# CONDITION REPORTING AND PRE-CONSTRUCTION RECOMMENDATIONS JOEL M. PRITCHARD BUILDING ARTWORKS – WASHINGTON STATE CAPITOL COMPLEX

Prepared for:	Erica Ceder, Architect   Principal <b>DLR Group</b> 51 University Street, Ste. 600 Seattle, WA 98101 eceder@dlrgroup.com Office: 503-274-2675 Cell: 503-220-1338
Prepared by:	Christina Varvi, Co-Chief Conservator cvarvi@rlaconservation.com Sonia T. Jerez Fraj, Assistant Conservator sjerez@rlaconservation.com
Date of Assessment:	January 24, 2023
Date of Rev. Report:	June 13, 2023



# TABLE OF CONTENTS

BASEMENT LEVEL:	4
THE CALLAHAN MURAL	4
ORIGINAL DISPLAY CASES	9
First Floor:	13
Fitzgerald Mosaic	13
Tobey Painting	19
DuPen Fountain	21



RLA Conservation, LLC is pleased to submit the following report to Erica Ceder at DLR Group for the condition reporting of multiple original artworks and integrated artwork design features at the interior and exterior of the Joel M. Pritchard Building, located at the Washington State Capitol campus in Olympia, WA. The Joel M. Pritchard Building, completed in 1958 and designed by Paul Thiry, was initially built to house the Washington State Library. A percentage of the building's construction cost was reserved for the addition of public art. These works remain intact in their original locations and may be adversely impacted by the major structural work and demolition slated to occur throughout the building.

The objective of this report is to provide conservation-related recommendations and specifications to prepare for future de-installation, re-installation, and potential conservation treatment, as well as specifications for the environmental conditions needed for storage and long-term exhibition. On Tuesday, January 24, 2023, RLA President and Chief Conservator Christina Varvi and Associate Conservator Sonia Jerez Fraj conducted a site visit with DLR Group Principal and Architect Erica Ceder, as well as two (2) Washington State staff members. The team also performed walkthroughs of each artwork with staff from ARTECH Fine Art Services (art handlers) and Seattle Solstice (fountain works), both based in Seattle, WA.

Record photographs of each assessed artwork are included in this document. Additional digital photographs were taken during the individual assessments. To access all assessment images, please copy and paste the following Dropbox link into your browser:

https://www.dropbox.com/sh/au3q541qruwj6oa/AACoBHrjoLgm4gwi2Nj\_TgiSa?dl=0



## **BASEMENT LEVEL:**

Artist:	Kenneth Callahan
Title:	The Callahan Mural
Date:	1958
Materials:	Oil on canvas glued directly to plaster substrate
<b>Overall Dimensions:</b>	3'-8" H x 170' L

## **DESCRIPTION & SITING:**

The Kenneth Callahan Mural is an oil painting on canvas that encircles the upper wall of the room where it is located, like a frieze. The subject matter is related to Washington state history and is primarily done in earth tones. It is unknown if there is a protective varnish over the canvas surfaces. The canvas appears to have been glued directly to the plaster wall in sections with an unknown type of adhesive. Seams between canvas sections were created so that they did not cut through images to help blend them throughout the composition. Additional material was added at the four corners of the room to help make the work look as seamless as possible. The mural is in contact with the ceiling along the top edges and trimmed along this connection with approximately 1" wide wood strips that appear to be nailed or screwed to the wall. Along the bottom edge of the canvases, there is an additional approximately 1" wide wood strip that is nailed into the wall to 'frame' the artwork.

Below the mural frieze, the wall makes a return that is 9 inches deep around the perimeter of the entire room. During the inspection we could see part of the wall construction via one of the ceiling tiles and confirmed that neither drywall or another type of panel system was used in the construction of the room. The wall construction appears to be metal studs with extruded wire lath (likely galvanized steel) and plaster. The corner/edge of the soffit also has a metal angle to help with the crispness of the edge. Aside from the doorways and the southeast corner where there are administrative desks, within this recess/alcove are bespoke bookcases that contain an array of books, some of which are decades old. The room does not have any windows or doorways that open to the exterior. Per the client, the south wall is largely below grade. There is some climate control in the room in terms of temperature, but less so for humidity. There are halogen or fluorescent lights that border the room and shine directly onto the surfaces of the mural.

The room is currently a reading/study room that is used by docents and other staff on campus. There are various groupings of tables and chairs throughout the floor. Approximately 1/3 of the room is being used for storage of additional chairs and desks making some surfaces of the mural inaccessible for the assessment. There is a full-size refrigerator at the center of the room and food and beverages can be consumed in this space. Sitting on the back of the room there was and an overstock of chairs and tables that difficulted the access to the west wall.



## **CONDITION:**

Overall, the mural appears to be in fair condition. In multiple areas, the adhesive that was used to secure the canvas to the plaster has migrated through the canvas to the surface of the artwork and sits on the surface. In these areas, the adhesive has noticeably darkened, yellowed, and looks shinier than adjacent surfaces. Presumably this has also occurred with the adhesive on the verso of the canvas as well. The canvas is bubbling/lifting in some areas, most likely where the adhesive has failed on the back, resulting in an air bubble/pocket. The adhesive that can be seen on the surface exhibits a reticulated pattern and gives off green luminescence under UV light observation. The south and east sides of the canvas exhibit more areas of glue that has transferred through to the surface and what appears to be water damage. Both forms of surface damage have resulted in lifting/flaking paint. The north side exhibits additional detached canvas and dry glue, as well as air pockets between the canvas and the plaster. Overall, the west side of the mural appears to be in the best condition.

All of the vertical seams are the areas with the most past retouches/interventions as well as paint losses, detaching canvas, and air bubbles. At some of the seams, additional canvas has been added and secured with staples. These areas are believed to be past interventions.

## PRE AND DURING CONSTRUCTION RECOMMENDATIONS:

Per the client, it is expected that the building will be under construction for approximately 24 months. There will be vibration tests performed at the interior and the exterior of the building. The room where the mural is located will undergo major interventions to the floor and the ceiling, including drilling down to pour additional foundation/footings. The south-east side of the building will be demolished, also creating major vibrations to the rest of the building and resulting in loss of any climate control.

Because of the high humidity and large temperature fluctuations in the region as well as high level of vibration that will occur, we highly recommend having the canvas mural removed from the wall to be stored off-site in a climate-controlled area during the period that the construction work is going to be active. Even though the canvas is adhered to the plaster, cutting the plaster to de-install the mural could be very difficult and would require cutting the mural into multiple smaller sections in order to be able to lift and handle the pieces safely and through relatively narrow corners and stairwells. The plaster could contain asbestos or other harmful construction materials which would make the process even more difficult and require abatement and/or encapsulation. Furthermore, if the plaster is cut into panels and removed, re-installation will require review by the project architect and possibly structural engineer to design how the mural panels would be re-attached in these areas throughout the room. That would include additional modifications to the supports in order to receive the panels as well as likely having to drive bolts/anchors through the faces of the artwork panels to secure them unless a cleat-like system is developed.



Since the adhesive holding the mural to the plaster has already become altered over time and is causing damage to the surface of the painting, we strongly recommend detaching the canvas from the wall through the elimination of the adhesive and rolling it for transportation off site. Short of the mural being brittle and breaking/tearing during de-installation, this method will maintain the original mural canvas lengths, which would then be re-installed in the room post construction in their original configuration. This sort of process can be very difficult and should be performed by a specialized paintings conservator that will redress any problems derived from the deinstallation. Rolling murals may cause loss of material, and typically requires conservation post de-installation.

## **Stabilization Treatment & De-Installation Recommendations:**

- Prior to de-installation, the mural should be documented with extensive high-resolution digital photographs and measurements taken to note the locations of the original canvas seams. This will ensure proper registration when the work is eventually re-installed back in the room and also document the surface to note any damage that may occur as a result of separating the mural from the plaster wall.
- The mural should be removed by a trained paintings conservation firm and rolled to mitigate creasing and possibly breaking the paint and canvas if it has become embrittled over time. The conservator(s) should assess the mural in person prior to de-installation to determine if any additional measures should be performed prior to de-installation in order to stabilize the work before removal is performed.
- The work will likely be rolled around a tube to help maintain the rolled form during transportation and mitigate creases in the surface.

## Packing & Long-Term Storage Recommendations:

- The canvas should be stored in a rolled position with the painted surface facing out to the exterior. Protective Tyvek® should be placed over the painted side of the mural as it is rolled so that the painted canvas does not become stuck to itself. Additional Tyvek® can be wrapped around the exterior to protect the rolled canvas segments while in storage.
- The canvas should be stored in an environmentally controlled and secured area. The ideal relative humidity for paintings storage is recommended between 40-50%. The recommended storage temperature is in between 50° to 70°F, with fluctuations no bigger than 5°F daily.

## POST CONSTRUCTION RECOMMENDATIONS:

## **Re-Installation and Treatment Recommendations:**

• Prior to reinstalling the mural segments, it is recommended that full conservation of the mural be performed by a trained paintings conservator. In addition to the various



conditions noted above, having the mural de-installed provides an opportunity to remove extant harmful adhesive and more easily and completely treat the mural in a way that would not be possible were it still on the plaster. Even if full conservation is not possible due to budgetary constraints, areas of damaged or lost paint should be mitigated along with removing as much old adhesive as possible prior to re-installing the canvas in the reading room.

- The full scope of conservation treatment will have to be determined after the mural has been deinstalled, since damage can be caused during the de-installation and because the conservator will need to see the verso and test methods of adhesive removal, cleaning, and repair to dial in on full costs.
- The method of re-installing the mural will also be determined by a paintings conservator after the conservation process has been achieved and in conjunction with the client. The system of presentation will be influenced by final condition of the painting as well as the client's desire to possibly make the work modular and portable. The goal would be to have the mural displayed in a safe manner that can also be easily removed from the wall if any emergencies or damage events occur (such as water leaks, a fire event, earthquake, etc).

## Long Term Display Recommendations:

- Once the canvas has been re-installed, the reading room should remain climate controlled. The mural should not be placed back in the room until climate control has been reestablished. The relative humidity value recommended for paintings is around 50% within a variation of ±5%. The recommended temperature is in between 50° to 70°F, with fluctuations no bigger than 5° daily.
- We highly recommend having the lighting in the room changed to LED, which has a lower impact on the amount of lux and heat emitted<sup>1</sup>. Over time, such exposure can cause color fading and/or shifting/discoloration. The color temperature can be determined in conjunction with a lighting designer based on the original lighting temperature that would have been available for the room when the mural was first installed.

#### **Ongoing Maintenance Recommendations:**

• The canvas should be dusted periodically to avoid the accumulation of dirt on the surface that can adversely affect the pictorial layers. The dusting process should be performed by a trained conservator that can simultaneously assess the artwork to ensure that there is no damage. Ideally routine surface dusting and inspection would occur every 6-12 months with higher frequency recommended if the room is used by many people for prolonged periods of time.

<sup>&</sup>lt;sup>1</sup> https://www.canada.ca/en/conservation-institute/services/conservation-preservation-publications/canadianconservation-institute-notes/environmental-display-guidelines-paintings.html



#### **SELECT ASSESSMENT PHOTOGRAPHS:**



Overall of the mural facing west.



Detail of the top of the wall showing plaster and lath construction with metal tie supports.



Detail of area where the adhesive seems to have migrated through the canvas to the surface (brown discoloration) as well as an air pocket between the canvas and wall.



Detail of seam between mural canvas panels with missing surface paint, retouches and staples



Artist:	Bert L. Cole, Paul Thiry, & Maryan Reynolds
Title:	Untitled (color transparencies; four panel display cases)
Date:	c. 1958
Materials:	Wood and plaster with methacrylate panels
5 cases Overall Dimensions:	168 <sup>1</sup> / <sub>2</sub> L x 28 <sup>1</sup> / <sub>4</sub> H x 9 1/8 int. D & 5 <sup>3</sup> / <sub>4</sub> ext. D
3 cases Overall Dimensions:	102 <sup>1</sup> / <sub>2</sub> L x 28 <sup>1</sup> / <sub>4</sub> H x 9 1/8 int. D & 5 <sup>3</sup> / <sub>4</sub> ext. D

## **DESCRIPTION & SITING:**

The installation consists of four (4) wall-mounted cases that were originally meant to serve as light boxes for various transparencies. The transparencies have been lost over time and there does not appear to be a record of their subject matter in order to have them re-created in kind. The cases themselves are made of painted wood with metal hardware at the interior that supports the lighting mechanisms. Currently, there are clear methacrylate sheets in place of the original transparencies that slip into place through a small slit along the top of the cases. At the interior of each case, between every framed methacrylate panel, there is a vertical halogen or fluorescent light bulb. The current paint color is an almost sage green. It is unknown whether or not this is the original color. The interior surfaces of the boxes (as well as the adjacent plaster walls) are white. Silver toned metal label holders are mounted to the bottom edge in front of each methacrylate sheet, but no labels are present.

Two (2) of the cases have five (5) openings for transparencies while the other two (2) are smaller with only three (3) openings for transparencies. The boxes are set into the plaster walls approximately 4". It is presumed that they are attached directly to the wall studs, but this has yet to be confirmed. Conduit is not visible at the exteriors of any of the boxes. Presumably this is all contained within the plaster wall assembly. It is not evident how the lighting within the boxes is controlled as there are no obvious switches anywhere on the exteriors of any of the boxes or nearby on the plaster walls.

#### **CONDITION:**

Overall, the display cases appear to be in good condition with no structural concerns noted. The placeholder methacrylate panels appear to be stable and intact with no incised graffiti or other markings. The exterior paint coat was also in good condition. Insects, spider webs, and other small debris was visible at the interior of the cases. At the time of inspection, RLA could not assess whether or not the lighting mechanisms work properly in any of the cases as the source(s) of turning the lights on and off could not be identified.

#### PRE AND DURING CONSTRUCTION RECOMMENDATIONS:

Based on the construction plans provided by the client, it appears as though the hallway where the light boxes are located will be a high-traffic area for construction staff and equipment. Even if they are boxed in place on the wall, there is a high probability that they would become damaged over



the course of the 24-month construction period. Additionally, high vibration from demolition and drilling to pour foundation reinforcement/pilons will likely cause cracking and separation of wood elements, at a minimum.

## Stabilization Treatment & De-Installation Recommendations:

- Prior to de-installation, perform extensive photo documentation and take precise measurements of the placement of each box on the wall and their method of attachment so that they can be re-installed in their original location post-construction.
- Prior to ARTECH de-installing the cases, all electrical components must be unwired by others.
- In order to release the boxes from the walls, holes will need to be cut in the surrounding plaster to disconnect wiring/conduit as well as release the boxes from where they are being supported within the wall system. The amount of plaster to be removed around the perimeter of each box will likely be several inches in order to gain adequate access to the box attachments. It may also be necessary to access the boxes from behind, through the full thickness of the walls. Additional site testing with a boroscope would be beneficial to understand the exact attachment methodology.
  - Either RLA or ARTECH can perform a boroscope inspection upon request at additional cost (not included below). RLA recommends having a conservator on site to perform conservation oversight during the de-installation to perform continuous documentation and assist with troubleshooting.
- If possible, once the boxes are de-installed, loosely cover the openings where they were removed for the duration of construction so that the boxes can be easily re-installed in their original locations.

## Packing & Long-Term Storage Recommendations:

- The display boxes should be stored in an environmentally controlled and secured area. The ideal relative humidity for storage is recommended between 40-50%. The recommended storage temperature is in between 50° to 70°F, with fluctuations no bigger than 5°F daily.
- Standard packing materials can be used to protect the light boxes. Non-stick materials should be used in contact with the painted case surfaces.

## POST CONSTRUCTION RECOMMENDATIONS:

## **Re-Installation and Treatment Recommendations:**

• The cases should be re-installed in the same location and manner in which they were originally and prior to de-installation unless otherwise specified by the client/project architect.



- Prior to installation, an engineer and electrician should be consulted to ensure that the wiring and associated mechanisms are all functional and up to code and that the method of attachment to (presumably) the wall studs is acceptable for current building code mandates for wall-mounted objects.
- All electrical work (either for re-connecting, modifications, and/or re-wiring) to be performed by others (i.e., a licensed electrician).
- After the cases have been installed, they should be inspected with the rest of the collection to assess their integrity and determine if any conservation repairs are warranted.
- Following installation, the surrounding plaster must be repaired by others to sit flush with the outer edges of the boxes, as it was prior to de-installation.

#### Long Term Display Recommendations:

• If transparencies will be reintroduced into the light boxes, the client may want to consider replacing the halogen or fluorescent lighting within the boxes with LED lights to minimize heat and also protect the transparencies from high lux, which can result in fading or color shifting over time. The color temperature can be determined in conjunction with a lighting designer based on the original lighting temperature that would have been available for the room when the mural was first installed. Any modifications should be made prior to re-installation.

#### **Ongoing Maintenance Recommendations:**

• Ideally, the cases should be dusted periodically at both the interior and exterior. RLA can train one (1) person form the custodial department to perform this routine maintenance once every two (2) months. Because there is light and heat inside of the boxes, insects have more tendency to become trapped inside and/or nest, increasing the accumulation of dust and debris at the interior. Even if lighting is changed to LED, since the cases are not completely sealed, the client should anticipate some form of insect and dust build-up within the cases over time. Damp cleaning can be performed on an 'as needed' basis, but only with distilled water and mild detergents. Proprietary cleaning products typically contain solvents, which can mar the paint surface and cause acrylic surfaces to etch and become cloudy or remove transparency inks/dyes.



#### **SELECT ASSESSMENT PHOTOGRAPHS:**



Overall of one (1) of the four (4) set of cases. Larger of the two case sizes.



Detail of the inside top of the case with vertical halogen or fluorescent light bulb and ballast between acrylic panes.



## FIRST FLOOR:

Artist:	James Fitzgerald
Title:	Untitled (interior mosaic)
Date:	1959
Materials:	Marble tesserae in cemented bed with bronze frame & divider
	strips
<b>Overall Dimensions:</b>	16' L x 20' H multiple sizes panels

## **DESCRIPTION & SITING:**

The mosaic is a compilation of abstract, organic forms in neutral earth tones. The exact method of installation is unclear, but the work appears to be fabricated from marble tesserae set into a cementitious mortar bed. The tesserae sit proud of the surface, so additional grout may not have been added after the mosaic sheets were set. Without more detailed information, we presume that the mosaic was built out from the wall using extruded metal lath over which layers of concrete were built up. Similar to rough terrazzo, there are bronze edge pieces as well as divider strips strategically throughout the mosaic. The divider strips are doubled up and sit tightly side-by-side. Visually this indicates some type of panel construction of the installation, but this may not be the case. We assume that the lath was installed and bronze edges and divider strips mounted in place before mortar was added between the sections to build up the surface before setting the mosaic sheets within their respective boundaries. Visually, there are twelve (12) panels of different sizes that are organized within one larger rectangular shape. The bronze edges and divider strips generally have a medium brown patina throughout. It is unknown at this time if the artist intended for the bronze to tarnish and develop a darker patina or if the bronze is supposed to be brighter and polished. Installation images and correspondence documents with the artist may be useful in making such a determination.

The mosaic was installed upon a non-structural wall adjacent to what is currently the entrance to the Code Reviser's Office. The work is level with the ground floor, but borders a stairwell to the basement level. It is also located next to large north-facing windows and within approximately 6'-8' of structural columns. As previously noted, the method of attachment to the non-structural wall is not apparent, either from the front of the mosaic, side, or verso of the wall (viewed from within the Code Reviser's Office. The wall is presumably a metal stud wall. Lath may be screwed/bolted or wire tied directly to these studs with the mortar built up over top, as RLA has seen on at least two (2) other mid-century mosaic installations. The lower mosaic surfaces are highly accessible to those in the building as well as custodial activities.

## **CONDITION:**

Overall, the mosaic appears to be in very good condition with no obvious structural concerns noted. Due to access constraints, the work could not be sounded to assess any areas of potential delamination. This should be performed prior to any work on the mosaic (i.e., protect in place, de-installation, etc.). The lower areas more accessible to pedestrians and custodial floor



cleaning/waxing products exhibit more concentrated soiling from hand oils and floor wax residue used to maintain the existing flooring. RLA assumes that the mosaic has never been cleaned. Therefore, there is likely build-up of dust, atmospheric soiling, and tobacco residue from when indoor smoking was permitted. The bronze frame and divider elements seem to be in generally good condition as well. As previously noted, it should be determined through research whether or not the metal surfaces should be tarnished, have a natural patina, or be polished to a more golden finish. If a protective coating was applied, it is no longer present. Localized areas of discoloration and corrosion were noted on the bronze, possibly due to splashes of cleaning liquids or patron beverages. Abrasions have also resulted in slight differences in surface color along the bronze frame edge closest to the office doorway.

## PRE AND DURING CONSTRUCTION RECOMMENDATIONS:

After discussing the general plans for stabilizing the building, particularly at the first floor, RLA is of the opinion that all efforts should be made to keep the mosaic in its current location and protect it in place for the duration of construction for the following reasons:

- The method of attachment to the non-structural wall is currently unknown. It would be helpful to utilize a boroscope from behind the mosaic (through the wall side in the Code Revisor's Office) to get a better understanding of the attachment methodology.
- Even once the method of detachment is determined, it will be very difficult to remove individual sections of the mosaic. Presumably, the mosaic was not made as individual attached panels, so it will need to be cut down into smaller, more manageable sections. Ideally, the bronze divider strips would serve as guidelines as to where to make the cuts. However, the space between these strips is likely not wide enough to cut between them and maintain their physical and visual integrity. That means any cuts would need to be made from the back side of the mosaic. The wall would need to be opened up completely and it may be necessary to cut through the wall studs to release the individual panels.
- Regardless of method, scaffolding will be required to access the full height of the mosaic. If panels will be removed, then a means of lowering panels and moving them will be required. This could be either a gantry-like system with machine hoist or a small forklift that is staged in the Code Revisor's Office to support the panels as they are lowered. This will likely mean removing the doorway so that lifts can fit through this space.
- Based on what we can see from the sides, the overall depth of the mosaic appears to be relatively shallow and some of the panel sections would be relatively large. There is a risk of thin, large panels torquing while being deinstalled and lowered before they can be properly braced. It may be possible (and necessary) to brace the panels before they are fully disengaged from the wall.
- Before being able to reinstall the mosaic, there will need to be an extensive review period with architects and structural engineers on how to re-build this non-structural wall and the method of attachment to re-install these panels of various sizes so that they are tight together and flush with one another.



However, RLA understands the client's concern regarding ongoing vibration, particularly when it will be less than 10' from the mosaic itself. There will be drilling into structural beams on either side of the mosaic as well as demolition on the other side of the building and basement level foundation reinforcement. Based on our visual assessment of the mosaic, we think that it can likely withstand the ongoing vibration and it would be easier to repair hairline cracks/fissures than to undertake a temporary re-location of the mosaic, which would likely result in more physical damage to the artwork overall. If the client and/or owner determine that deinstallation and reinstallation must happen, this should be coordinated with work regarding window replacement since it is an opportunity to move the panels/crates through large, easily accessible openings.

## Stabilization Treatment & Protect-in-Place Recommendations:

- Prior to applying protective facing, document the mural in great detail with high-resolution digital images for before and after comparison.
- Once scaffolding is up, dry brush and vacuum surfaces to remove loose particulate matter and dust, which can trap moisture and promote microbiological growths.
- Sound all surfaces of the mosaic to ensure there are no areas of delamination and also inspect for loose tesserae, cracks, or other conditions that may be exacerbated by ongoing vibrations.
  - If noted, stabilize these areas prior to applying surface protection.
- If climate control will be lost in this area of the building during construction, apply a sacrificial wax coating to bronze dividers and frame and brush-apply a non-toxic biocide to the mosaic surfaces to help mitigate formation of micro biological growths.
- Before covering with a more rigid material, apply vapor permeable soft Tyvek® over the face of the mosaic in contact with the tesserae so that the surface of the mosaic can 'breathe'.
- Secure wood panels with polyethylene braces (Ethafoam®) to avoid contact of the panels directly with the tesserae. This combination of wood panels (plywood) and foam will help absorb vibrations caused during construction as well as provide some protection against surface impact. Once the boards are up, the top edge should be enclosed or covered with a vapor permeable material and the boards labeled throughout to notify other workers that artwork is contained below the panels and that extra caution should be exercised in this area. It is not ideal to have foam and boards directly against the artwork surface as this can result in a microclimate that fosters the development of corrosion and microbiological growths. A biocide and wax can help slow their formation, but not completely protect against them over a 24-month period. Some air circulation would be beneficial over the course of construction and may help regulate the surface temperature. Large swings in temperature can result in differences in thermal expansion coefficients between the metal and concrete/stone components of the mosaic, resulting in micro cracks in the surface or delamination.



• It is recommended to install vibration monitors to document the amount of transmitted vibrations to the mosaic and perform regular checks (every 6 months) while the construction is happening to observe if there are problems derived from the construction and to ensure the mosaic protection is visually still intact and secure.

## **POST CONSTRUCTION RECOMMENDATIONS:**

## **Post Construction Treatment Recommendations:**

- Assuming that the mosaic will be left in its current location and protected in place, it should be thoroughly inspected and documented with high-resolution digital images after the protective coverings are removed.
- Sound all surfaces to ensure that no areas of mortar or tesserae have delaminated during the course of construction. If any areas are loose or have delaminated, stabilize in place.
  - Though not anticipated, a separate mobilization may be warranted to perform repairs depending on the extent of damage since this will be unknown up until the time the mosaic is uncovered.
- Once stabilized and documented, perform in-depth cleaning of the mosaic surface in preparation for the reopening of the building.
  - Appy a detergent-laden latex poultice over the face of the mosaic to remove embedded soiling and surface contaminants. This will mitigate the need for wet or damp cleaning and introducing water into the area.
  - Based on research, address any areas of corrosion, abrasion, and inappropriate finish throughout the bronze frame and divider strips. Perform general surface cleaning and apply a sacrificial wax coating to bronze surfaces to help mitigate corrosion and slow oxidation/tarnishing.
- If it is decided to de-install the mosaic, there will first need to be an engineering phase where all teams work together with a structural engineer to determine how the mosaic panels should be re-installed. This includes any reinforcement or re-building of the receiving, non-structural wall, modifications to the backs of the panels so that they can be installed, as well as any other concessions to meet WA building code.
- Once the panels are installed per the engineer's specifications, there will likely be repair work required throughout the panels in addition to the general cleaning and metal finishing described above.

## Long Term Display Recommendations:

• Because the majority of the artwork surfaces are very robust materials, especially indoors (concrete and marble), the recommended environmental conditions are less stringent. To mitigate the formation of micro biological growths on the marble or concrete and mitigate corrosion formation on the bronze, the relative humidity should be monitored. The recommended RH for collections display is in between 40-50%. The recommended temperature is in between 50° to 70°F.



#### **Ongoing Maintenance Recommendations:**

• Due to difficult and expensive access, the mosaic should be vacuumed and dusted once every two to five (2-5) years to eliminate excessive accumulations of dust, which can trap moisture and promote corrosion and micro biological growths, as well as assess the different sections of the mosaic for signs of cracking and/or delamination.

#### SELECT ASSESSMENT PHOTOGRAPHS:



Overall of the mosaic.



Detail of the proper left lower corner that shows the overall depth of the mosaic.





Diagram showing approximate locations of bronze divider strips within the mosaic composition.



Artist:	Mark Tobey
Title:	Untitled
Date:	1959
Materials:	Oil on framed canvas
<b>Overall Dimensions:</b>	8′ L x 9′ H

## **DESCRIPTION & SITING:**

The artwork is an oil painted canvas depicting multiple polygonal black, white, blue, dark gray and brown forms on a grey background. The canvas is nailed to a wood frame and the frame is hung on a non-structural wall via what appears to be a French cleat system. The work is within the Code Reviser's Room over the doorway to an area of staff desks.

## **CONDITION:**

Overall, the paining appears to be in relatively good condition with no apparent structural concerns visible from ground level. It is possible that the painting was cleaned and/or repaired at some point in the past, though there do not appear to be extant records of any past maintenances or interventions. There is an overall somewhat dinginess to the painting, which can likely be reduced or removed with proper cleaning by a painting's conservator.

## PRE AND DURING CONSTRUCTION RECOMMENDATIONS:

## **Stabilization Treatment & De-Installation Recommendations:**

- Because there will be extensive remodeling of the interior, non-structural spaces of the Code Reviser's Room, we recommend that the painting be de-installed and stored in a secure, climate-controlled space for the duration of construction.
- The painting should be documented by a trained paintings conservator with highresolution digital photographs before the piece is removed from its cleat as well as again when it is at ground level and one can do a more detailed and up-close inspection of the artwork, as well as its verso before it is crated and transported.

## Packing & Long-Term Storage Recommendations:

- RLA assumes that ARTECH will with soft pack the painting for transportation or create a bespoke travel frame and crate for the work. It should be lightly wrapped in a non-scratching material that is vapor permeable so as not to create a microclimate.
- The painting should be stored in an environmentally controlled area. The ideal relative humidity recommended for paintings storage is in between 40-50%. The recommended temperature is in between 50° to 70°F, with fluctuations no bigger than 5°F daily.



#### **POST CONSTRUCTION RECOMMENDATIONS:**

#### **Re-Installation and Treatment Recommendations:**

• The painting should be inspected prior to re-installation to ensure that the artwork is in good condition after long-term storage. Before the work is re-installed, it would likely benefit from in-depth surface cleaning due to years of dirt and grime build-up and possible exposure to tobacco residue from when people could smoke indoors.

## Long Term Display Recommendations:

- The relative humidity value recommended for the indoor display of paintings is around 50% within a variation of  $\pm 5\%$ .
- Luminosity should be kept under 150 lux to avoid the deterioration of the colors. Ultra violet (UV) light exposure should be completely avoided if possible. Lighting on and around the painting should be LED and UV protective film should be applied over any nearby windows.
- The ideal display temperature is recommended between 50° to 70°F, with fluctuations no bigger than 5°F daily.

#### **Ongoing Maintenance Recommendations:**

• The canvas should be dusted periodically to avoid the accumulation of dirt on the surface that can adversely affect the pictorial layers. The dusting process should be performed by a trained conservator that can simultaneously assess the artwork to ensure that there is no damage. Ideally routine surface dusting and inspection would occur every 6-12 months with higher frequency recommended if the room is used by many people for prolonged periods of time.

#### **SELECT ASSESSMENT PHOTOGRAPHS:**



Overall of the painting hung on a French cleat.



Overview of the proper left side of the painting.

Los Angeles Studio: 5418 Packard Street • Los Angeles, CA 90019 Miami Studio: 852 NW 71<sup>st</sup> Street • Miami, FL 33150 323.377.8425 • 305.573.7011 http://rlaconservation.com



Artist:	Everett DuPen
Title:	Untitled (exterior fountain)
Date:	1959
Materials:	Patinated bronze, limestone, rough terrazzo, lighting, pump works
<b>Overall Dimensions:</b>	12′ L x 5′ H

#### **DESCRIPTION & SITING:**

The fountain installation is large and spans the central façade of the building, below the main entrance. The sculptural elements of the installation are comprised of black or dark brown patinated bronze. At the center of the figures is a group of four (4) seagulls gliding above the crests of abstract waves. There are three (3) jets in front of this grouping that shoot water straight into the air. It is unclear whether these jets are original or if they were ever intended to project water as high as they currently are. On either side of this central grouping is one (1) salmon jumping out of the water, supported by a wave. At each figure, there is a jet of water meant to be emanating from the crest of the wave, just below the salmon. Behind the seagull group there is a crab that can only be seen from the main entrance terrace. There is another jet beneath this crab figure.

The bronze figures are mounted to an elevated/cantilevered platform and shallow basin that extends out over a larger fountain basin. This shallow, cantilevered basin is mounted to the limestone-clad low wall below the main entrance to the building. It appears to be made of cast concrete and tapers/increases in thickness as it gets closer to the wall. The top and vertical sides of the basin are clad with rough terrazzo with a light green aggregate. This type of terrazzo has an intentionally rough texture, unlike more traditional terrazzo that is honed and polished very smooth after it is installed. There are two submerged up lights at this upper basin at either end, near the salmon figures. Water delivered to this basin via the aforementioned jets (through presumably ferrous pipes embedded in the concrete) collects in the basin and cascades over the edges into the lower, larger basin.

The lower, larger basin is approximately double the length of the cantilevered basin and at least 12" deep. It also extends about 1/3 of the depth more than the upper basin. The limestone-clad wall extends down to the lower basin and there are also limestone clad low planters that flank either side of the large basin. The basin itself is clad in the same rough terrazzo with light green aggregate as the upper basin. The terrazzo wraps around the basin edge and continues down the vertical basin face, and continues throughout the adjacent sidewalk. There are additional up lights throughout this lower basin.

Water in the lower basin drains into additional below-grade pipes where it is then recirculated and pumped back up through the upper basin. There is no known cistern or other holding tank for the water other than the two visible basins. The water appears to be treated with two primary chemicals. One is Foam-Chek 707 by CH2O Incorporated, which is a silicone-based additive that



eliminates foam on contact. The main product is BioBrom BT by Bio Source Inc®. It is bromating chemicals for ornamental fountains and acts as a microbiocidal, bactericide, fungicide, algaecide, and slimicide. At the time of inspection, no other chlorinated tablets or microbiological growths were observed in the water or bottom of either basin. Water chemistry is maintained by Capitol campus facilities or grounds staff.

The lower fountain edge is highly accessible to the public and people routinely site on the surface. The bronze figures and upper basin are not easily accessible. The work was observed in late January and the fountain was still full of water and functioning. Because it is located along the north side of the building, depending on the time of year, the work is predominantly in full sun, though the surfaces closest to the limestone clad wall are mostly in shade. There is soil and live plants in both planters that flank either side of the basin, but none of these plants are overhanging the basin or encroaching down the basin walls.

## **CONDITION:**

Overall, the bronze components appear to be in relatively good condition with no structural concerns noted. If there was an applied protective coating, it appears to be largely missing. There are localized areas of corrosion on the two (2) salmon figures and below some of the seagull's wings. There is also evidence of white mineral deposits on the surfaces of the seagulls where water is deposited, then dries and leaves the minerals behind on the artwork surfaces. The water nozzles at the two (2) salmon and the crab figures are not working properly and the water exits through the bottom of the sculptures. It is likely that original copper tubing has eroded over time, resulting in holes in the pipe and loss of pressure through the pipe terminus. The three (3) jets in front of the waves and seagulls may be modifications of the original design. The spouts appear newer than any other component of the fountain and sit very proud/prominent of the basin surface. The jets they produce are also very high and slightly obscure the seagull figures. Historic footage and/or images should be reviewed to determine if the current jets are appropriate for the installation.

At the front of the lower, larger basin there is a large horizontal crack that runs the length of the basin. This may be the result of a concrete cold joint that is telegraphing through the full depth of the terrazzo topping. Additionally, there are vertical cracks in the basin wall where water is leaking. Moderate to heavy white mineral deposits are visible emanating from these cracks and have expanded to the adjacent ground. Moderate atmospheric and biological growth soiling is visible throughout the basin edge, vertical face, and adjacent sidewalk. Though filled with water, the inner basin surfaces appear to be relatively clean and free of algae or other growths or staining.

Ferrous corrosion runoff staining is visible around the vertical faces of the upper, cantilevered basin. Presumably the original pipes are ferrous metal and are corroding. The corrosion products are being deposited on the surface of the highly textured and porous terrazzo. The underside of this elevated basin is not clad in terrazzo. It is bare concrete with board formwork visible throughout. The water generally drips off of the edge of this basin, but there is a slight tideline



where water is visible on the underside of the basin. There is also a possible crack and associated mineral deposits along the center of the basin underside.

The fissures observed at the fountain exterior may be connected to deeper fissures or a network of them that extend deeper into the building's structure/foundation. At the basement level in a mechanical room, water leaks have been observed within the building in areas that may correspond to where the fountain basin is located. At the time of inspection, there did not appear to be water actively leaking or dripping in this storage area, but any exterior cracks should be addressed to try and mitigate additional water leaking into the building foundation and below-grade rooms.

The lights throughout the fountain basins were inspected at night around 6 PM Pacific time and none were operational. We do not know if this is due to a problem with the bulbs/wiring/lighting cases, the power, or that the lights are simply not turned on at night.

The limestone cladding along the back wall of the fountain is relatively clean and free of micro biological growths. The two (2) sides that also constitute planters are heavily soiled with moderate to heavy accumulations of bio growth. Presumably this is due to dirt, possibly fertilizers, additional water infiltration, and other nutrients from the plants becoming embedded in the porous structure of the stone and facilitating these growths. Secretions and the presence of lichen can result in bleaching/discoloration of stone, even after these growths are removed.

## PRE AND DURING CONSTRUCTION RECOMMENDATIONS:

## Stabilization Treatment & Protect-in-Place Recommendations:

- The fountain should be drained and properly protected while the duration of the construction work to avoid heavy machinery to damage the artwork and surrounding limestone.
- We recommend the use of Tyvek® in contact with the terrazzo and limestone, and wood panels to protect these areas from getting damaged.
- We recommend building a protective crate enclosed with Tyvek® (do not put Tyvek® in direct contact with the bronze surface) that will protect the sculpture from getting dirt and debris derived from the construction.
- While the duration of the work (estimated 24 months) we recommend having the Bronze inspected every 6-8 months to make sure that there is no conservation problems happening derived from the construction work.
- We recommend stabilizing the cracks at the terrazzo basin after the work on the building has been finished since the vibrations caused by the construction might not help to the overall stability and new cracks can form.



#### POST CONSTRUCTION RECOMMENDATIONS:

#### **Post Construction Treatment Recommendations:**

- We recommend performing a conservation treatment on the bronze fountain to eliminate any green corrosion and provide a new protective coating to all bronze elements.
- The client specified the need of making the water nozzles on the two (2) salmon figures operational. RLA contacted Seattle Solstice, an external company that specifically works on fountain internal systems and components to provide a budget to make these repairs.
- Water leaks derived from the fissures located on the basin must be redressed to avoid causing problems to the building's structure and to the inside operational systems. RLA contacted Seattle Solstice, an external company that specifically works on fountain internal systems and components to provide a budget to make these repairs.
- The limestone on the sides of the basin should be cleaned and treated to avoid the recurrence of biogrowth.
- The fountain must be drained at list one (1) week previous to the start of the treatment of conservation for the Bronze sculpture and the terrazzo basin.
- While performing any hot work or patina on the Bronze the terrazzo basin must be properly protected.

#### Long Term Display Recommendations:

- Water contains calcium ions that crystallize and can clog the water conductors of the fountain and are very difficult to dissolve or eliminate. We recommend the use of calcium filters on the pump that brings water to the basin to reduce the amount of calcium deposits that are contained on the running water of the fountain.
- Because of evaporation and rain the water becomes more concentrated on ions and this will also affect the concentration of calcium on the water, we recommend renewing the water of the fountain every season (every 4 months) to improve the quality of the water.
- Bromine (BioBrom® BT) has been used instead of chlorine. We recommend continuing using this product that is safer for running water through Bronze sculptures and appears to be safe for the other fountain components as well (i.e., terrazzo and limestone).

## **Ongoing Maintenance Recommendations:**

- The bronze sculpture should be maintained on a yearly basis to renew the protecting coating and inspect that all parts are on a good condition.
- The fountain must be drained at list one (1) week before the start of the maintenance.



#### **SELECT ASSESSMENT PHOTOGRAPHS:**



Overall of the whole fountain from the front.



Detail of interior leak caused by the cracks at the exterior basin.



Overall look of the top of the fountain.



Fountain at night with no lighting operative.

Thank you for the opportunity to care for your collection. Please do not hesitate to contact us with any further questions.

Prepared By:

Sonia T. Jerez Fraj, Assistant Conservator

isting Var

Christina Varvi, Co-Chief Conservator

Los Angeles Studio: 5418 Packard Street • Los Angeles, CA 90019 Miami Studio: 852 NW 71<sup>st</sup> Street • Miami, FL 33150 323.377.8425 • 305.573.7011 http://rlaconservation.com