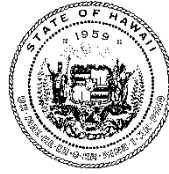


DAVID Y. IGE
GOVERNOR



CURT T. OTAGURO
Comptroller
AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

WRITTEN TESTIMONY
OF
CURT T. OTAGURO
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
TO THE
COMMITTEE ON LEGISLATIVE MANAGEMENT

MARCH 22, 2021, 2:00 P.M.
CONFERENCE ROOM 312 VIA VIDEOCONFERENCE, State Capitol

H.C.R. 43/ H.R. 34

REQUESTING THE DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES TO DEFER ITS PROPOSED RENOVATIONS OF THE HAWAII STATE CAPITOL REFLECTING POOL.

Chair Kobayashi, Vice Chair Mizuno, and Members of the Committee, thank you for the opportunity to testify on H.C.R. 43/H.R. 34 which requests the Department of Accounting and General Services (DAGS) to defer its proposed renovations of the Hawaii State Capitol reflecting pool.

The DAGS **opposes** this resolution and offers the following comments as to why State should proceed with repairs to the State Capitol pools and not defer.

1. This situation requires immediate action.
2. DAGS understands the current budgetary constraints that the State is facing over the next five (5) years but the health and safety of the Hawaii State Capitol tenants and employees is our top priority.
3. The tenants and employees who work in the offices beneath the reflecting pools have been plagued with leaks and noxious fumes that is a result of deferred maintenance and renovations.

4. Permanent solutions are required to address both structural and waterproofing concerns, regardless of whether or not the pools are restored.
5. DAGS provides interim measures for consideration as shown in the attached brief, with recommendations for implementing Option 3 at \$6 million. Option 3 would provide a 5-year warranty and is the first step necessary for the more permanent repair. Options 1 and 2, while less costly, are also less effective, lack warranties, and are temporary measures that may not fully address leaks. With an anticipated life of less than two years, Options 1 and 2 also do not extend the waterproofing protection very long before additional repair will be required.
6. DAGS acknowledges the request for a study to identify potential alternative finishing schema. To revisit this consideration, we will engage with the Department of Land and Natural Resources and the State Historic Preservation Division.

Thank you for the opportunity to testify.

The background of the slide is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance.

STATE CAPITOL REHABILITATION OF CHAMBER LEVEL WATERPROOFING

ALTERNATIVES TO FULL UPGRADE

MARCH 2021

PURPOSE AND KEY CONSIDERATIONS

- THE PURPOSE OF THIS BRIEFING IS TO PROVIDE ALTERNATIVES TO FULL RENOVATION AND UPGRADE AS PROPOSED BY THE STATE CAPITOL REHABILITATION OF CHAMBER LEVEL WATERPROOFING, WHICH IS ESTIMATED TO COST \$30 MILLION TO FULLY ADDRESS BOTH STRUCTURAL AND WATERPROOFING CONCERNS PRIMARILY FOR THE STATE CAPITOL POOLS.
- KEY CONSIDERATIONS FOR RECOMMENDING ALTERNATIVE OPTIONS INCLUDE:
 - COST
 - SOURCE OF FUNDING
 - EFFECTIVENESS OF ACTION TO MITIGATE LEAKS
 - SUSTAINABILITY/WARRANTY
- THE FOLLOWING OPTIONS ARE IN ORDER OF COST. NOTE THAT OPTIONS 2 AND 3 ONLY ADDRESS THE DIAMOND HEAD POOL. RECOMMENDATION IS TO KEEP EWA POOL AS-IS UNTIL FULL RENOVATION IS FUNDED AND SCHEDULED TO AVOID INTRODUCING MORE UNKNOWNNS.

OPTION 1: MANAGE IN PLACE

- PROS

- LEAST PREPARATION TO INSTALL COST EFFECTIVE, TEMPORARY CEILING LEAK DIVERTERS (ON LOCATION WATER CATCHMENT AND COLLECTION SYSTEMS)
- **ROUGH COST IN THE \$10K TO \$20K RANGE**

- CONS

- OCCUPANTS MUST LIVE WITH THE CEILING LEAK DIVERTERS IN THEIR OFFICES FOR AN EXTENDED PERIOD OF TIME
- DAILY MAINTENANCE TO EMPTY WATER CONTAINERS IF NOT PIPED ELSEWHERE
- POTENTIAL ODOR COMPLAINTS IF WATER SITS
- **FUNDS SOURCE: OPERATING FUNDS**

OPTION 2: TEMPORARY WATERPROOFING

• PROS

- COATING APPLIED OVER HORIZONTAL AND VERTICAL POOL SURFACES FOR MAXIMUM COVERAGE WITHOUT EXTENSIVE DEMOLITION
- BETTER THAN HIT-OR-MISS CRACK REPAIRS
- NO REMOVAL OF ORIGINAL TOPPING SLAB AND EXISTING WATERPROOFING
- MINIMAL IMPACT TO OCCUPIED SPACES BELOW
- **COST IS IN THE \$600K TO \$1M RANGE PER POOL (\$1.2 M TO \$2M TOTAL)**
- NOTE: ONLY DIAMOND HEAD POOL REQUIRED AT THIS TIME.

• CONS

- COATS ONLY EXPOSED SURFACES; DOES NOT ADDRESS HIDDEN CRACKS BEHIND CONCRETE SHELLS AT COLUMNS, FOUNTAIN WALLS, VOLCANO AND OTHER ADJACENT SURFACES
- NOT POSSIBLE TO REPAIR CRACKS AND SPALLS UNDER TOPPING SLAB
- LEAKS MAY STILL OCCUR DUE TO LATERAL WATER MIGRATION BETWEEN TOPPING SLAB AND UNDERLYING STRUCTURAL SLAB
- DOES NOT ADDRESS POTENTIAL LEAKS FROM OTHER ADJACENT AREAS NEXT TO POOLS
- REQUIRES MAINTENANCE FOR EXTENDED PONDING CONDITIONS (CLEANING, INSECTS) AND POTENTIAL PATCHING OVER TIME
- NOT VISUALLY APPEALING; LOOK REMAINS UNFINISHED UNTIL FULL RENOVATION DONE.
- NO WARRANTY DUE TO SURFACE CONDITIONS
- ESTIMATED MAXIMUM 2 YEAR LIFE; FUTURE ACTION REQUIRED SOONER
- WILL BE DEMOLISHED WHEN THE PERMANENT WATERPROOFING IMPROVEMENTS ARE INSTALLED
- **FUNDS SOURCE: OPERATING**

OPTION 3: INTERIM PREP- DEMO & CONCRETE REPAIR

• PROS

- MORE PERMANENT WATERPROOFING INSTALLATION
- WORK IS PART OF ORIGINAL PHASE 1 DIAMOND HEAD POOL SCOPE, SO FUTURE PHASE CIP FUNDING REQUEST MAY BE REDUCED ACCORDINGLY
- REMOVES 50-YEAR OLD ORIGINAL POOL TOPPING SLAB AND WATERPROOFING TO EXPOSE UNDERLYING STRUCTURAL SLAB AND ALLOW FOR INSPECTION AND CRACK REPAIRS
- NEW WATERPROOFING LAYER INSTALLED ON EXPOSED/ REPAIRED HORIZONTAL AND VERTICAL SURFACES FOR EFFECTIVE COVERAGE AND SEAL
- WITHSTANDS PONDING CONDITIONS AND IS UV RESISTANT
- CARRIES 5 YEAR MATERIAL WARRANTY ON WATERPROOFING
- PROVIDES OPPORTUNITY TO MORE FULLY EVALUATE EXTENT OF NEEDED CONCRETE REPAIRS AND EFFECTIVENESS OF WATERPROOFING REPAIRS TO RESOLVE LEAKS
- **FUNDS SOURCE: GO BONDS**

• CONS

- MAINTENANCE REQUIRED FOR EXTENDED PONDING SITUATIONS (CLEANING, INSECTS), BUT SHOULD NOT HAVE TO DO REPAIRS
- NOT VISUALLY APPEALING; LOOK REMAINS UNFINISHED UNTIL FULL RENOVATION DONE
- DOES NOT ADDRESS POTENTIAL LEAKS FROM OTHER ADJACENT AREAS NEXT TO THE POOLS
- **HIGHER COST AT \$6M PER POOL (\$12M TOTAL)**
- NOTE: ONLY DIAMOND HEAD POOL REQUIRED AT THIS TIME.

SUMMARY OF OPTIONS

COST	DESCRIPTION
\$10K - \$20K	OPTION 1: MANAGE IN PLACE
\$600K - \$1M \$1.2M - \$2M	OPTION 2: TEMPORARY WATERPROOFING; DH POOL BOTH POOLS
\$6M \$12M - RECOMMENDED OPTION -	OPTION 3: INTERIM PREP; DH POOL ONLY BOTH POOLS
\$17.5M/\$12.5M	FULL DEMOLITION/UPGRADE, BOTH POOLS OVER TWO YEARS

RECOMMENDED

OPTION 3: INTERIM PREP - DEMO & CONCRETE REPAIR (PHASE 1A)

- SCOPE OF WORK

- DEMO TOPPING SLAB, WATERPROOFING, COPING OVERHANG, COLUMN CLADDING, LOWER VOLCANO TILES, LIGHT WELLS, AND HIBISCUS FOUNTAIN WALL CLADDING
- REPAIR CRACKS AND SPALLS ON UNDERLYING STRUCTURAL SLAB AND EXPOSED SURFACES
- INSTALL NEW WATERPROOFING DIRECTLY ON REPAIRED SURFACES
- NO RESTORATION WORK INCLUDED

➤ **ADD PHASE 2A FOR EWA POOL IF TWO POOLS FUNDED**

- ESTIMATED SCHEDULE

- JULY 2021 – FUNDING APPROPRIATED
- OCTOBER 2021 - DESIGN COMPLETE
- DECEMBER 2021 – BID OPENING
- MAY 2022 TO DEC 2022 – CONSTRUCTION (DURING OFF-SESSION)

FUTURE PHASE 1 B AND PHASE 2

SCOPE OF WORK

- PHASE 1 B, RESTORE DIAMOND HEAD POOL
 - INSTALL DRAINAGE MAT, STRUCTURAL FOAM, CONCRETE TOPPING SLAB, ADDITIONAL WATERPROOFING AND TILE
 - REPLACE/RESTORE CONCRETE CLADDING AT COLUMNS AND HIBISCUS FOUNTAIN WALLS, VOLCANO TILES, POOL EDGE COPING
 - REPLACE WELL PUMPS AND RELATED PIPING
 - INSTALL POOL FILTRATION, TREATMENT, AND RECIRCULATION SYSTEM
 - RESTORE LIGHTING AND OTHER ELECTRICAL WORK
- PHASE 2, EWA POOL **[PHASE 2B IF TWO POOLS PREVIOUSLY FUNDED]**
 - DEMO TOPPING SLAB, WATERPROOFING, ETC., REPAIR CRACKS, AND INSTALL NEW WATERPROOFING, SIMILAR TO PHASE 1 A
 - INSTALL DRAINAGE MAT, STRUCTURAL FOAM, CONCRETE TOPPING SLAB, ADDITIONAL WATERPROOFING AND TILE
 - REPLACE/RESTORE CONCRETE CLADDING AT COLUMNS AND HIBISCUS FOUNTAIN WALLS, VOLCANO TILES, POOL EDGE COPING
 - INSTALL POOL FILTRATION, TREATMENT, AND RECIRCULATION SYSTEM
 - RESTORE LIGHTING AND OTHER ELECTRICAL WORK

ESTIMATED SCHEDULE

- FY22 – FUNDING REQUEST TO LEGISLATURE
- JULY 2022 – FUNDING APPROPRIATED
- OCTOBER 2022 - DESIGN COMPLETE
- DECEMBER 2022 – BID OPENING
- PHASE 1B: MAY 2023 TO DEC 2023
- PHASE 2: MAY 2024 TO DEC 2024 – CONSTRUCTION
(DURING TWO OFF-SESSIONS)

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the frame. The droplets have highlights and shadows, giving them a three-dimensional appearance. The word "MAHALO" is centered in the middle of the image.

MAHALO