

“Birth” Sculpture

Conservation Assessment and Recommendations



Prepared for
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I. Introduction

A. Object Description



"Birth" Sculpture Southeast Elevation

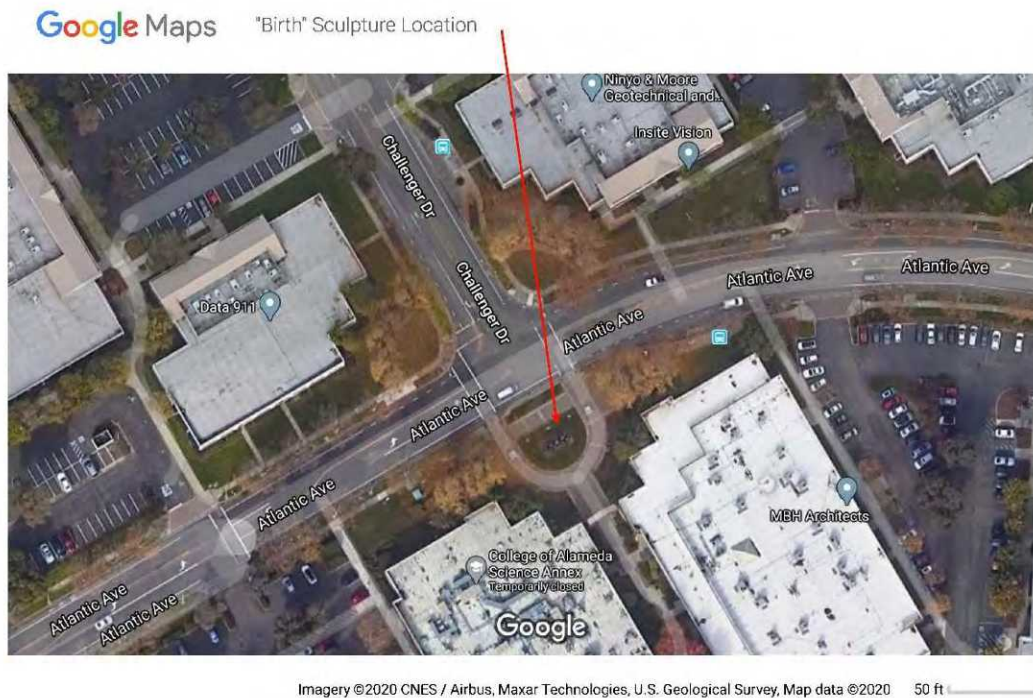
Title: Birth

Artist: Arthur Williams b.1942

Date: 1988

Material: painted steel

Dimensions: Approximately 20' l x 9' w x 7 1/2' h (steel) (9' h from ground sitting on concrete plinth).



Location: Near the intersection of Atlantic Avenue and Challenger Drive, Alameda, California.



Inscriptions: On east corner, "Arthur Williams L.D. [?] 1988" written in cursive in welding rod.



Plaque: Set on the concrete slab centered in front of the northwest elevation, "Birth" Arthur Williams 1988"

B. Project Scope of Work

In early 2020, the conservator noted some coatings deterioration on the sculpture. In July, the City of Alameda contracted to the conservator to conduct a conditions assessment and make recommendations for repairs and ongoing maintenance, along with conceptual cost estimates.

Conservation examination and recommendations follow the American Institute for Conservation *Code of Ethics and Guidelines for Practice*.¹

The Conservator does not conduct any assessment as to the structural integrity of the artwork and refers the Owner to a licensed structural engineer for any inspections or structural recommendations. However, a conservator may review a structural engineer's recommendations for the purposes of long-term preservation of proposed materials, such as juxtaposition of different metal alloys to reduce long-term corrosion potential. All conservation comments and reviews regarding any structural engineering should be returned to the structural engineer for final structural recommendations.

¹ Document can be found at <https://www.culturalheritage.org/about-conservation/code-of-ethics#:~:text=This%20document%2C%20the%20Code%20of,the%20care%20of%20cultural%20property>. Cited July 9, 2020.

II. Background

A. About the Artist

According to a blogpost of May 2020², the artist is still living. In addition to working in his own studio and created several public art pieces, the artist has taught sculpture and published books on the topic. A few references are appended.

Several of [his] large steel sculptures (over 10,000 lbs.) are located on Long Island and Rochester, NY; Dallas and Galveston, TX; Salt Lake City; West Palm Beach and San Francisco.³

A similar sculpture is in Dallas Texas with the following description:

Arthur Williams
American, born 1942
Birth II 1983
Abstract, 7' x 15' x 7' 8"; welded and pressed steel
Location: 6688 North Central Expressway⁴

B. Artist Rights Laws

The Visual Artists Rights Act (VARA) and the California Art Preservation Act (CAPA) may require written permission from living artists or their designees prior to any conservation intervention. The Owner/Client is responsible for contacting the artist and obtaining permissions for any work done to the artwork.

² Reborn. Posted on May 9, 2020 by Bill Chance <https://billchance.org/tag/mockingbird/> cited on July 9, 2020.

³ Silvey, Billie, Interview with a Sculptor at <http://www.billiesilvey.com/arthur-interview.html> cited on July 9, 2020.

⁴ Birth II. Posted on March 31, 2019 by Bill Chance at <https://billchance.org/tag/arthur-williams/> cited July 9, 2020.

C. Methods of Construction

The sculpture is fabricated from flat and turned mild steel that has been coated/painted. The thickness of steel plate is unknown and was not measured at this time. Fabrication drawings not yet available. Exact alloys are not known and the artist was not yet contacted for details at this time.

Turning marks (or possibly tide lines?) are evident on the interior/top surfaces of the "eggshells". The base has a structural frame underneath. The two halves of the "eggshells" have vertical drain pipes with approximate diameters of 1 ½" that may also serve structurally to help secure the forms. It is possible that there is an interior welded structure for the central sphere, but the underside of the sculpture was not inspected at this time.

The sculpture sits on a concrete plinth that is elevated about 1' and makes the sculpture appear to be floating off the ground. The edges of the base overhangs about ½' to 1'. It appears that there are no anchors into the concrete plinth as the sculpture is currently askew. (See additional comments below under "Conditions".)

The exterior surfaces have been coated with what is likely an automotive paint⁵ to resemble a dark brown metallic bronze color. There is visual evidence of a light grey primer, color coat and clear coat.

D. History of Treatments

There is no history of previous treatments or repairs. Until recently, the sculpture appeared to have been well maintained with the occasional dirt, debris, bird droppings, and graffiti cleaned on a regular basis. Recently the adjacent property was sold and the previous regular maintenance may have ceased as a result.

⁵ Art Around Galveston. The Wanderers, April 26, 2014 at <http://thewandererschuckandkate.blogspot.com/2014/04/art-around-galveston.html> cited July 9, 2020.

III. Conditions

The following conditions were noted during the site visit of July 3, 2020. Thumbnail images are appended to the report. Full size electronic images (JPEG) are available to the Client for download within 30 days of this report.

1. The sculpture sits askew from the concrete pedestal, possibly from repeated impact of skateboarders jumping onto the edge to slide down the side of the base.
2. There are scrapes through the paint along the base edges that appear to be from skateboarders.
3. The NW corner of the concrete plinth is broken off and the broken piece (approximately 6" x 8" x 6") is still sitting under the corner of the bronze base.
4. There was a pile of small stones sitting on the edge of the base and stones and debris inside the "eggshells" blocking the drainage.
5. The top of the base and framing is slightly warped or sunken, preventing water from running off the top of the base. There is iron rust colored staining and some metal spalling in areas where water has collected and cannot drain sufficiently, including in areas on top of the base, inside the "eggshells" and inside the drain pipes in the centers of the "eggshells".
6. The underside of the base is uncoated and corroded as are the two drain pipes extending down from the bottom of each "eggshell".
7. The top clear coat has failed and is either peeled and missing, blistering, or beginning to peel on approximately 70% of the sculpture. Most of the prime and metallic color paint layers remain intact except for scraped or corroded areas, and along most convex corner edges.
8. There are a few areas that appear to have been previously filled (possibly an epoxy or polyester type epoxy often used in the automotive industry) that have since spalled off or are currently lifting away from the metal surface.
9. On the northwest elevation of the "egg" are scratches that may have resulted from previous graffiti removal as they follow a linear pattern in the clear coat.
10. There are drip marks on the surface, general dirt and debris from nearby windblown vegetation (or birds), and a few bird droppings.

IV. Recommendations

A. Repairs

Prior to repairing the sculpture, skateboard deterrent design and installation should occur. Options might include a series of bollards surrounding the sculpture. Deterrents should not be attached directly to the sculpture.

Based on current conditions with sufficient paint coatings failing and the emergence of scaling rust, recoating the entire sculpture is recommended at this time.

Coatings should match the original color as closely as possible, but take advantage of improvements in the coatings industry over the past 32 years since the sculpture was fabricated. If original coating specifications can be obtained, they should be documented and archived with the City/Owner for future reference. Each treatment campaign should document all materials and methods, including this one.

Any persons working on the sculpture should submit a report of materials and methods used prior to any final payments.

An industrial grade coating is currently recommended for recoating, especially due to the sculpture’s location in a marine type environment. Specifications are appended. All surfaces are to be coated, including the underside of the base and the interiors of the drain pipes at the bottom of each “eggshell”.

When the sculpture is lifted, an inspection of the underside needs to take place. It may be feasible to insert a riser under the “egg” and “eggshells” to help create a downward slope toward the edges of the flat base, allowing for some additional drainage and thereby reducing the risk of future corrosion for water puddling. There should be weep holes at the bottom of each of the three hollow “egg” and “eggshell” elements located underneath the steel base to allow drainage of any condensation from the hollow interiors.

Damages that may require welding or other hot metal repairs are unknown until after the sculpture is lifted for inspections underneath, and after sandblasting to remove loose and spalling corrosion. If necessary, the framing should be inspected by a structural engineer or similar qualified professional.

Recoating is to follow all manufacturer instructions including surface preparations, immediate application of primer to reduce flashover, etc. Surface preparation will likely entail pre-cleaning, sand blasting to clean to bare metal followed by immediate application of a zinc rich primer, conducting welding repairs if there are any holes or gaps exposed in corroded areas, grinding and spot sand blasting followed by spot re-priming.

Inspections should include any hot metal or welding repairs, surface preparation and immediate application of primer, and coatings tests to ensure proper thickness application for each layer. The coatings manufacturer representative and a NACE certified inspector may be able to provide inspections at critical junctures and provide a letter of inspection to enable product and application warranties which is highly recommended.

B. Maintenance

1. Prior to Repairs

Continue cleaning sculpture by removing loose debris, stones, etc. Rinse sculpture with potable water and a garden hose. Air dry.

2. Following Repairs

Follow appended Maintenance Specifications.

Appendix A: Coatings Specification

Metallic Option: Zinc/Epoxy/Urethane/Fluoropolymer

Surface Preparation: Clean all surfaces per SSPC-SP1 Solvent Clean to remove soluble and visible surface contaminants before and after mechanical surface preparation. Once clean, subject all surfaces to an SSPC-SP6 / NACE No. 3 Commercial Blast Clean to create a dense, uniform and angular anchor profile of 2.0 mils minimum. Surfaces shall be clean: free of all visible oil, grease, dirt, rust, paints and coatings, oxides, mill scale, corrosion products, and other foreign matter. All surfaces shall be primed within the same work shift as prepared. Otherwise, use hand and power tools to restore surfaces to an SSPC-SP6/NACE No 3 level of surface cleanliness and SSPC-SP1 Solvent Clean just prior to application of primer.

Primer Coat: Series 94-H2O | Hydro-Zinc or Series 90-97 | Tneme-Zinc; 2.5 to 3.5 mils DFT

Stripe-Coat Procedure to Prevent Edge Rusting: Series L69 | Hi-Build Epoxoline II or Series L69F | Hi-Build Epoxoline II; brush-applied to all welds, voids, nuts, bolts and sharp edges referencing SSPC-PA 1, 6.6 Striping

Intermediate Coat: Series L69 | Hi-Build Epoxoline II or Series L69F | Hi-Build Epoxoline II; 3.0 to 5.0 mils DFT

Base Coat: Series 1095 | Endura-Shield (Color: 73MT “Red Bronze”¹); 3.0 to 5.0 mils DFT

Finish Coat: Series 1078V | Fluoronar Rollable Metallic (Gloss); 2.0 to 3.0 mils DFT

¹ Color selection subject to Owner and Artist pre-approvals.

Appendix B: Maintenance Specification

Recommended ongoing maintenance for the sculpture is to keep surfaces clean using a mild soap (we recommend Orvus Paste Soap (less than 1% in water)² and potable water from a garden hose, and removing general debris. A cold paste wax can be applied to the surface, either Renaissance Wax³ or ProSoCo Sacrificial Coating SC-1⁴. Maintenance providers should be trained first by a conservator. Consult with a conservator before using any other material and before removing any graffiti. Maintenance specifications are appended.

² Orvus Paste Soap available from Amazon.com and other suppliers.

³ Renaissance Wax available from Talas, NY, Amazon.com and other suppliers.

⁴ ProSoCo Sacrificial Coating SC-1, available from Prosoco.com.

Appendix C: Current Condition Image Thumbnails

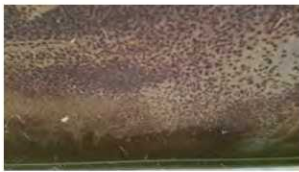
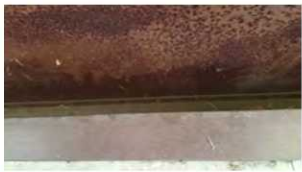
"Birth" Sculpture Condition Images



"Birth" Sculpture Condition Images



"Birth" Sculpture Condition Images



"Birth" Sculpture Condition Images



Appendix D: Conceptual Estimates

Item #	Description	Cost (Low)	Cost (High)
1	Conservation Project Management	\$10,066	\$10,066
2	Skateboard deterrent design		
3	Transport RT	\$23,085	\$23,085
4	Coatings	\$8,000	\$15,000
5	Metal repairs	\$1,000	\$1,000
6	Skateboard Deterrent install		
	Subtotals	\$42,151	\$49,151

Contingencies, Assumptions, Exclusions

- 1 Excludes Costs for skateboard deterrent design and installation.
- 2 Includes allowance of \$1000 for metal repairs to fill up to 1 sf of corroded holes
Excludes costs for metal repairs of unknown conditions until after sandblasting and inspecting underside of sculpture
- 3
- 4 Excludes costs for structural engineering consultations
- 5 Coatings costs are dependent upon actual conditions after sandblasting.
- 6 Owner/Client has option to improve slope of base for drainage, costs not included
Conservation project management on time and materials basis and will depend on conditions after sculpture is moved and sand-blasted.
- 7
- 8 Includes initial application of protective coating with maintenance training by conservator
- 9 Excludes costs for City project management, contacting artist, project and color approvals, etc.
- 10 Excludes any storage costs for sculpture if site is not ready for reinstall
- 11 Assumes separate contracting to each entity, excludes markups for subcontracting