

BOARD OF RECREATION AND PARK COMMISSIONERS

BOARD REPOR	RT		NO	20-232
DATE Decer	nber 17, 2020		C.D	4
BOARD OF RE	CREATION AND PA	RK COMMISSIONERS		
T F - C C S	HEATRE NORTH PROJECT - COMMIT STATUTORY EXE QUALITY ACT (CEQA OF FUNDING FOR PI BIGNIFICANCE] OF (SEISMIC RETROFIT AND REN AND SOUTH TERRACES (P MENT OF PARK FEES – ALLOCAT EMPTION FROM THE CALIFORIT A) PURSUANT TO ARTICLE II, CL ROJECT ALREADY EVALUATED FOITY CEQA GUIDELINES AND TO IIA CEQA GUIDELINES 300 DF	PRJ21381) FION OF G NIA ENVII ASS 2(i) [/ FOR ENVII	(PRJ21384) UIMBY FEES RONMENTAL ALLOCATION RONMENTAL
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RECOMMENDA	ATIONS			

1. Authorize the Department of Recreation and Parks' (RAP) Chief Accounting Employee or designee to commit from the following fund and work order number, a maximum of Eight Hundred Forty-Two Thousand, Three Hundred Forty-Four Dollars and Twenty-Seven Cents (\$842,344.27) in Park Fees, for the Griffith Park – Seismic Retrofit and Renovation of Greek Theatre North and South Terraces (PRJ21381) (PRJ21384) Project (Project);

FUNDING SOURCE	FUND/DEPT./ACCT. NO.	WORK ORDER NO.
Park Fees	302/89/89716H	QM142579

- 2. Authorize RAP's Chief Accounting Employee or designee to transfer One Hundred Fifty-Seven Thousand, Six Hundred Fifty-Five Dollars and Seventy-Three Cents (\$157,655.73) in Quimby Fees from the Quimby Fees Account No. 89460K-00 to the Griffith Park Account No. 89460K-GB;
- 3. Approve the allocation of One Hundred Fifty-Seven Thousand, Six Hundred Fifty-Five Dollars and Seventy-Three Cents (\$157,655.73) in Quimby Fees from Griffith Park Account No. 89460K-GB for the Project;

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- 4. Find that the proposed Project is statutorily exempt from the provisions of the CEQA, pursuant to Article II, Class 2(i) [Allocation of funding for a project which has already been evaluated for environmental significance] of City CEQA Guidelines and to Article 18, Section 15282 of California CEQA Guidelines and direct staff to file a Notice of Exemption (NOE);
- 5. Authorize RAP's Chief Accounting Employee or designee to prepare a check to the Los Angeles County Clerk in the amount of Seventy-Five Dollars (\$75.00) for the purpose of filing an NOE; and,
- 6. Authorize RAP's Chief Accounting Employee or designee to make technical corrections as necessary to carry out the intent of this Report.

SUMMARY

Griffith Park is located at 4730 Crystal Springs Drive in the Hollywood community of the City. This 4,281.73-acre park provides a wide variety of recreational programs and activities, such as train rides, a merry-go-round, hiking trails, and golf courses, for the local community. Approximately 18,155 City residents live within a one-half mile walking distance of Griffith Park. Due to the facilities, features, programs, and services it provides, Griffith Park meets the standard for a Regional Park as defined in the City's Public Recreation Plan.

The historic Greek Theatre (Greek) is located at 2700 North Vermont Avenue in Griffith Park. The 5,901-capacity outdoor venue is among the City's most cherished public sites, and is known the world over as one of the most iconic and recognized outdoor entertainment venues. On May 2, 2018, the Board of Recreation and Park Commissioners (Board) approved the award of a contract for open venue management and food and beverage concession management at the Greek and for food and beverage concession management at the Roosevelt Golf Course Cafe to SMG, for a term of five years with one five-year extension option (Report No. 18-080).

The two elevated seating terrace decks (terraces) on the north and south side of the Greek, constructed in 1982, are steel-framed grandstand structures consisting of a series of narrow concrete slabs on corrugated metal decking, supported by steel framing. Over the years, several steel members of the terraces have suffered significant deterioration due to weathering and leaching of acidic beverages into the unprotected concrete decks. Upon taking control of the venue in 2016, RAP issued a contract to design and construct additional steel reinforcing to support all areas of the deteriorated decks with the full understanding that the terraces would require eventual replacement and seismic renovation in the near future. It is also understood that the complexities of this work would impact the venue's operations and result in partial or complete loss of a concert season.

The geotechnical investigation and structural analysis provided by Wood Environment & Infrastructure Solutions, Inc. (Wood) and Miyamoto International, Inc. (Miyamoto), respectively, further demonstrated that the terraces are structurally deficient to adequately resist lateral loads generated through seismic events.

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On June 4, 2020, recognizing the urgency to address the structural deficiency of the terraces, and the window of opportunity to perform the seismic renovation work with the cancellation of the 2020 concert season and closure of the venue due to the COVID-19 pandemic, the Board (Report No. 20-091) approved the allocation of Park Fees and Quimby Fee Interest totaling Six Million Dollars (\$6,000,000.00) to fund the Project to complete the following work:

- Demolition of seats, concrete decking, secondary structural supports, electrical, HVAC ductwork, emergency generator, fire sprinklers, concrete walkways, Americans with Disabilities Act (ADA)-compliant ramp and wood framed enclosure under the north terrace
- New seismic bracing, grade beams and new concrete decks
- Replace approximately 1,350 seats
- Replace non ADA-compliant ramp at upper entrance to the north terrace
- Replace electrical infrastructure and HVAC ductwork at underside of both terraces
- Replace emergency generator
- New concrete waterproofing over new concrete decks

The Project requires an expedited schedule in order to meet the anticipated reopening of the venue for the 2021 concert season. The completion of the Project is under the supervision of the Bureau of Engineering (BOE), with the majority of the construction performed by existing RAP on-call contractors.

At the onset of the Project in May 2020, RAP and BOE developed a preliminary estimate of the total project cost of Six Million Dollars (\$6,000,000.00), based on the available information at that time, and without any design or engineering plans. Since then, the Geotechnical Investigation Report, Architectural Design plans and Structural Engineering plans have been prepared with all known plan check comments from the Los Angelels Department of Building and Safety (LADBS) incorporated, which has allowed more accurate cost estimates to be produced. In addition, with the removal of the concrete topping and corrugated metal decking of the terraces, and the old paint sandblasted off the primary and secondary steel structural members, previously hidden structural deficiencies and deterioration were revealed that need to be further addressed. RAP and BOE have determined that it is necessary to adjust the total project cost to Seven Million Dollars (\$7,000,000.00).

It is important to note that although this is an increase to the total Project cost, RAP does not consider this a change order. The Project has been put out to bid in parts and in phases. To date, work associated with site preparation, procurement of long lead time items and demolition have been authorized at an approximate cost of \$3,361,625.00, out of which \$168,478.00, or 5% are for change orders. The contractor was not able to provide a bid for the Project in its entirety until the complete permitted construction documents are in place.

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The major factors contributing to the increase in total Project cost can be categorized and summarized as the following:

1. Costs Associated with Additional Geotechnical and Geologic Investigations:

The terraces are supported by a series of steel columns of various lengths acting as cantilever poles placed in drilled shafts embedded in bedrock. Due to the extreme variations in column length and embedment depths, the terraces suffer from highly irregular distribution of seismic forces between columns, with nearly all seismic loading resisted by a small number of columns located at one end of the structure. This leads to large torsional movements and potential failure of the most heavily-loaded columns. BOE and Miyamoto worked closely with Wood to perform additional geotechnical investigations by conducting Pile Integrity Tests (PIT) to determine the pile length and embedment depth of each of the steel columns supporting the terraces. The PIT was performed by affixing an accelerometer on the top of the pile and then striking the pile top with a hand-held instrumented hammer. The hammer's impact generates a low-intensity compression strain wave in the pile, and the accelerometer monitors the motion associated with the wave. With the PIT results indicating each pile's length for all existing columns, Wood generated four geologic cross-sections for both terraces that identified the thicknesses of the artificial fill and alluvium and, most critically, the top of bedrock. Wood further determined that based on the known data and measurements of the bedrock formation. the Project site is considered Seismic Site Class "C", which provides the criteria for Miyamoto's load calculations and structural design.

The PIT results, findings and analysis were submitted to LADBS Grading Division as part of Wood's Soils Report for approval. However, LADBS Grading Division did not agree with Wood's initial findings and requested additional justifications for determining Seismic Site Class "C". Wood was required to perform further geotechnical and geologic investigations with additional subsurface explorations. Due to the urgency to expedite work completion, a drill rig team had to be brought in from San Diego as none were available for weeks in the Los Angeles area. Wood utilized a 100-foot high drilling rig to perform suspension logging and collect samples and data from 100 to 120 feet below ground surface, to achieve the goals of:

- (a) obtaining undisturbed and bulk samples for laboratory observation and testing to verify the nature and stratigraphy of the subsurface soils to support the Seismic Site Class "C" determination:
- (b) measuring the soils shear-wave velocity by sending subsurface shockwaves down the boring to mimic earthquakes, and observe and record the way the alluvium and bedrock react to the simulated seismic movements; and,
- (c) collecting subsurface data to determine the required site-specific ground motion values, to be used for structural calculations in the unlikely event that the Seismic Site Class is changed from "C" to "D".

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The collected data and laboratory results confirmed Wood's initial determination of Seismic Site Class "C". Wood has submitted the additional findings and justifications to LADBS Grading Division for further review and approval.

2. Costs Associated with Increased Structural Design:

Concurrent with the additional geotechnical and geologic testing, Miyamoto began the structural design. During design and structural analysis of the pile lengths verified by Wood, Miyamoto discovered that the torsional irregularity in the existing terraces was more significant than originally expected. Miyamoto had to increase their initial design of Buckling-Restrained Braces (BRBs) to reduce the maximum drift in certain sections of the terraces. The BRBs will supplement some of the existing cantilevered columns that will be disconnected laterally from the structural system. In addition to the increased BRB design, Miyamoto discovered several steel structural members needed upsizing to reduce overall torsional irregularity. With the top decks removed and old paint sandblasted off, many steel structural members hidden from view before were found to be severely corroded and required total replacement.

3. Costs Associated with Grade Beam Placement:

The contractor has performed exploratory work at areas where new concrete grade beams would be placed by saw cutting and removing the existing concrete slabs and excavation, and discovered existing utility lines that need to be re-routed, as well as existing conditions that need to be modified in order to accommodate the placement of large concrete grade beams.

4. Costs Associated with Stainless Steel Railings:

At the time of developing the initial preliminary cost estimates, it was assumed that the scope of new railings would be limited to the perimeters of the terraces only. However, after the initial plan check review, code requires additional handrails in the up-and-down aisles, and additional cross members are required at all the perimeter guardrails.

In addition, due to the placement of the new structural concrete grade beams, a sizable percentage of existing railings underneath the terraces would have to be removed and reinstalled, but given the state of rust and corrosion, the railings are better off to be replaced. Upon further investigation into the state of all the remaining railings, it was concluded that the condition of deterioration was essentially uniform throughout and commensurate with 40-year-old railings exposed to the elements and power washing after every concert. Also, many of the existing railings were no longer code compliant and were deemed a possible liability risk to the City. It was determined that all the existing railing underneath the terraces needed to be replaced.

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The original intent was that the terrace railings would be replaced in-kind with painted steel pipes matching the existing. However, through an iterative design process with the steel railing fabricator, RAP and BOE decided to upgrade the new railings to stainless steel cable system with stainless steel posts and handrails. The use of the cable system serves two purposes: it offers minimum visual obstruction between the patrons' sightlines and the stage, while allowing the maintenance staff to make future repairs without the need for welding. The decision to use stainless steel as the finish was not only based on aesthetics, but also in consideration of the life cycle costs of painting the regular steel railings each year. With the use of stainless steel railings, RAP paint crews are no longer required to repaint the terrace guardrails and handrails each year before the start of the new concert season, at the same time when RAP paint crews are inundated to get all the pool facilities citywide ready for the new swim season. The new stainless steel railings will never require repainting which also represents significant long-term savings in the maintenance costs for RAP.

PROJECT FUNDING

Previously, the Board approved the allocation and commitment of a total of Six Million Dollars (\$6,000,000.00) in Park Fees and Quimby Fee Interest funding to the Project (Report No. 20-091).

Upon approval of this Report, Eight Hundred Forty-Two Thousand, Three Hundred Forty-Four Dollars and Twenty-Seven Cents (\$842,344.27) in Park Fees can be committed to the Project and One Hundred Fifty-Seven Thousand, Six Hundred Fifty-Five Dollars and Seventy-Three Cents (\$157,655.73) in Quimby Fees can be transferred to the Griffith Park Account No. 89460K-GB and allocated to the Project.

These Park Fees and Quimby Fees were collected within ten (10) miles of Griffith Park, which is the standard distance for the allocation of Park Fees for regional recreational facilities pursuant to Los Angeles Municipal Code Section 12.33 E.3.

The total amount of funding available for this Project, including previously allocated Park Fees and Quimby Fee Interest, is Seven Million Dollars (\$7,000,000.00).

FUNDING SOURCE MATRIX

Source	Fund/Department/Account	Amount	Percentage
Park Fees	302/89/89716H	\$2,842,344.27	41%
Quimby Fees	302/89/89460K-GB	\$157,655.73	2%
Quimby Fee Interest	302/89/89460K-GB	\$4,000,000.00	57%
Total		\$7,000,000.00	100%

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TREES AND SHADE

The Project will have no impact on existing trees or shade at Griffith Park.

ENVIRONMENTAL IMPACT

The proposed Project consists of the allocation of additional funding to an existing project that was approved by the Board and determined exempt from CEQA in Report No. 20-091. RAP staff found that:

- 1. The proposed Project will not involve substantial changes in the project scope requiring major revisions in the previous CEQA determination due to new environmental effects;
- 2. The circumstances under which the Project is undertaken will not require revisions of the previous CEQA determination due to new environmental effects; and,
- 3. There is no new information of substantial importance showing new environmental effects not discussed in the previous CEQA determination.

As such, RAP staff recommends that the Board determine that the Project is exempt from CEQA, pursuant to Article II, Class 2(i) of City CEQA Guidelines, and to Article 18, Section 15282 of California CEQA Guidelines. Staff will file an NOE upon Board's approval.

FISCAL IMPACT

The authorization of this commitment of Park Fees and allocation of Quimby Fees will have no fiscal impact on RAP's General Fund.

The estimated costs for the design, development, and construction of the proposed park improvements are anticipated to be funded by funding sources other than RAP's General Fund.

The maintenance of the proposed park improvements can be performed by current staff with no overall impact to existing maintenance service at this facility.

STRATEGIC PLAN INITIATIVES AND GOALS

Approval of this Board Report advances RAP's Strategic Plan by supporting:

Goal No. 1: Provide Safe and Accessible Parks

Outcome No. 2: Safe and welcoming environments at all parks

Goal No. 3: Create and Maintain World Class Parks and Facilities

Outcome No. 1: Newly developed open space park project and the redesign of signature City

Parks

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Result: The Seismic Retrofit and Renovation of North and South Terraces will

provide an improved and safer experience for visitors of the Greek Theatre

This Report was prepared by Darryl Ford, Superintendent, Planning, Maintenance and Construction Branch.