

US Olympic Museum's Diamond Donor Program Using the Forge Platform

Jarod Schultz

Director of Research and Development





About the speaker

Jarod Schultz

Jarod Schultz is Director of Research and Development at MG. He works with a team to develop new solutions that his client's value: inventing new concepts, workflows, and processes | scrum master, planning projects, and implementations of software development | biomimicry, sustainability, computational, and generative solutions | analyzing data, summarizing, and reporting project outcomes | collaborating with early adopters/innovators. He is also a Kaizen Event/Emotional Intelligence Practitioner.

LEARNING

See how MG and USOM came together to make this dream a reality!

- How the project was conceived, brainstormed and developed
- How the building's 10,000 unique façade panels were developed in Solidworks and integrated seamlessly
- How you can be a part of the Diamond Donor Program for the USOM
- How to overcome the many challenges of creating an interactive online user portal

DS+R - Diller Scofidio + Renfro



THE UNITED STATES OLYMPIC AND PARALYMPIC MUSEUM

- A new cultural facility recognized by the International Olympic Committee, the United States Olympic and Paralympic Museum celebrates American Olympic and Paralympic athletes. The 60,000 square foot museum is located at the base of the Rocky Mountains in Colorado Springs, home of the United States Olympic Training Center. The museum will act as an anchor the new City for Champions District, forming a new axis bridging downtown Colorado Springs to the America the Beautiful Park to the west.

DYNAMIC FORM

“The dynamic building form is inspired by the energy and grace of Olympians in competition. The galleries, auditorium and administrative spaces spiral and stretch centrifugally around the central atrium space. The visitor’s experience through the gallery is guided by a subtle diagonal clerestory light that terminates in a view of the surrounding City.”



DYNAMIC FORM

Central atrium space with 40-foot LCD screen and different outreaching platforms representing different achievements, one of them will be the highest pole vault in US history.



GE JOHNSON CONSTRUCTION COMPANY

JOHN SCHWARZ



Integrated Services Manager

- Design phase management working with teams for cohesion and project approach
- Leadership of Virtual Design and Construction department
- Manage constructability reviews through extensive use of BIM
- Collaborate across departments for project pursuit strategies and deliverables
- Support Lean construction initiatives

CHRISTINE ANGARD



Assistant Design Phase Manager

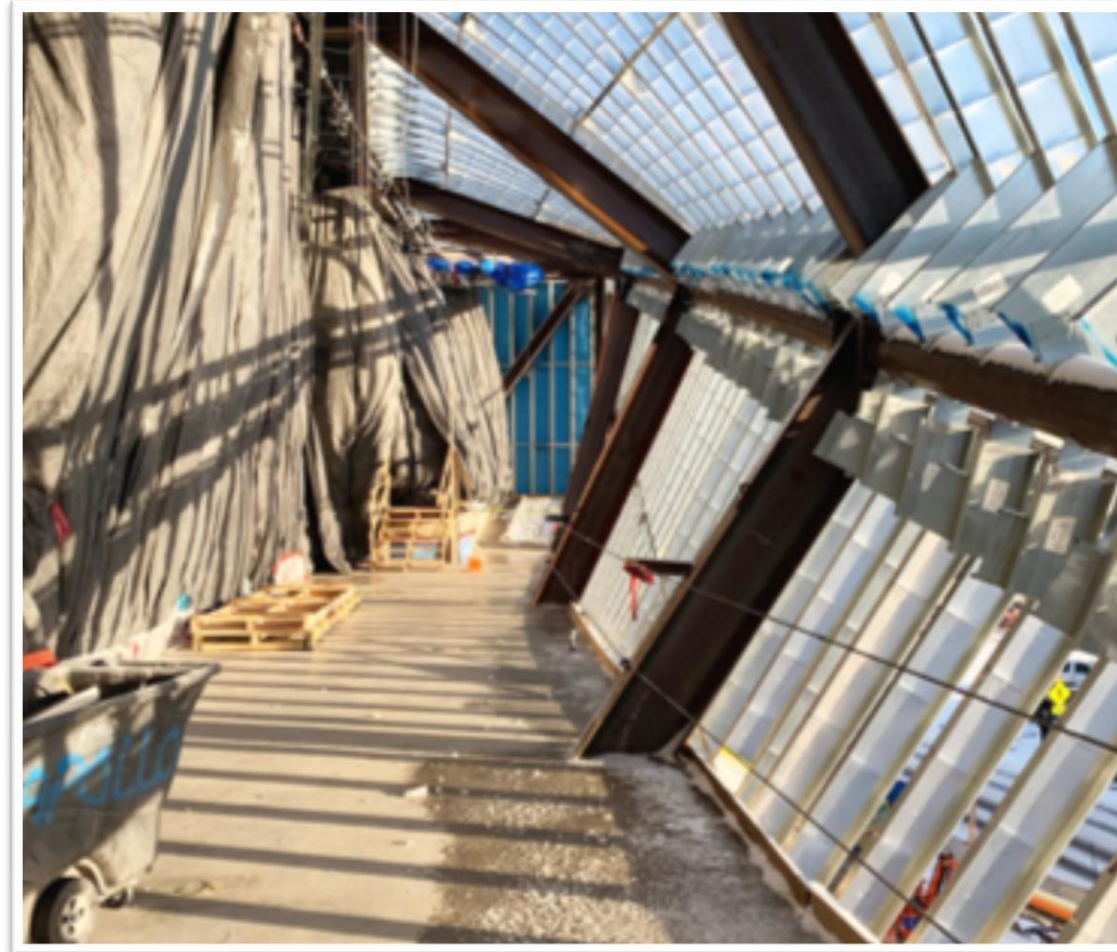
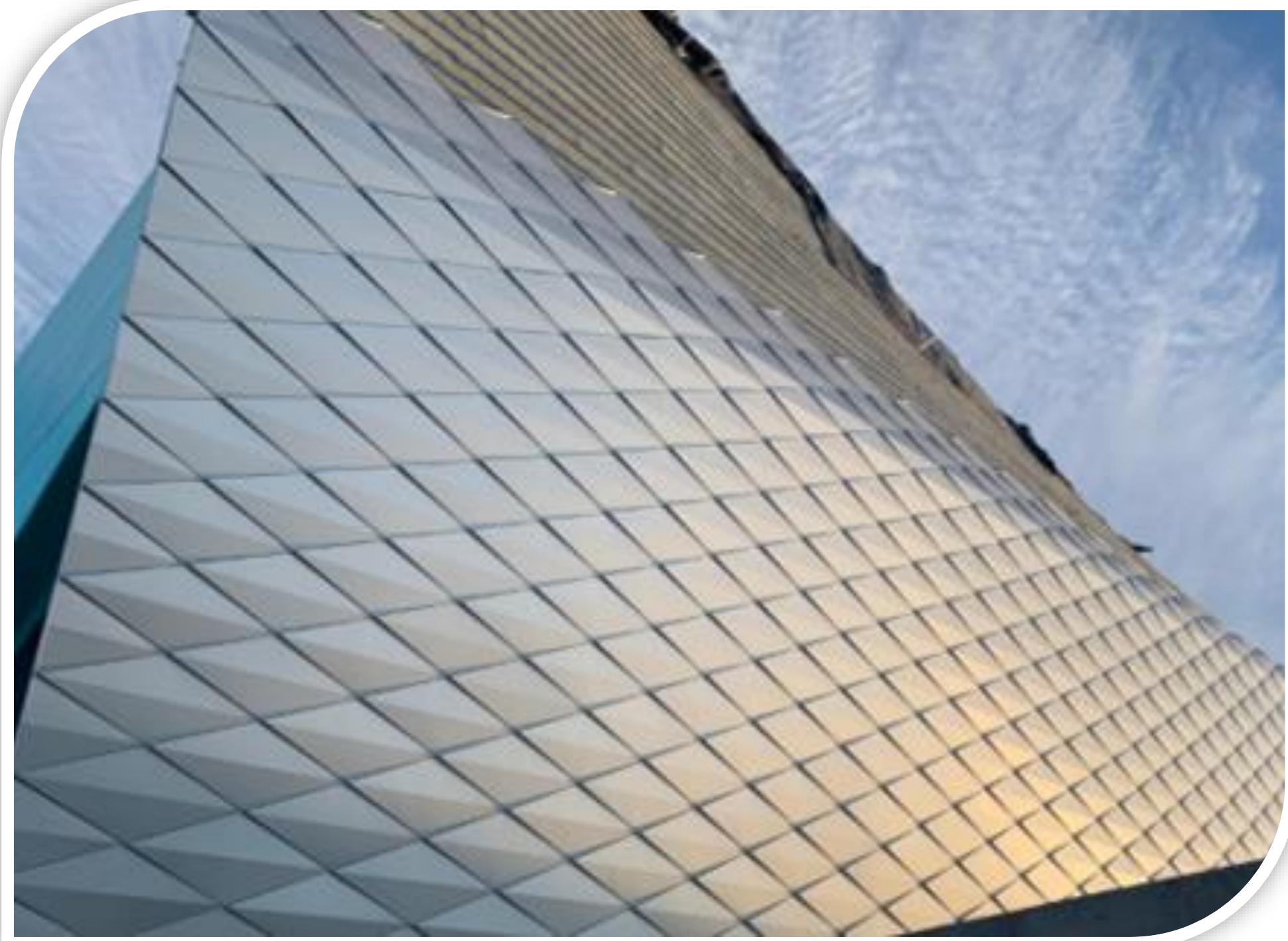
- Diverse and eye-opening career experience
- Skills to understand
- How to design interior spaces and draw construction details
- How to assemble and connect building materials and elements
- Well-rounded understanding of the design and construction industry

Overview of Site and Structure



CURRENT PROGRESS

- Opening March 2020, this is the current progress of the project. <https://usopm.org/follow-our-progress/>



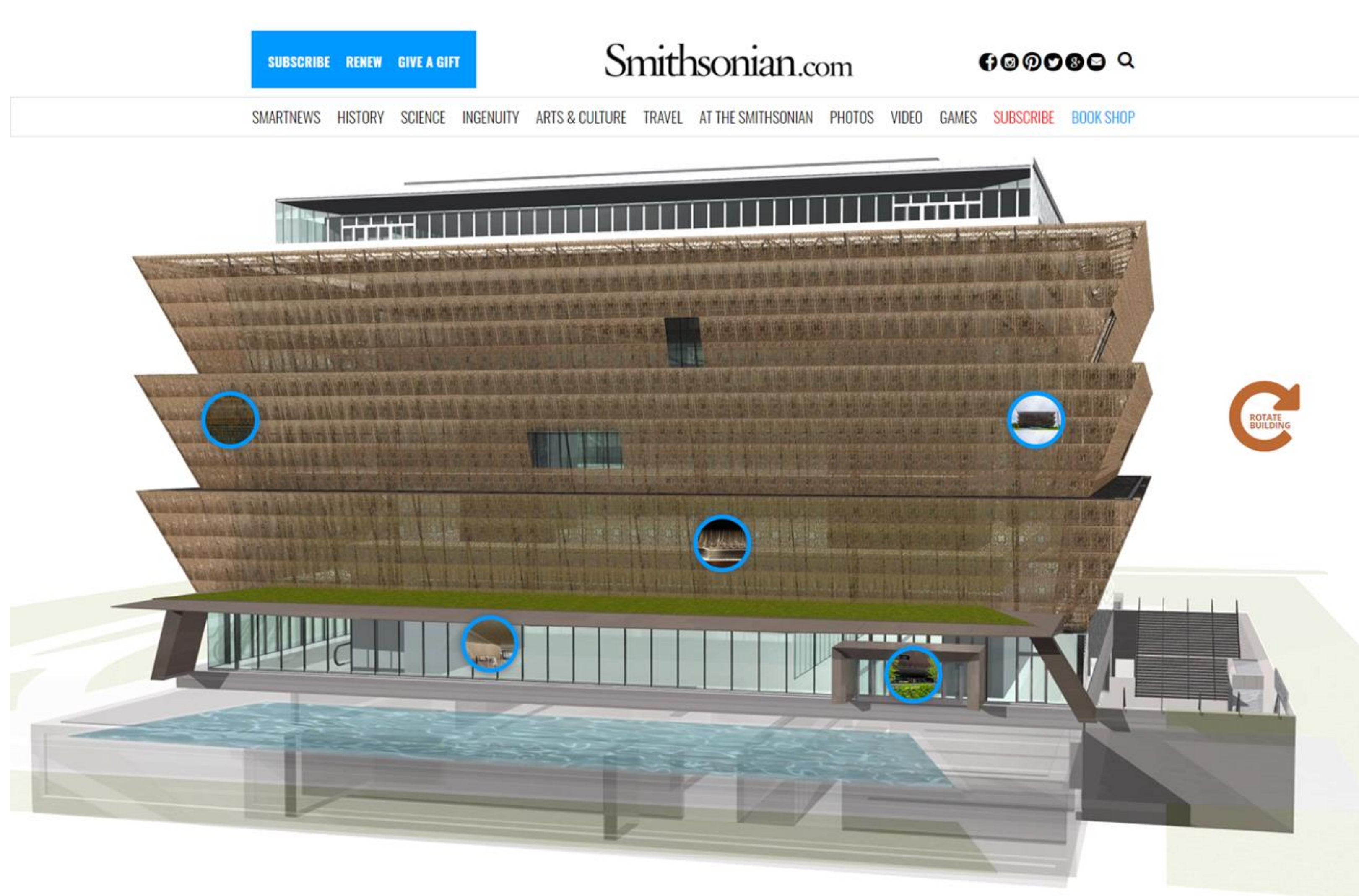
CHRISTOPHER LIEDEL, CHIEF EXECUTIVE OFFICER – USOM

- Joined team as CEO in May 2018
- Previously
 - Served as president of Smithsonian Enterprises for almost six years
 - Oversaw key commercial activities of the Smithsonian
 - During his tenure, the organization saw significant growth in revenue and earnings performance
- Served as executive vice president and chief financial officer at National Geographic for 16 years
- Board affiliations
 - Nobel Prize Education Fund
 - National Philanthropic Trust
 - EdWeek Magazine
- Serves on the board of PGA America
- Previously served on the executive committee of the United States Golf Association as chair of the museum committee
- Bachelor's degree at Bowling Green State University in Ohio
- Master's degree at Georgia State University in Atlanta
- Wharton Fellow from the University of Pennsylvania



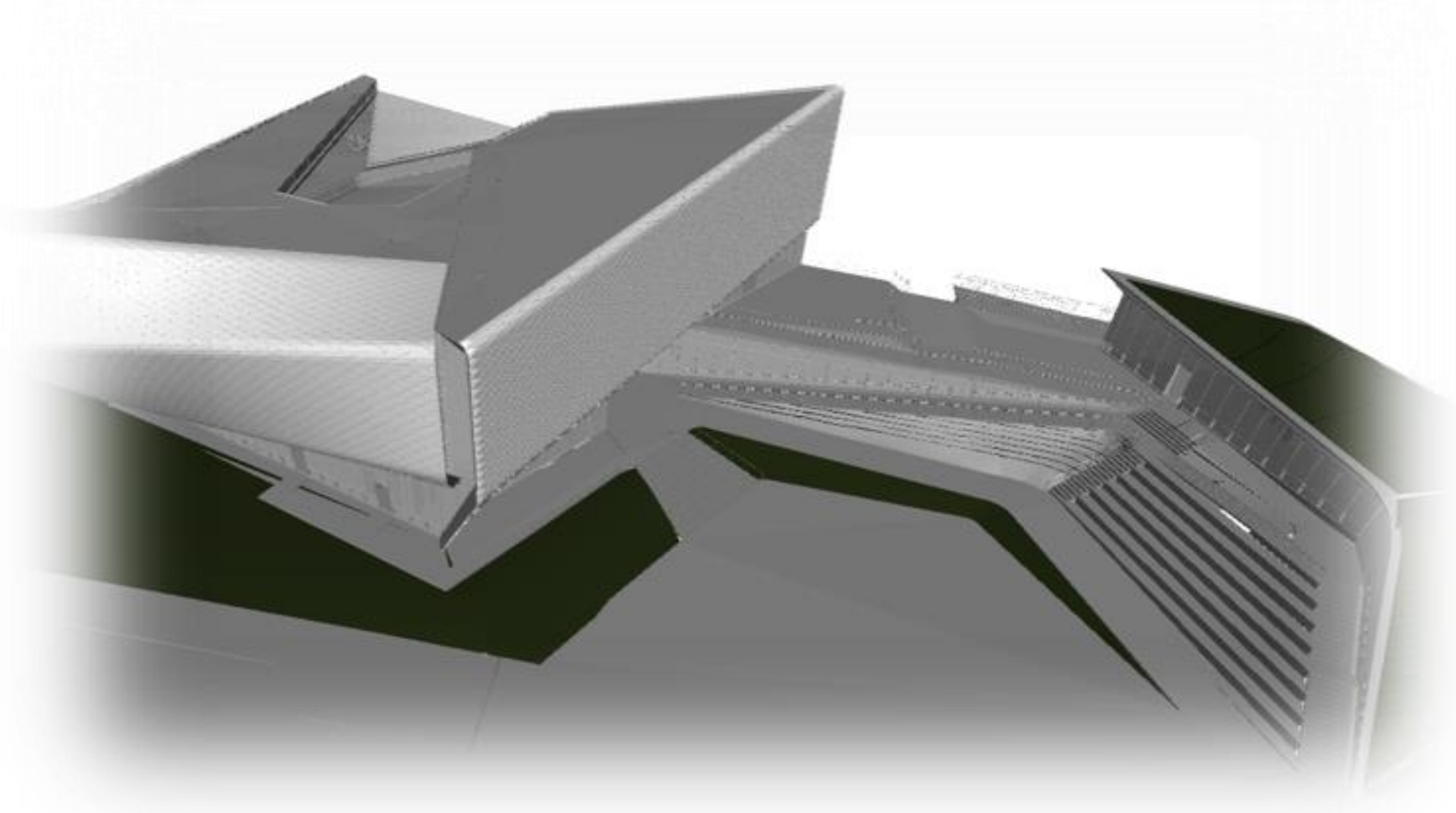
THE IDEA - The 1st Attempt at Interactive 3D model

URL: <https://tinyurl.com/national-museum-au>

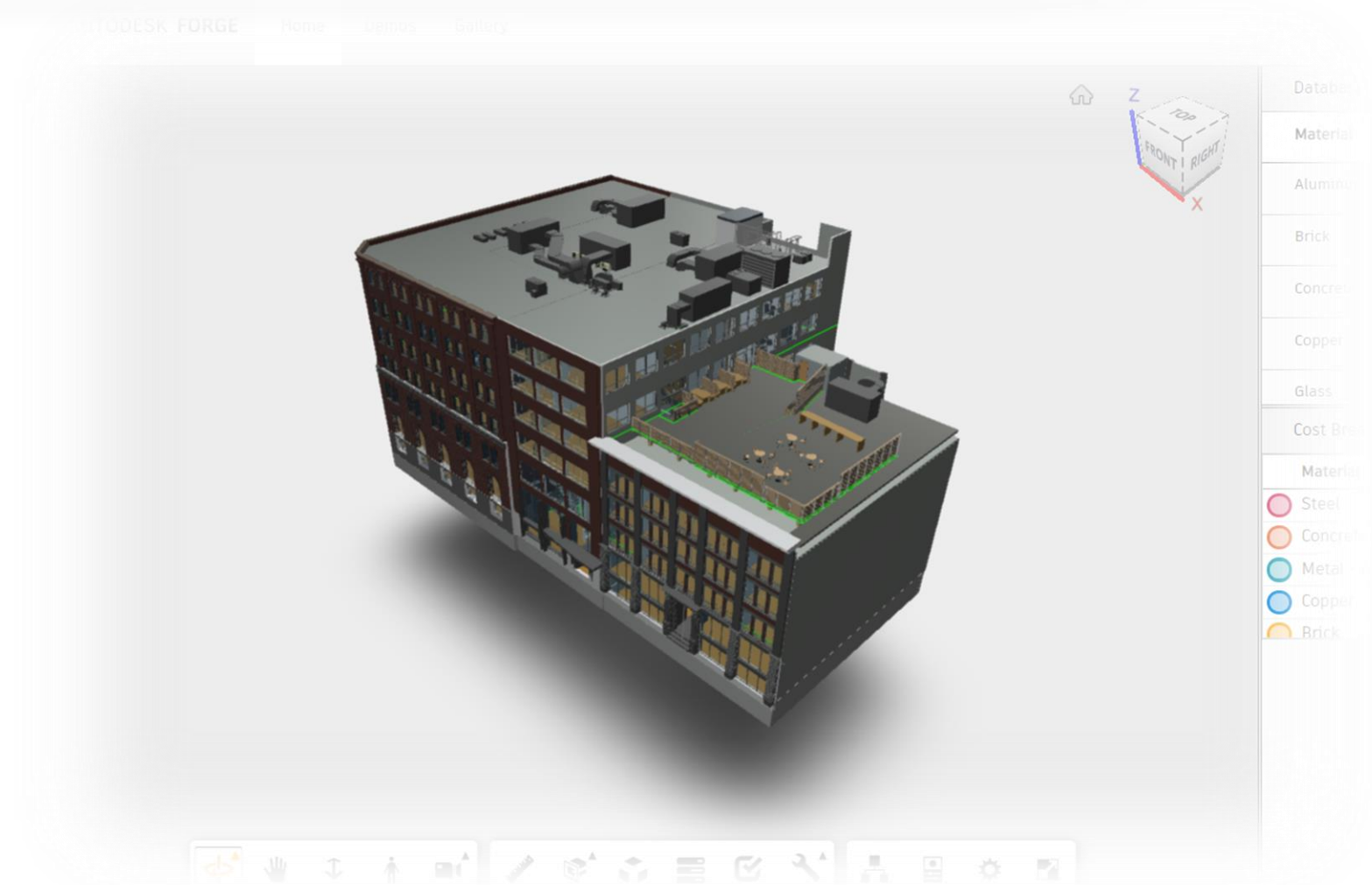


THE IDEA – Use BIM Model and Autodesk Forge

- Conversation with USOM / GE Johnson
- Diamond Donor Program
 - Online
 - Interactive
 - Take advantage of BIM model

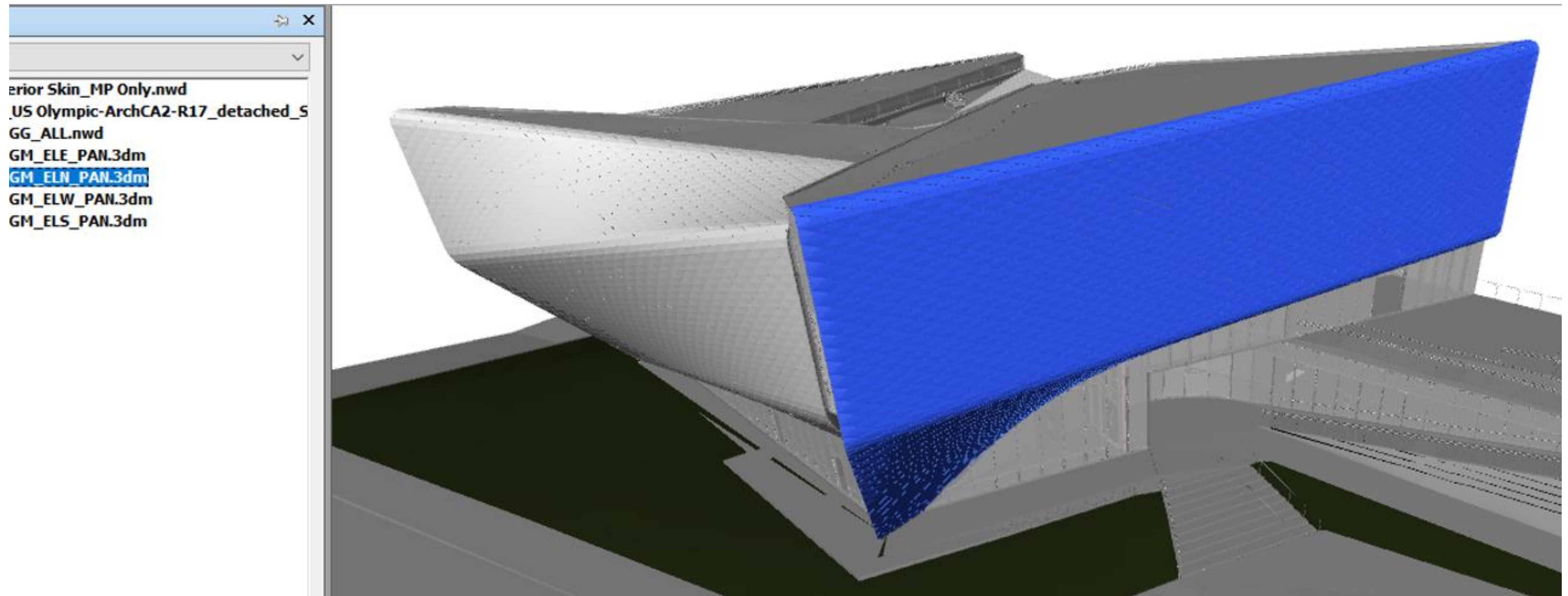


DIAMOND DONOR PROGRAM



ANALYZE MODEL

- The panels were designed using SOLIDWORKS
- Did the model have the data that we needed?



URL: <https://mgmcgrath.com/portfolio/united-states-olympic-museum/>

NAVISWORKS + FORGE VIEWER

- Forge Visual Reports for Data Mining



Q/A with USOM

- Website Integration – HTML or WordPress
- Donor Checkout - Cart Technology
- Model Location - BIM 360
- Application – Hosting
- USOM – What is Forge
- Donor Experience – UI (user interface)/UX (user experience design)
- Donor / USOM Interaction

TECHNOLOGY

- Forge takes components from Autodesk's powerful library of software and delivers them as cloud-based building blocks for companies to create their own new solutions.



INTEGRATE

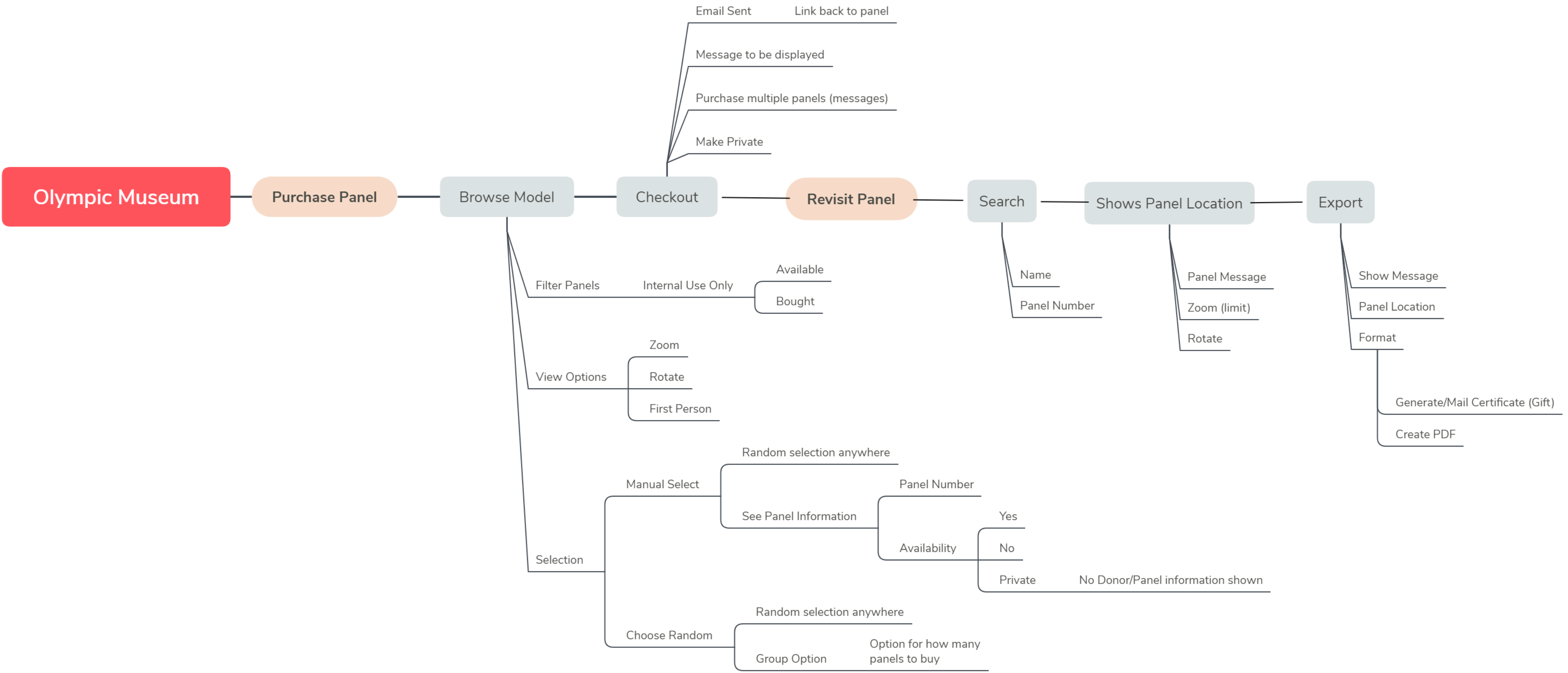
- Use these services to extend products or to create entirely new solutions within your existing infrastructure. Autodesk provides the blocks; MG can help build the solution.



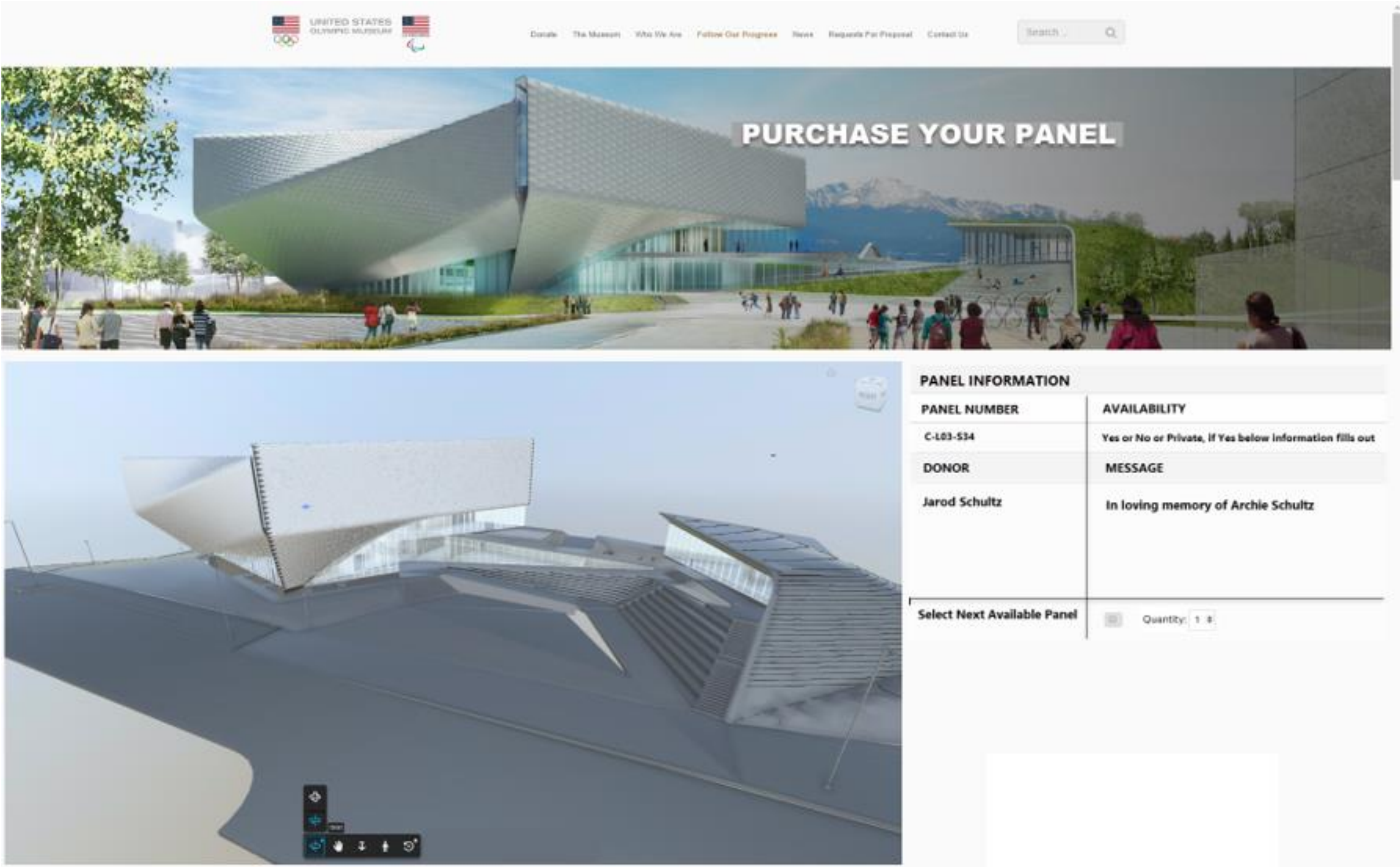
WEB STANDARD TECHNOLOGIES



PURCHASE PANEL WORKFLOW



INTERFACE MOCKUP - PANEL SELECTION



The screenshot displays the checkout process on the United States Olympic Museum website. At the top, there is a navigation bar with links: Home, The Museum, Who We Are, Follow Our Progress, News, Requests For Proposal, and Contact Us. A search bar is located on the right. Below the navigation bar is a large banner image of the United States Olympic Museum building with the text "PURCHASE YOUR PANEL".

The checkout process is divided into three main sections:

- 1 Donor Address**: This section includes fields for Name, Address, and City, State, Zip. There is a "Change" link next to the address field.
- 2 Payment method**: This section includes a "Payment Options" field and a "Billing address: Same as shipping address" note.
- 3 Review items**: This section includes a "Message" field with a text area for a message. The example message is "In loving memory of Archie Schultz". Below the text area, it says "190 characters - 7 lines".

On the right side of the checkout process, there is a "Make Panel Information Private" checkbox and a "Place your order" button. Below the button, there is a link to "privacy notice and conditions of use".

Below the "Place your order" button, there is an "Order Summary" section with the following items:

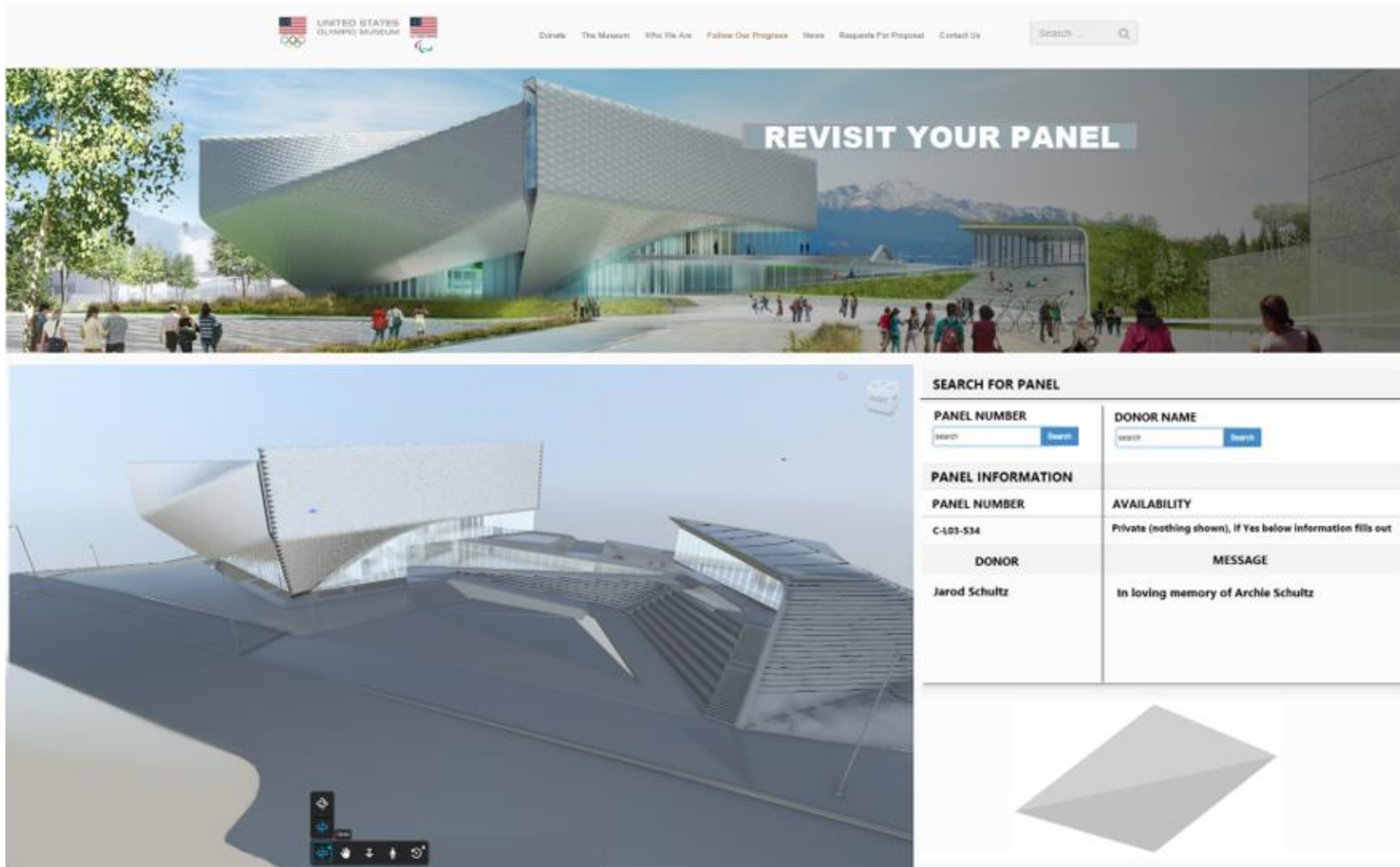
- Items:
- Shipping & handling:
- Total before tax:
- Estimated tax to be collected:

Below the "Order Summary" section, there is an "Order total:" label.

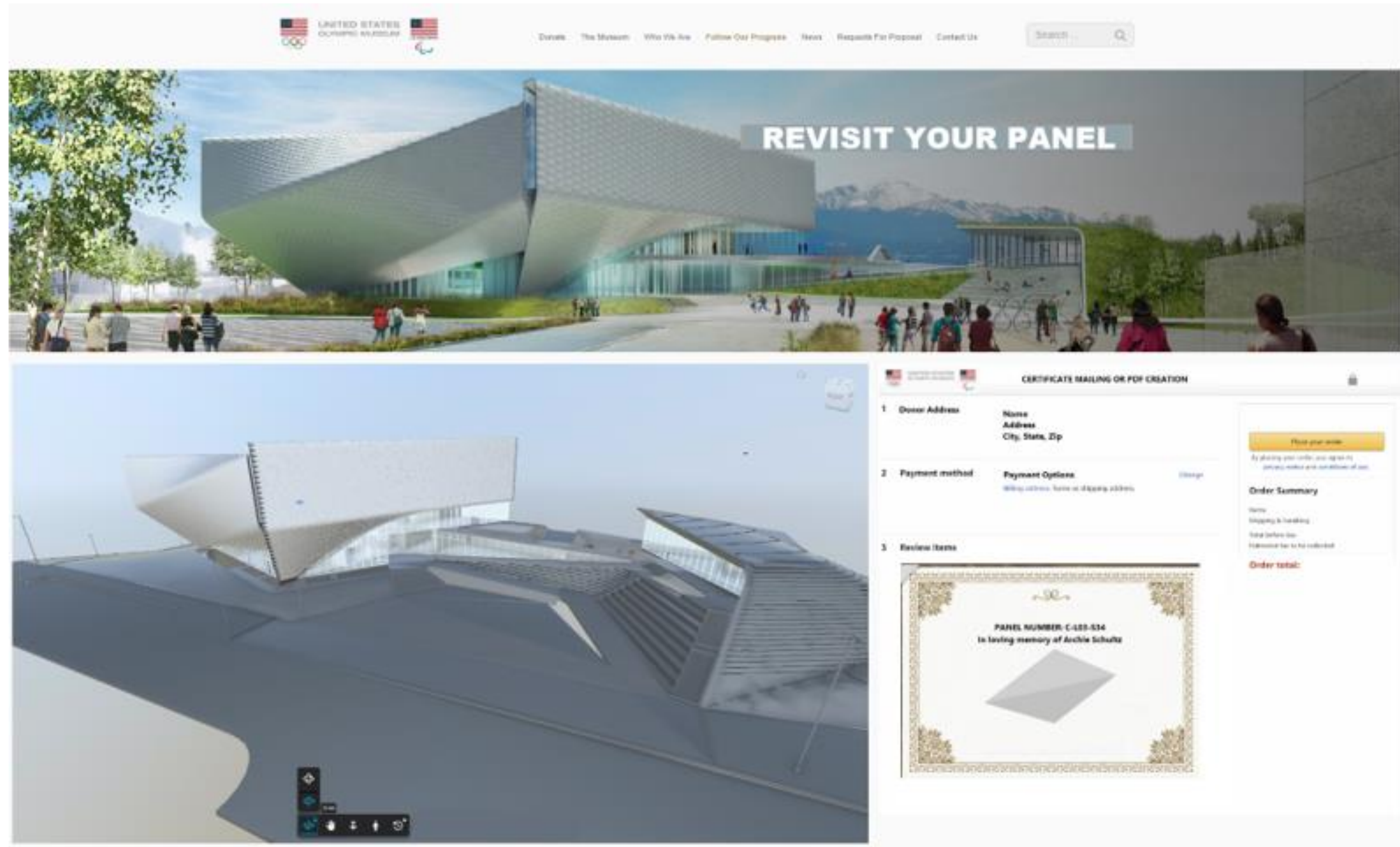
A red text overlay with a white border states: "If more than (1) panel is purchased form expands to add additional messages".

If more than (1) panel is purchased form expands to add additional messages

INTERFACE MOCKUP - REVISIT PANEL



INTERFACE MOCKUP – CERTIFICATE



TECHNOLOGY OVERVIEW

Microsoft Azure; SQL
Database/Server, Virtual Machine

Autodesk Forge; Viewer, BIM Model

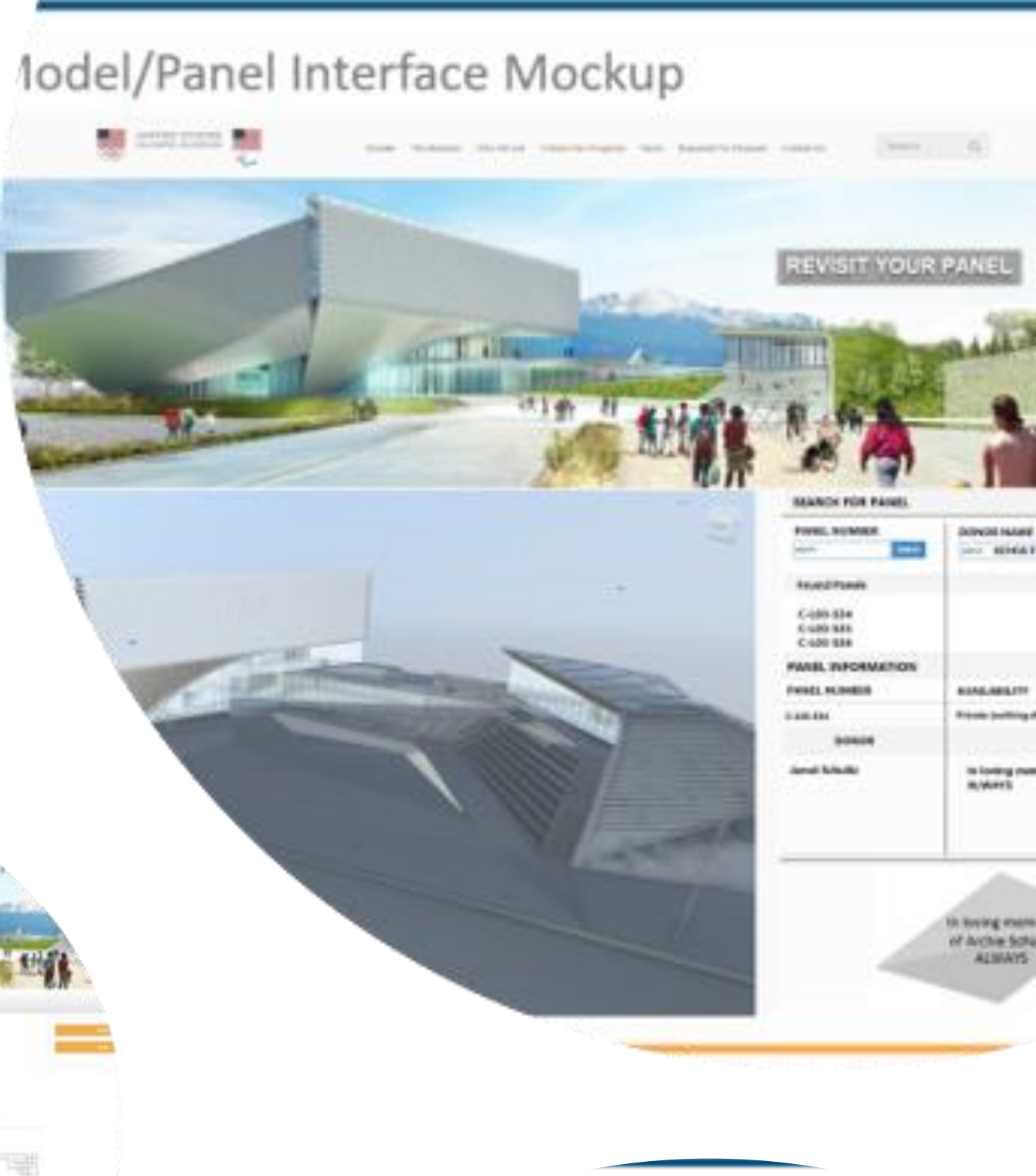
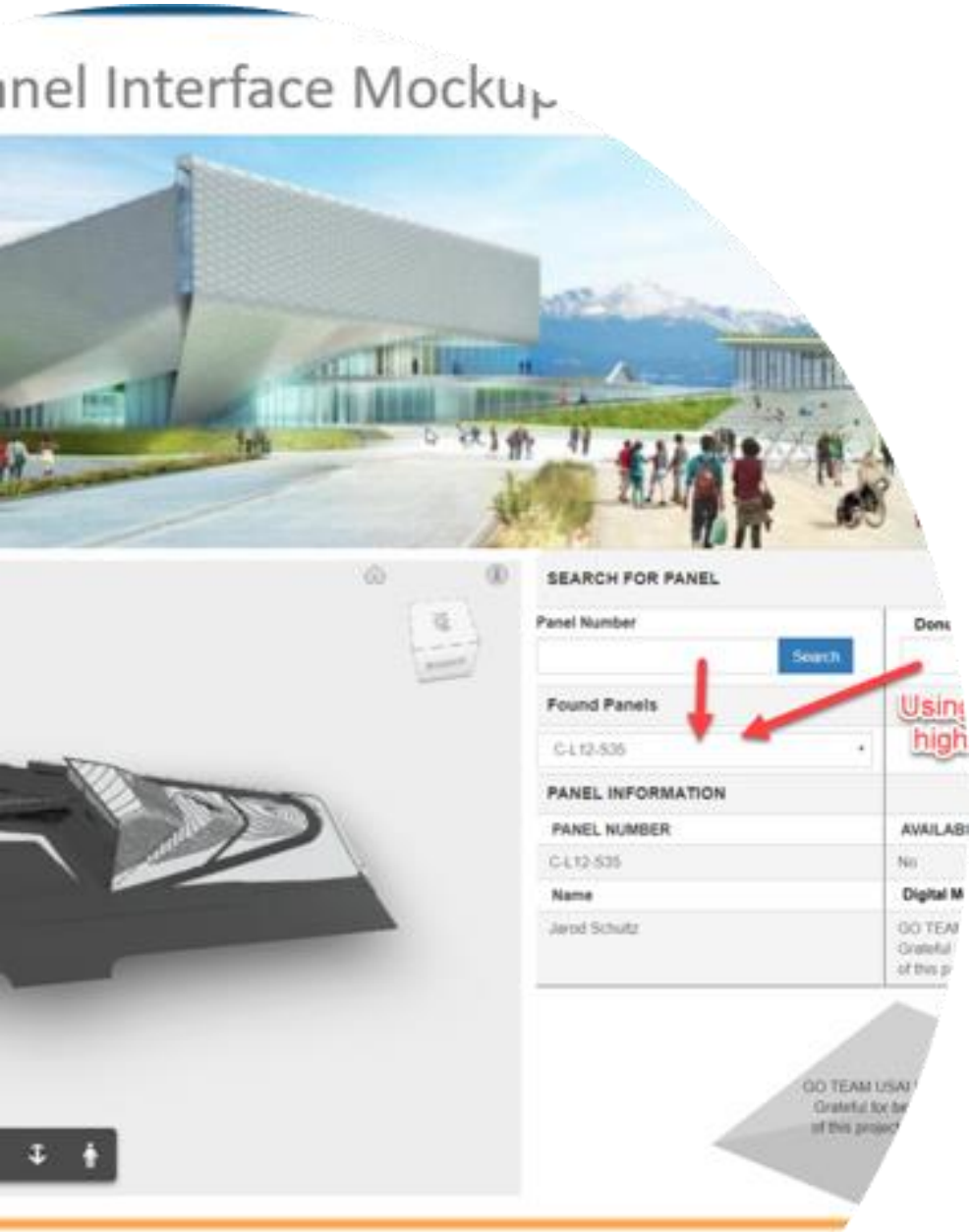
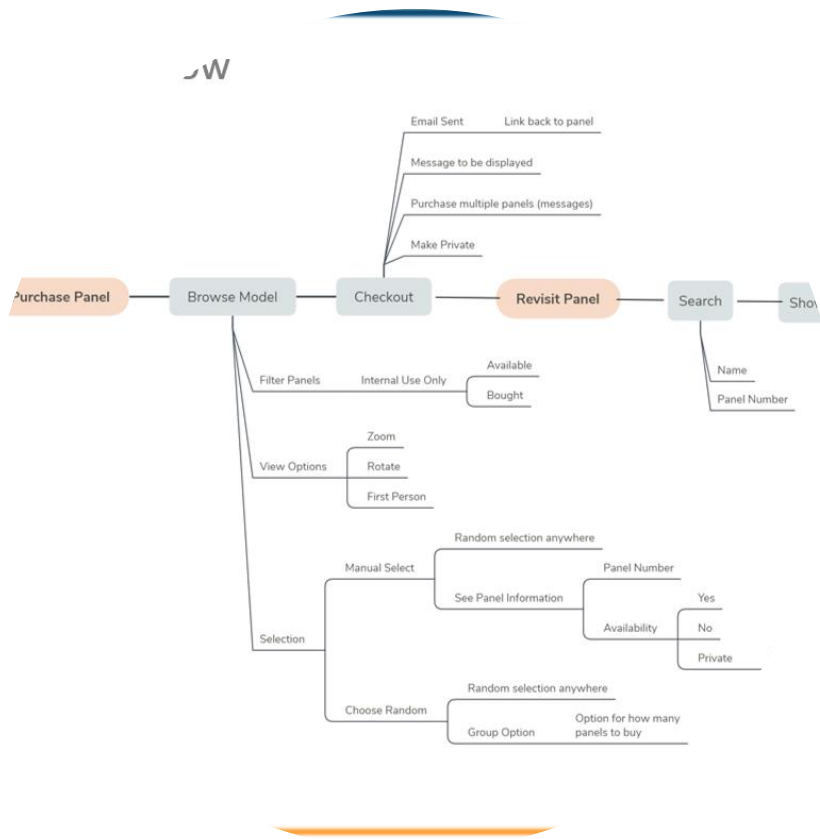
Code Language; ASP.NET MVC, C#,
Jquery, JavaScript and css

Email Server: SendGrid

Unique URL: Domain/SSL
Certificate,

FEW CHANGES AS WE WENT

- 4 Revisions on Phase 1
- 1 Revision on Phase 2



Checkout (1) Items

Name	Jarod Schultz	Required
Company Name	MasterGraphics aec	Not Required
Email Address	jarod.schultz@mg-aec.com	Required
Address	303 W 45th Ave	Required
State	CO	Required
City	Denver	Required
ZipCode	80216	Required

Make Panel I

By making a

Donation Sum

Total: \$1,000.00

name

maximum, each row maximum of

GO TEAM USA! USA #11 Grateful for being part of this project, MG aec

As donor types me text over the diamo dynamically up

OVERVIEW OF PROCESS



ADOPT A PANEL

PANEL INFORMATION	
PANEL NUMBER	AVAILABILITY

[Adopt Selected Panel](#)[ADOPT NOW](#)

"Thank you for visiting the United States Olympic Museum Diamond Donor website. The website provides an interactive and dynamic experience which will allow you to zoom in and move around the building. It may take a few seconds for the model and panel messages to fully load. Please be patient.

At any time, you may choose a panel on the model to see if it is available for adoption.

Please understand that you must select a panel from the model before selecting Adopt Now. Once that is done, it will open another page so you can add your message and donate to the United States Olympic Museum."

[Tutorial Video](#)[WATCH](#)

Waiting for raas-assets.autodesk.com...

USOM DIAMOND DONOR SITE



DIAMOND DONOR PROGRAM

Nearly 10,000 diamond shaped aluminum panels will intricately create the exterior shell of the U.S. Olympic & Paralympic Museum. For \$1,000, you can sponsor one of these unique panels and will be able to virtually search for your assigned panel and see your digital inscription.

Adopt a Panel

- URL: <https://usopm.org/>

REVISIT YOUR PANEL - SHARE WITH FAMILY / FRIENDS

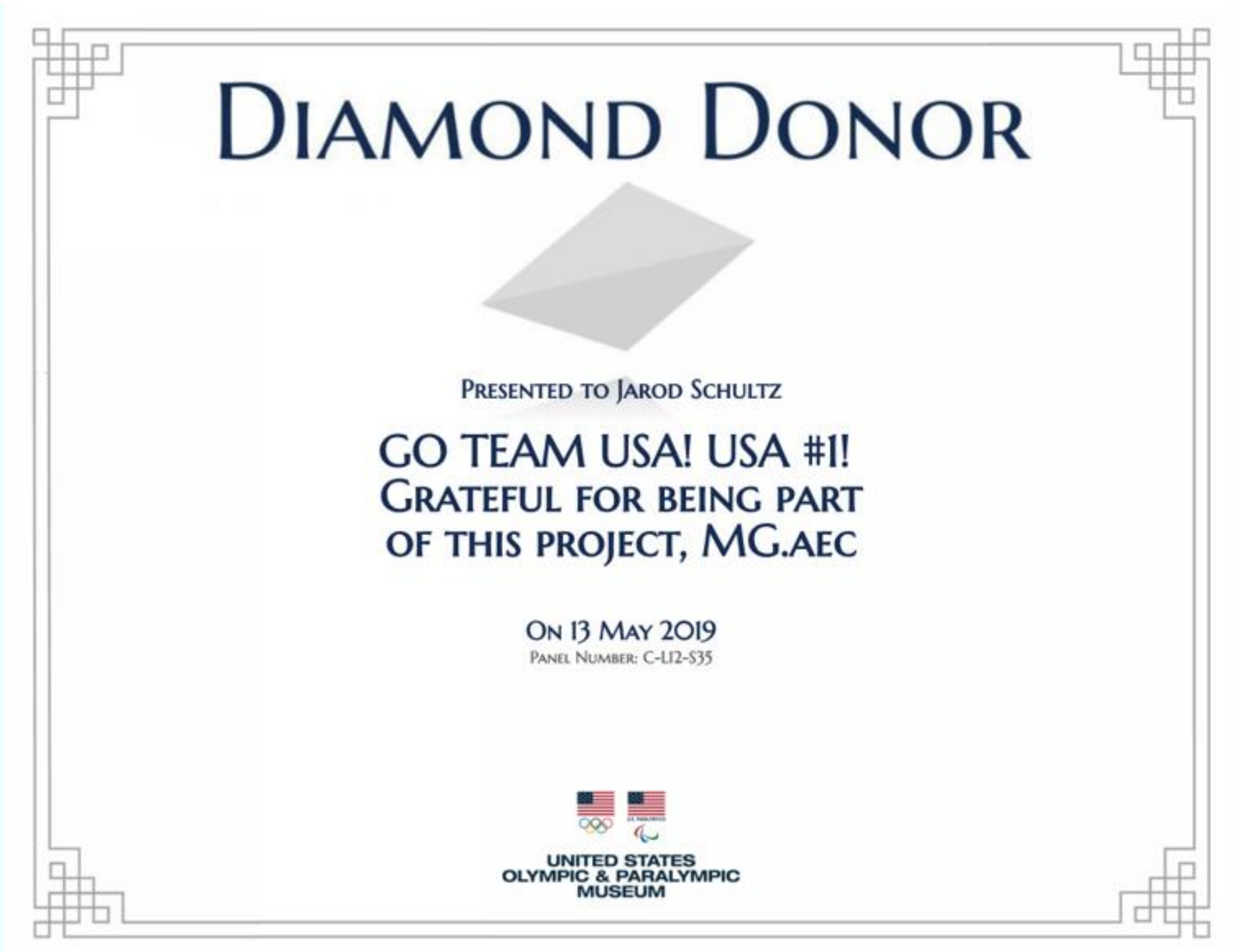


SEARCH FOR PANEL		Get Certificate
Panel Number	Donor Email Address	
Search	Search	
Found Panels		
C-L12-S35		
PANEL INFORMATION		
PANEL NUMBER	AVAILABILITY	
C-L12-S35	No	
Name	MESSAGE	
Jarod Schultz	GO TEAM USA! USA #1! Grateful for being part of this project, MG.aec	

GO TEAM USA! USA #11
Grateful for being part
of this project, MG aec

MG Panel - [Link](#)

DIAMOND DONOR CERTIFICATE





1. Donor Shipping Address

Name

Jarod Schultz

Company Name

MasterGraphics.aec

Address

303 W 45th Ave

State

CO

City

Denver

ZipCode

80216

Panel Number

C-L12-S35

PRINT CERTIFICATE

MAIL CERTIFICATE

2. Review items

DIAMOND DONOR



NEED MORE INFORMATION?

Jarod Schultz

Director of Research + Development

jarod.schultz@mg-aec.com

<https://www.mg-aec.com>

Please fill out the Survey, Thank You!





AUTODESK®

Make anything™

Autodesk and the Autodesk logo are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2019 Autodesk. All rights reserved.

