected useful life; however, this cost will fall below the cost threshold of this report and will, therefore, not be included in the Capital Reserve Schedule.

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8.2 PLUMBING

Water Service:	<p>The building is served with a 2"-diameter domestic water main with an above-ground backflow preventer. A 1.5-horsepower Baldor booster pump and associated Wellxtrol pressure tank were observed on the west side of the property. Maintenance personnel indicated that the booster pump served the main library building and was in place to supplement the city's water pressure.</p> <p>Landscape irrigation water is provided by a 2"-diameter separately metered water supply with an above-ground backflow preventer. The irrigation system is controlled by various controllers throughout the landscaped areas of the site.</p> <p>Three below-ground water meters were observed on site, but the building portions that they serve were unable to be verified.</p>
Domestic Water Piping:	<p>Where observed, domestic water piping is generally copper piping.</p>
Water Heating:	<p>Water heating is provided by one Bradford White 50-gallon electric storage-type water heater. The water heater was observed with seismic straps and a drain pan.</p>
Plumbing Waste and Vent Lines:	<p>Where observed, waste and vent lines are generally cast iron or PVC pipe. Three sump pumps were observed at the site. Two are located on the west side of the building and serve low points at stair landings, and one is on the east side of the building and serves a trench drain near the electrical transformer and trash enclosure. The building questionnaire indicates that a major stormwater drainage upgrade was completed in 2016 to prevent flooding in certain areas of the library though the full extent of these upgrades was not provided.</p>
Natural Gas Service:	<p>The building is provided with natural gas service without a seismic shut-off valve noted on the service. Natural gas service is used for space conditioning only.</p>
Age:	<p>The main supply and waste lines were installed during the 1982 renovation. Toilet room finishes appear to be from the same 1982 renovation, with some component upgrades as needed. The water heater is approximately two years old, and the pressure booster pump and tank appear to be approximately ten years old.</p>
Condition:	<p>Plumbing systems appeared to be in overall fair to good condition. The water heater should be expected to be replaced during the term due to its expected useful life. The water heater was not observed with an expansion tank, and the cold water system is likely a closed system (due to the presence of a backflow preventer). Expansion tanks protect closed cold water systems in the event of a water heater malfunction, and it is recommended that an expansion tank be added to the system when the water heater is replaced.</p>

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One of the sump pumps serving the stair landings on the west side of the building was observed with organic debris and broken sandbags on the inlet grate. Per the maintenance personnel at the site visit, the sump pump is functioning properly; however, Marx|Okubo recommends that the debris be removed, and the sump pump flushed out to confirm proper operation. No costs will be included in the Capital Reserve Schedule for sump pump repairs at this time, but the removal of debris should be completed immediately.

A natural gas service seismic shut-off valve should be added during the term to ensure safe operation during a seismic event.

8.3 ELECTRICAL

- Electrical Service:** Electrical service is provided to the building from a pad-mounted utility company transformer at 120/208-volt, 3-phase, 4-wire. The building is provided with a main switchboard rated at 1,200 amperes, though this switchboard was not observed during the site visit. The system provides an average capacity of 18.9 watts per square foot.
- Electrical Distribution:** Distribution panels and transformers are located throughout the building to serve occupant needs. In general, electrical distribution includes 120/208-volt, 3-phase low voltage.
- Emergency Power:** Emergency power for lighting is provided by an inverter power supply rated for 3,000 watts and a 90-minute runtime. No emergency power generation equipment is provided for the property.
- Lighting System:** Lighting systems for the majority of the library spaces consist of recessed canister fixtures or recessed 2'x4' or 1'x4' strip fixtures with LED or fluorescent lamps. Decorative hung fixtures are provided in the Community Room and around the stained glass accent feature in the main library. Back-of-house lighting generally consists of surface- or wall-mounted strip fixtures with LED or fluorescent lamps. Lighting controls are provided by wall switches or motion sensors. Exterior lighting includes wall- and pole-mounted fixtures that reportedly use 100% LED lamps.
- Maintenance:** Maintenance is completed by in-house staff or outside contractors as needed.
- Condition:** Electrical systems appeared in overall fair condition. Electrical capacity is generally adequate for current use with no reported electrical capacity issues.
- Infrared testing of electrical equipment is recommended to be completed every three years, and any findings corrected by a certified electrician. Inspection tags for infrared testing of the main electrical switchboard and distribution panels were not observed on site and should be completed during the term.

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A 2017 Facility Condition Report provided by the Client indicated a recommendation for the replacement of three electrical switchboards. The electrical systems at the facility are original to the 1982 expansion; however, it is common to see electrical equipment last well beyond the term with proper maintenance. For this reason, full replacement of the electrical panels is not included in our cost estimates and instead, an extensive maintenance service cost has been included with the infrared testing line item in the Capital Reserve Schedule.

Per the library management request, a cost has been included for an emergency power generation system. The original scope indicated that a photovoltaic array and battery-powered system would be the preferred system for this use; however, understanding that emergency systems are intended to be robust and easily repowered (via fuel transport trucks during extended emergencies), a manual transfer switch capable of connecting a portable diesel-powered emergency generator system has been included herein. The cost estimate includes minor site work, a manual transfer switch, electrical work to tie in the existing systems to the new emergency power systems, permitting fees, engineering fees, construction fees, and estimated taxes.

An additional cost item has been included for the purchase of a portable diesel-powered generator sized for 150-kilowatts of power. The generator size is estimated based on power requirements for water pressure booster pumps, sump pumps, emergency interior and exterior lighting, fire alarm, security system, partial computer/internet use, and 200 amperes of convenience power. HVAC loads have been excluded from the sizing calculations on this generator. An electrical engineer should be contracted to confirm the sizing estimates and provide a final size for the generator prior to purchase.

8.4 FIRE PROTECTION SYSTEMS

Fire Alarm System: The facility is equipped with a Radionics conventional fire alarm control panel located in the server room that is approximately 26 years old. The fire alarm system monitors for manual pull station activation, smoke and heat detection, and elevator status in both the library and senior center. The panel is remotely monitored by an off-site central monitoring station. Local notification devices include audible/visual alarms distributed throughout the facility. Three annunciator panels are provided and are located by the library's main entrance, the library administrative offices, and the senior center.

Fire Sprinkler System: No fire sprinkler systems are provided for the facility.

Maintenance: Fire protection and alarm systems are maintained by outside contractors.

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Manual Fire Extinguishing Equipment:	Manual wall-mounted fire extinguishers were noted throughout the facility. Inspection tags observed show the last inspection was conducted in January 2023.
Fire Hydrants:	Public fire hydrants maintained by the local water jurisdiction are located near the site on public thoroughfares.
Condition:	<p>Fire alarm systems appeared in overall fair condition. The fire alarm annual inspection was last completed in October 2022; however, the fire alarm inspection report adjacent to the fire alarm control panel dated October 2021 indicated that various issues were observed with the senior center building, including errors with the senior center annunciator panel, smoke detectors not functioning, pull stations not activating the alarm, outdated batteries, and missing errors when batteries disconnected. The 2022 report indicated no issues, and the senior center is not a part of the scope of this report; therefore, no cost is included in the Capital Reserve Schedule. These items should be verified to be fixed or corrected to ensure proper operation during an event.</p> <p>The fire alarm control panel is obsolete and should be replaced during the term. The cost to replace the fire alarm control panel serving the library only has been included in the Capital Reserve Schedule. As the senior center is not a part of the scope of this report, costs for the replacement of fire alarm components serving the senior center have not been included in the report.</p>

9.0 BUILDING EQUIPMENT

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9.1 VERTICAL TRANSPORTATION

Marx|Okubo retained HKA Elevator Consulting to review the building's vertical transportation systems. The following is a summary of their findings. The full report produced by HKA Elevator Consulting is included as an exhibit to this report.

Elevators: The vertical transportation systems were manufactured and installed by Westinghouse Elevator Company in 1982. The building's single hydraulic elevator is summarized in the following table:

Elevator Identification	Levels Served	Type	Manufacturer	Capacity (Pounds)	Speed (feet per minute)
1	1, 2	Passenger	Westinghouse/ Otis	2,000	100

Elevator machinery is located in an elevator equipment room adjacent to the elevator on the ground floor.

The hydraulic system has an in-ground jack and piston that are buried in the ground. The hydraulic cylinder is single bottom and has no lining.

Controls: The elevator uses microprocessor-type controls manufactured by Otis Elevator and installed in 2013.

The elevator is equipped with the Otis AT 400 linear door operator and Westinghouse-related components, such as hanger rollers and tracks.

The hydraulic passenger elevator is equipped with the Otis 211 MOD microprocessor controller installed in 2013.

Maintenance: A maintenance contract was requested but not provided as of the report issue date. Vertical transportation equipment is reportedly maintained by Total Access Elevator. The following items were noted.

- Hole in the hydraulic tank needs a cover
- Victaulic fitting is leaking at the pump

Emergency Communication: The elevator cabs include hands-free emergency communication devices.

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Cab Interiors: Flooring consists of carpet. The side walls consist of vinyl over wood panels, and the back wall consists of vinyl over wood panels. Ceiling finishes contain plastic grid drop ceiling and have fluorescent lighting.

Age: Vertical transportation equipment was installed during the original building construction and is approximately 41 years old. The microprocessor controller and linear door operator are approximately ten years old.

Inspection Certificates: Current inspection certificates were observed in the elevator cabs.

Condition: In general, the elevator equipment was found to be in fair condition. With continued good and proper preventative maintenance and availability of replacement parts, the modernized hydraulic elevator should have a remaining useful life of 15 to 20 years.

The elevators were last inspected by the State of California in February 2021. The annual no-load tests were not able to be verified for a completion date. It should be noted that these tests are required by code and need to be completed annually. The five-year full-load tests were last completed in August 2015. It should be noted that these tests are required by code and need to be completed every five years. In some cases, these tests are included in the monthly maintenance agreement and should be completed at no cost to the Owner, but in many cases, they are not and are billed extra to the contract. A small cost has been included in the cost table to complete this work assuming that it is not covered by the maintenance contract.

Generally, an elevator control system has a useful life of 15 to 20 years; the control system is now ten years old. A conservative estimate of life expectancy for the existing controls is 5 to 10 years. See the Modernization Recommendations in HKA Elevator Consulting's report included as an exhibit.

Currently, the door operator and Westinghouse door equipment are operating fair. Typically, an elevator door system has a useful life of 15 to 20 years; the Otis door operator is now ten years old and the Westinghouse-related components, such as hanger rollers and tracks, are 41 years old. Our conservative estimate of life expectancy for the existing door operator is five to ten years. To maximize the life expectancy of the door system, the current maintenance contractor needs to increase the maintenance interval of the equipment. Much of the door operation was rough and noisy. Refer to the maintenance comments in HKA Elevator Consulting's report included as an exhibit for the required work. A cost to replace the controller/car and hall fixtures and wiring during the term has been included.

Cab interiors were observed with typical wear and tear but are original to the 41-year-old elevator. Cab interiors are normally updated when elevators are modernized. A cost to modernize the interiors has been included and should be completed during the term.

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A wall opening in the elevator machine room was observed during the site visit. The wall opening should be closed by the building maintenance team to maintain any fire ratings around the elevator machine room.

9.2 COMMUNICATION SYSTEMS

Description: The building has both fiber-optic and conventional copper telecommunications conductors from local providers. A multimedia system is provided in the Community Room. The system includes wall-mounted speakers, a ceiling-mounted video projector, a wall-mounted control panel, and a drop-down projector screen system.

Condition: No significant issues were noted or reported.

10.0 SECURITY

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10.1 SECURITY SYSTEMS

Description: A post-alarm security system is installed at the building that includes security cameras, door monitors, and keyed locks on exterior doors.

Condition: No significant issues were noted or reported with the existing security system.

Per the library management request, a cost has been included for an upgraded security system. The estimated cost included in the Capital Reserve Schedule includes a new security system control panel and associated front-end equipment, 16 additional security cameras, a duress alarm at the front desk, electronic door access control for four doors at the facility, electrical work to tie in the new system with the existing, permitting fees, engineering fees, construction fees, and taxes.

Per the library management request, a cost for an additional 14 pole-mounted dark-sky-compliant light fixtures and the replacement of 14 existing pole-mounted fixtures is included in the Capital Reserve Schedule. The cost includes labor for trenching and conduit, permitting fees, engineering fees, construction fees, and taxes.

Per the library management request, a cost has been included for metal security fencing and gates at each balcony which fill the space within each arch completely. One access gate with egress hardware is provided at each landing to maintain emergency egress.

Per the library management request, a cost for additional light fixtures at the ADA ramp has been included. The cost includes the installation of eight additional wall-mounted light fixtures.

11.0 CODE REVIEW

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11.1 CODE CLASSIFICATION

Occupancy Use: Per the construction documents provided, the occupancy is A-3.

Construction Type: Per the construction documents provided, the property is Type V, one-hour construction.

11.2 CERTIFICATES OF OCCUPANCY/BUILDING PERMITS

Marx|Okubo filed a Public Records Request with the City of South Pasadena City Clerk's Office (<https://www.southpasadenaca.gov/government/departments/city-clerk/public-records-request>) on March 9, 2023 for the Certificate of Occupancy. Per Yolanda Chavez, Interim City Clerk Records Specialist, copies of the Certificate of Occupancy are not available.

11.3 GOVERNMENT AGENCY REVIEW

Building Department: Marx|Okubo filed a Public Records Request with the City of South Pasadena City Clerk's Office (<https://www.southpasadenaca.gov/government/departments/city-clerk/public-records-request>) on March 9, 2023 for information regarding potential outstanding building code violations. Per Yolanda Chavez, Interim City Clerk Records Specialist, there are currently no outstanding violations on record.

Fire Department: Marx|Okubo filed a Public Records Request with the City of South Pasadena City Clerk's Office (<https://www.southpasadenaca.gov/government/departments/city-clerk/public-records-request>) on March 9, 2023 for information regarding potential outstanding fire code violations and recent inspections. According to Yolanda Chavez, Interim City Clerk Records Specialist, there are currently no outstanding violations on record.

Planning Department: Marx|Okubo filed a Public Records Request with the City of South Pasadena City Clerk's Office (<https://www.southpasadenaca.gov/government/departments/city-clerk/public-records-request>) on March 9, 2023 for information regarding potential outstanding zoning code violations and current zoning information. Per Yolanda Chavez, Interim City Clerk Records Specialist, there are currently no outstanding violations on record.

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11.4 ZONING

Per the City of South Pasadena, the property is zoned Commercial General (CG) and Community Facilities (CF).

11.5 FLOOD ZONE

According to the Data Verify Flood Services Determination Report, Map Panel No. 06037C1635 F dated September 26, 2008, the site is located in Flood Zone X – areas of minimal flooding, areas determined to be outside the 500-year flood plain.

11.6 MEANS OF EGRESS

Description:	Egress at grade is provided through doors at the perimeter of the building. Fire stairs are located at the Reading Room and west and east balconies and discharge at the ground-floor exterior via stairs on the west and an accessible ramp on the east.
Emergency Lighting / Egress Signage:	Emergency lighting is provided by light fixtures connected to an emergency lighting inverter, or dual-head battery pack fixtures. Illuminated exit signs provide directions to the path of egress.
Condition:	No significant issues were noted or reported.

12.0 ACCESSIBILITY

Back to Executive Summary

Marx|Okubo performed a limited accessibility review for Title II of the Americans with Disabilities Act (ADA) based on a sampling of conditions. This limited review was done to identify major barriers related to federal accessibility requirements and there may be non-compliant elements that have not been identified. There also may be state and local regulations and/or requirements under funding programs that have not been considered in this review. Where issues are identified, review of a larger sampling is generally recommended.

We understand that violations under the ADA run with the property to new owners, and that landlords are responsible for violations in areas of public accommodation. Non-compliant elements that were required to comply at the time of construction are considered immediate costs. Elements that were constructed prior to the enactment of the law are included as advisories, as they are subject to readily achievable barrier removal with an indeterminate timeline. See the **Americans with Disabilities Act (ADA), Title II** subsection below for additional discussion.

Marx|Okubo cannot give legal advice, and we recommend consulting with legal counsel with expertise in accessibility for questions regarding liability and the legal process. This report is not to be construed as a program access plan or an opinion of program accessibility. Federal, state, and local regulations and obligations under funding programs should be thoroughly reviewed prior to implementing a barrier removal plan.

12.1 AMERICANS WITH DISABILITIES ACT (ADA), TITLE II

In July 1990, the ADA was signed into law, extending civil rights protection to persons with disabilities, effective January 26, 1992 (reference Federal Register 36.508, Friday, July 26, 1991). There are currently five titles in the ADA. Marx|Okubo's review is limited to Title II, Public Services - State and Local Governments. Under this Title, all programs, activities, and services of public entities, including state and local governments, must be readily accessible to and usable by individuals with disabilities unless doing so would result in a fundamental alteration in the nature of the programs, activities or services, or would result in undue financial and administrative burdens, or would threaten or destroy the historic significance of a historic property. This concept is known as program accessibility. This can be achieved through several methods including, but not limited to, provision of adaptive equipment, reassignment of services to accessible buildings, provision of auxiliary aids and services, delivery of services at alternate accessible sites, or the alteration of existing facilities. When choosing a method of providing program access, a public entity must give priority to the one that results in the most integrated setting appropriate to encourage interaction among all users, including individuals with disabilities.

Marx|Okubo made a general review of the property for compliance with the criteria in the 2010 ADA Standards for Accessible Design. Our review exceeds the visual-only review scope in the ASTM E2018-15. It should be noted that this is a limited review based on a sampling of conditions, and there may be non-compliance items that have not been identified.

SOUTH PASADENA PUBLIC LIBRARY
South Pasadena, California

The following issues were noted:

- Under-lavatory protection was not provided at all restrooms.
- Handrail extensions at the exterior stair northwest of the building were not compliant.
- Accessible route signage was not provided.
- Non-compliant accessible route and signage at the accessible parking space along Fairview Avenue were observed.
- Oxley Street book drop-off location is not accessible. Both drop-off containers face the street without a level landing.
- Ramps at the upper level were not provided with handrails; ramps appeared to exceed the 5% maximum.
- Non-compliant handrails in the elevator.
- Non-compliant restrooms near the Community Room.

13.0 DEFICIENCIES AND RECOMMENDATIONS

Recommendations for remedial work addressing significant building deficiencies are included in this section. Recommendations are divided into *Immediate Work Items* and *Capital Work Items*.

The contractual cost threshold for this project is \$3,000. Items that do not meet this threshold are excluded from our recommendations.

Immediate Work Items: Include items that correct safety and life-threatening building and/or fire code violations; items that, if left unrepaired over the next year, would result in serious damage to the building or its contents; and elements not compliant with federal accessibility regulations. These items should be undertaken on a priority basis taking precedence over routine preventive maintenance work.

Capital Work Items: Include items that are customarily repaired or replaced over several years due to economic considerations (e.g. paving, roofs, appliances), items which are currently in acceptable condition but will reach or exceed their useful economic service life during the term, and items that are periodic in nature but not considered normal maintenance (e.g. pavement seal coating, painting). Also included are significant energy-saving or operational improvements. These opinions of cost are generally based on industry-accepted life spans for these systems unless there are mitigating circumstances.



IMMEDIATE REPAIR COST

Prepared By: Marx|Okubo Associates, Inc.
 Building Gross Area (S.F.): 24,000
 Effective Age (Years): 41

Date Prepared: May 11, 2023

#	Item	QTY	Unit	Unit Cost	Replacement Percent	Immediate Total	Comments
9.0 BUILDING EQUIPMENT							
1	Provide annual no-load and five-year load tests for the elevator.	1	LS	\$1,000.00	100%	\$1,000	No records were available to indicate these tests have been completed. These tests should be completed by the vendor that provides regular elevator maintenance.
2	Close wall opening in the elevator machine room.	1	LS	\$500.00	100%	\$500	Repairs required to maintain the code-required fire rating of the elevator machine room walls.
12.0 ACCESSIBILITY							
3	ADA Advisory: A limited review of the property for compliance with the ADA was performed. Due to the age and public nature of the property, Marx Okubo recommends a detailed accessibility review be performed.	1	EA	\$0.00	0%	\$0	\$10,000 Advisory: Marx Okubo recommends a Detailed Accessibility Review for program access compliance.
Total Repair Cost						\$1,500	



CAPITAL RESERVE SCHEDULE

Prepared By: Marx|Okubo Associates, Inc.
Building Gross Area (S.F.): 24,000
Property Age (Years): 41

Date Prepared: May 11, 2023
Term: 10
Inflation Rate: 3%

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
4.0 SITE																		
1	Ⓟ Reseal asphaltic concrete paving at the service yard.	1	Allow	\$3,000.00	10	8			\$3,000								\$3,000	Based on observed condition.
2	Ⓟ Repair spalled and cracked concrete at the Community Room entrance.	1	Allow	\$4,000.00	0	0	\$4,000										\$4,000	Includes repairs at stairs, railing posts, and concrete benches. Review of work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.
5.0 STRUCTURE																		
3	No significant issues were noted or reported.	0	EA	\$0.00	0	0	\$0										\$0	
6.0 ENVELOPE AND EXTERIOR																		
4	Ⓟ Remove the existing built-up roofing assembly and replace with a modified bitumen roofing assembly.	12,000	SF	\$14.00	15	15	\$168,000										\$168,000	Tear off the existing built-up roofing system and replace with a modified bitumen assembly. Includes replacing select wood sheathing that may be deteriorated due to water intrusion, and replacing the roof hatch and skylight access doors.
5	Option: Remove and replace the existing built-up roofing assembly and spray foam overlay.	1	LS	\$0.00	20	20	\$0										\$0	Advisory cost: \$186,000. Includes replacing select wood sheathing that may be deteriorated due to water intrusion, and replacing the roof hatch and skylight access doors.
6	Ⓟ Remove and replace underlayment at clay tile roofing of the eastern and western pitched roof areas.	1,400	SF	\$20.00	30	30	\$28,000										\$28,000	Includes removing and replacing the existing roof tiles. Cost assumes the reuse of existing tiles; an allowance for breakage is provided as a separate cost. Tile installation should match existing, including the use of wire ties.
7	Remove and replace underlayment at clay tile roofing at areas not replaced in Year 1.	5,100	SF	\$20.00	30	30			\$102,000								\$102,000	Includes removing and replacing the existing roof tiles. Cost assumes reuse of existing tiles; an allowance for breakage is provided as a separate cost. Tile installation should match existing, including the use of wire ties.

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
8	Allowance for clay roof tile replacements at the eastern and western pitched roof areas.	300	EA	\$7.00	40	40	\$2,100										\$2,100	Allowance to replace 20% of clay roof tiles that are currently broken, or will potentially be broken during the re-roofing process.
9	Allowance for clay roof tile replacements at clay tile roofing at areas not replaced in Year 1.	1,000	SF	\$7.00	40	40				\$7,000							\$7,000	Allowance to replace 20% of clay roof tiles that are currently broken, or will potentially be broken during the re-roofing process.
10	Option: Remove and replace all underlayment at clay tile roofing.	1	LS	\$0.00	30	30	\$0										\$0	Advisory cost: \$130,000. Includes removing and replacing the existing roof tiles. Cost assumes reuse of existing tiles; an allowance for breakage is provided as a separate cost. Tile installation should match existing, including the use of wire ties.
11	Option: Allowance for replacement clay roof tiles.	1	Allow	\$0.00	40	40	\$0										\$0	Advisory cost: \$9,100. Allowance if clay tile underlayment is replaced all at one time, to replace 20% of clay roof tiles that are currently broken, or will potentially be broken during the re-roofing process.
12	Ⓟ Remove and replace below-grade waterproofing and drainage system.	1	LS	\$50,000.00	50	50	\$50,000										\$50,000	Based on reported and observed condition. Estimated repair scope includes soil removal at the northeast building corner to 4' away from the building and a depth of 7', new fluid-applied elastomeric waterproofing and drain board, 4" perforated PVC subdrains, gravel base, soil backfill and compaction, and new planting material. A termination bar and counterflashing are included for the entire length of the below-grade waterproofing. Irrigation rework does not appear to be required.
13	Prepare and repaint building exterior.	20,000	SF	\$2.00	8	8		\$40,000								\$40,000	\$80,000	Building repainting should occur after the replacement of windows. Costs include the installation of a new exterior cement plaster control joint at the east side of the building where the original building meets the addition, and minor crack repair which should be completed as required.
14	Prepare and repaint building and site miscellaneous metals.	1	LS	\$6,000.00	6	6	\$6,000							\$6,000			\$12,000	Scrape, prime, and paint miscellaneous metals, including doors, railings, guardrails, fencing, benches, bicycle parking, site light poles, and exterior steel framing for the stairs and accessible ramp to the balconies.
15	Ⓟ Replace all wooden windows installed during the 1982 renovation.	31	EA	\$2,000.00	25	25	\$62,000										\$62,000	Replacements should occur prior to repainting the building exterior. Costs include window replacement for all windows installed in the 1982 renovation, repairs to surrounding exterior cement plaster, and repairs to window sills as required. Review of work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
16	Replace original wood window and window screen sashes at eastern end of the Community Room. The windows and screens are located at the bottom of the overall window.	5	EA	\$1,500.00	25	25	\$7,500										\$7,500	Based on observed condition. Existing window frame and adjacent windows should be protected and remain in place. Replacement should occur before repainting of building exteriors. Review of work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.
17	☐ Replace skylights.	5	EA	\$800.00	25	25	\$4,000										\$4,000	Based on expected useful life.
18	Reapply balcony fluid-applied waterproof traffic coating.	1,200	SF	\$5.00	5	5	\$6,000					\$6,000					\$12,000	Includes surface preparation, substrate priming, and surface recoating. Based on the observed condition and expected useful life.
19	TBD Advisory - Preservation architect fee.	0	EA	\$0.00		41	\$0										\$0	Fee to be confirmed. Work at this historic building may require the involvement of a preservation architect.
7.0 INTERIOR IMPROVEMENTS																		
20	Repair moisture-damaged interior finishes.	1	Allow	\$4,000.00	5	41	\$4,000										\$4,000	Remove and replace water-damaged interior finishes, including hard-lid ceilings, acoustical tile ceilings, and paint.
21	TBD Advisory - Architect fee for restroom review.	0	EA	\$0.00	0	0	\$0										\$0	TBD Advisory - Restroom capacity should be reviewed by an architect in relation to community cooling center requirements.
22	Restroom facilities expansion and upgrade.	1	Allow	\$450,000.00	0	41	\$450,000										\$450,000	This item has been included per the client's request for upgraded restrooms. Estimated cost includes new plumbing fixtures, four additional stalls, upgrades associated with accessibility requirements, demolition, and reconstruction of existing restrooms, permitting fees, engineering fees, construction fees, and taxes.
8.0 MECHANICAL/ELECTRICAL/PLUMBING																		
23	☐ Replace rooftop package units.	55	TON	\$3,000.00	20	17			\$15,000	\$45,000	\$45,000	\$60,000					\$165,000	Due to condition and expected useful life. Unit No. 3 replaced in Year 3. Unit No. 4 replaced in Year 4. Unit No. 1 replaced in Year 5. Unit No. 2 replaced in Year 6.
24	☐ Complete corrective maintenance items as identified in the 2022 HVAC Performance Analysis report.	5	EA	\$5,000.00	0	0	\$25,000										\$25,000	Complete identified repairs to extend the expected useful life of the HVAC equipment. Maintenance items include replacing RTU filters, cleaning cooling coils, cleaning blower motors, adjusting motor sheaves, adjusting fan belts, repairing sensors, and repairing economizers.

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
25	Ⓟ Complete deferred maintenance on piping and ductwork serving the RTUs.	1	LS	\$5,000.00	0	0	\$5,000										\$5,000	Items to be addressed include painting/replacing corroded natural gas and condensate piping serving the RTUs, adjusting condensate drains to ensure proper sloping to drain, correcting ductwork that has ponding water, painting corroded RTU disconnects and exposed ductwork, and removing debris collecting around the units.
26	Ⓟ Replace electric water heater.	1	LS	\$3,500.00	10	2								\$3,500			\$3,500	Due to condition and expected useful life. Additionally, an expansion tank should be added to the system if the cold water piping connected to the water heater is verified as a closed system. The cost indicated here includes the cost for an expansion tank.
27	Ⓟ Install a seismic shut-off valve on the natural gas service.	1	LS	\$3,000.00	0	0	\$3,000										\$3,000	Seismic shut-off valves ensure safe operation during a seismic event.
28	Ⓟ Perform infrared testing on the electrical distribution equipment.	1	LS	\$30,000.00	0	42	\$30,000										\$30,000	Infrared testing should be performed every three years. Cost for subsequent testing after Year 1 should be included in the operations and maintenance budget. The cost shown here includes the estimated cost of servicing the electrical panels after the infrared testing.
29	Provide a portable diesel-powered emergency generator.	1	LS	\$100,000.00	0	0	\$100,000										\$100,000	This item has been included per the client's request for an emergency power generation system to supplement the facility's effectiveness as a cooling center and area of emergency assembly. Estimated cost includes a 150-kW portable generator. An electrical engineer should be contracted to confirm the final generator sizing prior to purchase.
30	Provide manual transfer switch and electrical work to allow connection of portable emergency generator.	1	LS	\$100,000.00	0	0	\$100,000										\$100,000	This item has been included per the client's request for an emergency power generation system to supplement the facility's effectiveness as a cooling center and area of emergency assembly. Estimated cost includes minor site work, a manual transfer switch, electrical work to tie in the emergency power to the existing power systems, permitting fees, engineering fees, construction fees, and taxes.
31	Replace fire alarm system serving the library.	24,000	SF	\$2.10	20	26	\$50,400										\$50,400	The fire alarm control panel is obsolete and should be replaced. Cost includes fire alarm system devices serving the library and fire alarm control panels for the library. The senior center fire alarm system devices and control panels have been excluded from this replacement cost, but will be required to be replaced at the same time as the library fire alarm scope.
9.0 BUILDING EQUIPMENT																		
32	Replace elevator controller/car and hall fixtures and wiring.	1	EA	\$45,000.00	20	10										\$45,000	\$45,000	Due to condition and expected useful life.
33	Modernize cab interiors that are original to the building.	1	EA	\$30,000.00	25	20					\$30,000						\$30,000	Due to condition and expected useful life.

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
10.0 SECURITY																		
34	Provide an upgraded security system.	1	LS	\$72,000.00	0	0	\$72,000										\$72,000	This item has been included per the client's request for an upgraded security system. Estimated cost includes a new security system control panel/front-end equipment, 16 additional security cameras, a duress alarm at the front desk, electronic door access control for four doors at the property, electrical work to tie in the new system with the existing, permitting fees, engineering fees, construction fees, and taxes. Cost shown here incorporates three related security quotes provided by the client.
35	Provide expanded site lighting and replacement of existing fixtures.	1	LS	\$169,000.00	0	0	\$169,000										\$169,000	This item has been included per the client's request for an upgraded lighting system. Estimated cost includes 14 new pole-mounted dark-sky-compliant LED light fixtures and 14 replacement LED light fixtures, electrical work to tie in the new system with the existing, permitting fees, engineering fees, construction fees, and taxes.
36	Provide new painted metal security fencing and gates at the balcony openings.	1	LS	\$20,000.00	30	0	\$20,000										\$20,000	This item has been included per the client's request to provide painted security fencing and gates for all arched openings at the east and west balconies, extending to the tops of the arches as a security measure. Cost includes one gate with egress hardware at each balcony. Review of the work scope by a preservation architect may be required to confirm adherence with the Secretary of the Interior Standards.
37	ADA ramp lighting is inadequate. Add new fixtures.	1	Allow	\$7,280.00	41	41	\$7,280										\$7,280	ADA ramp lighting is inadequate based on the information provided by the facility management. Additional light fixtures to be installed for adequate lighting.
11.0 CODE REVIEW																		
38	No significant issues were noted or reported.	0	EA	\$0.00	0	0	\$0										\$0	
12.0 ACCESSIBILITY																		
39	Ⓟ Provide scald protection under all restroom lavatories.	1	LS	\$800.00	0	0	\$800										\$800	Plumbing under all lavatories does not provide scald protection where required.
40	Ⓟ Stairs do not have compliant handrail extensions.	1	EA	\$900.00	0	0	\$900										\$900	Egress stair at the northwest of the building is not provided with compliant handrail extensions.
41	Ⓟ Provide compliant signage for the accessible routes.	1	LS	\$700.00	0	0	\$700										\$700	The existing accessible routes are not provided with compliant signage.
42	Ⓟ Provide curb ramp and compliant signage at accessible parking space.	1	EA	\$3,700.00	0	0	\$3,700										\$3,700	Accessible path of travel is not provided to accessible parking space and existing parking signage does not comply with ADA requirements.

#	Item	QTY	Unit	Unit Cost	EUL	EFF Age	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total Cost	Comments
43	P Provide an accessible book drop-off location.	1	EA	\$400.00	0	0	\$400										\$400	The book drop-off box at Oxley Street is not accessible and requires reconfiguration, including a level surface in front of drop-off boxes.
44	P Provide handrails at the upper-level ramps.	1	EA	\$5,600.00	0	0	\$5,600										\$5,600	Ramps on the upper level require handrails to be compliant.
45	P Provide a 1-1/2" round elevator interior handrail.	1	EA	\$2,500.00	0	0	\$2,500										\$2,500	The current handrail is a square bar which does not meet ADA and Title 24 standards.

Total (Uninflated)	\$1,387,880.00	\$40,000.00	\$18,000.00	\$154,000.00	\$75,000.00	\$66,000.00	\$0.00	\$9,500.00	\$0.00	\$85,000.00	\$1,835,380.00
Inflation Factor (3.0%)	1.0	1.03	1.061	1.093	1.126	1.159	1.194	1.23	1.267	1.305	
Total (inflated)	\$1,387,880.00	\$41,200.00	\$19,096.20	\$168,279.96	\$84,413.16	\$76,512.09	\$0.00	\$11,683.80	\$0.00	\$110,905.72	\$1,899,970.93

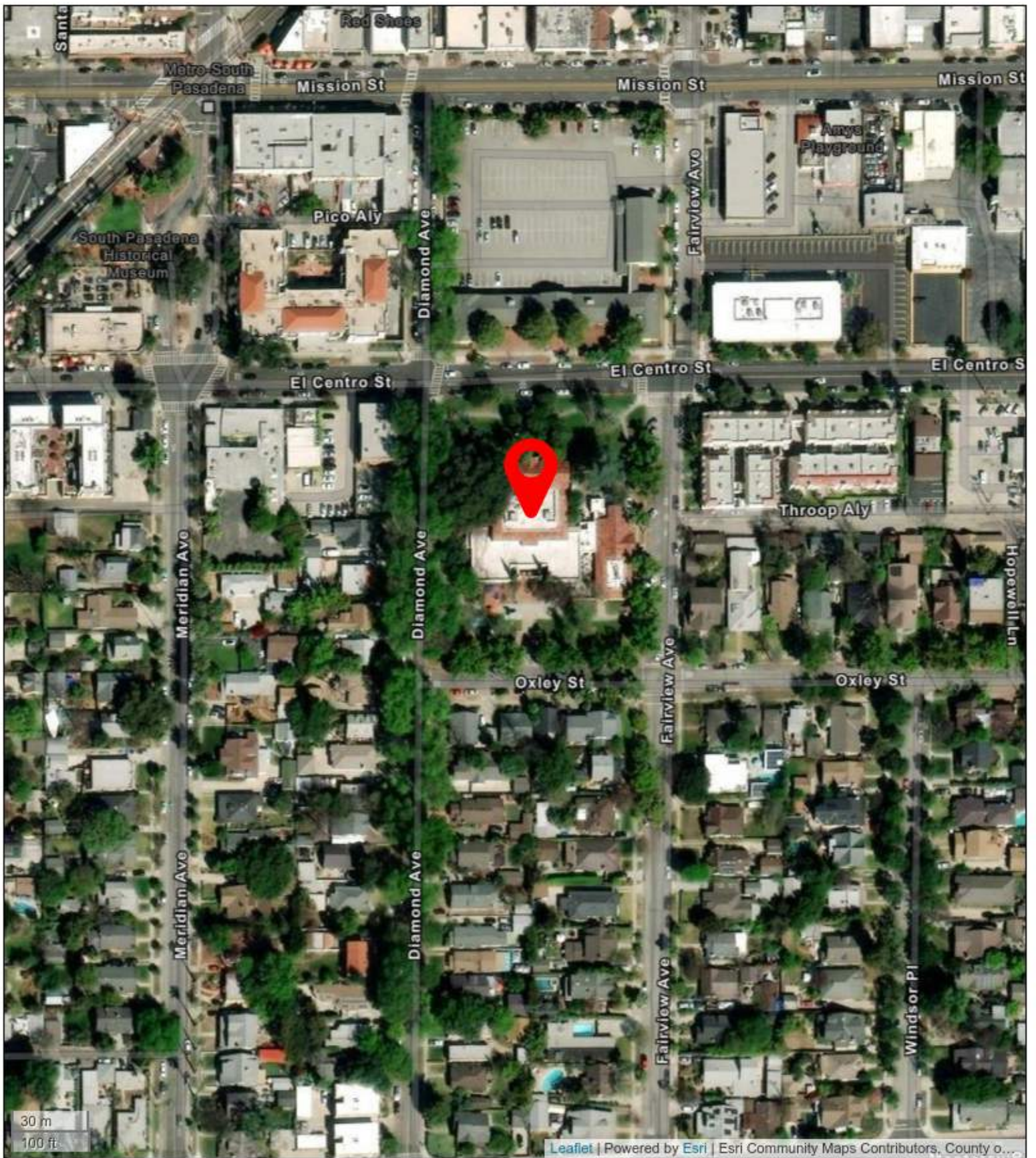
Evaluation Period:	10
# of square feet:	24,000
Reserve per square foot per year (Uninflated)	\$7.65
Reserve per square foot per year (Inflated)	\$7.92

- Opinions of cost are based on limited observations of readily observable conditions and available documentation. Determination of actual costs require competitive bidding by qualified contractors on a scope of work that may require development of repair documents by a qualified engineer or architect.
- Marx|Okubo is not an environmental consultant or evaluator of pest infestation. Opinions of cost exclude abatement of hazardous materials or remediation of pest infestations unless otherwise noted.
- This cost table is a supplementary document to the report and should be reviewed in conjunction with the full report and exhibits.

P Photos

14.0 EXHIBITS

VICINITY MAP



VICINITY MAP
South Pasadena Public Library
South Pasadena, California



SITE PLAN

FLOOR PLANS

FLOOD PLAIN DETERMINATION REPORT

MARX/OKUBO & ASSOCIATES - IRVINE : Insurance Report

DataVerify Flood Services

Determination Report

DATE: 03/22/23

Account Number: INS 97156131

**MARX/OKUBO &
ASSOCIATES - IRVINE**

Owner Name: SOUTH PASADENA PUBLIC LIBRARY

Certified Street Address: 1100 OXLEY ST, SOUTH PASADENA, CA 91030-3159

Requester: Julie Acosta Phone#: Fax#:

Policy Number: 230322121057795

Community Name: SOUTH PASADENA, CITY OF

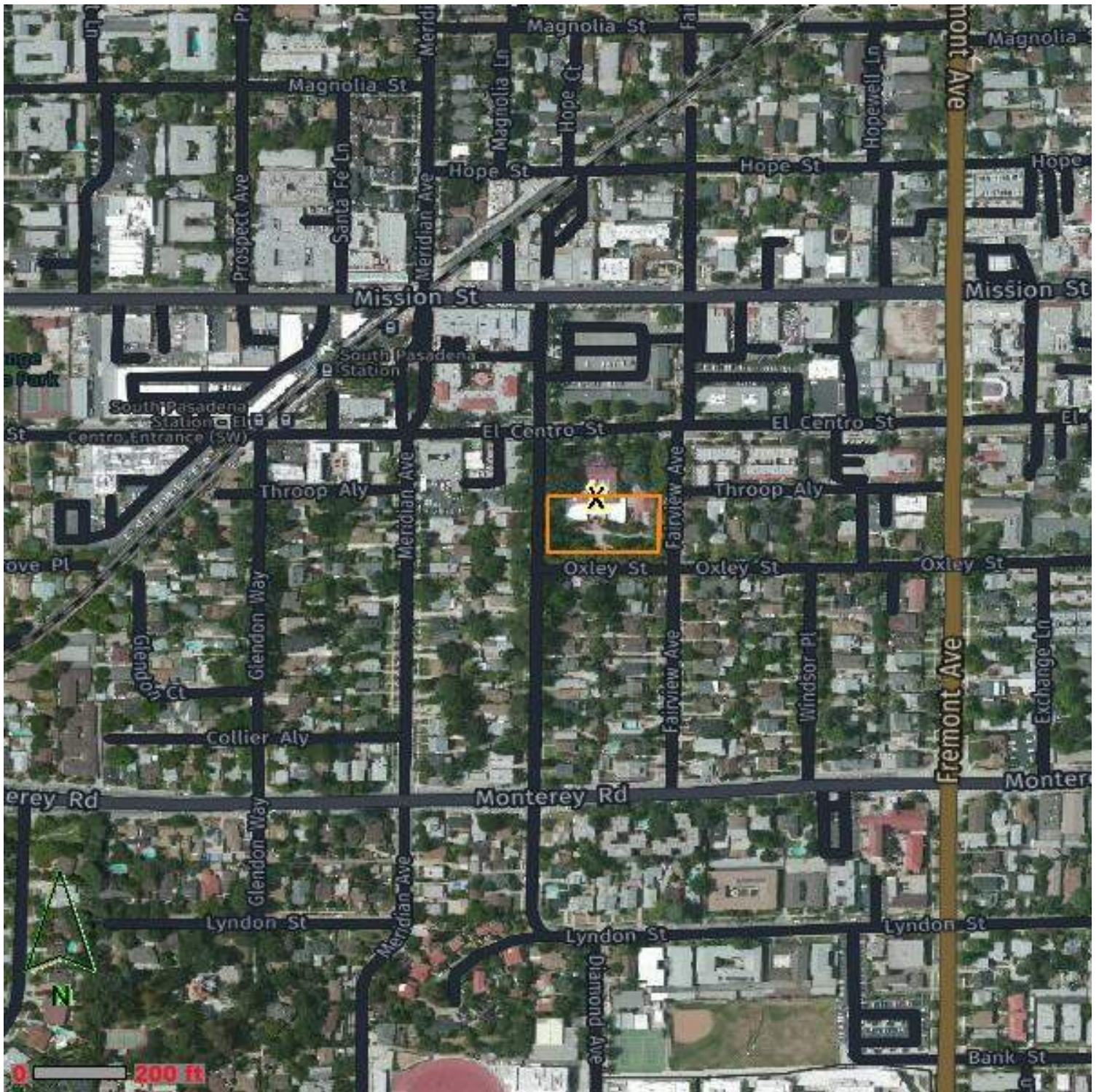
Community Status: Regular Program Type: Participating

Det ID: 058316171 Map Panel #: 06037C1635 F Community #: 065061 Panel Date: 09/26/08 Entry Date: 11/14/75



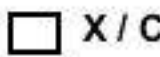



Det Date: 03/22/23 Flood Zone: X BFE: (Vertical Datum:) LOMA/LOMR DATE:

Areas of minimal flooding. Areas determined to be outside 500 year flood plain.

This flood determination is provided to the lender pursuant to the flood disaster protection act and for no other purpose. It does not create any private cause of action on behalf of the Policy Holder against DataVerify Flood Services.



**Flood Zones
Legend**

- | | | |
|--|--|--|
|  A Values |  X500 / SHX / B |  X / C |
|  D / NMA |  V Values |  Street |

Determination Id : 058316171
Certified Address : 1100 OXLEY ST, SOUTH PASADENA, CA 91030-3159
Flood Zone : X
Base Flood Elevat : N/A
FEMA Map Panel Number : 06037C1635 F
FEMA Map Panel Eff. Date : 09/26/08
Coast CBRA Date :
LOMA LOMR Date :
Distance To 100/500 : Greater than 3000 ft
Flood Zone

DISCLAIMER: THIS MAP IMAGE IS PROVIDED AS A VISUAL AID WITHOUT ANY WARRANTIES OR GUARANTEES; IT DOES NOT CREATE ANY PRIVATE CAUSE OF ACTION ON BEHALF OF THE BORROWERS OR INSURED PROPERTY OWNERS AGAINST THE FLOOD DETERMINATION PROVIDER. DISTANCE TO 100/500 YEAR FLOOD AREA IS AN APPROXIMATION CALCULATED FROM GEOCODING TECHNOLOGY AND IS NON-GUARANTEED.

DOCUMENTS UTILIZED

SOUT PASADENA PUBLIC LIBRARY
South Pasadena, California

DOCUMENTS UTILIZED

- Structural drawings titled "South Pasadena Public Library", prepared by Howard H. Morgridge, FAIA & Associates, Inc, dated February 26, 1981 for city approval.
- "South Pasadena Library Masonry Evaluation", prepared by RKA Consulting Group, undated.
- "Facility Condition Assessment", prepared by Faithful+Gould, Inc., dated June 26, 2017.
- "HVAC System Performance Analysis", prepared by Inland Mechanical Services, Inc., dated February 22, 2022.
- "South Pasadena Public Library Critical System Upgrades and Enhancements for Life Safety", prepared by Cathy Billings, dated October 28, 2021.
- "Fire and Life Safety Inspection Form", prepared by City of South Pasadena Fire Department, dated October 30, 2022.

HKA VERTICAL TRANSPORTATION REPORT



Elevator Consulting, Inc.
23211 South Pointe Drive
Laguna Hills, CA 92653



VERTICAL TRANSPORTATION DUE DILIGENCE

South Pasadena Library
1100 Oxley Street
South Pasadena Ca. 91030

DATE PREPARED

March 8, 2023

PREPARED FOR

Marx Okubo

PREPARED BY

Frank Belio

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INTRODUCTION

HKA Elevator Consulting, Inc. specializes in the business of vertical and horizontal transportation consulting. As an independent firm made up of professionals drawn from throughout the elevator industry, the staff has a broad range of experience and expertise in all phases of elevator consulting. HKA provides full services from schematic design through the final stages of construction and testing of the vertical transportation systems for both new buildings and the modernization of existing buildings. HKA also provides maintenance evaluations and "remaining useful life" studies of existing systems. The firm is a member of BOMA, IREM, NAESA, IAEC (formally NAVTP) and is QEI certified.

The purpose of this audit was to survey the vertical transportation equipment located at 1100 Oxley Street South Pasadena Ca. 91030 South Pasadena Library. On-site observations were made on March 8, 2023.

The objectives of the evaluation are based on the following:

- 1) Review the operational characteristics of the equipment;
- 2) Determine the current condition of the equipment;
- 3) Comment on the level of maintenance being performed by the contractor;
- 4) Provide an independent evaluation as to whether the equipment should undergo up-grades or modernization.

GRADING CRITERIA AND DEFINITIONS

MAINTENANCE CONTRACTOR'S PERFORMANCE

<u>Grading</u>	<u>Definition</u>
Excellent:	Maintenance and performance that is well above industry standard. With this rating no improvement is needed. Your maintenance contractor is exceeding contractual obligations thereby substantially increasing the safety, performance and life of the vertical transportation equipment.
Above Average:	Maintenance and performance that is above industry standard. With this rating very little improvement is needed. Your maintenance contractor is meeting and in some cases exceeding contractual obligations. The vertical transportation equipment is benefited by the degree of attention.
Average:	Maintenance and performance that is at the industry standard. With this rating some improvement is desired. It is advisable that your maintenance contractor pay extra attention to detail.
Below Average:	Maintenance and performance that is below industry standard. With this rating much improvement is required and justified. Overall, your maintenance contractor is not fulfilling the terms of the maintenance contract. This level of service will lessen the safety, performance and life of the equipment.
Poor:	Maintenance and performance well below industry standard. A substantial level of improvement is mandatory. Your maintenance contractor's performance is unacceptable and should be given a 30-day's notice to satisfy contractual obligations. Continued poor maintenance will jeopardize the integrity of the equipment.

EQUIPMENT'S OPERATION AND CONDITION

<u>Grading</u>	<u>Definition</u>
Good:	The equipment's operation and performance is proficient and operating as intended. No improvement needed; this level needs to be maintained.
Fair:	The equipment's operation and performance is adequate; however, minor adjustment and attention is suggested.
Poor:	The equipment's operation and performance is well below capacity and requires immediate corrective action. (NOTE: In some cases, a "Poor" rating is assigned where the components have exceeded their useful life and are obsolete. In this instance, a "Poor" rating should not be interpreted as a negative evaluation of a maintenance contractor's performance.

STANDARD ELEVATOR TERMINOLOGY

<u>Term</u>	<u>Definition</u>
Start-to-Stop Motion:	This is the time, in seconds, for an elevator to start and travel from one floor to level and stop at the next successive floor.
Door Dwell Time:	This is the time the doors remain open when arriving at a floor to answer either a hall call or a car call. Generally, the car call time is less than the hall call time.
Noise Levels:	During the elevator ride and door operation, noise levels are measured by the ear. It is subjective and based on the type of equipment and industry standards.
Leveling:	This is the distance, measured in inches, where the car threshold is above or below the hoistway sill.
Nudging Time:	When a door's re-opening device is being interrupted by someone in the entrance area causing the doors to remain open, a timing circuit will time out and a buzzer will sound as the doors begin to close.

SURVEY CRITERIA

The elevator was judged upon standard industry criteria for this particular type of equipment. The survey was based upon visual observations and timed responses of vertical transportation equipment. The performance and operational characteristics of vertical transportation equipment may vary from day to day and this report represents observations made only at the time of the survey.

Conditions not covered by this report include hidden defects in equipment that cannot be detected through audible or visual observations, code compliance (as this is the enforcing agencies responsibility), or presence of asbestos or other hazardous materials, as we are not experts in this field. The remaining useful life values of the equipment are based on availability of spare parts and quality preventative maintenance.

EXECUTIVE SUMMARY

The purpose of this audit was to survey the vertical transportation equipment located at 1100 Oxley Street South Pasadena Ca. 91030 South Pasadena Library. On-site observations were made on March 8, 2023.

The vertical transportation systems were manufactured and installed by Westinghouse Elevator Company in 1982. Overall, the systems are in fair condition The Building is served by Additionally, one (1) hydraulic elevator that serves levels 1 and 2. The elevator was in service at the time of our survey.

The hydraulic passenger elevator is equipped with the Otis 211 MOD microprocessor controller. Typically, an elevator control system has a useful life of 15-20 years; the control system is now 10 years old. Our conservative estimate of life expectancy for the existing controls is 5-10 years. See "Modernization Recommendations".

The elevator is equipped with the Otis AT 400 linear door operator and Westinghouse related components, such as, hanger rollers, and tracks. Currently the door operation and Westinghouse door equipment is operating fair. Typically, an elevator door system has a useful life of 15 to 20 years; the Otis door operator is now 10 years old and the Westinghouse related components, such as, hanger rollers, and tracks are 41 years old. Our conservative estimate of life expectancy for the existing door operator is 5-10 years. See "Modernization Recommendations". To maximize the life expectancy of the door system, your current maintenance contractor needs to increase their maintenance interval of the equipment. Much of the door operation was rough and noisy. Please reference maintenance comments for the required work

Cab interior descriptions consists of stainless-steel car operating panel, main only, single speed side slide stainless steel car door, applied lamen covered wood wall panels, carpeted flooring and a square grid drop ceiling with fluorescent lighting.

The maintenance provided is considered average when compared to the industry standard.

Description of Systems:

Overall, the systems are in fair condition. The systems are summarized in the table below.

Bldg.	Elev.	Type	Capacity	Speed	Landings	Mfg. / Year	Control
1	1	Pass.	2000 lbs.	100 fpm	2	Westinghouse/1982	Otis/2013

Code Compliance:

The elevators were last inspected by the State of California in February 2021. The annual no-load tests were last completed in (no tag). It should be noted that these tests are required by code and need to be completed annually. The five-year full load tests were last completed in August 2015. It should be noted that these tests are required by code and need to be completed every five years.

In some cases, these tests are included in the monthly maintenance agreement and should be completed at no cost to the Owner, but in many cases they are not and are billed extra to the contract.

Underground Hydraulic Cylinders:

The hydraulic cylinder for elevator #1 appears to be installed underground without PVC protection. Please reference below for further information regarding Hydraulic Cylinders:

Hydraulic Cylinders:

In recent years there has been concern over underground elevator hydraulic cylinders, to fully understand some historic background is required. In the early 1970's there was an accident at the General Motors Plant in Detroit, the bottom of a hydraulic

cylinder blew out, causing the elevator to descend in an uncontrolled manner.

Up until this time the bottom of cylinders were capped off by welding a flat plate to it. The accident investigation resulted in a change in the code-required construction of the cylinder bottom in 1972. The cylinders after 1972 were required to have a dished or rounded plate at the bottom, as well a double bottom with a small hole in the secondary bottom to allow a more controlled decent if the primary bottom were to fail.

The double bottom cylinder is one issue; another concern is the way the cylinders were put into the ground. Up until about 1986 cylinders were buried in the ground without any cathodic protection, although in some cases they were wrapped in fiberglass and mastic materials. Unfortunately, one nick in the wrapping allowed contact with the soil. This exposure to the soil opened the possibility of corrosion the entire length of the cylinder, which in some cases could be as much as 70 feet.

Most elevator manufacturers have adopted the following installation procedure.

1. A steel outer casing is set in the hole which is typically 3'-0" diameter with a capped bottom.
2. Inside the steel casing a capped schedule 80 PVC pipe is set.
3. The hydraulic cylinder is set inside the PVC isolating it from the soil.

System Performance:

Overall, the equipment was running fair, improvements can be made in adjustments to the valves for the hydraulic elevators to improve floor to floor performance and ride quality. The doors should be adjusted and serviced to provide smooth and quiet door operation. The doors were making noise in the open and closed directions. Adjustment to door dwell or hold open times will allow compliance with disabled access requirements and provide consistent operation.

The elevator maintenance contractor should make these adjustments under the terms of the full maintenance contract at no additional cost to the owner.

Maintenance:

The maintenance being performed by Total Access Elevator Company is average when compared to the industry standard.

Condition:

In general, the elevator equipment was found to be in fair condition. With continued good and proper preventative maintenance, and availability of replacement parts, the modernized hydraulic elevator should have a remaining useful life of 15 to 20 years.

In general, the elevator equipment was found to be in fair condition.

DISABLED ACCESSIBILITY

ELEVATORS

Disabled access requirements for the State of California Title 24 and ADA have changed over the years. Pushbuttons are now required to be raised 1/8" and have white on black Braille plates. Telephones are now required to be hands free, voiceless, and provide call tracking. The handrails in the elevators must be 1 ½" diameter tubes. The Disabled Access table listed below are included to provide a detailed accounting of all of the elevators. Tenant improvement work in buildings will trigger full disabled access compliance since the elevators are considered path of travel. The elevator inspector will not check and/or enforce these items.

Disabled Access Compliance Matrix				
HAND RAILS	32" Above Floor Grip = 1½" Round	C R		
CONTROL OPERATING PANEL	Raised 1/8" (Title 24) Braille White on Black (Title 24) Star for Egress Landing Illuminated Alarm Button Stop Switch at 35" Control Button does not exceed 48"	C C C C C C		
COMMUNICATIONN	Hands-Free Voice-Free Visual Signals Braille Identification	C C C C		
CAR POSITION INDICATOR	Minimum Floor Passing Tone	C		
CAR OR HALL LANTERN	2 ½" Dimension Single Stroke Up Double Stroke Down 72" Above floor Visible from Hall Button	C C C C C		
BRILLE MARKINGS	Braille Pins to bottom of symbol, White on Black	C C		
HALL BUTTONS	Illuminated Push Button Raised 1/8" (Title 24) ¾" Minimum Diameter 48" Maximum Height	C C C C		
DOOR PROTECTION	None Contact Device Nudging - 20 Seconds Minimum	C C		
DOOR DWELL	Car Call: Min. 5 Sec. Hall Call: Min. 5 Sec. Required: T = D □ 1.5	C C C		

Disabled Access Itemized Cost			
Item	Number of Elevators	Cost Per Elevator	Total Cost
1. Install 1 ½" diameter handrail at 32" AFF.	1	\$2,500.00	2,500.00
Total			\$2,500.00

Disabled Access Itemized Cost			
Item	Number of Elevators	Cost Per Elevator	Total Cost
1. Adjust the door nudging time to be CA ADA compliant, 20 second minimum. Contractor should adjust at no charge.	1	N/C	N/C
		TOTAL:	\$0.00

ESTIMATED REMAINING USEFUL LIFE (YEARS)

The remaining useful life values of the equipment are based on the projected availability of spare parts and the quality of preventative maintenance being performed on the equipment. ***A strong effort to properly maintain vertical transportation equipment greatly increases the remaining useful life. Likewise, poorly maintained equipment will reduce the remaining useful life of the equipment.***

Component	Typical Life Expectancy
Pump Unit	Applies to hydraulic elevators only. Typical life expectancy of a pump unit is around 20 - 25 years.
Controller	Typical life expectancy of a controller is around 15 – 20. years.
Door Operator	Typical life expectancy of a door operator is around 15 - 20 years.
Hoistway Equipment	Typical life expectancy of the equipment located in the hoistway is around 20 - 25 years.
Car Signals *	Typical life expectancy of car operating fixtures is around 10 - 15 years.
Hall Signals *	Typical life expectancy of hall station fixtures is around 10 - 15 years.

* Please note that existing code-compliant and ADA-compliant fixtures may become non-compliant in the future, should changes occur in the governing codes or acts. The federally mandated Americans with Disabilities Act (ADA) is not enforced by the local or state elevator inspectors. ADA is considered a civil right legislation and as such, its provisions are enforced by legal suits filed by alleged victims of discrimination.

The estimated remaining useful life of major components is summarized in the table below:

Elevator Number	Pump Unit	Controller	Door Oper.	Hoistway Equip.	Car Signals	Hall Signals
1	10-15 Yrs.	5-10 Yrs.	5-10 Yrs.	5-10 Yrs.	1-5 Yrs.	1-5 Yrs.

*Car and hall fixtures would be replaced during controller modernization.

MODERNIZATION RECOMMENDATIONS

The following items show considerable wear and tear, are obsolete, are no longer maintainable, are of poor quality, are such that parts are difficult to obtain. It is recommended that these components be modernized or replaced to provide reliable elevator service and allow this building to compete with newer buildings in the surrounding areas. These items are excluded from the terms of your maintenance contract. Cost estimates are expressed in current dollars.

Equipment Number	Time Frame	Modernization Recommendation	Cost Estimate
1	5-10	Controller/Car and hall fixtures and wiring	\$45000.00
1	5-10	Cab interior allowance	\$30,000.00
		Total:	\$75,000.00

DATA SHEETS

Client: Marx Okubo
 Project Name: South Pasadena Library
 Address: 1100 Oxley Street
 City, State: South Pasadena Ca. 91030

Date Surveyed: March 8, 2023
 Building Manager
 Building Engineer

EQUIPMENT INFORMATION

BUILDING	1
ELEVATOR #	1
MANUFACTURER	Westinghouse
INSTALLED BY	Westinghouse
DATE INSTALLED	1982
DATE MODERNIZED	2013
MODERNIZED BY	Otis
MACHINE TYPE	Hydraulic
CONTROL	AC/VV
CAPACITY (Pounds)	2000
SPEED (FPM)	100
MAINTENANCE CONTRACTOR	Total Access
MAINTENANCE CONTRACT	Full
FIREMAN'S SERVICE*	Phase I & II
CERTIFICATE IN CAB	Yes
STATE ID	71892
LAST STATE INSPECTION	02/02/2021
TYPE	Pass
OPERATION	SC
FLOORS SERVED	1, 2
OPENINGS: Front	2

* SYSTEMS NOT TESTED TO AVOID DISRUPTION TO BUILDING OPERATIONS.

ELEVATOR #	1
POWER UNIT – HYDRO	10 Yrs.
Upgrade/Mod Rating	1
Manufacturer	Westinghouse
Type	Belt
Horsepower	20
Location	Adjacent
General Condition	Fair
Noise	Fair
Vibration	Good
Emer. Battery Lowering	No
Oil Cooler	No
Oil Heater	No
Thermostat	No
Relief Valve Sealed	Yes
Starter Type	Solid State
CONTROL PANELS	10 Yrs.
Upgrade/Mod Rating	1
Manufacturer	Otis
Model	211 MOD
General Condition	Good
SELECTOR	10 Yrs.
Upgrade/Mod Rating	1
Manufacturer	Otis
Model	2550E
General Condition	Good
SEISMIC	
Machine Tie down	Yes
Control Tie down	Yes
Drive Tie down	Yes
Seismic Switch	No
MACHINE ROOM	
Location	Adjacent Fl: 1
Cleanliness	Fair
Spare Parts	Yes
Check Charts	No

ELEVATOR #	1
Service Records	No
Fire Service Logs	Yes
OTHER OBSERVATIONS	
Sprinklers	No
Shunt Trip	No
Machine Rm. Doors	
Self-Closing	Yes
Self-Locking	Yes
Fire Rated	Yes
Legal Stair Access	N/A
Smoke Detectors	No
Heat Detectors	No
Fire Extinguisher	Yes
Mainline Disconnect Switch Fused Lockable	Yes
Cab Lighting 110 Disconnect	Yes
GFCI Receptacles	Yes
M. Room Cooling	Yes
M. Room Vents	No
Proper Lighting	Yes
Foreign Equipment	No
Hoistway Vents in Floor	No

BUILDING	1
ELEVATOR	1
DOOR OPERATOR	10 Yrs.
Upgrade/Mod Rating	1
Manufacturer	Otis
Model	AT 400
General Condition	Fair
CAR TOP EQUIPMENT	10 Yrs.
General Condition	Good
MRL Overhead Lighting	N/A
Hoistway Lighting	No
Insp. Station	Good
Light/outlet	Good
Fan	Good
Guide Shoes – Car	Fair
Guide Shoes – Cwt	N/A
Door Restrictor	Yes
Car Shell Weight	
Car Enclosure Weight	
Car Weight	2160 lbs.

BUILDING	1
ELEVATOR	1
HOISTWAY DOORS	
INTERLOCKS	Fair
SPIRATOR	Fair
SIGHT GUARDS	Fair
ASTRAGALS	Fair
GIBS	Fair
HOISTWAY DOOR FINISH	
MAIN	Stainless #4 #8
TYPICAL	Stainless #4 #8
SILL FINISH	
MAIN	Alum
TYPICAL	Alum
HOISTWAY EQUIPMENT	10 Yrs.
General Condition	Fair
Guide Rails	Fair
Brackets	Fair
Car Frame	Fair
Platform	Fair
WIRING	10 Yrs.
Traveling Cables	Good
Hoistway Wiring	Good
OTHER OBSERVATIONS	
Hoistway Vents	No
Sprinkler at Top	No
Smoke Detectors at Top	No
Heat Detectors	No
Foreign Wire/pipes	No
Ledges (Over 2")	No
Holes in Hoistway	No

0 = Not Applicable
Obsolete/No Parts

1 = Age/Wear and Tear

2 = Exposure to Owner

3 = Energy Efficiencies/Performance 4 =

BUILDING	1
ELEVATOR	1
SEISMIC	10 Yrs.
Derailement Device	N/A
Car Guide Shoe Retainer	No
Cwt Tie Rods	N/A
PIT EQUIPMENT	10 Yrs.
Compensation Type	N/A
General Condition	Good
GFCI Receptacle	Yes
Proper Lighting	Yes
Sump Pump	None
Oil Return Pump	No
Buffers	Good
Sprinkler in Pit	No
Compensation Sheave	N/A
Tail Sheave	N/A
Stop Switch	Good
Piston	Fair
Leakage	Fair
PVC Lined Cylinder	No
Pit Access	
Pit Ladder	No
Walk In	No
Service Platform	No
Seismic Safety Valve	
Condition	N/A
Manufacturer	N/A
Model	N/A
Sealed	N/A
CAR SIGNALS	10 Yrs.
Upgrade/Mod Rating	1
Car Operating Panel	Good
Panel Quantity	Main Only
Panel Type	Applied
Position Indicator	Good
Direction Indicator	Good

0 = Not Applicable
Obsolete/No Parts

1 = Age/Wear and Tear

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3 = Energy Efficiencies/Performance 4 =

BUILDING	1
ELEVATOR	1
DIGITAL DISPLAYS – ELEVATOR SCREENS	No
EMERGENCY LIGHT*	Yes
CARD READERS	No
TYPE	Insert Swipe Proximity
CCTV	No
CAR LANTERN	Good
SERVICE PANEL KEY	Type: Otis # UTF
INSPECTION KEY	Type: Otis # UTH

HALL SIGNALS	10 Yrs.
Upgrade/Mod Rating	1
Pushbuttons	GOOD
Position Indicator	None
Hall Lantern	Good
Access Key Switches	Yes Type Otis # UTH
Inconspicuous Riser	No
INTERIOR FINISHES	
Shell	Steel
Wall Panels	Wood applied
Flooring	Carpet
Cab Height	7 ft. 9 in.
Ceiling	Yes
Doghouse	NO
Lighting	Fluorescent
Car Door Finish	Stainless #4 #8
Sill Finish	Alum
Handrail	Flat SS
LOBBY CONDITIONS	
Smoke Detectors	
Upper Lobbies	Yes
Main Lobby	Yes
Lobby Smoke Control	Yes
Life Safety Panel	No
Guard Panel	No

CAR PERFORMANCE	
BUILDING	1
ELEVATOR #	1
START	Fair
ACCELERATION	Good
DECELERATION	Good
STOP	Fair
STOPPING ACCURACY	± ¼
TYPICAL FLOOR HEIGHT	13 ft. 9 in.
RIDING QUALITY	Fair
NOISE LEVEL	Fair
ALARM BELL	Accept.

DOOR OPERATION & PERFORMANCE	
ENTRANCE WIDTH	36 in.
ENTRANCE HEIGHT	84 in.
ENTRANCE TYPE	Side Slide, Single Speed
DOOR PROTECTION	IR
GENERAL OPERATION	
Open – Front	Fair
Close – Front	Fair
NOISE LEVEL Front	Fair
STALL PRESSURE	< 30
AUDIBLE SIGNAL	Yes
Notes:	

PERFORMANCE TIMES	
ACTUAL CAR SPEED (FPM)	82 fpm down 114 fpm up
START-TO- STOP	10 sec.
Achievable Standard	
NUDGING TIME	Front 15 sec.
Achievable Standard	20-40 Sec.
DOOR TIME: OPEN	Front 3.0 sec.
Achievable Standard	
DOOR TIME: CLOSE	Front 3.5 Sec
Achievable Standard	
DR. DWELL: CAR CALL	Front 7.5 Sec.
Achievable Standard	
DR. DWELL: HALL CALL	Front 5.0 Sec.
Achievable Standard	5-8 Sec.
Notes:	

Photos



Elevator disconnecting means



Elevator cab lighting disconnecting means



Elevator machine room ABC fire extinguisher



Elevator machine room HVAC. Note hole in drywall and abandon electrical fitting.

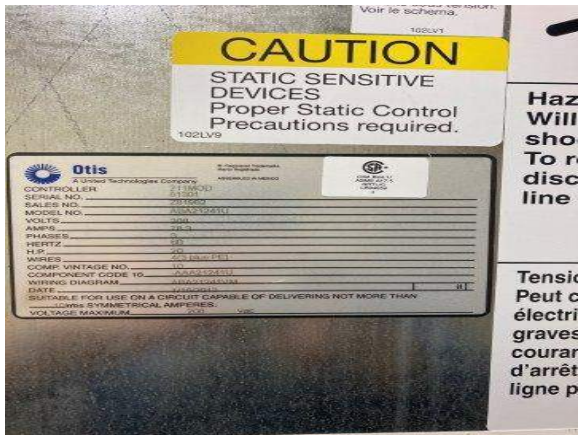
0 = Not Applicable
Obsolete/No Parts

1 = Age/Wear and Tear

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4 =



Otis elevator 211 MOD controller (2013)



Westinghouse hydraulic pump unit (1982)



5-year full load test tags current



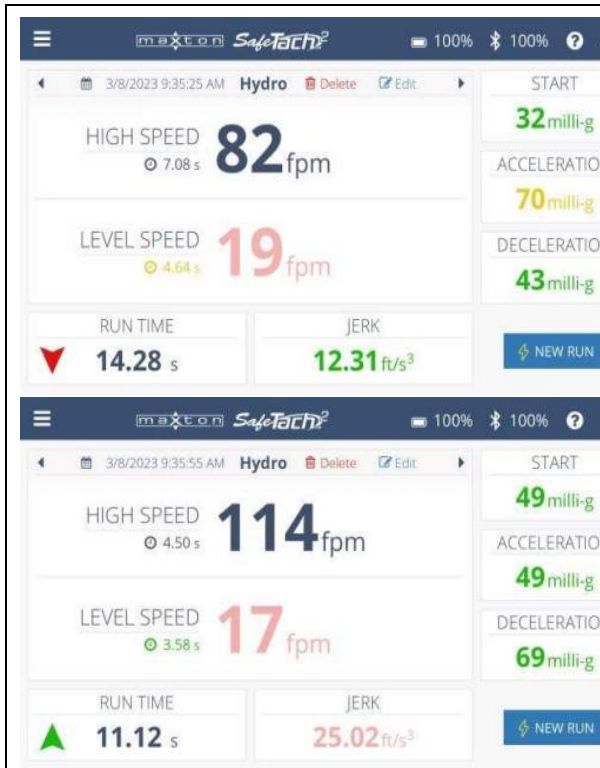
Hydraulic tank hole (top) and Victaulic leak (bottom)

0 = Not Applicable
Obsolete/No Parts

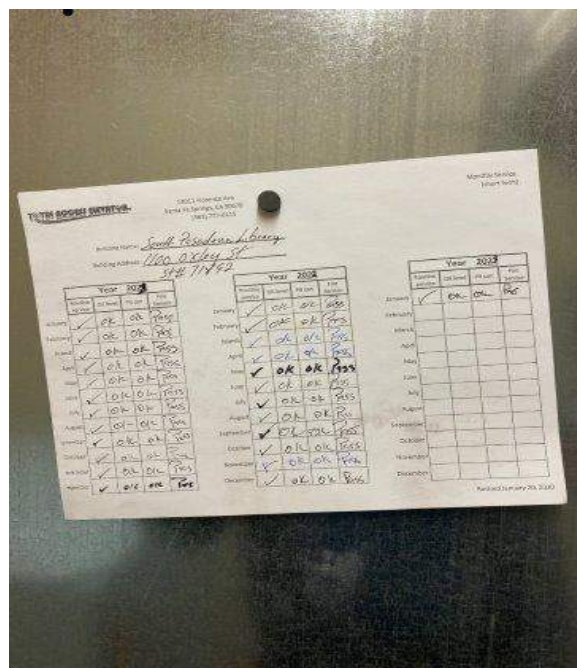
1 = Age/Wear and Tear

2 = Exposure to Owner

3 = Energy Efficiencies/Performance 4 =



Actual car speeds in feet per minute



Fire service log 30 days in arrears



Otis AT 400 linear car door operator (2013)



Westinghouse crosshead data tag. 06/04/1982. State # 71892

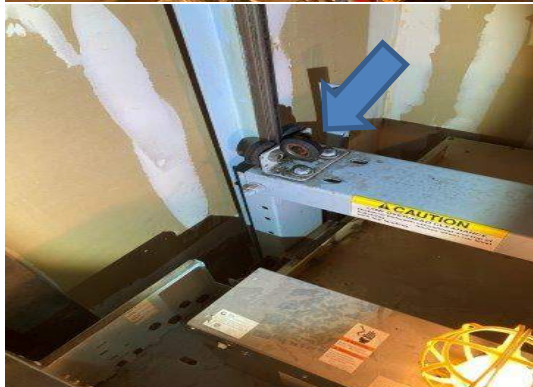
0 = Not Applicable Obsolete/No Parts 1 = Age/Wear and Tear 2 = Exposure to Owner 3 = Energy Efficiencies/Performance 4 =



Car top door operator isolation bracket damage



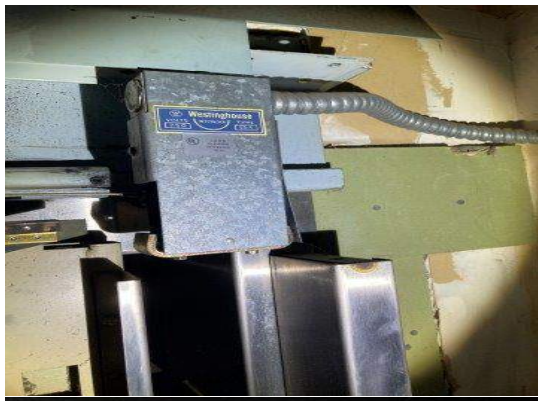
Elevator car top fan and emergency exit



Elevator cartop Otis tape reader (2013) (top). Westinghouse roller guide assembly (1982) (bottom)



Top of hoistway and hoistway switches



Westinghouse hoistway door lock assembly (1982)



Elevator pit Westinghouse hydraulic jack, buffers and piping. (1982)



Car operating panel (2013)



Elevator cab interior

0 = Not Applicable
Obsolete/No Parts

1 = Age/Wear and Tear

2 = Exposure to Owner

3 = Energy Efficiencies/Performance 4 =



Elevator hall fixtures (2013)

PHOTOGRAPHS



1 - South Pasadena Library entrance.



2 - Surface drain at the egress stairwell with debris build-up.



3 - Representative catch basin at the landscaped areas.



4 - Trench drain at the service yard.



5 - Wall-mounted lantern located at the entrance to the Community Room.



6 - Pole-mounted lantern distributed throughout the site.



7 - Building-mounted identification and address signage at the south building entry.



8 - Overview of the rear service yard.



9 - Wood trusses and original sheathing at roof framing of the Community Room.



10 - Concrete sidewalks throughout the park.



11 - Brick paver service entrance concrete pavers and concrete sidewalk.



12 - Mowed grass and mature landscaping at the main building entrance plaza.



13 - Mowed grass and mature landscaping near the Community Room.



14 - Mature Moreton Bay fig tree near the west side of the building.



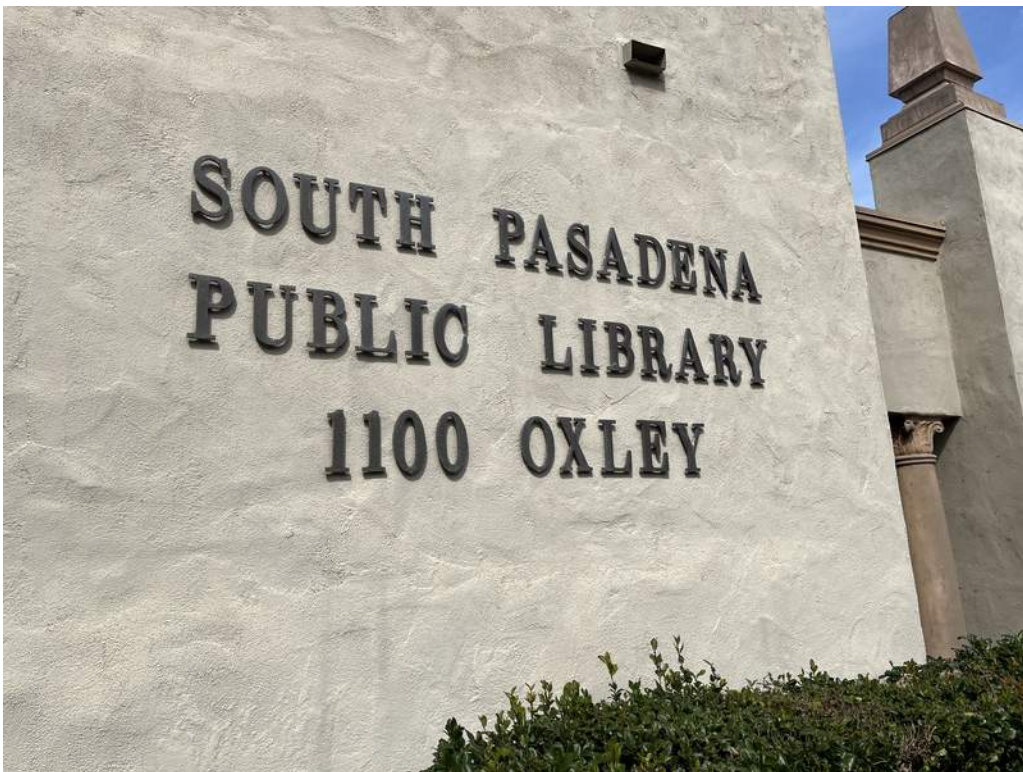
15 - Retaining planter on the east side of the building.



16 - Metal and ornamental fencing at the service yard.



17 - Broken hinge at the service yard gate.



18 - Building-mounted identification and address signage at the south building entry.



19 - Monument signage is located at the north building entry.



20 - Cast-in-place concrete benches at the main entrance plaza.



21 - Cracked concrete bench at the Community Room entrance.



22 - Concrete seating area is located at the entrance to the Community Room.



23 - Wood trusses and original sheathing at the roof framing of the Community Room.



24 - Exterior view of the original 1930 unreinforced masonry.



25 - Sawn lumber joists and plywood sheathing at roof framing of the 1982 renovation.



26 - Splits at bottom chords of the Community Room trusses.



27 - Low-slope roof with multi-ply, built-up roofing and SPF overlay coated with elastomeric protection coating.



28 - Pitched roof with tapered barrel single-piece clay tiles.



29 - Pitched roof with asphalt singles.



30 - Gutter and downspout at the pitched roof eave. Note PVC drain pipes provided without sleepers.



31 - Large ruptured blister in the spray foam roofing membrane.



32 - The roofing termination at the parapet is separating providing a possible path for moisture intrusion.



33 - Internal low-slope roof drain and overflow. Debris build-up noted.



34 - Debris build-up on the clay tile roof.



35 - Damaged clay tiles.



36 - Northeast corner of building with temporary plastic sheeting to reduce water infiltration into the basement.



37 - The visible edge of the below-grade waterproofing is deteriorated and not provided with termination bar and counter flashing.



38 - Original wooden windows set into exterior cement plaster wall and accents of brick and stone.



39 - Rotted and deteriorated window sill.



40 - Wooden windows set into exterior cement plaster wall.



41 - Circular dome skylight with translucent acrylic dome glazing.



42 - Pyramid skylight with translucent acrylic glazing.



43 - Evidence of wood rot at the window frame; the material is soft and brittle. Film-forming sealer temporary repair noted.



44 - Deteriorated and warped window with failed gaskets and paint.



45 - Cracked sealant at the circular dome skylight.



46 - Main entry dark bronze anodized aluminum doors.



47 - Representative painted hollow metal egress door.



48 - Exterior balcony with fluid-applied waterproof traffic coating, dark anodized aluminum windows, cast stone columns, painted metal guardrail, and exterior cement plaster soffit.



49 - West balcony steel-framed egress stairs and handrails with painted finish.



50 - Community Room painted metal entry doors and painted metal handrails.



51 - Community Room interior finishes, including original wood ceiling.



52 - Children's Reading Room interior finishes and egress signage.



53 - Water damage at the Children's Reading Room acoustical ceiling.



54 - Reference desk and lobby interior finishes.



55 - Reading Room interior finishes.



56 - Water damage on the acoustical ceiling in the Reading Room.



57 - Staff area interior finishes.



58 - Ground-floor elevator lobby interior finishes.



59 - Two-story atrium interior finishes.



60 - Staff offices interior finishes.



61 - Damaged door closer at the upper level.



62 - Water damage at the staff area ceiling.



63 - Historic stained glass skylight lens and coffered ceiling at atrium.



64 - Staff area restroom interior finishes.



65 - Ground-floor women's restroom interior finishes.



66 - Staff breakroom interior finishes.



67 - Bookstore interior finishes.



68 - Horizontal blinds in the conference room.



69 - Blistering paint and efflorescence observed in the staff work room.



70 - Rooftop packaged unit with electrical disconnect, condensate drain, and natural gas piping.



71 - Wall-mounted through-wall AC units in the server room.



72 - Ceiling-mounted exhaust fan in the janitor's closet.



73 - Wall-mounted digital programmable thermostat.



74 - Air ducts mounted on the roof. Ponding water on the top of deformed ducts noted.



75 - Corroded natural gas piping at the roof.



76 - Condensate drain askew and not draining properly.



77 - Backflow prevention device and water meter.



78 - Water pressure booster pump and pressure tank.



79 - Electric water heater in the janitor's closet.



80 - Sump pump inlet grate and controller at the service yard.



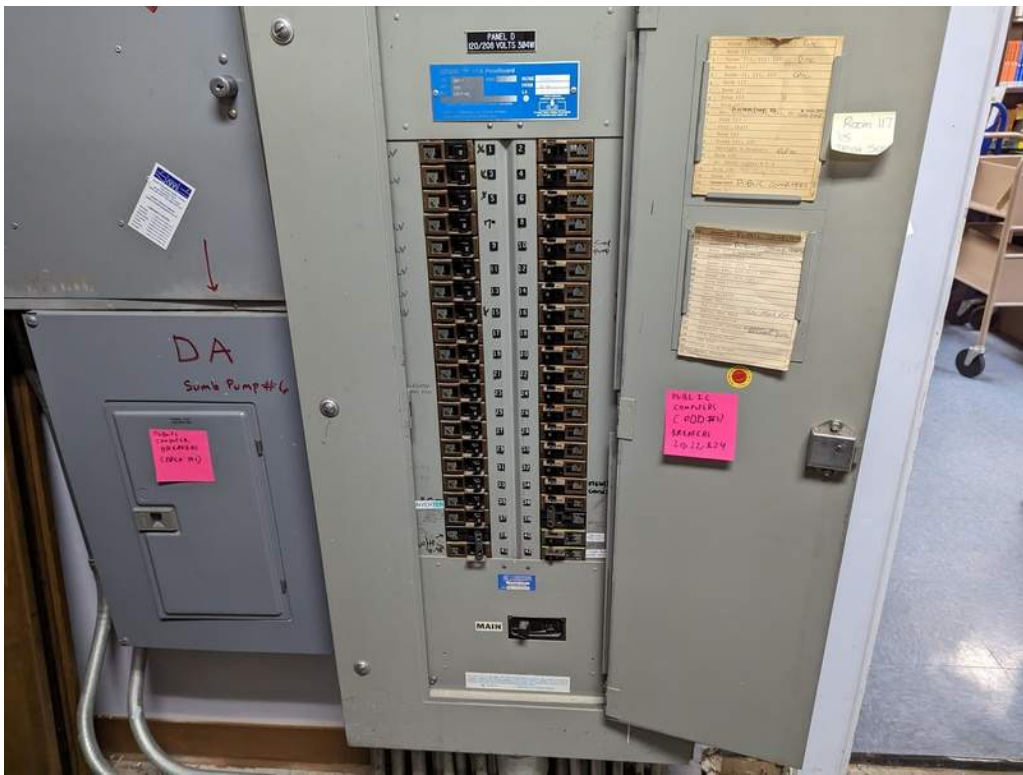
81 - Sump pump inlet at west stair landing with debris covering inlet.



82 - Natural gas service with no seismic shut-off valve.



83 - Electrical panel in enclosure at the roof.



84 - Electrical distribution panel in the server room.



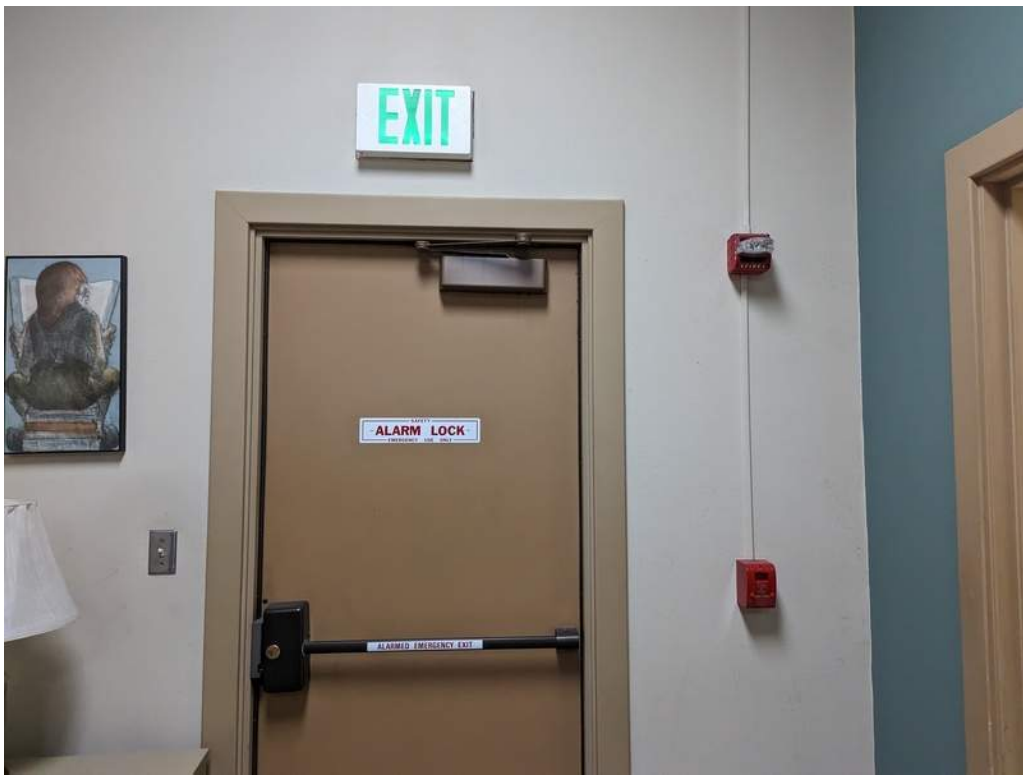
85 - Emergency power supply system in the server room.



86 - Fire alarm control panel in the server room.



87 - Fire extinguisher in a recessed cabinet.



88 - Pull station and audible/visual alarm at the exit door with illuminated signage and push hardware.



89 - Car operating panel (2013).



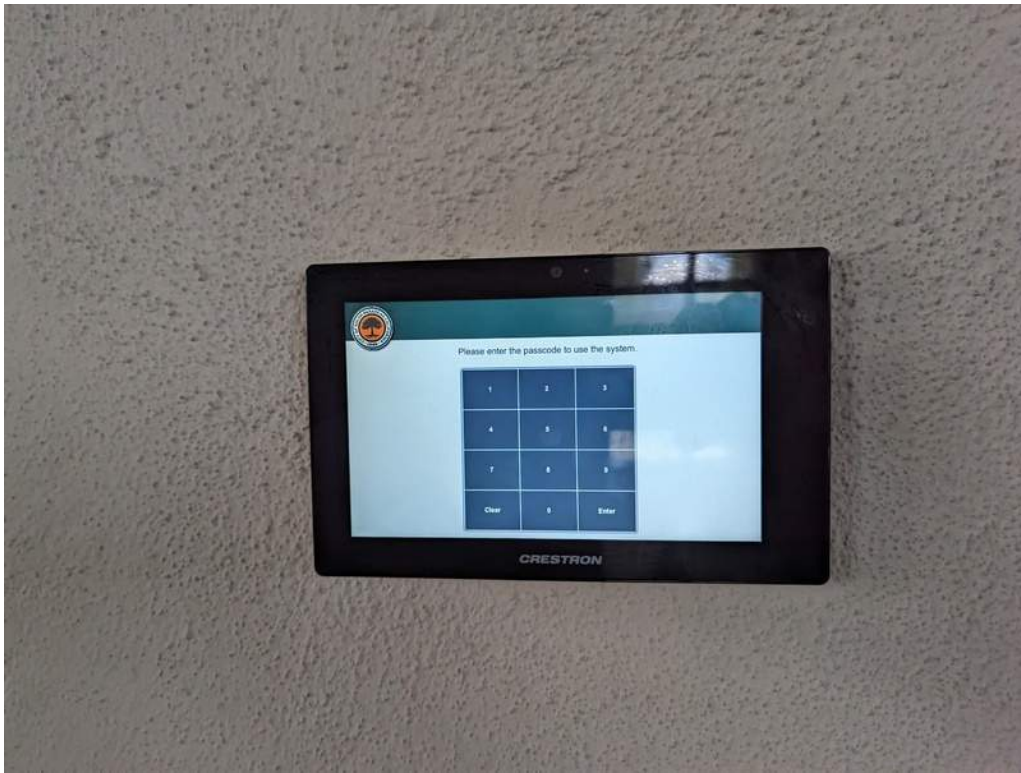
90 - Otis elevator 211 MOD controller (2013).



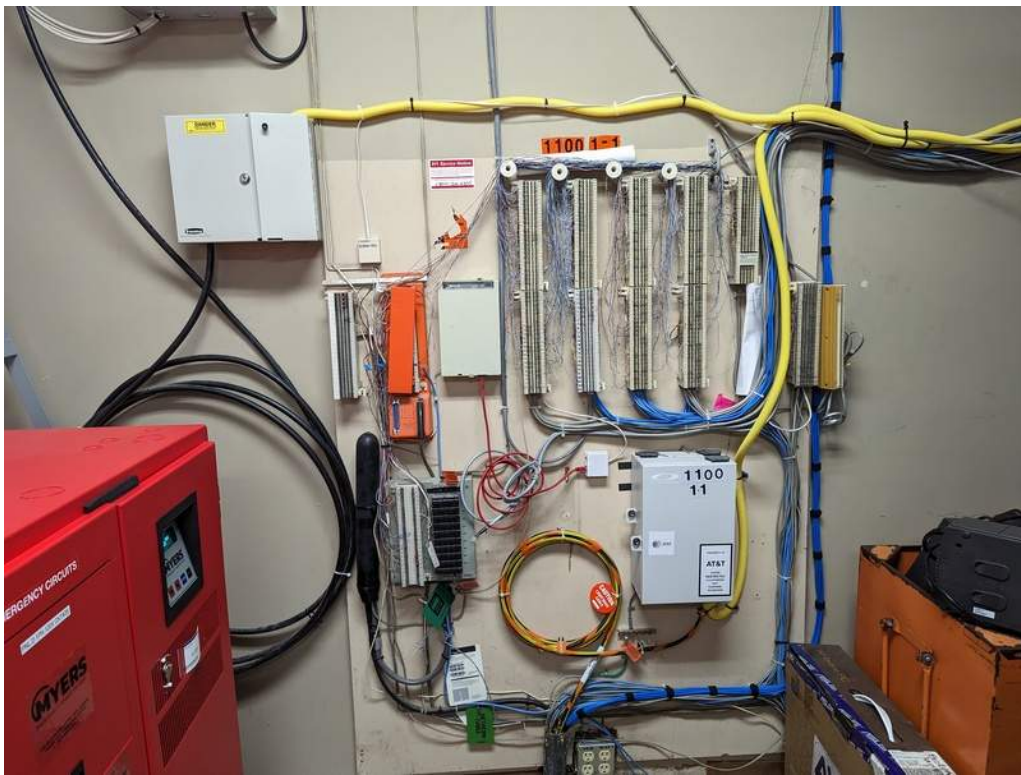
91 - Otis AT 400 linear car door operator (2013).



92 - Wall openings in the elevator machine room.



93 - Multimedia system control panel.



94 - Telecommunication backboard in the server room.



95 - Exterior egress stair with missing handrail extension and open treads.



96 - Exterior egress stair with missing handrails.



97 - Non-compliant accessible parking spaces without an adjacent curb ramp to the path of travel.



98 - Ground-floor men's restroom interior finishes.



99 - Handrails with non-compliant handrail extensions at the entrance to the Community Room.



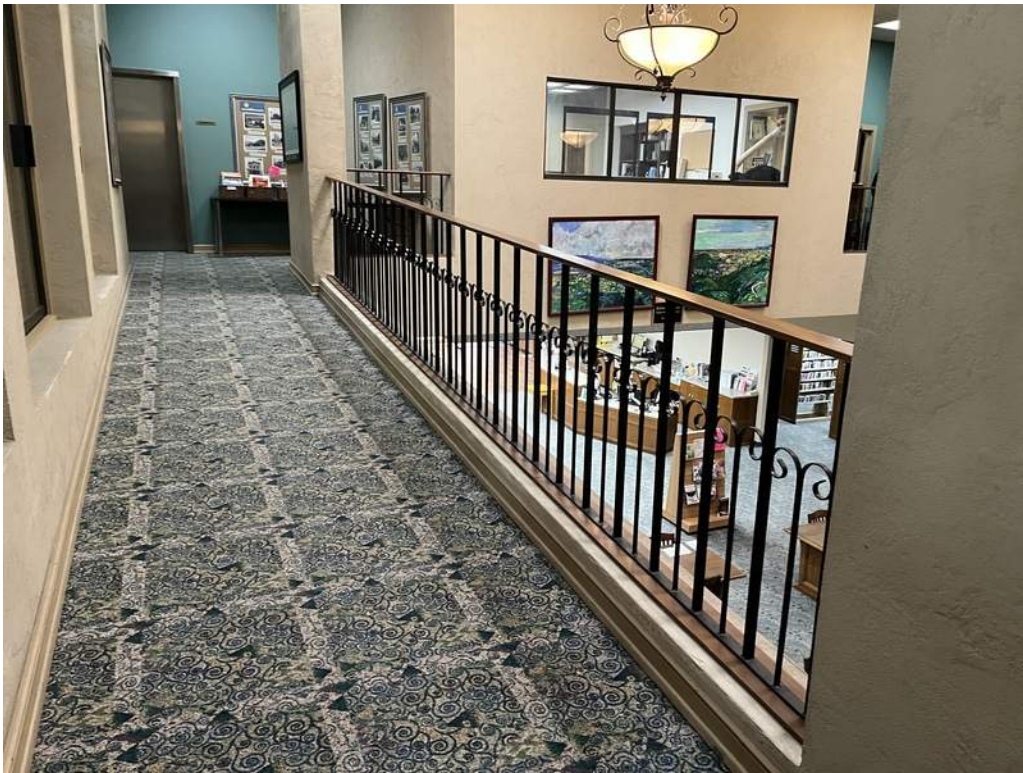
100 - Upper-level women's restroom interior finishes.



101 - Book drop-off boxes without the required level landings along Oxley Street.



102 - Accessible route without directional signage.



103 - Non-compliant ramps on the upper level with missing handrails.



104 - Non-compliant elevator cab interior handrail.



105 - Upper-level women's restroom interior finishes.



106 - Security panel and fire alarm annunciator panel.



107 - Non-compliant book drop-off boxes observed along Oxley Street.