City Council Agenda Report

Meeting Date: June 3, 2019

TO: **HONORABLE MAYOR & COUNCILMEMBERS**

FROM: **JIM SADRO, CITY MANAGER**
By: Kelly Fujio, Director of Community Services

SUBJECT: **CONSIDER LOCATION AND FUNDING FOR A PROPOSED IMMERSION THEATER EXPANSION OF THE LA HABRA CHILDREN'S MUSEUM IN COOPERATION WITH THE FRIENDS OF THE LA HABRA CHILDREN'S MUSEUM.**

SUMMARY RECOMMENDATION:

Approve a proposed public/private funded $1.5 million expansion project for the La Habra Children's Museum.

1. Staff to secure no more than $400,000 in allowable non-General Fund resources as the City's contribution for the proposed immersion theater project;
2. Staff to work with the Friends of the La Habra Children's Museum to develop an architectural design for the new proposed building that aesthetically complements the existing Children's Museum buildings, subject to Planning Commission, Community Services Commission and City Council approval;
3. Staff to secure a suitable development site at Portola Park for the new proposed building that will not significantly impede the use of Portola Park for other park uses; and,
4. Staff to develop and implement a capital-financing plan with the Friends of the La Habra Children's Museum to secure an additional $2.5 million in funding for needed upgrades and improvements to the existing Children's Museum buildings.

DISCUSSION:

The Friends of the La Habra Children's Museum (Friends) are a registered 501(c) 3 non-profit organization that has worked in partnership with the City since 1988 to further support the Museum's operations with private funding, and to realize the Museum's mission "to encourage enthusiasm about learning in a hands-on environment that opens the world to even the youngest child". The Friends have proposed the construction of a

Agenda Item No. VI.A.1

Meeting Date: 6/3/19

new standalone building adjacent to the existing Children's Museum site to house a novel specialized immersion theater concept (Attachment 1).

The Friends have estimated a construction cost of approximately $1.5 million for the new building and have indicated that they have already secured $472,000 in private funding commitments for the project. The Friends are seeking City Council conceptual approval for the project, as well as a commitment of $400,000 from the City towards the construction of the new building. If approved and constructed, the building would be owned by the City of La Habra. Current Children's Museum staff, in cooperation with the Friends, would then design and produce appropriate visual content, develop a new admission and facility rental rates, and incorporate the operation of the immersion theater into their regular daily duties.

BACKGROUND

The La Habra Children's Museum (Museum) was established in 1977 after a five-year planning process that involved reviewing museum operations "best practices," developing financing support, hiring professional staff, and renovating the existing 1923 train depot building at Portola Park as a permanent location for the new museum. The Museum was expanded in 1989 through a capital expansion fundraising project that occurred between 1987 and 1989. The expansion tripled the size of the building to 12,500 square feet and added much needed exhibit space, a classroom and a gift shop. The Children's Museum at La Habra was the first dedicated children's museum in Southern California and continues to attract approximately 95,000 patrons a year (mainly children) with exhibits focusing on arts, sciences, culture, nature, conservation and everyday life.

The Museum has been owned and operated by the City since its inception. In the past the Museum was significantly subsidized by the General Fund to help run programs essential to the operation of the Museum, operating with annual deficits for many years. In 2001 the City determined that it was unable to continue the large level of annual General Fund support and, although the Museum operated as an Enterprise Fund (a city controlled fund that is expected to be self-sustaining by paying its own operating costs through admissions, fund-raising activities, and occasional grants, with minimal to no impact to the General Fund), the City and the Friends agreed that the City would continue to contribute $85,000 a year towards its operating costs, in addition to increasing admission fees. The Friends, in turn, agreed to expand their fundraising activity to cover more of the Museum's operating costs. The City's General Fund support for Museum Operations ceased in 2010; however, the City's Utility Authority commissioned the creation of certain permanent conservation exhibits at the Museum and provides continued funding each year to update and maintain those exhibits.

PROPOSED IMMERSION THEATER PROJECT

A representative of the Friends approached the City in 2016 with a proposal to build a new immersion theater adjacent to the existing Museum. The project, as proposed at the time, entailed the construction of a new 5,000 square foot building along the northern edge of the existing Museum, stretching into the open space at Portola Park adjacent to the eastern Little League field. The building would house an immersion theater offering "exhibits based on high-definition projection technology that creates a stunning audio-visual experience." High definition imagery would be projected on the exhibit's walls, screens and floor, accompanied by a compatible musical soundtrack. The inspiration for this concept theater is the *Chateau des Carrieres de Lumieres* (Quarries of Light) located

in a repurposed quarry in the town of Les Baux de Provence in France (http://carrieres-lumieres.com/en). Each 35-40 minute show at the Quarries of Light comprises thousands of digitized images of works of art that are projected onto all the quarry's surfaces, moving to the rhythm of a musical soundtrack. The goal of the proposed immersion theater is to mimic this type of visual and audio display inside of the new proposed building.

The sentiment expressed by members of the Friends is that the immersion theater concept would infuse a unique and exciting new element to the Children's Museum experience. The new theater concept, possibly the first of its kind on this scale in the United States, would increase interest in the Museum and attract visitors from throughout the region. The new venue would also provide La Habrans a new place to visit and hold events, with the goal of becoming a destination point for educational, cultural, and social interaction.

After reviewing the initial site plan, design and location, City staff expressed concerns about the building's potential impact on existing park operations and other public events held at Portola Park. Staff worked with the Friends to consider alternate sites and building designs. Based on these conversations the Friends have modified their earlier conceptual drawings and developed an alternative design that would construct a roughly 5,000 square foot building, measuring approximately 110'L x 45'W x 25'H along the northern edge of the Museum site oriented to the east rather than north (Attachment 2). This site would be closer to the Museum and would potentially be less impactful on other park activities. City staff continue to have concerns regarding the impact of the new proposed building on other public events held at Portola Park, but are committed to a dialogue regarding potential development sites and designs. At this point, the proposed site selection and site plan is conceptual and subject to change following further discussion and refinement.

On April 17, 2019, the Friends approved a resolution in support of the creation of the new immersion theater concept at Portola Park (Attachment 3). The resolution also committed the Friends' support to collaborate with the City to address significant repair and renovation needs of the existing Children's Museum buildings.

ANALYSIS

At the July 18, 2016 City Council meeting, a representative from the Friends presented the project concept and requested the City Council's support to move forward with the project. After receiving this request City Council directed staff to conduct a review of the proposed project and return with a report providing more information about the proposed project for Council consideration. Since that time, staff has worked with the Friends to refine the project scope, budget, and location, as well as attempt to determine the project's feasibility. The Friends have developed a pro forma Operating Budget that estimates that the immersion theater, as a standalone program, would fully sustain all operating costs through entry fees, donations and other revenue sources (Attachment 4).

FEASIBILITY ANALYSIS

In order to better understand the viability of the immersion theater concept, City staff also requested that the Friends provide a feasibility analysis for the project. To accomplish this the Friends retained the services of students at the University of Southern California to prepare a feasibility study (Attachment 5). The study analyzed other types of museum operations in the region and, in their opinion, found that despite a proposed increase in

the Children's Museum admissions to accommodate new proposed fees for the immersion theater, the cost to visit the Museum would remain competitive with surrounding museums. The study further indicated that the target market for the immersion theater would essentially be the Children's Museums existing customer base.

- The feasibility study included a "SWOT" analysis that examined project "strengths, weaknesses, opportunities, and threats." Project strengths included reasonable prices and unique content. Potential weaknesses could include a relative lack of similar successful projects and a limited "brand effect." For example, the Children's Museum does not have the same kind of recognition or location as a large-scale movie theater chain or larger scale museum operation. Opportunities for the project include updated and changing content that could continually create different experiences for patrons. Threats to the project included competition for consumers' use of discretionary income on sports, movie theaters, playhouses, and other forms of entertainment.

- The feasibility study also emphasized the need to constantly innovate and improve the immersion theater experience in order to maintain a competitive edge over other types of competing entertainment. As part of the report, 400 surveys were collected that provided additional information and insight into the project; however, because most of the surveys were collected at the Museum they may contain an inherent bias towards the Museum in their results. The other major limitation to the report's findings is that there is no comparable type of experience in the region. Although the feasibility study included the evaluation of fifteen other entertainment facilities, none of them is a close match to the type of programming proposed at the immersion theater. The lack of comparable facilities could be viewed as either a benefit or a detriment to the proposed project.

Due to the unique nature of the proposed immersion theater concept and the lack of comparable types of entertainment venues, staff cannot opine on the long-term viability of this proposed project. Under normal circumstances, the risks associated with an unproven concept such as this would likely not justify the investment of $400,000 of public funding to help construct the project. However, this risk is somewhat mitigated by the fact that, should the immersion theater concept fail in the long-term, the City would retain ownership of new 5,000 square foot building with an estimated value of $1.5 million. In the event, the building could be easily repurposed as expansion space for the Children's Museum or programmed for other City purposes.

Aside from determining project viability, City staff have also worked closely with the Friends to develop acceptable architectural designs for the new building that complement the adjacent Museum buildings, as well as identify a suitable location for the new building within Portola Park. During these discussions, City staff also raised concerns that, whether or not the Museum expansion project were to occur, the existing Children's Museum buildings are in need of upgrade and renovation. To better understand these needs, staff retained the services of WMM Associates (WMMA) to perform a structural evaluation of the interior/exterior of the existing Museum facility.

CONDITION OF THE EXISTING MUSEUM

In February 2019 WMMA completed its assessment and issued a report to the City (Attachments 6 and 7). The report concluded that the "Museum is in fair repair and is in need of some upgrades including structural, electrical, mechanical and ADA access."

However, the consultant noted that they "examined only conditions exposed to view." **In the event renovations begin, and considering the age of the original Museum building, it is highly likely that additional unforeseen repairs will be necessary.**

The WMMA report estimated that upgrades and renovations of the existing Museum buildings would cost approximately $1.5 million, not including any unforeseen conditions; however, City Public Works and Engineering staff strongly recommend establishing a preliminary budget estimate of $2.5 million to provide sufficient funds to address currently unknown issues that may arise during renovations. This additional funding could also help upgrade certain technologies within the Museum in order to provide more advanced exhibits in the future.

City staff met regularly with the Friends to discuss the proposed expansion, as well as the need to consider renovations to the current Museum buildings. To help facilitate these discussions, the City and Friends formed a Museum Task Force to discuss both projects. While the Friends were interested in the proposed expansion project, they had also expressed a strong desire to work with the City to secure funds to renovate the existing Museum building. The Friends saw a need for improvements and upgrades to the older Museum structures so that the facility remained safe and accessible to Museum patrons, as well as providing upgrades that would allow the building to accommodate newer contemporary exhibits in the existing exhibit space.

PHASING PLAN

After several meetings and discussion about various options for both potential projects, the Friends proposed a "two-phase" expansion and renovation plan for Council consideration.

- "Phase One" would entail the approval of the proposed immersion theater concept and construction of the new building to house it. The Friends have agreed to raise approximately $1.1 million for the new building and have asked to the City to contribute land at Portola Park for the new building, in addition to $400,000.

- "Phase Two" would likely be delayed several years as both the City and Friends worked together to raise an additional $2.5 million to renovate and upgrade the existing Museum buildings. Staff's goal would be to secure some funding for the City's portion of the "Phase Two" project through a combination of grant funds, donated funds or other special purpose funds, with the goal of not utilizing General Fund resources for that part of the project. In conjunction with the City's efforts, the Friends have agreed to develop a capital fundraising campaign to raise a significant portion of the resources necessary to complete "Phase Two" of the proposed project.

NEXT STEPS

If the City Council approves the proposed immersion theater project concept, staff will begin to formally process the project through the Design Review Committee. The Committee is comprised of City staff from Planning, Building, Public Works, Engineering, Police, Fire and Community Services. This internal process will review and evaluate appropriate architectural designs, final building dimensions, and attempt to locate a site for the new building that suits the Friends and meets the needs of the City in a way that does not adversely impact the use of the open space at Portola Park.

Once a final design has been vetted by the Committee, the project would be presented to the Community Services Commission, the Planning Commission, and finally back to City Council for final approval at some point in the future.

Staff would also either internally, or through a parking/traffic consultant, evaluate all the existing and proposed uses at Portola and Brio Parks and determine to what extent parking demands could change once the immersion theater is in full operation. In the event additional parking is necessary, staff will return to Council with a proposed parking plan for review and approval.

Finally, staff will begin to review potential special revenue funds, park development funds, specialized grant funds, donations, or other non-General Fund resources that may be available to fund the $400,000 requested City contribution to this project. Furthermore, the Friends would also need to continue to raise funds for their portion of the project cost. Despite having almost $500,000 in private funding pledged to this project, they still need to raise approximately $600,000 to fully fund the estimated cost of the new building and equipment. The Friends are in agreement with staff that construction for the proposed immersion theater building would only commence once all approvals have been secured and the complete $1.5 million funding needed for the project has been obtained.

In addition to efforts to secure funding for the immersion theater, staff would continue working with the Friends to develop a capital funding campaign with the goal of securing at least $2.5 million that can be used to renovate, upgrade and modernize the existing Children's Museum buildings.

CONCLUSION

Overall the proposed immersion theater concept has promise and, if successful, would be a valuable new addition to the Children's Museum and for the community; however the project comes with inherent risks, which is why the staff recommendation has been formulated with several contingencies. Acknowledging the need to address upgrades and improvements to the existing Children's Museum building, and also supporting the constructing of a new wing for the immersion theater, demonstrates the Friends and the City's commitment to re-invest in the community and its youth. Concerns about the long-term viability of the immersion theater, and the City's associated financial contribution to the project, is largely mitigated by the ability for the Children's Museum to easily reprogram the new building for exhibits, meeting space or banquets if the immersion theater does not meet expectations. While the most challenging part of the project will likely be identifying and securing various sources of funds to construct the project at a location that is suitable for all stakeholders, it is a challenge that the City and Friends, in partnership, should be able to achieve.

FISCAL IMPACT / SOURCE OF FUNDING:

The Friends estimate that the proposed "Phase One" immersion theater project will cost $1.5 million, and they have requested that the City fund $400,000 towards that cost. If approved by Council, staff will begin to research what sources of unencumbered non-General Fund resources might be currently available, or which could be secured in the future to fund the City's $400,000 portion of this proposed project.

As for the larger $2.5 million “Phase Two” cost to renovate, upgrade and modernize the existing Children’s Museum buildings, staff will continue to work with the Friends to develop a capital financing plan to address how the funds for this part of the project could be secured in the future, without impacting the City’s General Fund.

GENERAL PLAN RELEVANCE:

CI 5.1 Programs for Youth
CI 5.2 Family Programs
CI 6.1 Community Events and Celebrations
OS 3.1 Recreational Programs and Services
OS 3.2 Youth, Adults, Seniors
S 1.12 Joint Educational Services

RECOMMENDATION / REQUESTED ACTION:

Approve a proposed public/private funded $1.5 million expansion project for the La Habra Children’s Museum.

1. Staff to secure no more than $400,000 in allowable non-General Fund resources as the City’s contribution for the proposed immersion theater project;
2. Staff to work with the Friends of the La Habra Children’s Museum to develop an architectural design for the new proposed building that aesthetically complements the existing Children’s Museum buildings, subject to Planning Commission, Community Services Commission and City Council approval;
3. Staff to secure a suitable development site at Portola Park for the new proposed building that will not significantly impede the use of Portola Park for other park uses; and,
4. Staff to develop and implement a capital-financing plan with the Friends of the La Habra Children’s Museum to secure an additional $2.5 million in funding for needed upgrades and improvements to the existing Children’s Museum buildings.

ATTACHMENTS:
1. Friends’ Immersion Theater Museum Expansion Proposal
2. Alternate Location Diagram
3. Friends’ Board Resolution
4. Immersion Theater’s Pro Forma Budget
5. USC Student Feasibility Study
6. Structural Assessment Letter
7. Structural Assessment Report

Immersion Theater Museum Expansion Proposal
Friends of the Children's Museum at La Habra
Executive Summary – 5-1-19

Overview

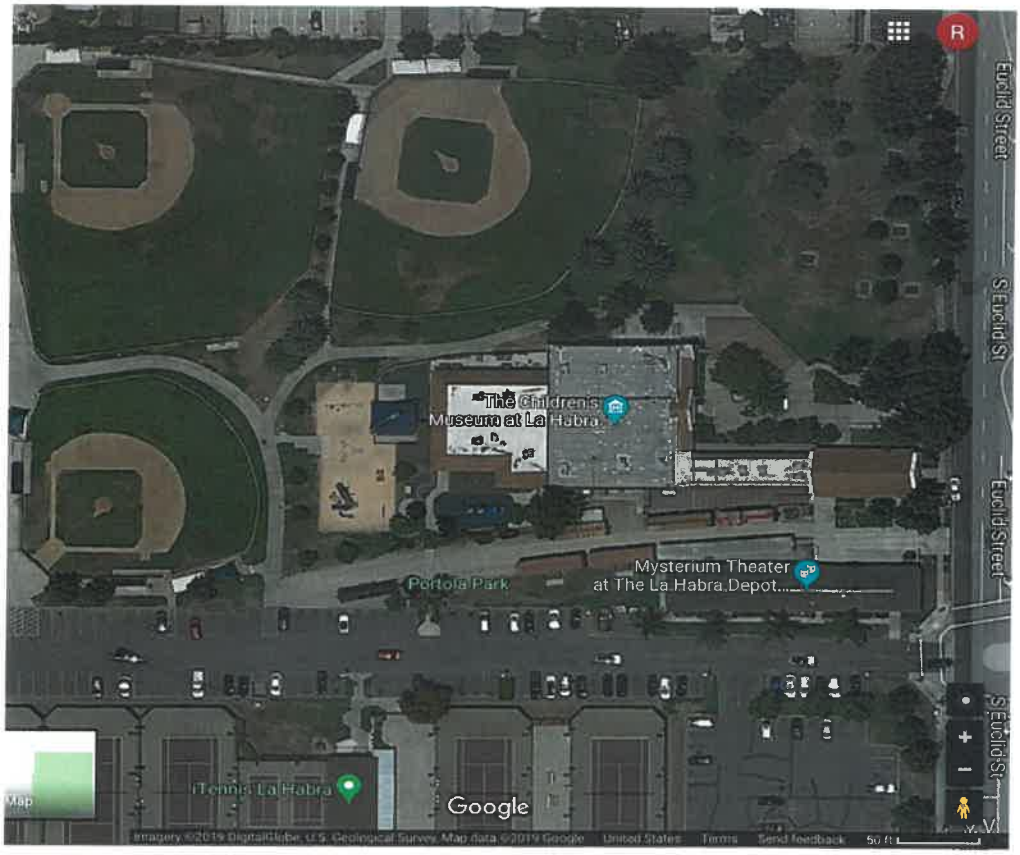
The Friends of the Children's Museum at La Habra propose an expansion of the current Children's Museum at La Habra to the north of the existing Museum in Portola Park. The proposed expansion plan involves a unique exhibit concept that has the potential to expand the Museum's reach to intergenerational audiences, increase Museum attendance and enhance the City of La Habra's image within the region.

- 5,000 sq. ft. building constructed at 3-feet above ground level with an entry that accommodates easy traffic flow from the current Museum and acts as a control point for the visitor experience

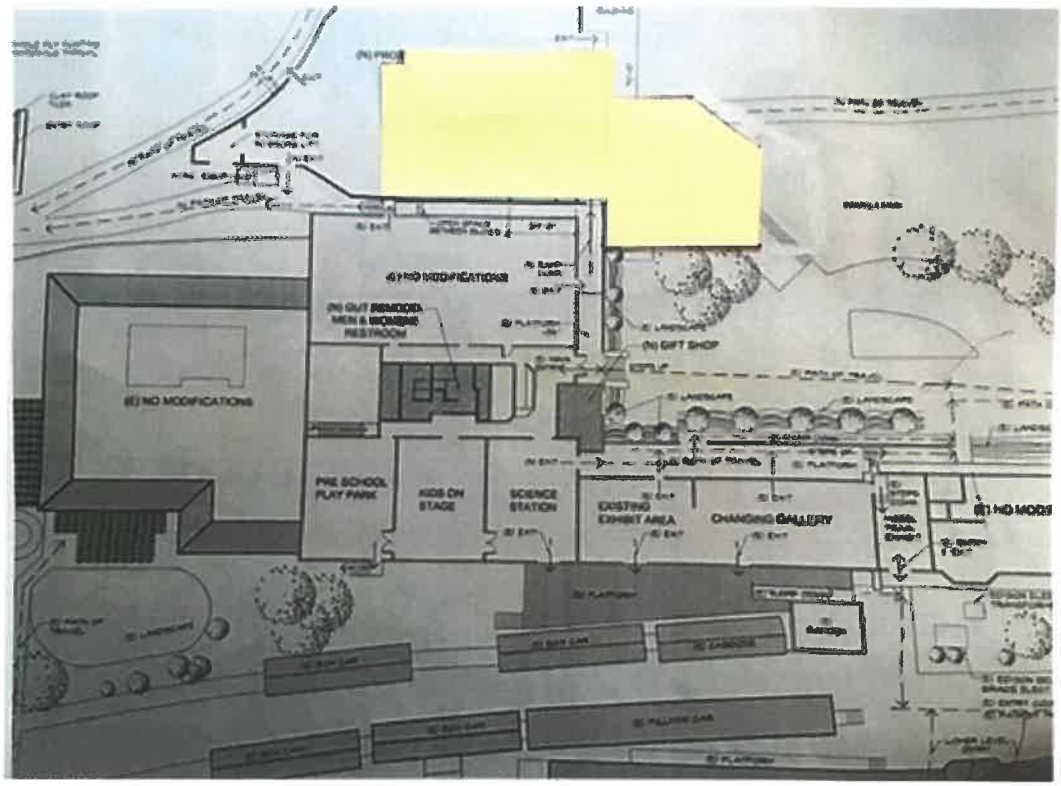
- 22' building height with 20' high viewing area for projected imagery; rooftop solar panels to mitigate future electricity costs

- Open interior space with concrete floor and twelve (12) 10' x 18' hanging screen structures that add visual appeal to the visitor experience

Portola Park: Site of Current Children's Museum at La Habra



Proposed location for *new* Immersion Theater expansion:



New Exhibit Concept

The concept for the new exhibit is based on high-definition projection technology that creates a stunning audio-visual experience: imagery is projected on the exhibit's walls and floor and enhanced by a compatible musical soundtrack. The new exhibit is targeted for all ages, ethnicities and income levels.

The Museum's exhibit concept has been inspired by an attraction in France entitled Château des ***Carrières de Lumières*** (Quarries of Lights) located in a repurposed quarry in the town of Les Baux de Provence: http://carrieres-lumieres.com/en. Each Carrières de Lumières 35-40 minute show comprises thousands of digitized images of works of art that are projected onto all the quarry's surfaces, moving to the rhythm of a musical soundtrack.

Exhibit Content

The Friends Board is working in small group task forces to support the development of the new exhibit. Friends' Board member, Kent Roberts, has secured free content of United States National Parks from Mark Finley who owns Finley-Holiday Films in Whittier. Mark has images and video from all of the national parks in the United States. The Museum expects to offer a wide variety of exciting and compelling content to visitors from the arts to science to sports to nature.

Business and Marketing Plans - Project Development Timeline (see Attachment C)

CMLH's business plan supports the concept of an "evergreen" exhibit that can be changed often to create freshness and newness to the Museum visitor experience and is based on growing intergenerational visitor attendance and interest in the Museum. This ***first laser projected immersion exhibit for any U. S. based museum type of attraction*** would bring prestige to the City of La Habra and support La Habra businesses (e.g. restaurants for pre or post-experience dining), etc.

A marketing study for the Immersion Theater project was completed by USC for the Museum in May 2017. **An Immersion Theater Development Plan was presented to the City of La Habra on February 20, 2018.**

Exhibit Operating Budget-Pro Forma (see Attachment A)

Projected revenue	$194,225
Projected expenses	- $150,667
Net income	**$ 43,558**

Net income from the new exhibit will be allocated in the following manner:

Replacement reserves for technology equipment	40%
New laser projection programs	20%
Marketing enhancements	20%
Museum operation expenses	20%

The Museum's pro forma business plan for the new exhibit projects increased Museum attendance, both from existing markets (school field trip visits and the general public) and new markets (intergenerational adults and special private event use-birthdays, anniversaries, wedding receptions, Quinceañeras, et. al.).

***Move More, Eat Healthy* Concerts – Portola Park**
Partnership with the City of La Habra Recreation Division

CMLH also intends to collaborate with the City of La Habra through co-branded experiences like the City's *Move More, Eat Healthy Concerts in the Park* and *Movies in the Park* programs in Portola Park with access to the new Museum immersive exhibit.

Special events will be offered one weekend per month and every weekend during the month of September, when the existing Museum is closed for annual maintenance. The facility will also be available on weeknights for corporate functions, et. al. Other possibilities include themed shows for holidays like the 4th of July and Halloween. All of these could create a new destination experience for the citizens of La Habra.

The Children's Museum at La Habra: A Brief History (see Attachment B)

- Founded in 1977 by the La Habra City Council - 41 years of uninterrupted service to the community, including during the worst economic downturn in recent U.S. history in 2008-2009

- 90,000 annual visitors from southern California – Orange, Los Angeles, Riverside and San Bernardino counties - 70% of Museum visitors are minority: 50% Hispanic, 10% Asian, 5% African American, 5% Other, with 30% Caucasian

- Museum general operations are supported through Museum earned income and Friends of the Children's Museum at La Habra's fundraising efforts since general fund support from the City of La Habra ended with the sun setting of utility use tax revenues in 2007

Project Construction Budget - Estimate		**Funding Provided By**
New Building Construction	$ 580,000	Friends of the Children's Museum at La Habra
	$ 400,000	City of La Habra
Technology Component	$ 400,000	Friends of the Children's Museum at La Habra
Construction Contingency	$ 120,000	Friends of the Children's Museum at La Habra
Estimated Total	**$1,500,000**	

CMLH is in discussion to collaborate with the following vendors to complete this project:

Lyle Parks Jr. (LPJ) Construction has agreed to be a project construction advisor. Tim Mayeda at LPJ has volunteered a number of services to keep construction quality high and costs low:

- Site plan review
- Final construction plan review
- Value engineering of project - consideration of sub-contractor material costs (e.g. Ganahl Lumber)

La Habra based Farpointe, Inc. has been asked to provide a construction estimate. Farpointe has completed $1M remodels of both HBIC and the Gary Center. Kim Koch, Farpointe's Owner-Contractor, is CMLH's preferred provider for the construction of the building

Proposed site plan discussions have taken place with a joint City of La Habra/Friends of the Children's Museum at La Habra task force, as requested by City Manager, Jim Sadro. This has resulted in several modifications of the Friends original site plan to make a smaller footprint in Portola Park.

Task force members include:

Lovely Qureshi, Children's Museum at La Habra Managing Director
Kelly Fujio, City of La Habra Community Services Director
Elias Saykali, City of La Habra Public Works Director
David DeLeon, City of La Habra Recreation Manager
Kim Albarian, City of La Habra Administrative Analyst
Roy Mueller, Friends of the Children's Museum at La Habra Executive Director
Dawn Fielder, Friends of the Children's Museum at La Habra Board President
Kent Roberts, Friends of the Children's Museum at La Habra Board Member
Rick Snyder, Friends of the Children's Museum at La Habra Board Member
Missy Fleet, Friends of the Children's Museum at La Habra Board Member
Jimmy Andreoli, Friends of the Children's Museum at La Habra Board Member

Donor Recognition

Exhibit donors will be recognized in the Museum's semi-annual newsletter (distributed to approximately 3,000 households), on the Museum's Facebook page (approximately 4,000 users), on the Museum's existing website and *new* exhibit website.

Donors will also be recognized on the Museum's donor mural, *The Elements of Support,* located in the Museum's lobby as well as in the new exhibit's entry area. Additionally, all Museum donors are invited to the Children's Museum at La Habra's *Open House* event in January/February, an annual recognition thank you event.

Funding Request to the City of La Habra & Fundraising Plan

The Friends of the Children's Museum at La Habra Board intends to create a public-private partnership to complete this project and has already begun a silent fundraising phase. To date, $400,000 has been pledged towards estimated building and technology costs. The Friends also project a commitment of $72,000 of existing Friends funds for $472,000 of total pledged funding.

The Friends of the Children's Museum at La Habra respectfully request an investment of $400,000 by the City of La Habra for construction costs of the new Immersion Theater. The Friends Board has agreed that construction will only move forward when 100% of the funding needed to complete the project has been obtained. An investment by the City of La Habra will show civic support for the project and will provide leverage to other potential funders available to the Friends to complete the project

Upon the completion of the Immersion Theater, the City of La Habra will effectively own a *new* 5,000 sq. ft. building and a potential multi-purpose event center in Portola Park for less than one-third of its' estimated construction costs.

Other fundraising sources being targeted to support the new exhibit include grants from Southern California foundations and donations from individual donors. As mentioned, The Friends also plan to seek in-kind donations of materials from project vendors to reduce the costs of the project. A capital campaign for the proposed expansion will begin in earnest immediately after the La Habra City Council's approval of the project. Longer term, the Friends will also seek funding to increase the number of programs offered in the new exhibit at a cost of approximately $11,000 per program.

Current Museum Renovations and Friends Board Resolution – April 17, 2019 (see Attachment D)

The Friends Board is aware of the existing Museum's physical plant assessment that the City of La Habra requested a third-party vendor to complete in February 2019. City Manager, Jim Sadro and City staff presented findings from the assessment report at the Friends March and April 2019 Board meetings.

On April 17, 2019, The Friends Board passed a resolution that addresses and supports both the Immersion Theater expansion project and collaborative fundraising efforts with the City of La Habra to support the renovation needs of the existing Children's Museum at La Habra facility.

As a show of the Friends commitment, the Friends of the Children's Museum at La Habra have already secured a $75,000 grant from the Lowe's Charitable and Educational Foundation to address safety and repair issues related to the Museum's front entry way and deck. **(see Attachment E - 12-14-18 press release)**

City/Friends Task Force Discussion: Project Work Plan – April 2019 (see Attachment F)

The City/Friends Task Force Project Work Plan discussion is enclosed for your reference.

The Children's Museum Value Proposition – 40+ years of service to the community

The Children's Museum at La Habra is at a crossroads, an inflection point—Is the Children's Museum truly "the jewel of La Habra" and "a world class institution" as we have often heard it described?

If so, then it's time for all of us to step up and make an investment in an institution that has served the community of La Habra well during the past 40+ years. It's time to invest in the Museum's future so it can continue to be a vibrant and relevant organization for the generations to come who will be enriched by its' exhibits and programs during the next 40 years.

We ask you to take the actions necessary to both provide the children and families of La Habra with exciting new educational adventures through the creation of the Immersion Theater and proactively accommodate the restoration of the Museum's existing physical plant to give La Habra "a real jewel" all can take pride in.

2018 CMLH Annual Report (see Attachment G)

The Museum's 2018 Annual Report is also enclosed for your reference.

For additional information, please contact:

Roy Mueller, Executive Director and Chief Development Officer
Friends of the Children's Museum at La Habra
562-383-4242 or rmueller@lahabraca.gov

ATTACHMENT 2

S. CALIFORNIA ST.

S. EUCLID ST.

62 Feet

45 Feet

Proposed Site

41 Feet

48 Feet

301

309

60 Feet

80 Feet

Alternate Site

303

N

W

E

S

Friends of the Children's Museum at La Habra – Attachment
Board Resolution – April 17, 2019

The Friends of the Children's Museum at La Habra enthusiastically support the creation of The Children's Museum at La Habra's new Immersion Theater project in Portola Park. We seek City of La Habra approval of the project and respectfully request a commitment of $400,000 of City funds towards project building costs. The Immersion Theater project will only move forward when 100% of the costs of the project have been obtained; and

The Friends of the Children's Museum at La Habra support collaborative fundraising efforts with the City of La Habra to address repair and renovation needs for the existing Children's Museum at La Habra facility, as identified in the City's recent assessment of the Museum's building.

As a show of our commitment, the Friends of the Children's Museum at La Habra have already secured a $75,000 grant from the Lowe's Charitable and Educational Foundation to address safety and repair issues related to the Museum's front entry way and deck.

THE CHILDREN'S MUSEUM AT LA HABRA
IMMERSION THEATER
PRO FORMA BUDGET –
2-14-19

REVENUE	
Admission Increase @ $12 pp	$46,085
Adult Admissions	$60,000
Memberships	$ 9,790
Special Event Rental	$38,350
Gift Shop	$ 7,000
Sponsorships	$33,000
TOTAL	**$ 194,225**

EXPENSES	
Personnel	
IT Special Event Coordinator- PT	$17,472
- 16 hours per week	
Special Event Coordinator Benefits	$ 1,806
IT Program Coordinator-contracted	$10,000
Special Event Staffing – PT	
- 266 hours @ $15 per hour	$ 3,990
- PT Special Event Staff Benefits	$ 399
Total Personnel	**$33,667**
Immersion Theater (IT) Exhibit*	
Program Development	$33,000
- 3 new programs per year	
Equipment Maintenance	$12,000
- Projector bulbs	
Total Exhibit	**$45,000**
Advertising & Marketing	
Marketing Coordinator-Contracted	$15,000
Dedicated IT Website	$ 8,000
Media & Advertising	$10,000
Total Advertising & Marketing	**$33,000**
General Operations	
Special Departmental	
Risk Management	$10,000
Utilities	$21,000
Gas, Electric & Water	
Janitorial	$ 5,000
Security	$ 3,000
Total Operations	**$39,000**

TOTAL REVENUE	**$194,225**	**TOTAL EXPENSES**	**$150,667**
NET OPERATIONS INCOME	**$ 43,558**		

*Immersion Theater projectors have a 7-year warranty; Immersion Theater computers have a 15-year life

PROJECTED NET OPERATIONS INCOME ALLOCATION

PROJECTED NET OPERATIONS INCOME		**$ 43,558**
40%	Replacement reserves for technology equipment	$ 17,422
20%	New laser projection programs	$ 8,712
20%	Marketing enhancements	$ 8,712
20%	Museum operation expenses	$ 8,712
TOTAL		**$ 43,558**

ATTACHMENT 5

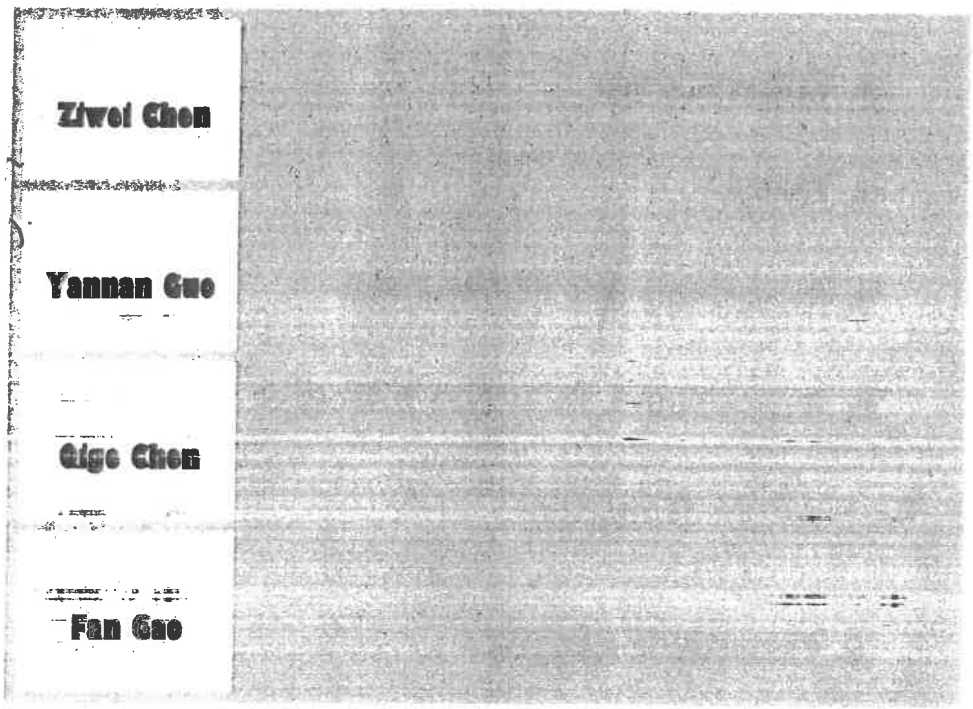
FEASIBILITY RESEARCH REPORT FOR CHILDREN'S MUSEUM AT LA HABRA

Ziwei Chen

Yannan Guo

Gige Chen

Fan Gao



May 2nd, 2017 2017

TABLE OF CONTENTS

4. Limitation Analysis

5. Conclusion

1. Background

A. Past History

"Encourage enthusiasm about learning in a hands-on environment that opens the world to even the youngest child." As the mission statement proposes, the Children's Museum at La Habra (CMLH) combines education with entertainment. The Museum provides children with opportunities to develop creativity, explore the world, learn to share, and obtain more skills. Established in 1977, CMLH has continued offering unique experiences to kids from 2 to 10 for 40+ years. As an award-winning non-profit public museum, it has been a great example of a public private partnership.

The Museum serves 90,000 visitors every year, with 50% of its' attendance from Orange, 41% from Los Angeles and 9% from Riverside and San Bernardino counties. CMLH is the only one of its kind in this area. CMLH provides 10,000 square feet of hands-on exhibits and covers various themes, like science, culture, nature, daily life as well as the arts. The Museum provides 7 galleries and 14 hands-on permanent exhibits as well as one exhibit area that changes twice a year.

General admission is $10 for children and adults, $9 for La Habra residents, and free for children under 2 and members. The Museum's current loyalty program offers 4 different membership packages: Conductor Pass, Caboose Pass, Engineer Pass and Freight Pass. Each provides customers with different benefits, like discounts in the gift shop and invitations to special events. Besides individual customers, CMLH also has a vibrant outreach program to schools and effective television marketing partnerships. This has effectively helped the Museum expand its' influence and successfully offer its' customers a huge variety of hands-on experiences.

B. Current Programs

CMLH's current permanent exhibits are Nature Walk, STEAM Lab, Model Train Village, Carousel Room, Science Station, 1942 Caboose, Kids On Stage, Pre-School Play Park and Family Art Center. The Museum's current changing exhibit is "The Children of Hangzhou: Connecting With China" from January 23, 2018 to May 27, 2018.

CMLH has created 10+ visitor experiences under three categories: New Exhibits, Arts-based Education Programs and Public Programs.

- New Exhibits: Conservation Garden teaches kids water conservation through the use of drought-tolerant plants and drip irrigation; STEAM Lab provides visitors with hands-on opportunities to solve engineering, math and science challenges including building a raceway and testing objects in a flight lab; and The Children of Hangzhou: Connecting With China gives Museum visitors a glimpse of modern and rural Chinese life through the eyes of four children from Hangzhou.
- Education Outreach Programs align with the Museum's Strategic Plan goal to develop STEM-based, environmental conservation and arts/cultural programs, such as: Lil' Innovators EC STEM Project, On the Road for Energy Conservation, H2O, Here We Go!, California Science Quest, Dream Big!, and Read Across America. These programs are provided to low-income students and help them build skills for their future.
- Public Programs include Target Free Sundays CMLH's monthly Free Admission Program), Lil' Learners, Autism Family Mornings, Girl Scout Overnight Campouts, Caterpillar Adoption, S.M.A.R.T Saturdays and Let's Take It Outside. These activities provide enthusiasm about learning and open doors to real-world hands-on experiences.

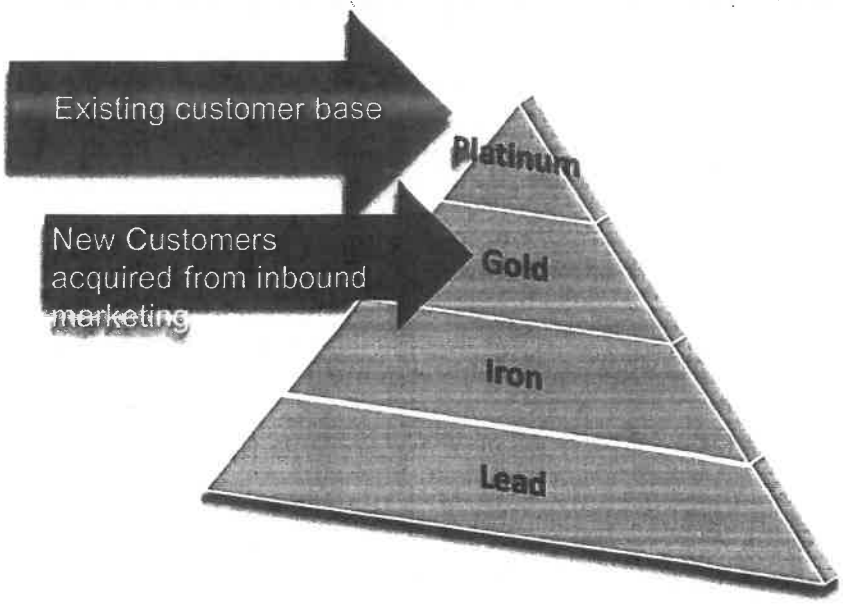
2. New Exhibit Outlook

The Museum's proposed new exhibit will offer visitors an immersive light and sound experience. Visitors will walk through a dimly lit space to view large, beyond human scale images, with accompanying music or environmental sounds. A variety of individual show themes are proposed from art to science to nature, et. al. There is no defined seating and no time limit for the experience. General admission fees are projected to be comparable to the price of a movie. Visitors will have the opportunity to explore new worlds that they may have never visited before. Content can be easily changed, once the technology is installed. The new exhibit is expected to open to the public in December 2018 .

A. Target Market

The primary target market is CMLH's existing customer base. This base is loyal to CMLH and at the top of the Museum's target customer pyramid. This segment can be easily reached with low cost since these customers are already willing to pay for the Museum's existing exhibits. We believe they will not mind paying a few more dollars for the new exhibit.

The Museum's secondary target consists of new customers acquired from inbound marketing. CMLH will target all ages, ethnicities, and income levels, but mainly millennials and heavy smart phone-users. Internet marketing and social media platforms will be utilized to generate leads for this segment, because they are both effective and inexpensive.



B. Content

Content is the most important element for the new project. Currently, four main categories have been taken into consideration: visual arts, nature, science, and special occasions. For visual art, the Museum plans to display paintings from both old world well-known masters and contemporary art professionals. For nature, national parks from US and picturesque places from other continents and countries, like Africa, will be chosen. Ocean views and Hubble Telescope images might also be great choices. For special occasions, CMLH could choose content that aligns with the theme to create a celebration atmosphere for visitors, like Easter, 4th of July, Veterans' Day, Christmas, Halloween and so forth. To attract more people, CMLH might also add special date themes from other cultures and countries, like the Chinese Spring Festival, Cinco de Meyo and Quinceñeras for 15-year Latina young women.

C. Partnership and Collaboration

Now: CMLH enjoys several partnership including local schools, social service agencies and non-profit foundations. Schools and social service agencies bring their students to the museum to equip them through

hands-on experiences; while local non-profit foundations assist with fundraising. Community service clubs like the La Habra Rotary Club, La Habra Host Lions Club and National Charity League-Whittier Chapter are also important partners which help CMLH expand its' influence; television and media partners like KTLA-TV and PBS-SoCal give CMLH additional exposure and promotion opportunities.

Future: With the establishment of the new exhibit and the addition of new target markets, CMLH might also consider cinematic schools, VC or VR/AI startups as potential partners. If the new exhibit can offer young directors an innovative place for their graduation project films or a great experience for VR demo day, these customers could be effectively transferred into become customers.

D. Omni-Channel Marketing Strategies

Social Media: CMLH consistently uses Facebook and its' official website to promote Museum activities and exhibits. However, we would suggest expanding CMLH's Facebook platform to an "online community" to improve the Museum's loyalty program. Besides receiving admission discounts, education and interaction are most important for CMLH and its customers. Based on CMLH's current situation, using Facebook is better than considering any new social media platform because of its low costs and convenience. Moreover, CMLH could also target influencers on Instagram, because Instagram is a great way to spread the Museum's message. More and more people nowadays are no longer fans of traditional TV/media, especially millennials. In the near future, CMLH should also look at Snapchat or Instagram with video functions, because Gen Z is the largest group in school right now, and they could become the largest group of Museum visitors in the near future. Compared with millennials who might be still attracted by pictures and texts, Gen Z relates more to videos. Therefore, the Museum would be wise to focus more attention on social media and Internet channels.

Mobile App: Millennials and Gen Z should be CMLH's main target if it wants to spread the Museum's message, because millenials are heavy users of the Internet and Gen Z would more likely rely on smart phones. Millenials and Gen Z always want to "cool" among their friends and they love to post "cool" things on social media platforms. This would be a way for CMLH to expand its' visibility and reputation. Mobile apps are an effective approach and greatly improve users' experience because they save time and are convenient.

3. Feasibility Analysis

A. Comparable Analysis

For comparable analysis, seven alternatives were selected to compare with the new proposed project at CMLH. All are located within 40 miles from CMLH and each of them represents a different type of entertainment. They are La Mirada Theatre for the Performing Arts, AMC at Downtown Disney, Discovery Cube Museum, Knott's Berry Farm, Aquarium of Pacific, Angel Stadium of Anaheim and Zimmer Children's Museum.

Alternatives	Description
La Mirada Theatre	One of the most highly lauded theatres in Southern California. Producing a highly regarded Broadway Series consisting of five professional plays and musicals Presenting programs for Young Audiences and a single-night events series.
AMC at Downtown Disney	Various advanced technologies like Real D® 3D, Dolby Cinema®, and IMAX®. Gives the audience a chance to experience the difference of premium formats that come with superior acoustics and richer imagery.

Discovery Cube Museum	Inspiring and educating young minds through engaging science-based programs and exhibits to create a meaningful impact on the community it serves. Offering children choice to select a core initiative to learn more.
Knott's Berry Farm	A 160-acre old-fashioned amusement park in Buena Park, opened in 1920's. Providing 40 rides including roller coasters, family rides, children's rides, water rides, and historical rides. Hires 10,000 seasonal and full-time employees.
Aquarium of Pacific	Instilling a sense of wonder, respect, and stewardship for the Pacific Ocean, its inhabitants, and ecosystems. Creating an aquarium dedicated to conserving and building Natural Capital by building Social Capital.
Angel Stadium of Anaheim	A modern-style ballpark located in Anaheim, California, offering audiences baseball games. The home ballpark of the Los Angeles Angels of Anaheim of Major League Baseball (MLB), and also the home stadium to the Los Angeles Rams of the National Football League (NFL) from 1980 to 1994.
Zimmer Children's Museum	Designed for children 8 and under. Boasts hands-on exhibits and frequent family programs.
New Project at CMLH	First one of this type in US, the content is unique and exclusive. Overwhelming huge images coupled with music. Content includes visual arts, nature and special events.

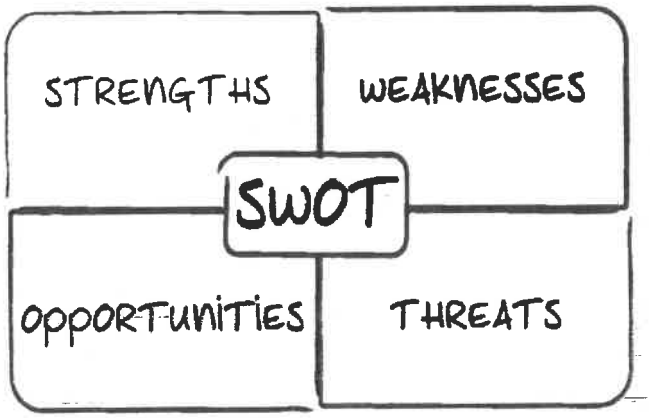
For further comparison, we compare three different aspects of each alternative to the new project at CMLH. These three aspects are location, hours of operation and pricing, with details in the table below.

Alternatives	Location*	Hours	Price
La Mirada Theatre	La Mirada (5.3 miles)	Evenings and matinees	$20-$50
AMC at Downtown Disney	Anaheim (9.3 miles)	10:00am-12:00am	Digital: from $10.99 Imax 3D: from $17.99
Discovery Cube Museum	Santa Ana (14 miles)	10:00am-5:00pm	From $12.99
Knott's Berry Farm	Buena Park (7.7 miles)	10:00am-8:00pm	From $41.99
Aquarium of Pacific	Long Beach (22 miles)	9:00am-6:00pm	From $17.95
Angel Stadium of Anaheim	Anaheim (15 miles)	Depends on events	Ranges from $20-$500
Zimmer Children's Museum	Los Angeles (37 miles)	10:00am-5:00pm	$7.50
New Project at CMLH	La Habra	10:00am-4:00pm After hours for special events	New Project $12-16 (TBD) $10; La Habra residents $9

* This number indicates the distance from CMLH to certain alternatives.

The table above shows the pricing competitiveness of the new project at CMLH. The Museum's current general admission price is $10.00; $9.00 for La Habra residents. CMLH's admission price is far less than most other comparables. There is only a slight difference between the current admission price of the Zimmer Children's Museum and CMLH. With a $12-16 all-inclusive admission price beginning in July of 2018, CMLH visitors will enjoy both the current Museum and a brand new "movie house" that provides a cool new experience. Compared to the Zimmer Children's Museum, which only targets kids, the movie house at CMLH will target at all ages, from children to the adults.

Based on the alternatives presented, for the sake of deep comparable analysis, we will present a SWOT analysis of the new project at CMLH.



a) Strengths:

- Reasonable price

According to the comparable analysis table above, affordability is one of the strengths of new project. People can stay at CMLH for an entire day at for the expense of only about $12-16(TBD).

- Unique content

The content of CMLH's movie house concept will be brand new for all visitors as it is the first one of its type in the U.S. The uniqueness of the experience will definitely attract a large number of both existing and new customers.

b) Weaknesses:

- Lack of successful precedents

As CMLH's movie house experience will be the first one created in the US, there are no previous successful samples from which to refer and learn. However, CMLH could learn from the successful experiences of the existing "movie house" in the Carrieres-Lumieres image museum in France,. As there is no similar experience in the US, La Habra's "movie house" will attract great attention.

- Brand effect

CMLH's brand is not as famous as AMC's, so people may be not interested in or even aware of the new project at CMLH. Given this situation, a strong marketing strategy with multiple events will need to be implemented before the new experience debuts.

- Location

CMLH is located in the City of La Habra, which is in North Orange County but also serves portions of East Los Angeles county. This distance may be an obstacle for some people who want to come. However, as the Museum's marketing program takes effect to both describe the experience and promote the type of content being offered, we believe people will come, despite the long distance.

c) Opportunities:

- Regular update

As the content of the movie house experience is very unique, it will attract many first-time visitors. At the same time, CMLH has an opportunity to generate multiple return visits by regularly updating and refreshing the content of its experience with new themes and shows.

- Change of target customer segments

The movie house experience will appeal to all ages, different ethnicities and income levels. CMLH's target audience will widen from just children and families. Therefore, CMLH will need to embrace social media marketing strategies like Facebook, Twitter, Instagram, Snapchat, etc. to attract youth and adults.

- Seeking additional resources

The new project will be attractive to other funders because of its uniqueness, thus, CMLH will have opportunities to create new partnerships in the future.

d) Threat:

- Competition

There will always be multiple choices for spending discretionary income such as sports, movie theatres, playhouses and other entertainment. CMLH will need to constantly and vigilantly innovate and improve the experience to maintain its competitive edge over alternative spending opportunities.

B. Value Proposition

There are three main Value Proposition items that are important in terms of providing educational and entertainment cultural programming to La Habra residents.

a) Unique and Compelling Venue

The venue under construction will be the first of its kind in America that can provide an emotional visual/audio experience, which is immersive and overwhelming for both educational and entertainment purposes.

By taking advantage of laser projectors and audio equipment, the venue will be able to provide high-resolution videos and high-fidelity sound to create an overwhelmingly positive emotional experience for visitors. Unlike sitting still in a movie theater, visitors can actually walk around to explore things that they are interested in and adjust their distance to the screen to "live" in the show CMLH provides. The venue is able to create a Virtual Reality experience that visitors will never forget.

Currently, no museums or facilities in America has have built this kind of venue. CMLH's venue will be an iconic attraction for the city of La Habra, Orange County or perhaps even the greater Los Angeles area. Our comparable analysis shows that all our potential alternatives (including movie theaters, museums, and amusement parks) are only able to provide either education or entertainment. While there is a IMAX theater at Discovery Cube, the theater mainly shows only science cartoons and documentaries. CMLH's venue will be the only existing site with a deep combination of education, entertainment and a highly emotional experience.

A large venue of 5,000 square feet allows Museum visitors to experience the exhibit within their own time schedule. Visitors can spend one to two hours or even the entire afternoon immersed in CMLH's

exhibition. They can freely move around in the venue to explore different content and aspects of the experience. Visitors can control their distance from the screen, so to speak, which provides multiple opportunities to appreciate the exhibition from different perspectives.

b) Pricing

According to the comparable analysis of all other attractions in our area, CMLH will have a very competitive visitor admission price. CMLH visitors can spend less to enjoy a unique combination of education and entertainment than through other alternatives.

CMLH's current market, which consists of mostly families, will only need to spend a few dollars more to visit the Museum's new venue. In general, parents often feel that they are paying a reasonable price for their kids but often resist paying for themselves because they perceive that the Museum has few exhibits of interest to them. The new venue will provide an educational and entertaining experience for both kids and adults. Therefore, it will become more appealing for adults to bring the whole family to the Museum to experience a wonderful all-age inclusive journey.

Besides regular exhibitions for the general public, the venue will provide customized events for special occasions. For a reasonable price, the 5,000 square-feet laser projector venue can be a perfect place for family parties, anniversaries, birthdays and Quincearenas by allowing customers to choose from CMLH's library of programs

After the new venue is completed, CMLH's targeted audience will expand from families to a multi-generational audience, including teenagers and adults. All will enjoy a variety of visual/audio experiences and hours of enjoyment for a reasonable price of $12-$16. The venue will attract people of all ages by expanding the Museum's existing market, which will also increase the Museum's profit. The proposed price of an admission ticket will be accessible to all income levels.

c) Programming

Through cooperative ventures with other organizations, CMLH will have access to a vast range of selected content for future exhibitions. CMLH plans to create programs on the National Parks of the United States, the oceans, Africa, the mysteries of the universe captured by the Hubble Telescope, as well as other educational documentaries. The venue could also provide copyrighted movies and cartoons as entertainment.

Through customizing videos for special events, including birthday parties, family reunions, et. al., the venue will become a dynamic multi-media center that provides an immersive experience. This content can be programmed in a rotation. Visitors will return to the venue multiple times to explore new content and different experiences.

C. Survey Analysis

In order to test the feasibility of the new project, Comparable Analysis and Value Proposition were examined, from a qualitative perspective, to analyze the advantages and disadvantages of the new project. Besides the two methods mentioned, a quantitative survey (See Appendix 2) centered on the new movie house project was also conducted to present an alternative perspective on the feasibility of the new project.

The survey consisted of six questions following three main concerns we wanted to investigate. First, the survey asked whether visitors liked the idea of the new movie house project; second, if so, what content they would like to see; third, how much they would pay for a ticket to the new experience. Overall, the survey attempted to gain an evidenced conclusion on visitors' preferences to the new movie project through data collection.

Questionnaires were distributed in the Family Art Center at CMLH to existing museum visitors and those who enjoyed free admission on Sunday, April 2nd, 2017. Survey participants were asked to watch a sample video of a similar thematic movie house museum in France, and then completed the survey, after having gained a brief impression of CMLH's new proposed movie house. Based on random selection, we received 403 surveys; 399 surveys were effective out of 403. After collection and synthesis of these surveys, the statistical description of this data was analyzed and is presented below.

The first question "Do you like the video?" was designed to gauge the extent potential visitors liked the content proposed for new movie house museum. The answer scale of this question was "1" to "7" with "1" being low and "7" being high. The average answer of the 399 questionnaires collected was 6.07, indicating survey takers responded positively to the idea of the new project. After further analyzing the data, specifically, the distribution of scores and its corresponding percentage against the total number of results, we found, as Exhibit 1 shows, that 209 people chose "7", indicating that 209 out of 399 people liked the new movie house, 81 people chose "6", and 57 chose "5". 36 people chose "4", 11 people chose "3" and 4 people chose "2". Noticeably, no one out of 399 people chose "1". As Exhibit 2 shows, 87% of survey takers selected "7", "6" or "5", indicating that a majority had a positive opinion of the new project.

To more closely examine why people liked the new idea of movie house, based on the sample video of the existing one in France, the survey's second question "What attracts you most (multiple chose)?" explains the reasons behind. Exhibit 3 below shows that 221 people liked the large-scale imagery, 57 people enjoyed the emotional experience, 160 people liked the music, and 90 liked the combination the education and entertainment. Exhibit 2 indicates that the large-scale images had the greatest appeal to the 399 people surveyed and the combination of education and entertainment was positively indicated by 40.10% of the total number of survey participants.

The question "What content would you like to see" lists possible movie house themes as follows: National Parks, Africa, Hubble Telescope, Ocean, and Documentary. Exhibit 4 shows that among the five listed choices, the Hubble Telescope, with 232 votes, was the most popular choice; other preferences include National Parks and Ocean with 178 and 173 votes respectively. Noticeably, several alternative themes were proposed by some survey participates, such as Art, Seven Wonders of the World, Wildlife, and Jungles. Overall, the result shows that survey participants, most of whom are parents of young kids, hold an expectation that the content of the new movie house will a variety of topics with a focus on the combination of education and entertainment.

We examined the question, "How much money you are willing to pay", through two separate perspectives: one focused on existing family users and the other one on individual adults. The 399 survey participants indicated their preference for an increase of $2.81 (average) to CMLH's current ticket cost and an average total ticket cost of $12.46. Further analysis on choice percentage is indicated in Exhibit 5 and Exhibit 6.

For current museum users, four choices $0, $2, $4, $6 were listed in the question. 236 or 59.15% of current museum users would pay an additional $2 for this experience, which represents the majority of all survey takers. As for adults, as indicated in Exhibit 6, 253 (63.4%) of survey participants would pay $12 for the ticket.

Considering the question "whether you would tell your friend about the new movie house", Exhibit 7 indicates that a majority of 59% of survey participants would tell their friends for sure, and 29% of people would very possibly spread this experience to others. This indicates that the idea of new movie house has attracted people's attention and once the exhibit is completed, it is very likely that the news will be spread by word-of-mouth.

In summary, three conclusions can be drawn from the data collected. First, 87% of the survey participants hold an overall positive opinion on the new movie house exhibit; second, Hubble Telescope, National Parks, and Ocean are among the three most popular themes expected by the survey participants; third, 59% of current museum users would pay an additional $2 dollars for the new exhibit and 63.4% of adults would pay $12 for a ticket, which would include both the existing museum and the new movie house experience.

D. Financial Analysis

Projected Income Statement for CMLH

Total Revenue	**$177,616**
Operating Expenses	
Salary	
Administration	
Maintenance	
Insurance	
Security	
Total Operating Expenses	**-$124,363**
Net Income	**$53,253**

To calculate an estimated net income of the projected exhibit, an income statement was generated. As the income statement shows above, operating expenses include salary, administration fee, maintenance, insurance, and security, with the total cost of $124,363 based on previous operation history.

Operating revenue from admission tickets was calculated based on the data collected from surveys; the method is detailed below:

As the survey indicates, 90.98% of the 399 survey participants would be willing to pay at least an additional $2.00 more than CMLH's current general admission price established for the 2018-19 fiscal year. Therefore, we advise that CMLH charge $12.00 for its' new general admission fee as of July 1, 2018, which will allow visitors to enjoy both the current museum and the new exhibit. Considering that other targeted groups may very likely be solely attracted by the new movie house, we suggest that adult pricing for the new exhibit be set at $6.00.

According to the survey, 90.98% of survey participants would be willing to pay at least an additional $2.00 for admission. Based on 85,000 annual museum visitors in 2016, an anticipated number of visitors for the new exhibit could be 77,333 (85,000*90.98%). As for the number of visitors outside of current users, there is no direct supporting data from the survey, However, based on the fact that 59% of the survey participants chose "for sure" to spread the word about the new exhibit, it's reasonable to predict that there will be additional new visitors beyond CMLH's current users. We offer a conservative educated guess of 4.5% of current annual visitors would visit the new exhibit once it is built, which would be 3,825 (85,000*4.5%). Based on a $2.00 additional ticket price and the estimated number of visitors, total CMLH ticket revenue for the new exhibit will be $177,616. (77,333*$2+3,825*$6).

Subtracting operating expenses from the total revenue, annual net income will be $53,253 ($177,616-$124,363). Therefore, we conclude that the new exhibit will attract a paying audience sufficient to provide a minimum of $25,000 net income per year.

4. Limitation Analysis

The limitations of this paper's methodology lie in two parts, survey and comparable analysis.

First, the survey is partially biased by the domains of the locations where it was conducted, survey participants, choices of questionnaire, and conducted methods. To shed light on the location, all surveys were conducted in one and only place – CMLH's Family Art Center. This affects the randomness of survey participants, the majority of whom are very likely current museum users. The surrounding cities such as Brea, La Mirada, and Rowland Heights were not specifically surveyed, which also leads to bias of single location selection. Therefore, the survey is unable to represent all the other adult groups that are outside of current Museum users. As for the limitation in choices on the questionnaire, it is biased in the example of the fourth question. The survey fails to provide a scale from $0 to $15. Rather, the $8 to $15 scale assumes all people are willing to pay certain amount of money. Thus, the result of the data is positively biased more than it might otherwise be. Lastly, regarding the methodology of conducting the survey, 88.72% of the surveys were conducted in a face-to-face manner, which we assume positively influenced survey results as there was a possibility that survey participants did not always reflect their true feelings in front of survey takers.

Second, despite the fact that the comparable analysis selected several comparable museums, no single one venue is highly comparable. This means that the comparable analysis is unable to predict much of the future acceptance of this new project due to lack of previous examples that have a high degree of similarity since the project is so unique.

5. Conclusion

Driven by the demand of current museum users, CMLH is exploring a new exhibit to enrich its' current exhibits and serve additional visitors. Staying true to the Museum's mission of combining both education and entertainment functionality within its' exhibitions, CMLH plans to build a new movie house with large digital screens, music, and meaningful content. This report seeks to test the feasibility of the new exhibit through four methodologies: Value Proposition, Comparable Analysis, a Quantitative Survey, and Financial Analysis. Value Proposition was a comprehensive self-examination that determined that new project's three main attractive qualities: Uniqueness, Pricing, and Programming speaks volumes about its feasibility. By selecting several museums in LA County, Comparable Analysis illustrated the advantages and disadvantages of the new exhibit. It attempted to fill in the blanks of what has not been exhibited to visitors from a comprehensively comparable analysis on current museums in LA and Orange counties. Apart from these two qualitative analyses, the survey and its post-data financial analysis provided evidence of the feasibility of the new project from a quantitative perspective. According to the 399 effective surveys we collected, survey participants indicated a positive opinion about the new movie house and a willingness to pay an average additional cost of $2.81 for it. An income statement was also created to calculate projected net income for the new exhibit. Despite some limitations in these four methodologies, exhaustively mentioned in our Limitation Analysis, this report investigated expected user groups, examined other comparable museums, analyzed values and provided evidence based financial analysis to conclude that CMLH's new movie house will attract a paying audience sufficient to provide a minimum of $25,000 net income per year.

Appendix 1

Exhibit 1

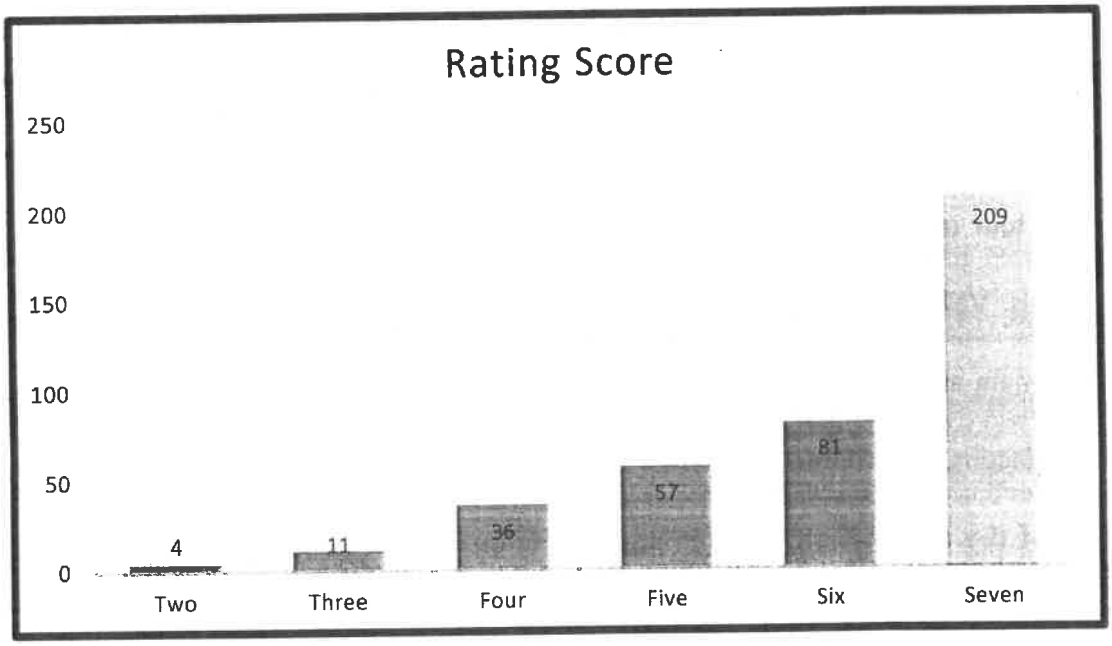


Exhibit 2

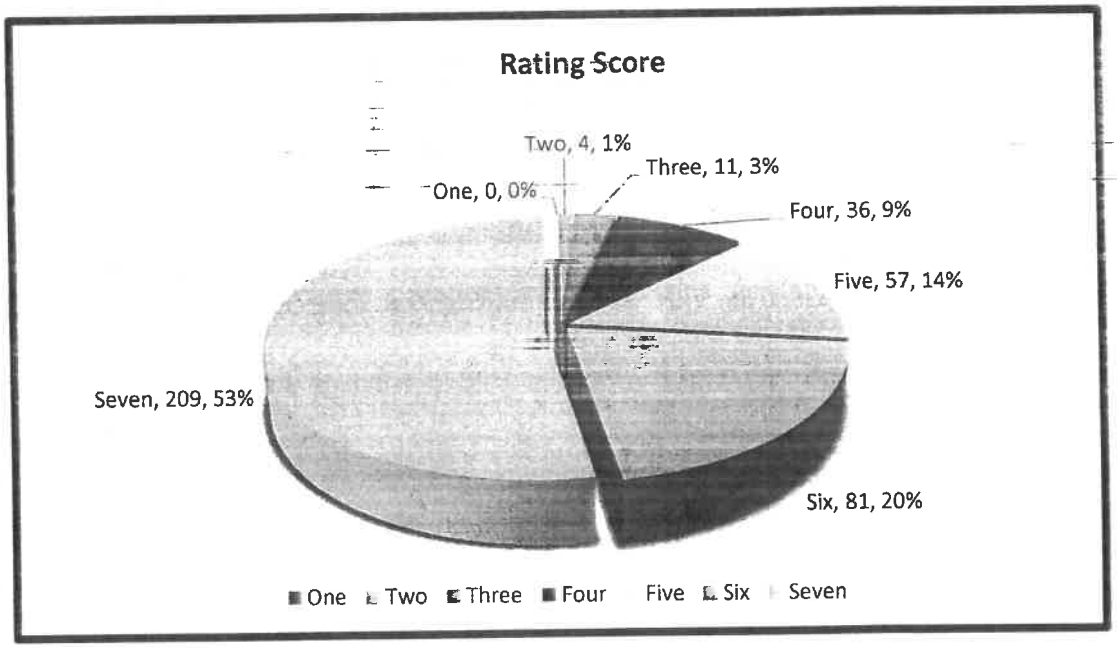


Exhibit 3

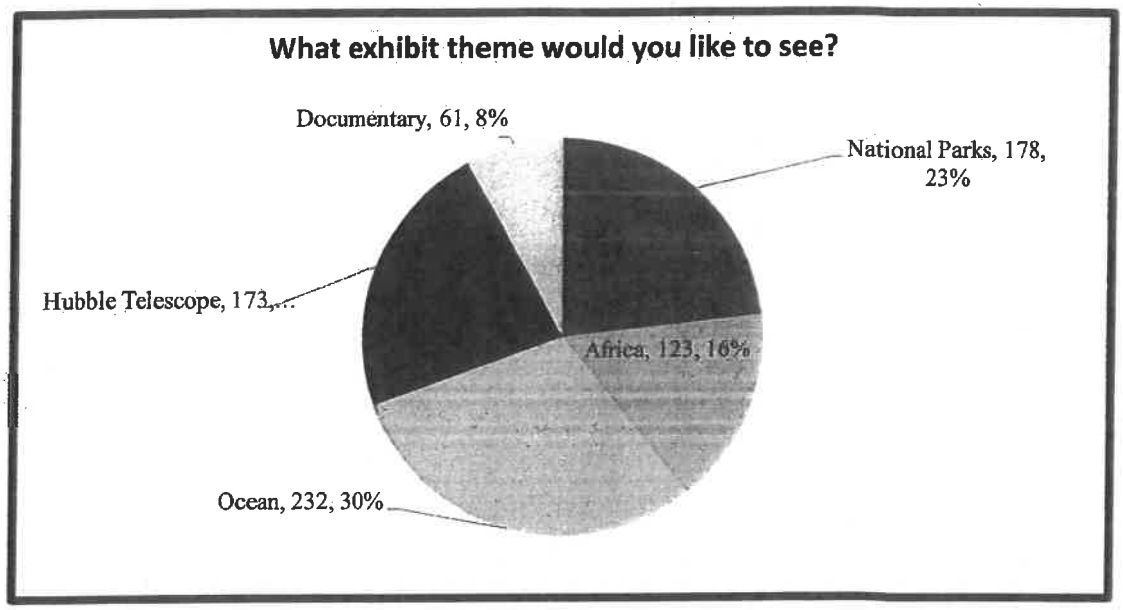


Exhibit 4

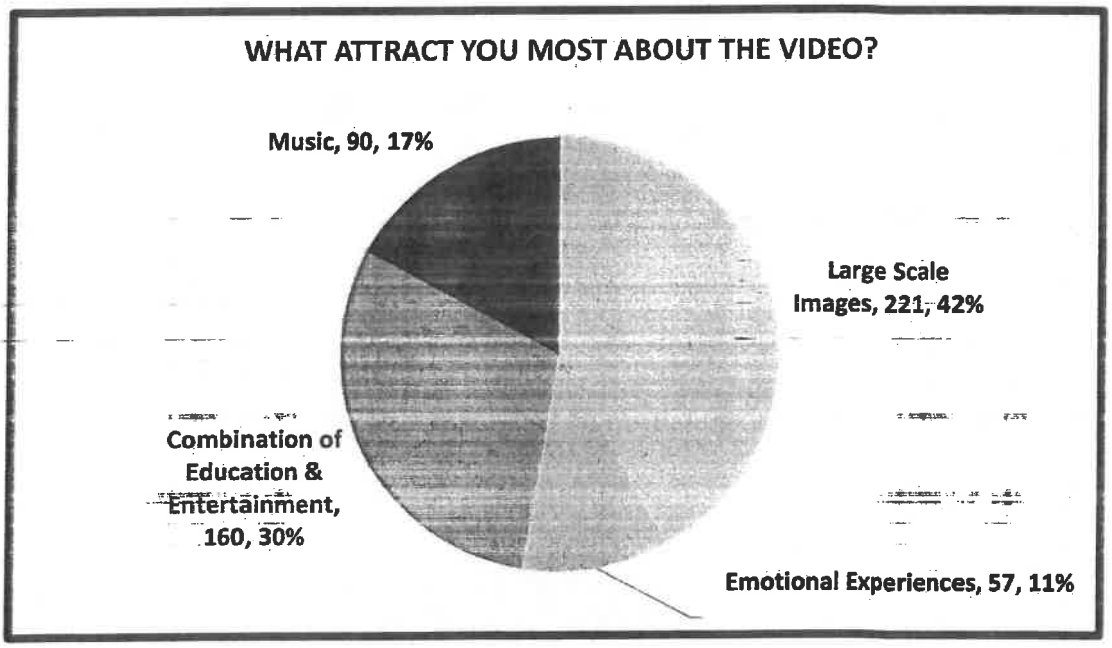


Exhibit 5

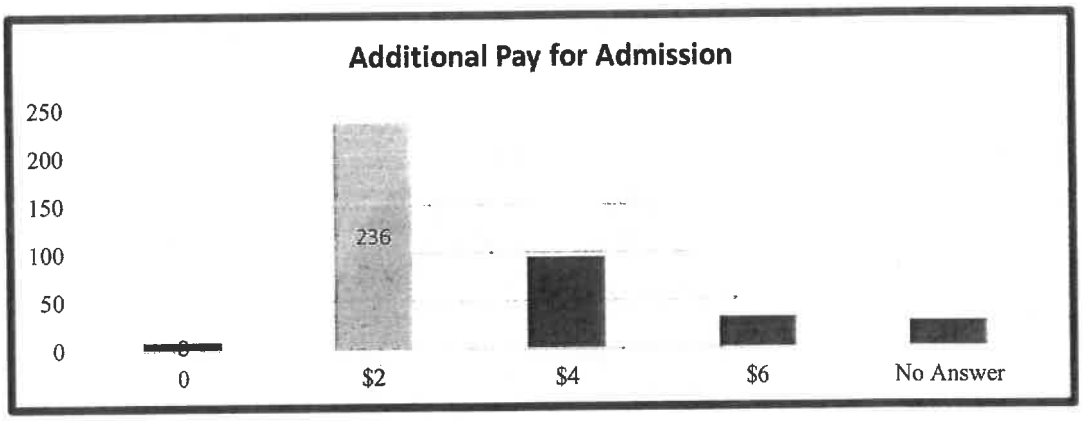


Exhibit 6

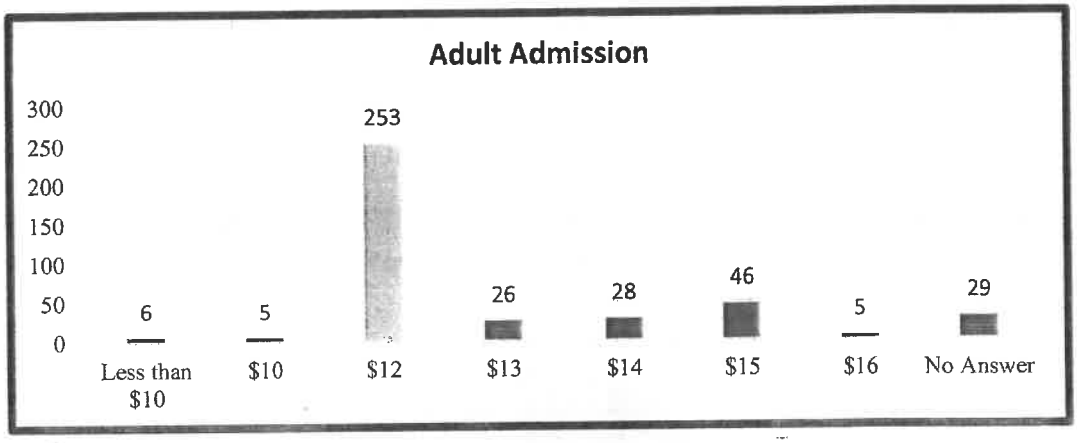
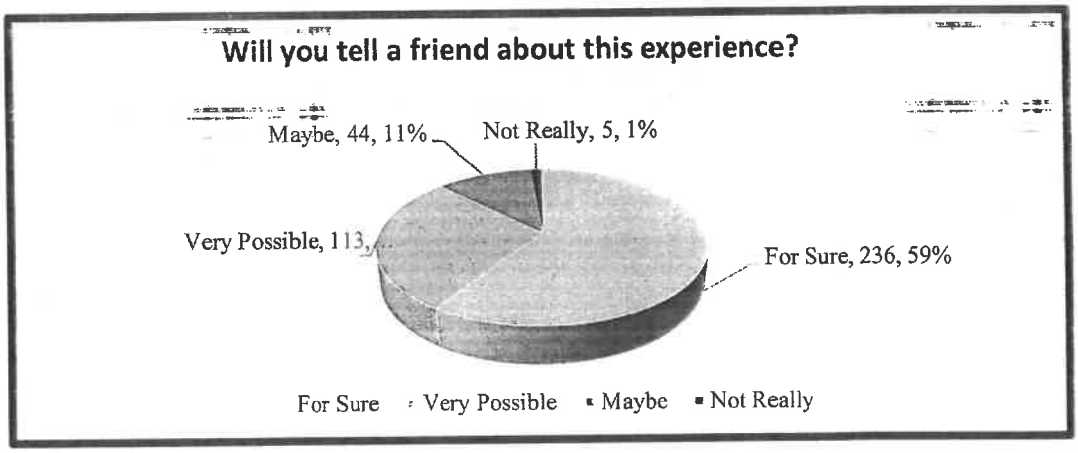


Exhibit 7



Appendix 2

NEW EXHIBIT QUESTIONNAIRE

Thank you for taking the time filling this questionnaire. You will remain anonymous.

We appreciate your cooperation! -- Friends of Children's Museum at La Habra

1. Do you like the video? (Scale it from 1 to 7. 1 is the least, 7 is the most)

1 2 3 4 5

2. What attracts you most? (multiple choice)

A. Large images B. Emotion experiences C. Combination of education and entertaining purposes

D. Music E. Others, please specify _____

3. For current family users, are you willing to pay additional amount of ticket? If yes, how much?

$0 $2 $4 $6

3. For Adults, how much would you be willing to pay?

$8 $9 $10 $11 $12 $13 $14 $15

4. What theme of exhibit would you like to see? (multiple choice)

A. National parks B. Africa C. Hubble Telescope D. Ocean E. Documentary

F. Other, please specify _____

5. Would you be willing to tell your friend?

A. For sure B. Very possible C. Maybe D. Not really E. Never

6. Would you consider holding your private parties (anniversaries, birthday parties, Valentine) at the venue? (chosen from our program library)

A. For sure B. Very possible C. Maybe D. Not really E. Never

WMM ASSOCIATES
Architects and Planners

April 11, 2019

Attn: Mr. Mark McClaren, Building Maintenance Services
City of La Habra
101 E. La Habra Blvd.,
La Habra, CA 90633-0337

Re: City of La Habra Children's Museum (301 South Euclid Street)

Dear Mr. McClaren:

Thank you for allowing us to perform the Architectural and Engineering Review of the City of La Habra Children's Museum located at 301 South Euclid Street. After the review we found the Facility to be a very pleasant facility that serves the Community very well.

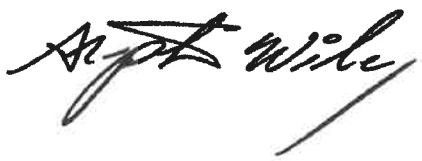
However; after a number of years the Building hosing the exhibits has aged and does suffer from pest damage, water damage and is in need of repair throughout the facility. Our report outlines the findings in detail.

We estimate at this time the total cost for renovation of the facility is approximately $1.5 million dollars. There are ways to reduce that total cost by allowing some components to be simply repaired and remain. Those items would be up to management on the extent of the repair.

We would also estimate the replacement value of the facility to be between $4.2 and $4.5 million dollars for a similar type facility. This number could vary depending on the type of exhibits that are kept in the facility and other items that might be wanted, closer parking, specialty lighting, etc.

Should you have any questions, please do not hesitate to contact us. We look forward to the future development of this wonder facility for the community.

Sincerely,
WMM Associates *(a Minority Business Enterprise)*



Stephen Wiley, Architect
Principal

February 15, 2019

Steve Wiley
Andrew Kil
WMM ASSOCIATES
3325 Wilshire Boulevard, Suite 632
Los Angeles, CA 90010

Re: Limited Structural Evaluation
La Habra Children's Museum
Structural Assessment – Limited Structural Evaluation
[Project #18301]

Dear Mr. Wiley & Mr. Kil:

410 E. Cypress Ave.
Burbank, CA 91501

t: 818.729.9777
f: 818.729.9779

6767 W. Tropicana
Ave., Suite 217
Las Vegas, NV 89103

t: 702.485.4200
f: 818.729.9779

801 2nd Avenue,
Suite 800
Seattle, WA 98104

t: 206.273.7777
f: 818.729.9779

www.risha.com

This report is in response to your request that we perform a structural evaluation of the existing La Habra Children's Museum. We understand the intent of this limited structural evaluation is to determine, based on review of reference structural drawings, and visual examination of the building and exposed structure, our opinion of the structural condition of the building and provide recommendations to correct conditions that pose unusual risk to occupants and affect functional use.

We examined only conditions exposed to view. We conducted neither analyses nor physical materials testing to confirm strength or quality of structural materials. These activities are outside the scope and your intent of this project. Although limited in scope, our evaluation and this report should be sufficient to provide the information you require and to determine direction for future evaluations, if appropriate.

Basis of Evaluation

Our evaluation is based upon the following:

1. Reference architectural and structural drawings made available for our review, titled "An Addition to The Children's Museum", dated May 24, 1988, prepared by South Coast Architectural Group.
2. Site observations made by Salvador Dorado, SE on January 28, 2019.
3. Compliance with good standards of practice serve as the basis of evaluations.

Observations and Findings

The La Habra Children's Museum comprises the original single story building constructed circa 1923 and a single story addition, constructed circa 1988. The original single story building is partially constructed on slab-on-grade and partially on a raised wood-framed floor system.

We identify each area of the museum in the attached key plan as follows:

1. Area A – 1923 slab-on-grade portion. Footprint is approximately 29 feet by 66 feet.
2. Area B – 1923 raised floor system portion. Footprint is approximately 25 feet by 81 feet.

3. Area C – 1988 Addition. Footprint is 80 feet by 100 feet.

See Figure 1 for key plan of areas.

We have the following observations, comments, and findings:

1. **Area A.**
    a. The existing building is one story above grade, slab-on-grade structure. It is rectangular in plan with a gable roof.
    b. The structure was built circa 1923.
    c. Gravity Load Resisting System.
        i. The structure is a wood framed structure.
        ii. Walls are 2x studs spaced at 16 inches on center.
        iii. A small area of interior finish was removed on the interior face of an outside bearing wall, exposing stud wall framing. Interior finish is plaster and exterior finish is stucco over 1x diagonal sheathing.
        iv. Stud wall interior conditions we observed have 2x sills with sill bolts spaced at approximately 36 inches.
        v. Roof and ceiling framing comprises wood trusses spaced at 24 inches on-center spanning the north-side direction.
        vi. Though not visible, it is our impression that conventional concrete foundations support structure loads.
    d. Lateral Load Resisting System:
        i. Stud walls with interior plaster and exterior 1x6 diagonal sheathing serve as an incidental lateral force resisting system. Perimeter walls in four sides of this are considered shear walls.
        ii. In 1923, the construction period of this building, requirements for lateral force resisting systems were poorly developed compared to contemporary systems.
        iii. South, east and north walls of the Area A are mostly open with doors and windows.
            - South wall has short wall segments with a total of about 28 feet out of 66 feet length of south wall, or about 40 percent solid wall.
            - East wall has four short wall segments with a total of about 12 feet out of 29 feet length of east wall, or about 40 percent solid wall.
            - North wall has mostly short wall segments with one better wall segment. We estimate about 44 feet of the 66 feet total length is solid wall, or 65 percent.
            - Short wall segments are vulnerable to damage during an earthquake and generally provide poor lateral force resistance.
        iv. Our impression is that there is insufficient total wall length along each shear line.
        v. Our impression is the Area A, with short wall segments and insufficient overall length along each shear line, is vulnerable to damage during moderate to large earthquakes and could lead to a degrading condition.
        vi. The west wall of Area A, common also to adjacent Area B, is mostly solid, but appears insufficient in length to provide adequate seismic resistance.

vii. Interior non-bearing partition walls occur within the space. These walls may serve as incidental lateral force resisting walls but are often of limited effectiveness owing to a lack of connection to the roof.
viii. We observed 1 x 6 straight roof sheathing from the floor below in areas exposed to view.
- Some areas of roof construction, including trusses and sheathing, exhibit water exposure and damage.
- The aspect ratio, length-to-width, of the roof diaphragm is roughly 2.3 to 1, which is slightly excessive for this sheathing.
- The 1x6 straight sheathing has low diaphragm shear resisting capacity.

ix. In our opinion, the lateral force resisting system should be improved by installation of proper lateral force resisting plywood diaphragm and plywood shear walls.

e. Roof is clay tile supported on 1x6 straight sheathing spanning between trusses.
f. Landscape vegetation grows directly adjacent to the exterior walls. It appears water from irrigation saturates the area and also soaks the walls. Some minor cracks/damage on the walls appears to be caused by moisture. Refer to Photo #1 for a representative condition. This may damage the wall framing if the water penetrates the stucco and finish system.
g. We observed the underside of the roof framing by accessing the ceiling space.
i. Roof sheathing and trusses are stained, evidence of water seepage through the roof, at the west and east ends. Refer to Photo No. 2.
ii. Termite fecal pellets were observed within the ceiling space. Roof truss members exhibit termite damage. Refer to Photos No. 3 and 4.
h. There was a small interior wall area exposed for repair during our site visit. The area shows definite signs of termite infestation and damage, Refer to Photo No. 5.
i. Slab-on-grade floor is uneven within existing Gallery 1. Refer to Photo No. 6. It is not clear what caused this floor unevenness.
j. Area A is comparatively well maintained and overall in poor to fair condition, but probably lacks a reliable and effective lateral force resisting system. We strongly recommend termite treatment and repair of termite damage. Refer to our recommendations section for additional information.

2. Area B.

a. The existing building is one story above grade structure, with a raised wood floor foundation system.
b. Building is rectangular in plan with a mostly flat roof. The roof north and south ends appear to be built up and slope with a clay tile finish to match adjacent Area A tile finish.
c. Gravity Load Resisting System:
i. The structure is a wood framed structure.
ii. No wall interiors were exposed at the time of our site visit to verify existing wall framing, but framing is assumed conventional 2x regularly spaced studs.
iii. Roof and ceiling framing comprise wood trusses spaced at 24 inches on-center spanning the north-side direction. Refer to attached Photo No. 7.
- Minor cracking was observed in diagonal and vertical wood truss web members. Refer to Photo No. 8 for example.

- Water stains are visible on some roof truss members. Refer to Photo No. 9.
- It is our opinion the damage is minor and of no immediate need for repair, but should be further investigated and addressed.

iv. The raised floor system is visible from the crawl space vent openings. We determined the raised floor system is supported as follows:
- Perimeter concrete stem walls.
- Heavy timber beams span in the west-east direction, supported on end stem walls and intermediate concrete pedestals.
- Floor joists span in the north-south direction, supported on stem walls on north and south ends, and on the interior intermediate heavy timber beams.
- Floor sheathing is 1x straight sheathing.
- The stem walls and concrete pedestals exhibit minor cracks but otherwise appear to be in fair to good condition.
- Refer to Photo No. 10.

d. Lateral Load Resisting System:
i. Exterior stud wall framing is similar to Area A, with interior plaster finish and exterior 1x diagonal sheathing underlying stucco finish.
ii. These walls also appear to serve as an incidental lateral force resisting system.
iii. In 1923, the construction period of this building, requirements for lateral force resisting systems were poorly developed compared to contemporary systems.
iv. South and north walls of the Area B are mostly open with doors and windows.
- Both south and north walls have short wall segments with a total of about 37 feet out of 81 feet length of south wall, or about 45 percent solid wall.
- Short wall segments are vulnerable to damage during an earthquake and generally provide poor lateral force resistance.

v. East and west walls have only one door opening each but are relatively short for the roof area they laterally support.
- West wall is common to Area A and resists lateral force imposed by each area.

vi. The west end of the building has one long solid wall segment directly adjacent to the Area C.
- It appears there is a building seismic separation between Area B and Area C. Refer to Photo No. 11.
- This is consistent with what is graphically shown in the museum addition architectural reference documents, sheet A-1.

vii. Interior non-bearing partition walls occur within the space. These walls may serve as incidental lateral force resisting walls but are often of limited effectiveness owing to a lack of connection to the roof.
viii. Our impression is that there is insufficient total wall length along each shear line.
ix. Our impression is the Area B shear walls, with short wall segments and insufficient overall length along each shear line is vulnerable to damage

during moderate to large earthquakes and could lead to a degrading condition.

x. Area B appears rigidly connected to Area C at the north-west corner of Area B, which is inconsistent with the seismic separation depicted on reference drawings and observed on the south side of the building. This area exhibits finish cracking. Refer to Photos No. 12 and No. 13.
   - This is inconsistent with graphic depiction of this condition shown on the museum addition architectural reference documents, sheet A-1. The reference documents graphically show a seismic separation at this location.
   - The finish cracks we observed do not significantly reduce the shear resistance of these walls.
   - This condition should be further investigated to verify a proper seismic separation is provided as originally intended.

xi. Roof sheathing is 1x6 straight sheathing.
   - The aspect ratio, length-to-width, of the roof diaphragm is roughly 3.8 to 1, which is excessive.
   - The 1x6 straight sheathing has very low diaphragm shear resisting capacity

xii. In our opinion, the lateral force resisting system should be improved by installation of proper lateral force resisting plywood diaphragm, and properly constructed plywood shear walls.

e. Area B is directly to the west of Area A and both share a wall, common to existing Gallery 2 and existing Gallery 3. The common wall extends above the roof line and becomes part of the exposed thickened parapet feature of the building.
   i. The exposed portion of the wall exhibits multiple cracks in the plaster, at both the south and north ends of the structure. Refer to Photos No. 14 and No. 15.
   ii. We believe the two adjacent structural systems are insufficiently interconnected, resulting in finish cracking.
   iii. We recommend further investigating this condition to determine if structural repairs are required.

f. The roof parapet is framed with structural steel supports and finished with a cementitious panels bolted to the steel frame. Some panels are cracked at the corners, which is probably the result of rigid panel connections. Refer to Photos No. 16 and No. 17.

g. Area B is comparatively well maintained and overall in fair condition, but probably lacks a reliable and effective lateral force resisting system. Refer to our recommendations section for additional information.

3. Area C.

a. The existing 1988 addition building is a one story above grade structure, with a raised wood floor foundation system.

b. Building is rectangular in plan with a flat roof.

c. The reference architectural drawings for original construction show a basement in the north-west corner of the building. However, during our site walk, we determined the basement does not exist and was never constructed. We observed the original crawl space in the location shown as basement on the reference architectural drawings, Sheet A-2.

d. Main interior partition walls span floor to underside of roof, with no accommodation of vertical roof deflection. Minor interior partitions at the center of the building are partial height.
e. Gravity Load System:
    i. The structure is a wood framed structure.
    ii. Architectural drawings specify walls as 2x6 studs spaced at 16 inches
    iii. No wall interiors were exposed at the time of our site visit. We were unable to verify existing wall framing.
    iv. The roof framing is open-web trusses spaced at 32" o.c. spanning the west-east direction. The trusses span from exterior bearing walls to an interior girder line located at approximately the center of the building. Refer to attached Photo No.18.
    v. Based on the age of the building, the roof sheathing is likely plywood structural panels.
    vi. The underside of the raised floor system may be viewed from the crawl space. It was determined the raised floor system is constructed as follows:
        - Perimeter concrete masonry unit stem walls, with interior concrete masonry stem walls regularly spaced in the west-east direction support the floor joists.
        - Single 2x12 floor joists spaced at 16 inches on-center span north-south between exterior and interior stem walls.
        - Floor sheathing is structural plywood panels.
        - Refer to Photo No. 19 for floor joists supported on intermediate stem walls.
    vii. The framing over the stem wall, shown in Photo No. 19, is typical at stem wall access openings.
    viii. One area of the floor exhibits noticeable deflection. The tenant explained this deflection is a long standing condition causing delamination of the vinyl flooring. Based on our examination, we believe the observed floor deflection occurs at each north-south interior partition wall. In our belief the cause of the floor deflection is as follows:
        - Floor joists are single 2x12 members spanning in the north south direction between stem walls.
        - Single floor joists support partitions above the floor, either directly or on each side of the wall. One floor joist we observed exhibits minor splits.
        - Roof trusses are solidly connected to the tops of partition walls, imposing roof loads on walls not intended to support loads.
        - This condition should be corrected.
f. Lateral Load Resisting System:
    i. Owing to the age of the building and governing code, exterior stud walls were likely designed as shear walls. We cannot confirm this without reference structural drawings or removal of finishes.
    ii. Two interior walls in the west-east direction appear to be load bearing walls and may also be acting as lateral force resisting shear walls.

iii. This area has multiple solid wall segments in both the north-south and west-east directions. It is our impression the Area C structure has appropriate lateral force resisting elements.
iv. The roof sheathing is likely structural plywood panels, but we cannot confirm.
v. Plywood panel diaphragms were commonly used to resist lateral building forces in buildings of this era.
vi. Perimeter walls possess limited openings and the main interior walls likely provide lateral force resistance. The footprint is rectangular, with no irregularities. We observed no features often associated with poor seismic performance. This building is a Type W2 as defined in ASCE 41-13 built in accordance with a post 1976 edition of UBC and meets the Benchmark Building criteria. Benchmark Buildings are deemed to meet the Basic Performance Objective for Existing Buildings.

g. The north-west corner of the building, as described by staff, becomes saturated with water during rain seasons and during landscape irrigation. As we understand it, natural water flow is directly towards the north-west corner of the building.
i. Minor exterior façade finishes near the ground surface exhibits damage that is likely caused by irrigation and rain water. Refer to Photo No. 20.
ii. The exterior north-west corner of the building exhibits minor cracking. Cracking propagates from the corner of a window on the north elevation, located approximately 12 feet away from the building corner. This appears the result of minor differential in-plane movement, and assuming it is a static condition, does not suggest a structural condition requiring attention. If conditions worsens, the cause should be investigated. Refer to photos No. 21 and 22 for views of the cracking cracks at two different windows.

h. We observed multiple cracks in the stucco finish in the exterior walkway, located on the east side of the structure. These cracks appear superficial and non-structural. Refer to attached Photo No. 23.
i. We observed a few cracks in interior finish, near the southeast corner of the building, adjacent to Area B. These cracks do not suggest a significant underlying structural concern.
j. We observed finish cracks in the interior west-east walls, near doors. These cracks do not suggest a significant underlying structural concern.
k. While walking on the south corridor, near the gift shop, the floor squeaks and vibrates vibrated. This may be a result of improperly supported partial height walls located within this area. This condition should be corrected.
l. In our opinion, Area C is overall in good condition. Conditions cited above should be corrected. See our recommendations section for additional information.

4. **Exterior wood decks, stairs and ramps.**
a. We observed the underside of the wood deck, near the corner of Area B and Area C. refer to photos
i. Decks, stairs and ramps are framed with 2x floor joists supported on heavy timber girders at intermediate supports and 2x4 studs at 16 in on center cripple walls. Refer to attached Photo No. 24.

ii. Low concrete and concrete masonry stem walls support stud cripple walls.
iii. Concrete and concrete masonry stem walls and concrete piers support heavy timber beams.
- At one location observed, the concrete pedestal supporting a girder possesses a large crack thought the full cross section. This suggests either the pier is unreinforced or, more likely, bond failure occurred between reinforcing steel and concrete. Repair is warranted in any case. Refer to attached Photo No. 25.

iv. Framing is generally damaged from dry-rot and termites. Some members are warped, which occurs naturally, but likely exacerbated by exposure to water.
v. An area of cripple wall observed, appeared to have recently installed plywood sheathing, as if a recent repair of damage sheathing had occurred. This is an indication, that damage to the existing decks is ongoing.

b. Ramp guard rails/handrails are out-of-plumb, poorly connected and deflect excessively when lightly pushed. These rails are inadequate based not only on current code, but original design code and pose a day-to-day safety risk. This should be corrected. Refer to attached Photos No. 25 and 26.
c. Deck plank surfaces are severely worn and deteriorated throughout. Deterioration extends to interior of planks. Deterioration is caused by normal use and exposure to weather. Refer to attached Photo No. 27.
d. See our recommendations section for additional information.

We have the following recommendations:

1. All areas.
   a. We recommend a termite inspection be performed by a professional pest control entity to determine the extent of the termite infestation.
   b. Though we observed termite infestation only in Area A, all buildings are at risk and should be inspected.
   c. Based on our observations, we estimate about 40 to 50 percent of the roof trusses framing members in Area A may be damaged by termites.
   d. Based on limited observation of exposed stud framing, we suspect that about 20 to 30 percent of the Area A stud framing may be damaged by termites and dry rot.
   e. We estimate about 20 to 30 percent of the Area A framing may be damaged by termites and dry rot.
   f. The extent of termite damage must be determined and affected framing members, replaced, strengthened or supplemented as required by design.
   g. It may be advantages to expose the structure from the exterior to observe the wall framing to determine the extent of damage. The termite inspection firm should make recommendations.
2. **Area A.**
   a. It is our conclusion the lateral force resisting system is deficient and does not provide a minimum acceptable life safety seismic protection for occupants. This requires improvement. We recommend the following minimum retrofits steps:

i. Analyze the structure using ASCE 41-13 methodology as a basis of design for retrofit measures, including on-site investigations and data collection.
ii. The exterior walls should be sheathed with structural plywood sheathing. Hold down posts and hardware with foundation upgrades will likely be required.
iii. The existing 1x6 straight roof sheathing should be removed and replaced with structural plywood sheathing to develop a structural diaphragm capable of transferring the lateral forces to the shear walls.
iv. An effective load transfer shall be developed between the roof diaphragm and plywood shear walls.

b. The floor unevenness observed within this area has no clear cause, but is likely related to soils below the slab. We find no evidence of cause related to the building structure, nor does it pose a risk for the structure. It may be investigated by a geotechnical engineer and corrections made. Repair may be made by correcting the underlying soils and leveling or replacing slab-on-grade.
c. The exterior landscaping and irrigation shall be adjusted to reduce the amount of water that reaches the area directly adjacent to the exterior building foundations.

3. Area B

a. It is our conclusion the lateral force resisting system is deficient and does not provide a minimum acceptable life safety seismic protection for occupants. This requires improvement. We recommend the following minimum retrofits steps:
i. Analyze the structure using ASCE 41-13 methodology as a basis of design for retrofit measures, including on-site investigations and data collection.
ii. The exterior walls should be sheathed with structural plywood sheathing. Hold down posts and hardware with foundation upgrades will likely be required.
iii. The existing 1x6 straight roof sheathing should be removed and replaced with structural plywood sheathing to develop a structural diaphragm capable of transferring the lateral forces to the shear walls.
iv. An effective load transfer shall be developed between the roof diaphragm and plywood shear walls.
b. The cracks in roof truss members should be investigated and documented in detail and repair details designed and implemented.
c. The exterior landscaping and irrigation shall be adjusted to reduce the amount of water that reaches the area directly adjacent to the exterior building foundations.

4. Area C.

a. The supports under interior partition walls now serving as unintended load bearing walls, should be supplemented to resist inadvertent imposed loads. This may require lifting and floor framing to correct position.
b. Floor joists at partition locations shall be evaluated and strengthened as required to support the wall and reduce floor deflections.
c. In the area directly to the south of the gift shop, the floor shall be investigated and repaired as required to ensure the partial height partition walls are properly supported and lessen the squeaks and vibration.
d. The floor framing located directly over openings in the concrete masonry stem walls should be strengthened to span across the opening and reduce floor joists deflection.

e. The partially damaged framing observed on the exterior should be exposed, removed and replaced as required.
f. The exterior landscaping and irrigation shall be adjusted to reduce the amount of water that reaches the area directly adjacent to the exterior building foundations.
g. The downslope water flow towards building at to the north-west corner of the building should be corrected. It is our recommendation, the grades adjacent to the building should be re-worked to deflect the flow water away from the building.

5. Exterior Decks and Ramps.

a. Decks, ramps and rails should be repaired or replaced. Repair of decks and ramps may be possible but does not seem cost effective. For this reason, we recommend removal and replacement of the exterior wood decks and rails. Replacement decks shall be constructed of durable wood materials or other materials suitable for exterior use.
b. Reinforced concrete stem walls to be used to raise wood framing above the finish grade.

This report is for the La Habra Children's Museum structures, the original 1923 buildings and the addition from 1988 only.

This report is not applicable to any other structure at the site. The La Habra Child Development Center is located directly to the west of the 1988 addition, Area 'C'. This structure was not observed by us and is not part of the scope of this project.

Our professional services have been performed with the intent to meet the degree of care and skill ordinarily exercised by reputable structural engineers practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice or opinions included in this letter.

We trust that this report provides you with the information you require. Please do not hesitate to contact this office if you have further questions. Thank you for the opportunity to provide you with our services.

Yours truly,
RISHA ENGINEERING GROUP, INC.

Robert T. Lyons, SE 2719
Principal

Salvador Dorado, SE 6193
Senior Associate

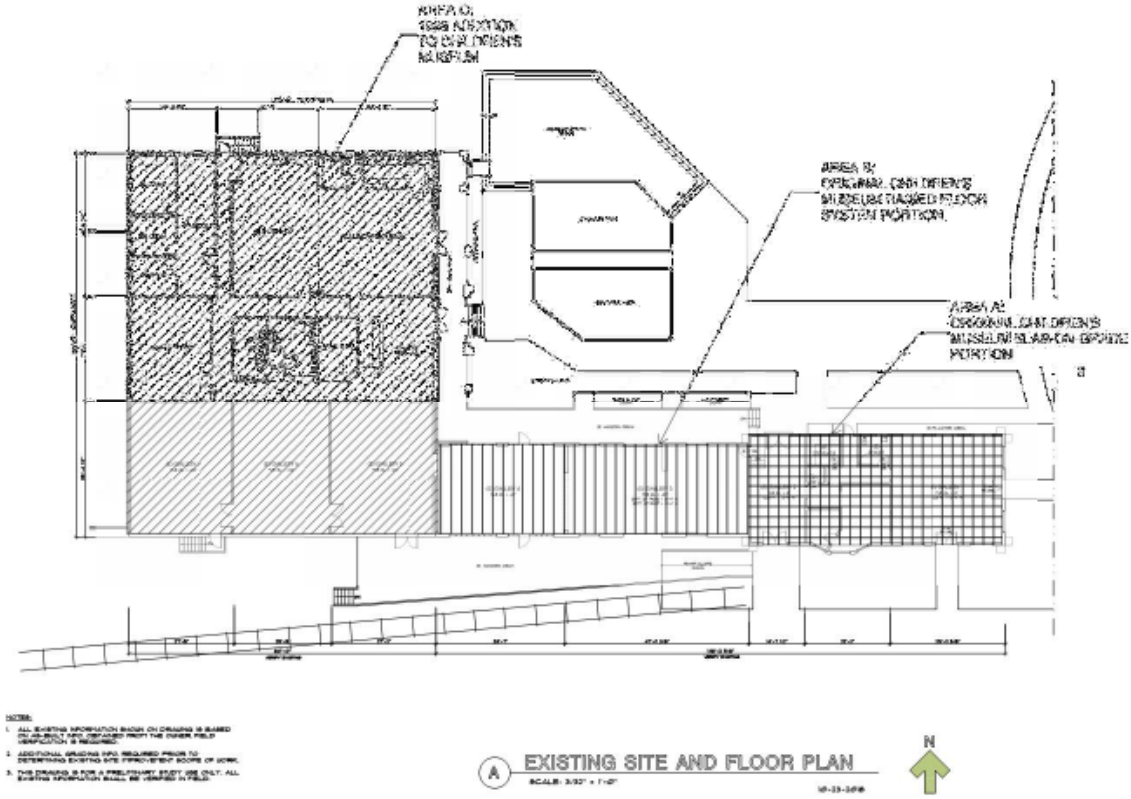


FIGURE 1 – AREA A, B AND C KEY PLAN
PLAN PROVIDED BY WMM ASSOCIATES

Photo 1 – Area A – Exterior Cracks in Finishes

Photo 2 – Area A – Attic Crawl Space.

Photo 3 – Area A – Attic HVAC Duct. Notice termite fecal pellets on duct.

Photo 4 – Area A – Termite damage in wood truss.

Photo 5 – Area A – Deterioration of Wood Wall.

Photo 6– Area A – Floor unevenness.

Photo 7– Area B – Roof Framing.

Photo 8– Area B – Truss Joint Connection – Minor splits.

Photo 9– Area B – Truss Joint Connection – Minor splits, water stains.

Photo 10– Area B – Raised Floor Support

Photo 11– Area B and Area C Seismic Separation.

Photo 12– Exterior Area B and C connection.

Photo 13– Area A and C connection.

Photo 14– Area B – Exterior Cracking at Parapet Wall.

Photo 15– Area B – Exterior Cracking at Parapet Wall.

Photo 16– Area B – Exterior Cracking at Parapet Wall.

Photo 17– Area B – Roof Overview

Photo 18– Area C – Roof Underside Overview

Photo 19– Area C – Crawl Space Access

Photo 20– Area C – Damage in exterior façade.

Photo 21– Area C – Cracks in plaster.

Photo 22– Area C – Cracks in Plaster.

Photo 23– Area C – Cracks in Plaster.

Photo 24– Exterior Decks – Framing.

Photo 25– Exterior Decks – Damaged Framing Support Pier.

Photo 26– Exterior Decks – Overview

Photo 27– Exterior Decks – Ramp