

# **BERKELEY MUNICIPAL PIER**

## **Structural Assessment & Ferry Terminal Feasibility Study**

### **EXECUTIVE SUMMARY**

#### **Introduction**

This study includes a structural assessment of the existing pier and multiple ferry feasibility studies including a small scale ferry, large scale ferry, landside studies, the development of a three potential conceptual designs and a public process. The public process was initially scheduled to start in March, 2020, but has been delayed until November of 2020. This process is now aligned with the Berkeley Marina Area Specific Study (BMASP) and will go to City Council in February.

#### **Funding Sources/Partners**

This study is funded by Measure T1 Bond funding, the Water Emergency Transportation Authority (WETA) and the Marina Fund.

After a lengthy competitive process, GHD, Inc. was awarded the contract to conduct the feasibility studies and develop the conceptual designs of the new pier with options for the ferry.

#### **Background**

The Berkeley Municipal Pier is located at the western end of University Avenue at the intersection of Seawall Drive at the Berkeley Marina. The Pier was constructed in 1926 and originally extended 3.5 miles into the Bay. It offered two-lane vehicle traffic and access to a trans-bay auto ferry dock at the end of the Pier. In the early 1960's, the wood decking was replaced with concrete planks, and the Pier has been used for pedestrian recreational activities since that time (sightseeing, fishing, etc.), with occasional access by City maintenance vehicles.

In July, 2015, the Berkeley Pier was closed for public use due to structural issues. Visual observations found extensive concrete spalling on the underside of the concrete planks that exposed the bottom reinforcing bars to salt water. Extensive corrosion has occurred, with many bars snapped, some separated from the concrete, and some completely corroded away.

#### **Comprehensive Pier Structural Assessment**

A comprehensive structural assessment was conducted in late 2017 to assess the structural integrity of the Pier, as phase 1 of the project. The initial findings indicated that the existing pier structure as evaluated does not meet current seismic criteria for earthquake level performance per 2016 California Building Code. The existing structure was found to be unstable for earthquake levels checked and should either be retrofitted or replaced. The damaged deck panels on the pier also do not provide adequate resistance to 100 pounds per square foot live loading as required for a recreational pier used by the public.

## Outcome of Preliminary Structural Assessment

The Municipal Pier requires extensive repair to return the structure to serviceable condition and allow public use. The estimated cost to retrofit or replace the existing municipal pier ranges from \$17 million to \$55 million.

## **Ferry Terminal Feasibility Studies**

Based on the magnitude of structural work and potential funding limitation, the City began a small-scale ferry terminal study to evaluate the feasibility of passenger ferry service at the retrofitted or replaced Municipal Pier. The study focused on the waterside improvements needed for a ferry terminal and integration of a terminal with a new dual purpose pier that could be used by the public for recreation in addition to providing access to the terminal.

Subsequently, in 2019, the City and WETA established a partnership via a memorandum of understanding (see Attachments 1 and 2) that was approved by both the City Council and WETA Board of Directors for the planning phase of the large-scale ferry terminal feasibility study. With the approved MOU in July, 2019, the City and WETA staff have been collaborating based on the framework of the MOU to initiate the planning phase for the potential dual-use pier that would support WETA ferry service and public recreation.

The scope of work includes engineering feasibility studies and assistance with the City's public engagement process regarding the proposed improvements and impacts as the result of WETA-scale ferry passenger volumes.

The waterside studies evaluated fixing the existing pier, building a new pier for the concept of dual-purpose pier (ferry terminal & recreation), and a wave protection assessment.

The landside studies evaluated public transportation facilities (e.g., pathways, bus terminal, rideshare), site amenities (e.g., restrooms, bicycle facilities), transportation and parking demand analysis such as parking demand forecast, ferry ridership forecast, ferry access mode split analysis, and parking transportation demand reduction strategies.

Both waterside and landside studies also included mitigation measures to minimize impacts to recreation users at the Marina.

## **COMMUNITY ENGAGEMENT**

The first community open house workshop was originally scheduled on March 28, 2020 to present the preliminary vision of the planning study that consists of a new or renovated dual-use pier that would both serve as passenger ferry facility for berthing public ferry vessels and provide public access to San Francisco Bay restoring the public amenities that were once offered by the now closed pier, and to seek community feedback on the functionality, siting, and space needs of the dual-use pier.

Due to the COVID-19 (Coronavirus) global pandemic, all public in-person meetings were cancelled and residents were directed to shelter-in-place by order of the City of Berkeley Public Health Officer. The community meetings are being rescheduled for this winter and will be conducted via online meeting. At that time, the multiple studies, options for the waterside elements including a new pier, and the landside elements will be distributed and publically discussed.

Attachments:

- 1: Presentation at Parks and Waterfront Commission on Aug 8, 2018, *“Update on Possible Ferry Service at Berkeley Marina – WETA MOU”*
- 2: Memorandum of Understanding with WETA, March 2019

# ATTACHMENT 1

*Presentation at Parks and Waterfront Commission*

*August 8, 2018*

*“Update on Possible Ferry Service at Berkeley Marina – WETA MOU”*

# Update on Possible Ferry Service at Berkeley Marina – WETA MOU



Nelson Lam, PE, QSD  
Associate Civil Engineer  
Department of Parks, Recreation & Waterfront



Parks and Waterfront Commission Meeting

August 8, 2018

Parks, Recreation & Waterfront

# MOU between the City and the Water Emergency Transit Authority

## Draft Project Memorandum of Understanding (MOU)

A framework to define the “Project”, and future implementation strategy between WETA & the City

### Implementation Framework

- Planning: WETA Ferry Terminal Feasibility Study, Public Engagement, and Funding Transfer for Planning Phase
- Design Development: Design, Environmental Clearance, Permitting, Funding, and Public Engagement
- Construction: Bidding, Construction, Construction Administration, and Funding
- Ferry Service Plan, Operation, and Long-Term Maintenance & Rehabilitation

Next MOU

Current  
MOU  
Focus

Mechanism: Language to terminate partnership at any phase upon mutual agreement

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



Parks, Recreation & Waterfront

# MOU between the City and the Water Emergency Transit Authority

## Background: *Common Interest between the City and WETA*

### Water Emergency Transit Authority (WETA)

WETA System Expansion Policy (Adopted in 2015) & Strategic Plan (Adopted in 2016):

- Berkeley Marina Ferry Facility: Near-Term Expansion Project
- WETA Projected Annual Ridership 203,000 in the 1<sup>st</sup> year of service, and increase by 1.78% annually
- By 2025, projected daily passengers is 1,700
- 2008 – 2011 WETA Ferry Terminal Study

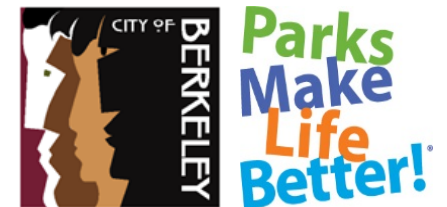
### City of Berkeley (City)

City is currently conducting Berkeley Municipal Pier Structural Assessment, and Small-scale Ferry Terminal Feasibility Study at the pier:

- A summary of the renovation alternatives from the draft structural assessment was presented to this Commission in January, 2018
- Small-scale Ferry Terminal Feasibility Study, *due September, 2018*

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



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# MOU between the City and the Water Emergency Transit Authority

SUMMARY OF DRAFT STRUCTURAL ASSESSMENT REPORT BY GHD, DATED NOVEMBER, 2017.		Berkeley Municipal Pier Renovation Alternatives										
SUMMARY PREPARED BY NL, 12/18/17, Comments by GHD, 1/9/2018		Rehabilitation			Seismic Retrofit				Replacement			
<b>DRAFT</b>		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11
		Concrete Repairs	Concrete Repairs + Lateral Stiffening	Concrete Repairs + Lightweight Deck	Concrete Repairs + Seismic Retrofit (Moment Frame)	Concrete Repairs + Seismic Retrofit (Pile Bent Frame)	Concrete Repair + Seismic Retrofit (Moment Frames & Light Weight Deck)	Concrete Repairs + Seismic Retrofit (Pile Bent Trusses & Lightweight Deck)	Monopile with Precast Deck	Monopile with CIP Deck	Precast Concrete Construction	Monopile with Prefabricated Steel Bents Caps and Aluminum Truss Deck System
Component of Work	Concrete	Repair	Repair	Repair	Repair	Repair	Repair	Repair	New	New	New	New
	Piles	X	Repair + Add	X	Repair + Add	Repair + Add	Repair + Add	Repair + Add	Monopile	Monopile	2 piles per bent cap	Monopile
	Deck	X	X	New 16' Deck	-	-	New 16' Deck	New 16' Deck	16'	16'	16'	16'
	Seismic Strengthening	X	X	X	Moment Frame	Bent Frame	Moment Frame	Bent Truss	✓	✓	✓	✓
Seismic	Current Building Code Seismic Compliance	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Resistance to Seismic Events	Very Poor	Poor	Poor	Fair	Fair	Fair	Fair	Good	Good	Good	Good
Sea Level Rise	Resilience to Mid Century Level (~13.5 ft)	Poor	Poor	Good	Poor	Poor	Good	Good	Good	Good	Good	Good
	Adaptability to End of Century (~15 ft)	Difficult	Difficult	Simple	Difficult	Difficult	Simple	Simple	Simple	Simple	Simple	Simple
Permits	U.S. Army Corps of Engineers	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10	Section 404 and Section 10
	Regional Water Quality Control Board	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401	Section 401
	CA Department of Fish & Wildlife	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation	Consultation
	US Fish and Wildlife Service	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation	Biological Opinion and Section 7 consultation
	Bay Conservation Development Commission	May need administrative permit only	May need administrative permit only	May need administrative permit only	May need administrative permit only	May need administrative permit only	May need administrative permit only	May need administrative permit only	May need administrative permit only	Major Permit action	Major Permit action	Major Permit action
Capital Costs	Probable Construction Cost (Million)	\$18.90	\$23.21	\$10.41	\$33.46	\$28.41	\$21.72	\$18.43	\$13.30	\$14.80	\$14.00	\$13.67
	Estimated Total Project Cost (Million)	\$29.75	\$36.42	\$16.58	\$54.60	\$46.17	\$35.73	\$30.27	\$21.71	\$24.01	\$22.92	\$22.47
Long Term M&O	Longevity	10 years (additional work)	10 years (additional work)	10 to 15 years (additional work)	30 to 45 years	30 to 45 years	35 to 50 years	35 to 50 years	55 to 70 years	55 to 70 years	55 to 70 years	55 to 70 years
	Long Term Maintenance (Inspection Interval/Repairs)	3 to 5 year/within 10 years	3 to 5 year/within 10 years	5 year/within 10 years	5 year/within 10 years	5 year/within 10 years	5 year/within 15 years	5 year/within 15 years	5 to 10 years/after 20 years.	5 to 10 years/after 20 years.	5 to 10 years/after 20 years.	5 to 10 years/after 20 years.

The **draft** assessment indicates:

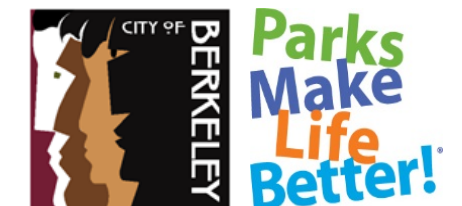
A replacement pier may probably be the better option.



*Is it better for Ferry?*

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



Parks, Recreation & Waterfront



# MOU between the City and the Water Emergency Transit Authority

## 2008 – 2011 WETA Ferry Terminal Study Timeline

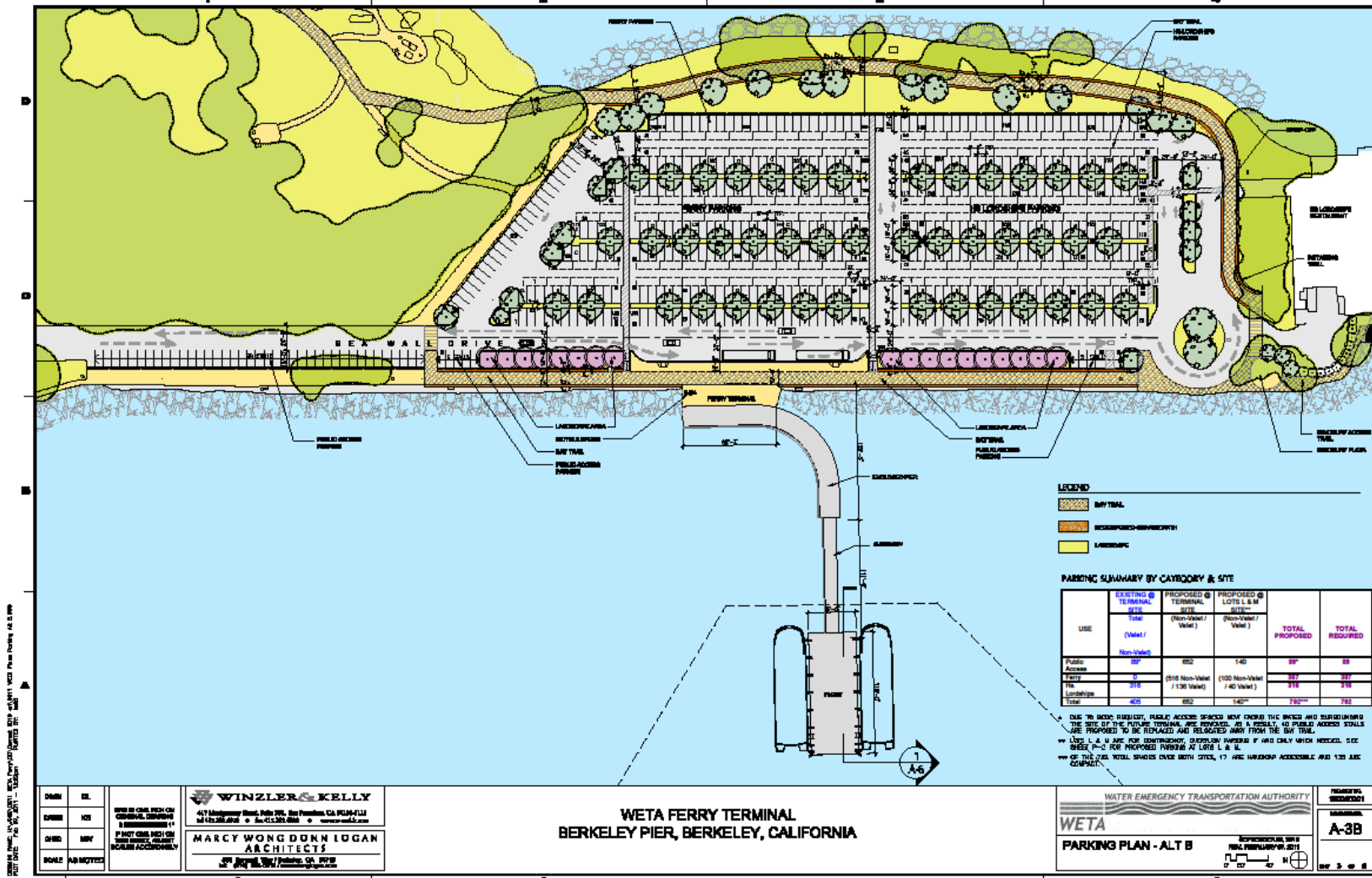
- **October, 2008** - Berkeley/Albany Ferry Terminal Study – Draft EIS/EIR – Four Sites (A thru D)
- **April, 2009** – WETA Board Adopted the DEIR Site B, as their “Locally Preferred Alternative”
- **November 17, 2009** – Adopted by Council (RESO. 64,702), “Supporting in Concept WETA Ferry Terminal Project on Seawall Drive, Subject to Conditions.”
- **February, 2011** – Revised Parking Lot Plan at HS Lordship Lot

Update on Possible Ferry Service at Berkeley Marina – WETA MOU  
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# MOU between the City and the Water Emergency Transit Authority

WETA Concept from 2011



Update on Possible Ferry Service at Berkeley Marina – WETA MOU

Parks and Waterfront Commission Meeting August 8, 2018

# MOU between the City and the Water Emergency Transit Authority

## Current WETA Study Timeline

- **January, 2018** – WETA, and City Staff met to discuss potential of reevaluating the possibility of a ferry terminal at Site B, in the context of the approval of RM3

- **April, 2018** – WETA, and City Staff met to discuss the scope/framework/funding to reevaluate of a ferry terminal:

**We are here**



- Draft Project Memorandum of Understanding (MOU)
- Funding Agreement from WETA (One of the key purposes of MOU)
- Develop WETA Ferry Terminal Feasibility Study Scope of Work

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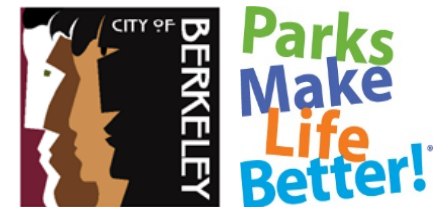
The vision “**Project**”: **A dual-purpose pier (1<sup>st</sup> half: WETA Ferry Terminal, 2<sup>nd</sup> half: Recreation)**

*“The Berkeley Marina Ferry Facility is a new project that may be built in the vicinity of Seawall Drive in Berkeley Marina. The facility will include but are not limited to waterside facilities such as a pier that can accommodate both ferry and recreation uses, a landing float able to accommodate two vessels, a gangway, and dredging, while landside amenities will include but are not limited to control gates, parking lots, a restroom, and bike share/public transit locations.”*

*Vision: Requires a study to understand the feasibility technically, financially, and to obtain public support.*

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# MOU between the City and the Water Emergency Transit Authority

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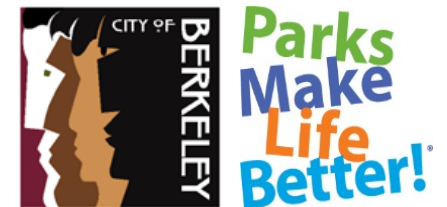
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# MOU between the City and the Water Emergency Transit Authority

## Draft Scope of Work for WETA Ferry Terminal Feasibility Study

### A. Review of Ferry Terminal shore side amenities

- Parking areas, ADA path of travel, Restrooms, Bike share stations, Landscaping, Lighting & Security

### B. Develop conceptual design of dual-purpose pier

- 1st segment – WETA ferry terminal, 2nd segment public recreation
- Concept site plans including shoreside facilities and improvements
- Determine optimal location for pier on Seawall Drive
- Develop budgetary-level cost estimates
- Ferry Terminal wave protection study
- Geotechnical investigation

- Restriction of City Funds
- Parking Impacts
- Recreation Impacts
- Access “Bay Trail” Improvements

**See: November 17, 2009 Council Resolution and the associated Conditions of Approval regarding ferry terminal project on Seawall Drive**

### C. Public Engagements and Commission Presentations

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



Parks, Recreation & Waterfront

# MOU between the City and the Water Emergency Transit Authority

## Benefits of Partnership with WETA

Regional Ferry supports City's Climate Action Plan, which identifies public transit as one of the main sustainable means of transportation. The best way to implement is to have WETA onboard. ← **Environmental**

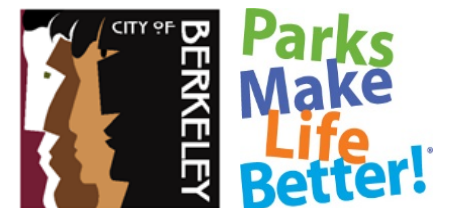
Utilizing specialized resources from planning to environmental permitting and CEQA, and design and construction. Streamline the project process.

Addition venues of grants, and other funds. Stimulate local businesses. ← **Economy**

It is a challenge for the City itself to retrofit the existing recreation pier.

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



Parks, Recreation & Waterfront

## MOU between the City and the Water Emergency Transit Authority

### **End Product: *Recommendation on the rehabilitating, or replacing the existing pier***

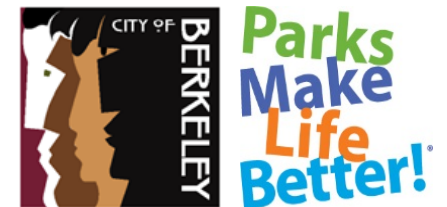
A Comprehensive report (including Structural Assessment, Ferry Terminal Studies) to provide recommendation on what is best the course of action for the Berkeley Pier. *Is a complete replacement a better option if ferry terminal is viable?*

### **Next Steps**

- Finalize MOU with consensus from WETA and City
- October, 2019 – City Council adopts MOU, and Funding Agreement
- December, 2019 – Amend GHD’s Contract to include WETA Ferry Terminal Scope of Work
- May, 2019 – Draft WETA Ferry Terminal Feasibility Study
- Fall, 2019 – Draft Comprehensive Report
- End of 2019 – Recommendation on Existing Pier

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



Parks, Recreation & Waterfront



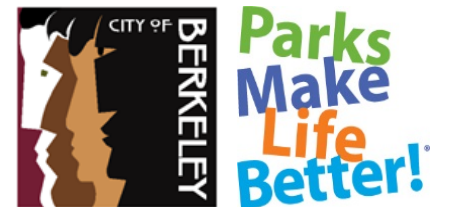


# Questions?

If you would like specific details, or have additional questions about this presentation, please join us at the next Subcommittee on Marina Fiscal Issues meeting.

Update on Possible Ferry Service at Berkeley Marina – WETA MOU

*Parks and Waterfront Commission Meeting August 8, 2018*



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# ATTACHMENT 2

*Memorandum of Understanding with WETA, March 2019*

**PROJECT MEMORANDUM OF UNDERSTANDING  
BERKELEY MARINA FERRY FACILITY PROJECT**

March 12, 2019

**Term, Parties**

1. General	<p>This Memorandum of Understanding ("<b>MOU</b>") establishes the framework for the funding, development and operation of the planned ferry service facility at the Berkeley Marina (the "Project", as further described in paragraph 5 below). The Project is anticipated to be carried out in the following four consecutive phases: (1) Planning; (2) Design; (3) Construction; and (4) Operation.</p> <p>This MOU covers the Planning Phase. City and WETA have secured a portion of the necessary funding needed for the Planning Phase. Although this MOU also provides general assumptions for the Design, Construction, and Operation Phases, the Parties are not obligated to embark on, and have not secured funding for the Design, Construction, or Operation phases. In addition, the Parties anticipate executing either amendments to this MOU, or separate agreements to govern the precise terms of the subsequent phases, each of which shall be subject to the approvals of the City Council and WETA Board.</p>
2. Term	<p>The term ("<b>Term</b>") of this MOU shall commence on <u>July 1st</u>, 2019 ("<b>Effective Date</b>") and shall remain in effect until the first to occur of: (i) <del>December 31st</del> <u>2021</u> or (ii) the date which is one (1) year following completion of the Planning Phase work, or such later date as the Parties may mutually agree.</p>
3. Parties	<p>This MOU is entered into between the San Francisco Bay Area Water Emergency Transportation Authority ("<b>WETA</b>") and the City of Berkeley ("<b>City</b>"). City and WETA may be individually referred to herein as a "<b>Party</b>," and collectively as the "<b>Parties</b>."</p> <p>WETA was established in 2008 as the successor agency to the Water Transit Authority with a mission to consolidate and operate certain existing publicly operated ferry services on the San Francisco Bay, expand new routes, and coordinate ferry services in the event of an emergency.</p> <p>City is a charter city and municipal corporation located in Alameda County. City has jurisdiction over the property in and around the Berkeley Marina where the proposed Project may be located.</p>
4. WETA System Expansion Policy	<p>On June 4, 2015 the WETA Board of Directors adopted a System Expansion Policy attached hereto as <u>Exhibit A</u> and incorporated herein ("<b>System Expansion Policy</b>") to serve as a framework for evaluating the feasibility of new ferry projects. This Policy is applicable to the proposed Project.</p>

ORIGINAL

*Berkeley Marina Ferry Service Project Agreement*

<p>5. Project Objectives</p>	<p>WETA's 2016 WETA Strategic Plan indicates the desire to construct and operate a Berkeley ferry service. It is the intention of both Parties that, upon completion of the Project, WETA will commence public ferry service between San Francisco and the Berkeley Marina. WETA anticipates that it will initially provide direct public ferry service to and from San Francisco during commute times. As ridership grows, WETA may include direct public ferry service to and from the Berkeley Marina to its other facilities. WETA also anticipates that it may provide direct public ferry service for special events. City desires to reconstruct or replace the Berkeley Municipal Pier, which is currently closed due to structural safety concerns, to restore public access to San Francisco Bay. City and WETA agree to work together in good faith to coordinate their efforts in pursuing these objectives.</p> <p>The proposed Berkeley Marina Ferry Facility Project ("<b>Project</b>") contemplated by this MOU would include a new or restored dual-use pier facility that would both serve as a passenger ferry facility for berthing public ferry service vessels and provide public access to San Francisco Bay. WETA may permit non-WETA vessel operators to call on the Berkeley Marina Ferry Facility provided they do not interfere with regularly scheduled WETA service and they meet WETA's private landing requirements, and agree to pay reasonable docking fees, if applicable, to WETA. The Parties anticipate that the dual-use pier will be located at or near the Berkeley Municipal Pier located at the west terminus of University Avenue along Seawall Drive.</p> <p>The Project would also include landside improvements, such as reconfiguration of the existing parking facility, new parking facilities, roadway improvements, bus/ride share drop areas, pedestrian trail improvements, landscaping, and security measures. The Project may also include construction of a breakwater and the dredging of a navigation channel extending west into the Bay.</p>
<p>6. Partnering</p>	<p>Federal, state, regional or local funding may become available during the term of this MOU. WETA and the City commit to collaborate and coordinate to pursue funding for the Project. Such support may include, but will not be limited to: application support letters, provision of ridership data, operating or capital cost information or other technical information required by funders, as well as WETA Board or City Council resolutions in support of one another's funding applications.</p> <p>City and WETA agree to work collaboratively to advocate for and coordinate with AC Transit and other potential local transit operators to provide frequent, reliable, and convenient bus or shuttle service to the Berkeley Marina Ferry Facility.</p>

**Phase 1: Planning Phase (Feasibility Study, Public Engagement, and Funding)**

<p>7. Feasibility Study</p>	<p>The City is currently conducting and has completed a draft feasibility and structural condition assessment to explore options for restoring, rehabilitating or reconstructing the Berkeley Municipal Pier in conjunction with ferry service. That work is nearly complete and has been fully funded by City at a cost to City of approximately \$330,744.</p> <p>In partnership with WETA, City will expand this assessment to consider development of a WETA-scale ferry facility alongside a new or restored pier ("<b>Expanded Feasibility Study</b>").</p> <p>City will serve as the project lead, with assistance from WETA, for the Expanded Feasibility Study that will include technical analyses and a public process. The Expanded Feasibility Study will also develop the conceptual designs for a dual-function facility (ferry and public access) including both waterside and landside improvements. The Expanded Feasibility Study will also include conceptual analysis on wave protection. Landside facilities will include, but are not limited to, parking areas, paths-of-travel, restrooms, bus and shuttle stops, and ride and bike share stations. The Parties will mutually agree to a final scope of work prior to initiating work on the Expanded Feasibility Study.</p>
<p>8. Public Engagement</p>	<p>All interaction with the public as part of the planning phase will be managed by City with assistance and participation from WETA. This coordination includes public notices, scoping meetings, public engagements and comments, City Council and Commission presentations.</p>
<p>9. Contracting</p>	<p>City will contract for professional consultant services for the Expanded Feasibility Study.</p>
<p>10. Funding</p>	<p>WETA will reimburse City for a total amount not to exceed \$250,000 of the cost of the Expanded Feasibility Study unless otherwise agreed to by the Parties. The City will contribute for a total amount not to exceed \$110,000 of the cost of the Expanded Feasibility Study. The Parties will execute a funding agreement in the form attached as Exhibit B. City and WETA will each contribute staff resources to support the Planning Phase.</p>
<p>11. Feasibility Determination</p>	<p>It is anticipated that the Planning Phase will conclude with a determination by the City Council of the City of Berkeley and the WETA Board regarding the feasibility of the proposed Project. If the City Council or WETA Board determines, each in its sole and unfettered discretion, not to proceed with the Project, this MOU shall automatically terminate and the Parties shall have no further obligations under this MOU.</p>

**Phase 2: Design (Design, Environmental Clearance, Permitting, and Funding)**

<p>12. Design Assumptions</p>	<p>If the Parties mutually determine to proceed to the Design Phase, the Parties will prepare an amendment to this MOU to address design, environmental review, permitting, and funding. The MOU amendment shall memorialize the Parties' determination that the proposed Project is feasible, and describe in greater detail the obligations of the Parties in the Design Phase.</p> <p>The Parties anticipate that the City will serve as the lead agency for CEQA review and any associated public outreach or interaction during the Design Phase.</p> <p>The City will also be responsible for project permitting and leading the design process, including contracting for professional design services.</p> <p>WETA will coordinate with the City and provide technical resources and assistance to support the Design Phase.</p> <p>Subject to applicable laws and the Parties' ability to secure adequate funding, WETA will pay all costs associated with Project elements associated with public ferry service, including CEQA (and, if applicable, NEPA) compliance, resource agency permitting, and design costs, City will pay all costs associated with public access aspects of the Project. For aspects of the Project that are required for both types of elements, WETA and City will implement a reasonable cost-sharing method. The City and WETA will each contribute staff resources to support the Design Phase.</p>
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**Phase 3: Construction (Bidding, Construction, Construction Administration, and Funding)**

<p>13. Construction Assumptions</p>	<p>If, after conclusion of the Phase 2 Design Phase, the Parties determine to proceed to the Phase 3 Construction Phase, the Parties will negotiate and enter into appropriate agreements to address bidding, construction, construction management, funding, and related issues, subject to the concurrent approvals of the City Council and WETA Board</p> <p>The Parties anticipate that City will serve as the Project lead, with assistance from WETA to advertise and bid out the construction of the Project in accordance with applicable provisions of the Public Contract Code and any specific funding requirements. The Parties contemplate that the Project will be constructed as soon as possible after necessary permits and regulatory approvals have been approved and 100% of the construction funding has been secured.</p> <p>The City will contract for professional construction management services for inspection, construction support and management for the Project.</p> <p>Subject to applicable laws and the Parties' ability to secure adequate funding, WETA will pay all costs associated with Project elements associated with public ferry service, including any needed dredging work, and City will pay all costs associated with public access elements of the Project. For aspects of the Project that are required for both types of elements, WETA and City will implement a reasonable cost-sharing</p>
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*Berkeley Marina Ferry Service Project Agreement*

	method. The City and WETA will each contribute staff resources to support the Construction Phase.
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**Phase 4: Operation**


<p>14. Operation Assumptions</p>	<p>Prior to the commencement of construction of the Project, the Parties shall negotiate and execute appropriate agreements to address the use, operation, maintenance and repair of the new Berkeley Marina Ferry Facility, subject to concurrent approvals of the City Council and WETA Board. Issues to be considered include responsibilities for capital rehabilitation, funding, landing and property rights, use by third parties, and related issues. It is anticipated that WETA will own all improvements to the waterside of the access control gate built exclusively to support ferry operations, including, but limited to the gangway, float, guide piles and the access control gate itself, and that City will retain ownership of the waterside improvements related to public access, and all other landside improvements and property upland of the access control gate, including all State public trust lands.</p> <p>City acknowledges that WETA's initiation of public ferry service between San Francisco and Berkeley is contingent upon City providing parking facilities within a reasonable distance from the access control gate. This reasonable distance and the number of required spaces will be determined and mutually agreed upon after feasibility and other necessary studies have been conducted. The parking facilities will be owned, maintained, and operated by City or its designated representative. City will evaluate the possible implementation of public/private transit connections and potential parking fees, the proceeds of which, if any, would be committed to support maintenance and operation of the landside facilities, including the parking facilities.</p>
<p>15. Public Ferry Service Assumptions</p>	<p>Vessels: The public ferry service contemplated by this MOU will likely require a dedicated vessel and a shared spare vessel to ensure reliable operations. The estimated cost of a dedicated vessel and shared spare is approximately \$22 million (FY 2018 dollars).</p> <p>Initial Ferry Service: A minimum level of service is desired to operate an effective commuter service, which the Parties will endeavor to provide upon the initiation of the San Francisco/Berkeley ferry service consistent with the WETA System Expansion Policy. It is anticipated that the initial service would include a minimum of three departures during the AM peak (6-9 AM) from Berkeley to San Francisco and 3 departures during the PM peak (4-8 PM) from San Francisco to Berkeley. Midday and weekend service is not initially anticipated but may be added as demand warrants and funding is available.</p> <p>Expansion of Service: The initial ferry service level defined for Berkeley Marina service may be expanded as necessary. All service adjustments, including possible 30-minute or faster headways in the peak hour and initiation of midday or weekend services, are anticipated to be consistent with the WETA System Performance Targets Policy adopted by the WETA</p>

Berkeley Marina Ferry Service Project Agreement

	<p>Board on June 4, 2015 and other WETA service planning policies in effect at the time of adjustment, as applicable.</p> <p>Emergency Response and Recovery: In the event of a natural disaster or disruptive regional event ("<b>Casualty Event</b>"), WETA ferries may be called upon by the California Office of Emergency Services ("<b>Cal OES</b>") to provide service from the Berkeley Ferry Terminal for both emergency response and recovery after the Casualty Event.</p> <p>In the immediate aftermath of an event, Cal OES will determine how to allocate regional transportation resources including WETA ferries. The Berkeley Marina Ferry Facility will be an asset in this emergency network and it will be a state and regional decision as to how this asset will be used.</p> <p>In the weeks and months following an event as the Bay Area recovers, WETA ferry service will play a critical role as a component of the regional transit network that can be quickly operationalized at facilities like Berkeley. Decisions regarding funding and asset deployment during the recovery phase will also likely take place at the state and regional level.</p>
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WETA and the City of Berkeley have entered into this Memorandum of Understanding as of the last date set forth below.

**San Francisco Bay Area  
Water Emergency Transportation  
Authority**

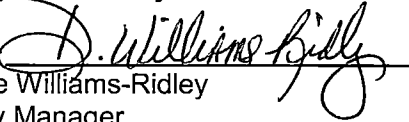
By:   
Nina Rannells  
Executive Director

Date: 6/24/19

**Reviewed:**

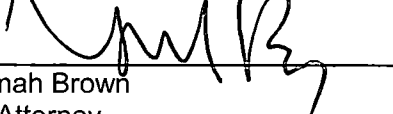
By:   
Madeline Chun  
Legal Counsel to Authority

**City of Berkeley**

By:   
Dee Williams-Ridley  
City Manager

Date: 7/26/19

**Reviewed:**

By:   
Farimah Brown  
City Attorney

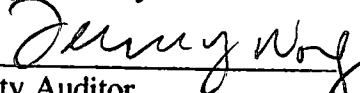
Attachments:

Exhibit A: WETA System Expansion Policy

Exhibit B: Funding Agreement

Exhibit C: Amendment to Consulting Services Agreement

**Registered by:**

  
City Auditor

March 12, 2019

ATTEST FOR THE CITY OF BERKELEY

  
DEPUTY CITY CLERK



**EXHIBIT A**

WETA System Expansion Policy

<https://weta.sanfranciscobayferry.com/strategic-plan>

March 12, 2019

15027302.2

**EXHIBIT B**

**Funding Agreement**

March 12, 2019

15027302.2

May 9, 2019

City of Berkeley  
Attn: City Manager  
2180 Milvia St.  
Berkeley, CA 94704

Re: RM2 Funding Agreement - Berkeley Marina Ferry Facility Project

Dear Ms. Dee Williams-Ridley,

This letter agreement memorializes the understandings between the San Francisco Bay Area Water Emergency Transportation Authority (WETA) and the City of Berkeley (CITY), to fund an expanded feasibility study of the Berkeley Marina, utilizing RM2 operating funds available to WETA.

The City of Berkeley's contractor, GHD, pursuant to an Agreement for Consulting Services between City and GHD dated May 8, 2017 ("GHD Agreement"), has already conducted a feasibility and structural condition assessment to explore options for restoring, rehabilitating or reconstructing the Berkeley Municipal Pier in conjunction with the potential for ferry service.

It is agreed that CITY shall amend the GHD Agreement to expand the scope of the GHD feasibility study to assess the potential for a WETA-scale ferry terminal, and to develop conceptual designs for a dual-function facility (public ferry service and waterfront public access) including both waterside and landside improvements.

CITY will serve as the project lead, with assistance from WETA, for the expanded feasibility study, which will include technical analyses and a public engagement process. The expanded feasibility study will include water technical analysis on wave protection. Landside facilities will include, but are not limited to, parking areas, paths-of-travel, restrooms, bus and shuttle stops, and ride and bike share stations. The parties will mutually agree to a final scope of work prior to initiating work on the expanded feasibility study. CITY will engage professional consultant services, approved by WETA, to conduct the expanded study. CITY and WETA will each contribute staff resources to support the expanded feasibility study, and will confer on a regular basis on the progress of the work. CITY will provide drafts of the study for WETA's review prior to finalizing the work.

WETA will reimburse CITY for CITY's actual costs incurred for authorized and satisfactorily completed work and services rendered by CITY's outside professional consultants, including GHD, for the expanded feasibility study, not to exceed Two Hundred and Fifty Thousand (\$250,000.00). Payment will be made within thirty (30) days of receipt of an invoice, approved by WETA (which approval shall not be unreasonably withheld, conditioned or delayed), describing work performed, itemizing all costs for which reimbursement is requested, and

stating the payment requested and the cumulative amount billed to date. CITY shall also attach to each invoice such receipts, proof of payment, and other supporting documentation as may be reasonably required by WETA.

All invoices must be made in writing and delivered or mailed to WETA as follows:

Attention: Accounting Department  
San Francisco Bay Area Water Emergency Transportation Authority  
Pier 9, Suite 111, The Embarcadero  
San Francisco, CA 94111

Performance will begin on or after August 1st, 2019 and be completed by December 31st, 2020, unless this Agreement is terminated by either WETA or CITY as provided below. Invoices must be submitted before March 31st, 2021 to be paid.

Either CITY or WETA may terminate this Agreement, in each party's sole discretion, for any force majeure event, if such events (i) irrecoverably disrupt or render impossible CITY's performance hereunder; or (ii) disrupt WETA's ability to make payments hereunder. CITY will be entitled to payment for costs of work performed by CITY's outside professional consultants, including GHD, prior to the date of such termination, up to the maximum amount payable under this Agreement.

If CITY fails to perform as specified in this Agreement, WETA may terminate this Agreement for cause by advance ten (10)-day written notice and CITY will only be entitled to costs of work performed by CITY's outside professional consultants, including GHD, in accordance with this Agreement, not to exceed the maximum amount payable under the Agreement for such work.

CITY agrees to retain all documents, working papers, records, accounts and other materials relating to its performance under this Agreement for a minimum of four (4) years following the fiscal year of the last expenditure under this Agreement and WETA and its authorized representatives may inspect and audit such records during that period of time.

In performing services under this Agreement, CITY will be acting as an independent contractor and not as an agent or employee of WETA. CITY will have no authority to contract in the name of WETA, and CITY will be responsible for its own acts and those of its agents, contractors and employees.

CITY agrees that the amendment to the GHD Agreement ("GHD Amendment") shall be substantially in the form attached hereto and shall, among other things, (i) obligate GHD to defend, indemnify and hold harmless WETA and its officers, agents, officials, representatives and employees from and against any and all claims, loss, cost, damage, injury (including, without limitation, injury to or death of an employee of GHD or its subconsultants), expense and liability of every kind, nature and description that arise out of, pertain to or relate to the negligence, recklessness, or willful misconduct of GHD and its subconsultants, anyone directly or indirectly employed by the them, or anyone that they control; (ii) name WETA and its directors, officers, representatives, employees, consultants, subcontractors and agents as additional insureds under GHD's commercial general liability, business automobile liability and professional liability insurance policies; and (iii) name WETA as a third party beneficiary of the

GHD's indemnity and insurance obligations under the GHD Agreement, as amended by the GHD Amendment, and provide that such provisions may not be amended without WETA's consent.

Any amendment of the Agreement must be in writing, specifically identified as an amendment to this agreement, and signed by both CITY's City Manager and WETA's Executive Director, or their designated representatives.

Please sign and date both counterparts of this letter in the space provided below, return one counterpart to WETA, and retain the other counterpart for your files.

Sincerely,

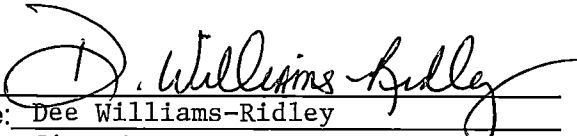


Nina Rannells  
Executive Director

\* \* \* \* \*

Accepted and Agreed this 26<sup>th</sup> day of July, 2019.

CITY OF BERKELEY

By:   
Name: Dee Williams-Ridley  
Title: City Manager

RESOLUTION NO. 68,782-N.S.

A MEMORANDUM OF UNDERSTANDING (MOU) WITH THE WATER EMERGENCY TRANSPORTATION AUTHORITY (WETA) TO ACCEPT UP TO \$250,000 IN WETA FUNDING FOR THE PLANNING PHASE FOR THE VIABILITY OF A NEW WETA FERRY SERVICE AND PUBLIC RECREATION PIER AT THE BERKELEY MARINA

WHEREAS, WETA's overall mission is to plan for and operate passenger-only ferry services on the San Francisco Bay for commuter and disaster response purposes. In February of 2016, the Water Emergency Transportation Authority (WETA) updated their Strategic Plan, which identified a network of sixteen ideal locations for expanded ferry service throughout the Bay Area region, including the Berkeley Marina, to help provide alternative transportation for passengers and emergency response; and

WHEREAS, in July of 2015, the Berkeley Municipal Pier was closed to the public indefinitely due to structural safety issues. On June 21, 2017, the City contracted with GHD, Inc. to perform a structural engineering assessment to identify feasible options and costs for fixing the Pier (Contract No. 10632, Resolution No. 67,856); and

WHEREAS, on June 5, 2018, Bay Area voters approved Regional Measure Three (RM3) toll bridge increase to finance \$4.5 billion in highway and transit projects, and would provide \$60 million each year to operate new bus and ferry services in congested bridge corridors. WETA is expected to receive up to \$300 million for one-time capital construction projects and up to \$35 million per year to operate an expanded regionwide ferry system; and

WHEREAS, WETA staff contacted City staff to initiate a dialogue for a potential partnership to study the feasibility of ferry service at the Berkeley Marina. During initial meetings, WETA and City staff realized that it would be cost-effective to investigate a single pier that would provide two uses – ferry service and public recreation; and

WHEREAS, the Planning Phase for the potential WETA ferry service and public recreation pier would include engineering feasibility studies on the proposed improvements and impacts: the waterside improvements would look at fixing the existing or building a new pier, wave dynamics and breakwaters, and dredging, etc.; and the landside improvements would include renovations to existing parking lots, public access (e.g., paths), and public amenities (e.g., restrooms). The Planning Phase will also include a robust public engagement process that will review the findings of the studies and help the City decide if there is a preferred project alternative that is viable enough to move forward to the Design Phase; and

WHEREAS, if the project is found to be viable in terms of costs, public benefits, and minimized impacts at the Berkeley Waterfront, the project would move to subsequent phases (design, construction, and operations) in the form of additional MOU amendments, each of which would be subject to approvals by the City Council and WETA Board; and

WHEREAS, WETA will cover the costs of the technical feasibility study in an amount up to \$250,000. The City will use \$75,000 from the Measure T1 allocation for the Berkeley Pier Project to cover those costs associated with the non-ferry-related elements of the project.

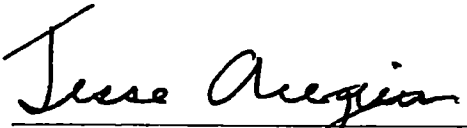
NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley That the Council authorizes the City Manager to execute a Memorandum of Understanding (MOU) (Attachment 1) with the Water Emergency Transportation Authority (WETA) to accept up to \$250,000 in WETA funding for the Planning Phase (technical feasibility study and public engagement process) for the viability of a new WETA ferry service and public recreation pier at the Berkeley Marina. A record signature copy of the MOU and any amendments to be on file in the Office of the City Clerk.

The foregoing Resolution was adopted by the Berkeley City Council on March 12, 2019 by the following vote:

Ayes: Bartlett, Davila, Droste, Hahn, Harrison, Kesarwani, Robinson, Wengraf, and Arreguin.

Noes: None.

Absent: None.

  
\_\_\_\_\_  
Jesse Arreguin, Mayor

Attest:   
\_\_\_\_\_  
Mark Numainville, City Clerk

**SAN FRANCISCO BAY AREA WATER EMERGENCY TRANSPORTATION AUTHORITY**

**RESOLUTION NO. 2019-09**

**APPROVE MEMORANDUM OF UNDERSTANDING WITH CITY OF BERKELEY FOR A FERRY TERMINAL PLANNING AND FEASIBILITY STUDY**

**WHEREAS**, WETA is working in partnership with the City of Berkeley to develop a ferry terminal and ferry service in Berkeley, CA consistent with the 2003 Implementation and Operations Plan adopted by the Water Transit Authority (predecessor to WETA), the 20-year vision of potential expansion projects included in the 2016 WETA Strategic Plan, and the multi-agency Core Capacity Transit Study completed by the Metropolitan Transportation Commission in 2017; and

**WHEREAS**, WETA undertook initial environmental and design work for a potential terminal and ferry service in Berkeley, but halted this effort in 2013 due to feasibility concerns including, but limited to, dredging, potential mitigation measures, and lack of a clear funding source; and

**WHEREAS**, WETA and the City of Berkeley have identified several changed conditions since 2013 that could represent new opportunities to create a feasible project to build a ferry terminal and operate ferry service in Berkeley, CA; and

**WHEREAS**, the City of Berkeley has initiated a \$330,000 study to identify feasible options for fixing or replacing the Municipal Pier located in the Berkeley Marina as a dual-use facility that would restore public access and serve as a new landing location for small-scale ferry operations; and

**WHEREAS**, WETA and the City of Berkeley desire to invest up to \$360,000 to expand the study to consider the feasibility of constructing a WETA-scale facility located at or near the Municipal Pier; and

**WHEREAS**, WETA and the City of Berkeley have drafted a Memorandum of Understanding (MOU) setting forth specific roles and responsibilities for each party during the planning phase of the project, including contributions of up to \$250,000 by WETA and \$110,000 by the City to expand the feasibility study; and

**WHEREAS**, the MOU covers only the planning phase of the project, other project phases, including design, construction, and operation, would not be pursued without future agreement between the parties once the feasibility study is completed; and

**WHEREAS**, on March 12, 2019, the Berkeley City Council approved a consent item authorizing the City Manager to execute the MOU with WETA; and

**WHEREAS**, staff recommends that the Board approve moving forward with the project feasibility study consistent with WETA and MTC plans; now, therefore, be it



**RESOLVED**, that the Board approves the MOU with the City of Berkeley for ferry terminal planning and feasibility study activities and authorizes the Executive Director to execute the MOU and enter into related funding agreements.

### **CERTIFICATION**

The undersigned, Board Secretary, does hereby certify that the foregoing is a full, true and correct copy of a resolution duly and regularly adopted at a meeting of the San Francisco Bay Area Water Emergency Transportation Authority held on May 9, 2019.

YEA: J Breckenridge, J DelBono, A Intintoli, J Wunderman

NAY: N Josefowitz

ABSTAIN: None

ABSENT: None



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/s/ Board Secretary

2019-09

\*\*\*END\*\*\*