



Digital Design

**Monuments, Guardians and
Specialized Construction**

Full-Service Exhibit Design and Fabrication Specialists

For more information including engineering drawings and videos go to:

[**www.DigitalDesignLLC.com**](http://www.DigitalDesignLLC.com)



Full-Service Museum Exhibit Design
and Fabrication Specialists

Monument, Guardians and Specialized Construction

CONTENTS;

Our Organizations

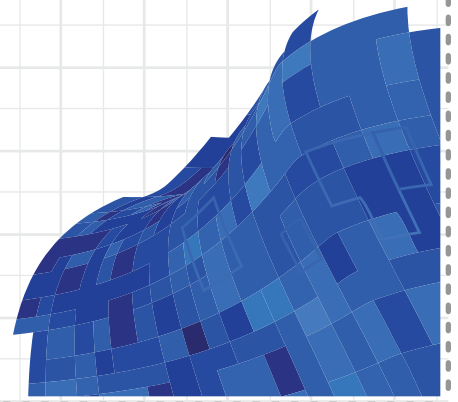
References

Production Capabilities

Services

Concept Design

Project Samples





Aviation is brought to life in the form of full-size, precision-crafted, and impeccably detailed aero space replicas. These replicas produced to precisely match the originals are an economically prudent and affordable alternative to obtaining the real artifact, assuming one exists and is available for sale. The complications involved in locating, restoring, and of course the enormous cost involved in accomplishing this task can be overwhelming. The Digital Design group can provide a solution tailored to accommodate any budget.

Through a dynamic collaboration of professionals which include engineers, aviation design professionals and talented artisans the Digital Design group has assembled a team to construct the finest replicas in the world.

Our group is capable of manufacturing, and constructing historic replicas in any size finished to be indistinguishable from the original aircraft.

Any replica is possible, if used for a museum display, shopping mall, outdoor guardian, television, movie props, or the pride of the corporate boardroom, Digital Design can create the replica that suits your needs.

We invite you to carefully review our portfolio and examine the quality replicas we have built for our clients. Contact us and let's discuss your needs.

Thank You

Jaime Johnston
Managing Partner

A decorative graphic in the bottom left corner consisting of a series of overlapping blue squares and rectangles, creating a wave-like or abstract geometric shape.

Organization

www.DigitalDesignLLC.com • sales@digitaldesignllc.com • 602-971-5646



Lockheed Vega
Floyd Bennett Field Brooklyn, NY

The Digital Design group is a dynamic collaboration of specialized design, exhibit and construction professionals with broad-based real world experience. Because each project is unique unto itself our clients need only retain the services necessary for the specifics required for their project. Eliminating unnecessary overhead by using our a la carte menu allows each project to be priced in the most cost effective manner. Our group members are specialists in all aspects of the design, fabrication and construction for projects both big and small. We can also assist with fund raising and financing for your project.

The Digital Design group consists of the following organizations and specialties.

Digital Design LLC [Graphic Production](#) • [Design Engineering](#) • [Commercial Sales](#) • [Info Kiosks](#)

Arizona Model Aircrafters [Flying Models](#) • [Retail Sales](#) • [Desktop Display Aircraft](#) • [Spacecraft Vehicles](#) • [Ships](#) • [Precision Miniatures](#) • [Custom Models](#)

Ryden Architectural [Architectural Concepts, Design and Plans](#)

Slaysman Engineering [Structural Analysis and Certifications](#)

Blackhawk Models [Retail and Wholesale Beginner and Educational Model Kits](#)

US Buildings LLC. [Full Service General Contractor](#) • [Steel Fabrication](#)

Museum Quality Replicas and Artifacts

Full-sized replicas of historical artifacts are our primary specialty. Utilizing our rapid prototype production equipment, we are able to fabricate parts and components directly from blueprints, plans and photographs.

The Digital Design group has had the pleasure of producing high quality replicas for commercial clients. Shown below is a client list for animated and static displays, museum and traveling exhibits, outdoor monuments, special events, tradeshow, and film and theater productions.

Selected Client List

Museums, Airports & Government Facilities

NASA (National Aeronautics and Space Administration)
U.S. Air Force Academy - Colorado Springs, CO
USMC Museum - Quantico, VA
USCG Academy - New London, CT
US Naval Aviation Museum - Pensacola, FL
Tyndal AFB - Panama City, FL
Holloman AFB - Alamogordo, NM
National Geographic - Washington, DC
Irish Air Force Museum - Dublin, Ireland
Venezuelan Air Force Museum - Maracay, Venezuela
National WWII Museum - New Orleans, La
Commemorative Air Force Museum - Mesa, AZ
First Flight Society - Kitty Hawk, NC
USS Intrepid Sea Air & Space Museum - New York
Virginia Air & Space Center - Hampton, VA
Huffman Prairie Flying Field Interpretive Center - Dayton, OH
TAC Air Facility - Airport Raleigh Durham, NC
Regional Airport Authority- Clarksville, Montgomery County, TN
Malta International Airport - Malta
Ogden Higley Airport - Ogden, UT
Piedmont Triad International Airport - Greensboro, NC
TAC Air Facility - Airport Lexington, KY
Virgin Atlantic Airlines - United Kingdom
Charlotte/Douglas International Airport - Charlotte, NC
Curtiss Wright Corporation - Roseland, NJ
Purdue University - West Lafayette, IN
Floyd Bennett Field - Brooklyn, NY
Page Field - Ft Myers, FL
Shaw AFB - Sumter, SC
Fernandina Airport, Fernandina Beach, FL
Stapleton Airport - Denver, CO
TAC Air Facility - Airport Little Rock, AR
General Atomics - San Diego, CA
Royal Saudi Air Force - Riyadh, SA



Entertainment

Movie- Unbroken
Movie- Unforgiven
Movie- The Aviator
Movie- Flyboys
Movie- Transformers 3
Movie- The Congress
TV- HBO Band of Brothers
TV- Man, Moment, Machine
TV- HBO Boardwalk Empire
TV- Showdown Air Combat
TV Commercial- Virgin Atlantic Upper Class
TV Commercial- Exxon I want to be an Engineer
Mandalay Bay- Las Vegas
Industrial Light and Magic
Discovery Channel

Reference contact information
available upon request.

References

PRODUCTION SYSTEMS

Creation Through Advanced Technology

Our design/build group has invested considerable time and finances to create a state-of-the-art, computer-operated manufacturing process. By producing our own parts we are able to keep costs down and quality high. Using specialized scanning and graphics equipment, we are able to significantly reduce the time and labor typically associated with bringing new designs to you. In addition we have had further assistance from our friends at Scale Research, Air Age Publications and WWI Aero in providing plans, data and other historical documentation, to help to bring you the finest replicas.

Using state-of-the-art CNC driven production equipment the Digital group can make virtually any part at any size. Each design is individually cut according to the plans. In addition to the laser cut parts cases we also produce custom fitting and hardware sets specific to your design. These are made using a high pressure water jet which is capable of cutting over 1" thick steel.

Our production equipment is available for any special project. If it is a simple plans enlargement or a complete custom manufactured replica you need, we are here to help.

We offer scanning, digitizing & enlarging of plans, laser cutting, water jet cutting, CNC routing, assembly and manufacturing services



Large format printing and scanning



Metal laser cutter



Water jet



Wood laser cutter

Professional Production Services

Our CAD driven process allows for highly accurate component production. Coupled with our 2 and 3D design capabilities the fabrication process is both shorter and more accurate. With our expert crew of assemblers and finishers we strive to make our reproductions indistinguishable from the actual artifact by all but the most experienced observer. Replicas are designed specifically suited to the display environments. Typically replicas are a hybrid of a metal space frame and composite skin. This method is ideal for indoor use typically being less expensive in both time and materials to produce. All metal construction is an optional method typically reserved for outdoor display.



Our 3D printing and CNC machining make for easy scalability of our designs. Shown above is a large (1/24) full stack orbiter and to the left a 1/48 scale model made from the same 3D CAD design plans.



Production

Professional Assembly

Our CAD driven process allows for highly accurate component production. Coupled with our 2 and 3D design capabilities the fabrication process is both shorter and more accurate. With our expert crew of assemblers and finishers we strive to make our reproductions indistinguishable from the actual artifact by all but the most experienced observer. Replicas are designed specifically suited to the display environments. Typically replicas are a hybrid of a metal space frame and composite skin. This method is ideal for indoor use typically being less expensive in both time and materials to produce. All metal construction is an optional method typically reserved for outdoor display.



Professional Installation Services

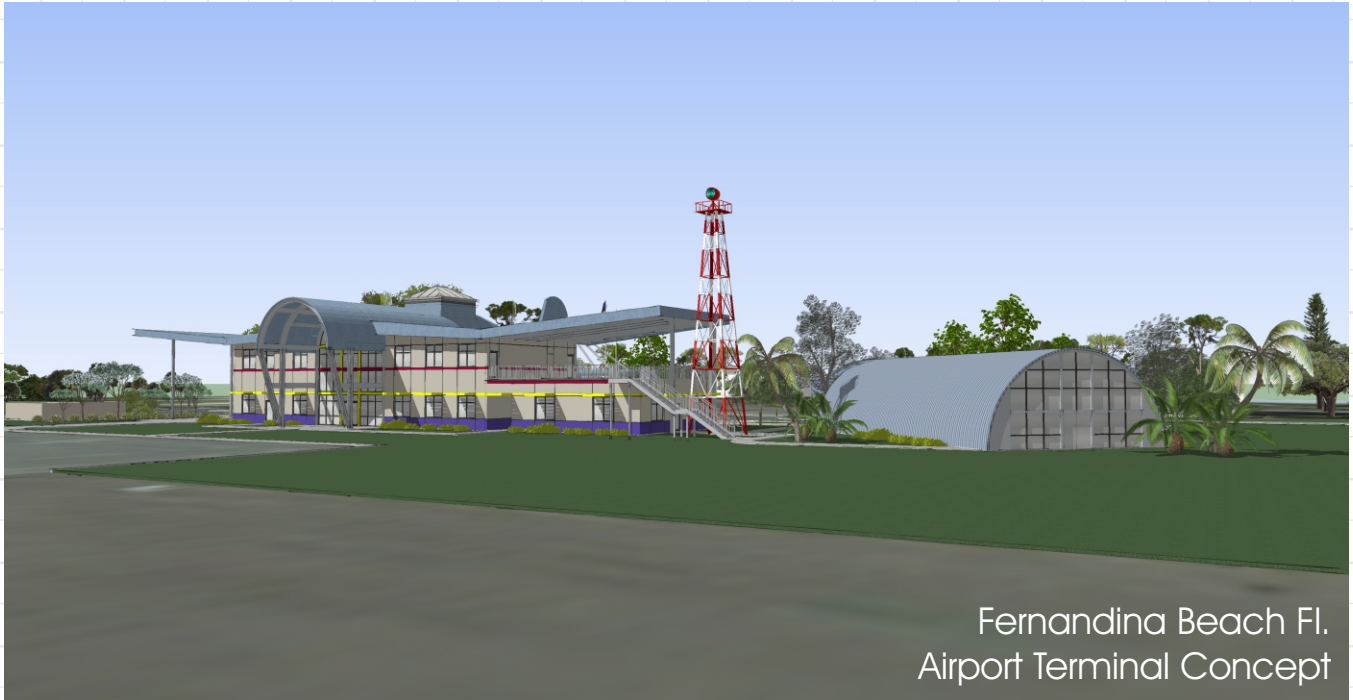
Standard project pricing typically includes reassembly and setup on site. We can work with your local contractor riggers or maintenance personnel if the replica requires special placement or hanging. If you prefer a complete “turn-key” operation we can provide professional and experienced licenced contractor.



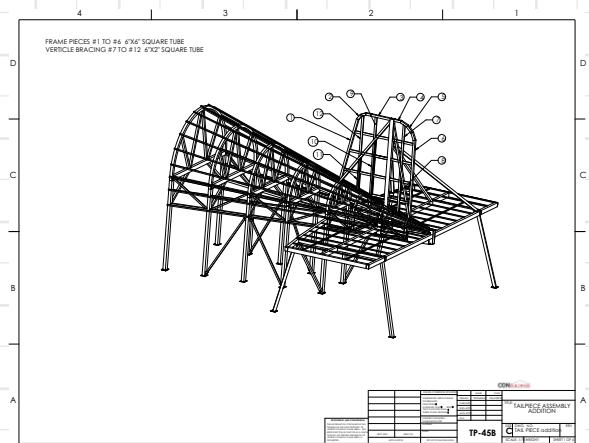
On Site Services

ENGINEERING

With a speciality in unusual designs our engineering services provide a unique and cost effective approach to a wide variety of disciplines. Indoor or outdoor presentations of any scope and size are handled by our certified structural engineering and architectural services. Coupled with our fabrication capabilities provide for a seamless design build process.



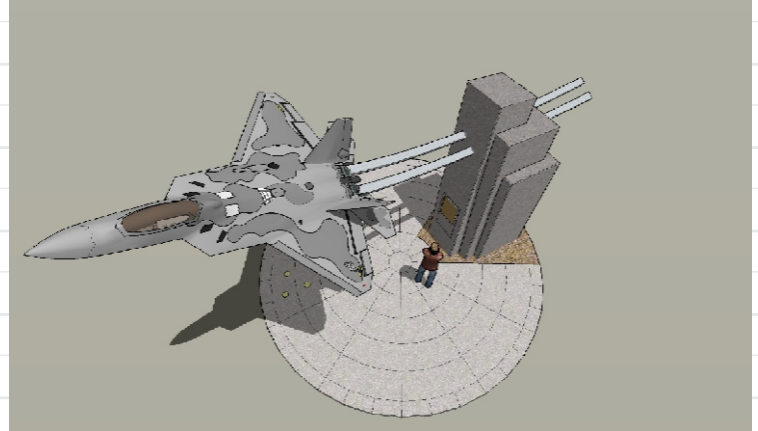
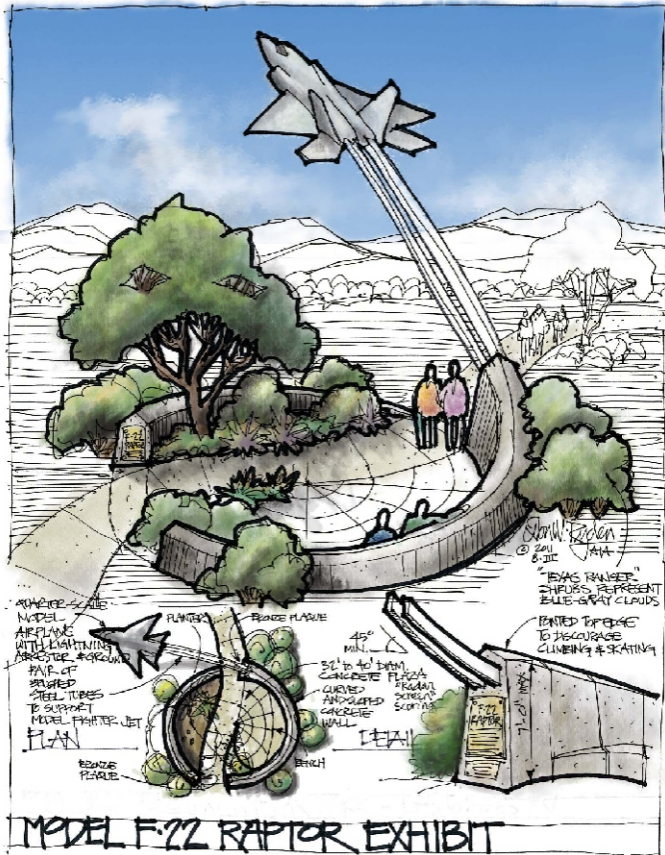
Current project under construction
Expected completion July 2018



Building Permit Drawings

CONCEPT DESIGN SERVICES

Every project starts with the concept. Shown are a few examples from the development phase of the design process exploring possible exhibit components and visitors flow through the space. Our concept and artistic team bring your idea to life. From simple pencil sketches and watercolors through full animated 3D presentations we can budget this first step of the development to your needs.



The main feature of this new Las Vegas park is a 1/4 scale F-22 Raptor display in a decorative central plaza to honor the local military personnel at Nellis Air Force Base. The Raptor replica is mounted on steel "con-trails" supported by a 14 FT structural concrete monument pedestal. Ryden Architects worked with Arizona Model Aircrafters to develop this unique dynamic design to highlight the aircraft's nimble acrobatics. The circular concrete plaza was also thoroughly thought out as part of the design. The joints and score lines represent the visual display of a radar screen with "enemy bogey" blips represented by the three up-lights that shine on the underside of the aircraft. The design successfully engages visitors by drawing them into an intimate space where, for a moment, they can reflect and appreciate those hard trained pilots and the beauty of their jet fighter.



Raptor Park Las Vegas, NV

Support Services

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OUTDOOR MONUMENT CONCEPT AND FINISHED PROJECT SAMPLES

THE DESIGN PROCESS - A Case History

The following pages illustrate various design concepts submitted for the city of Las Vegas Raptor Park monument.

The initial design concept as proposed by the customer was patterned after a display located at Nellis AFB (photo insert). This initial design referred to as “ bug on a pin ” was discarded as being undramatic and uninspiring. The secondary rendering submitted was based on a design for the ROTC building at the University of Indiana This version was rejected as being too susceptible to vandalism and or injury in an unsupervised city park. The third rendering was well received but later rejected as requiring too much landscape maintenance.

The initial concept stage of the project is the most critical. Beginning with the hand drawn sketches which are then turned into 3D renderings and finally a computer animation. These tools are not only valuable to visualize the piece in its final setting but are also helpful in promoting the project to the public and for fund-raising.

The final approved monument was considered dramatic and ascetically pleasing. Photos of the finished display are shown at the end. Additional sample concept drawings and photos from other recent projects are also included as samples of our past work.

The remaining photos and illustrations show other projects we have provided for various customers across the country. We did it for them We can do it for you.



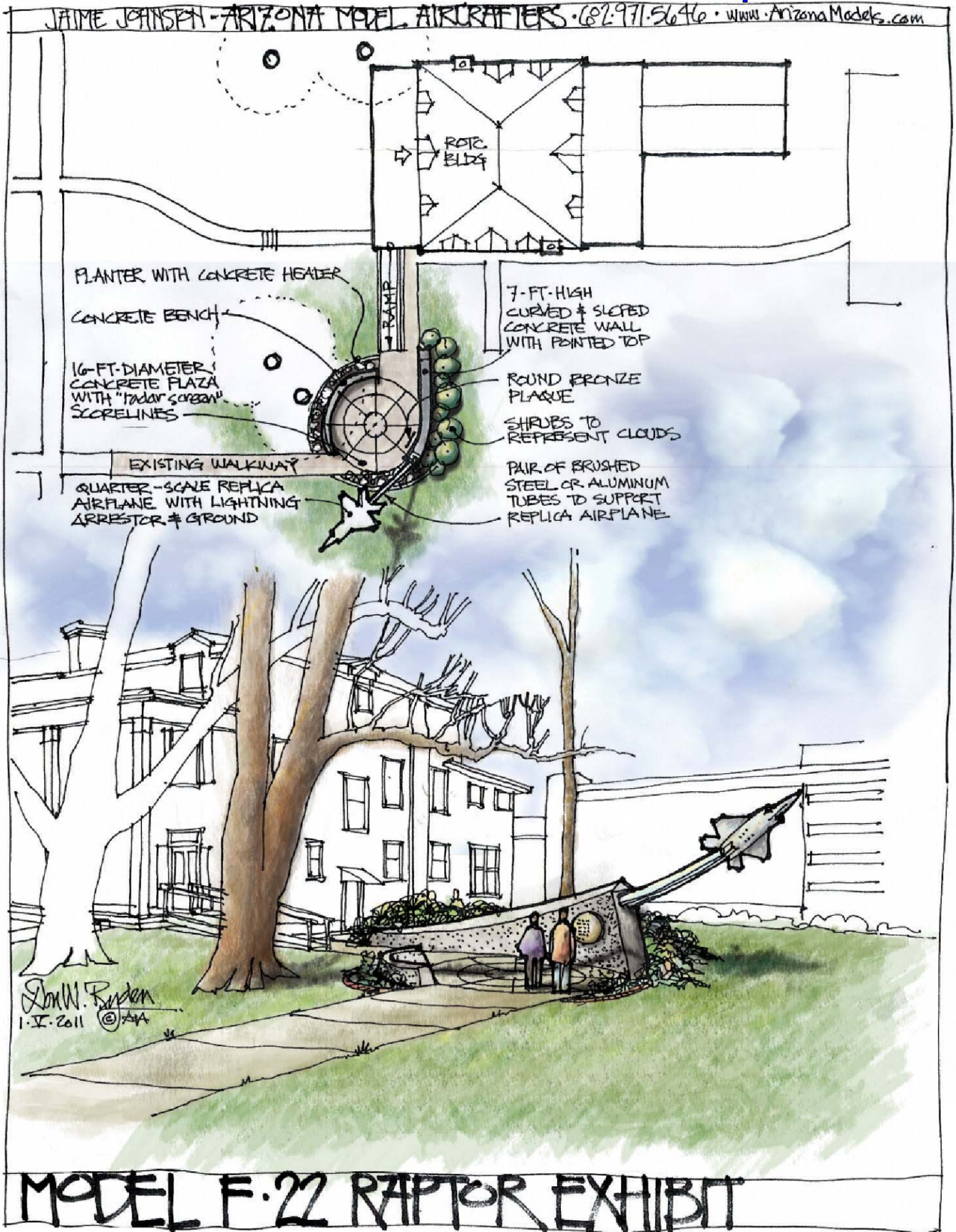
F 22 Nellis AFB

**Original Idea from the Customer
Based on a display at Nellis AFB**



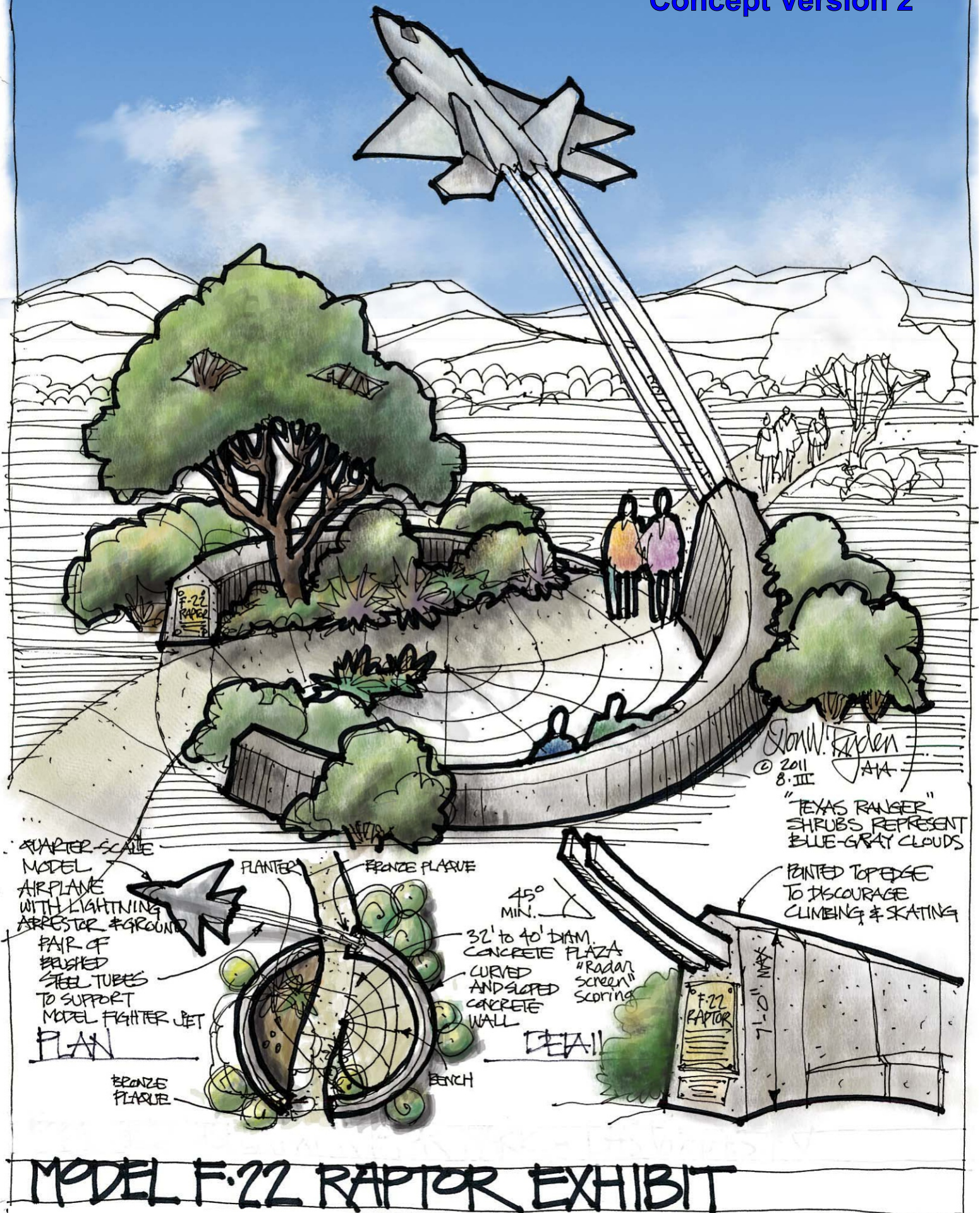
Concept Version 1

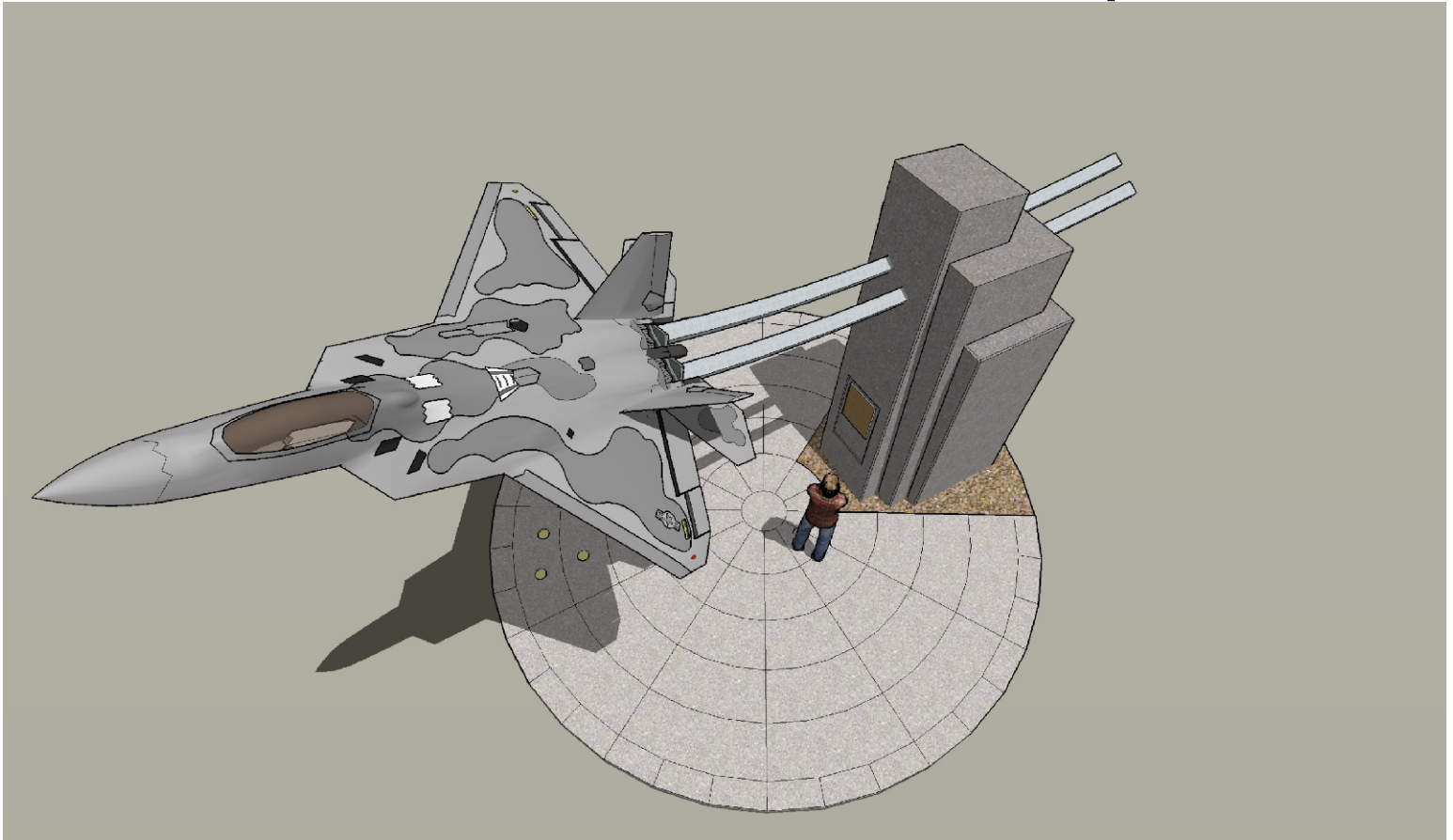
JAMIE JOHNSON - ARIZONA MODEL AIRCRAFTERS - 602-971-5646 - www.ArizonaModels.com



MODEL F-22 RAPTOR EXHIBIT

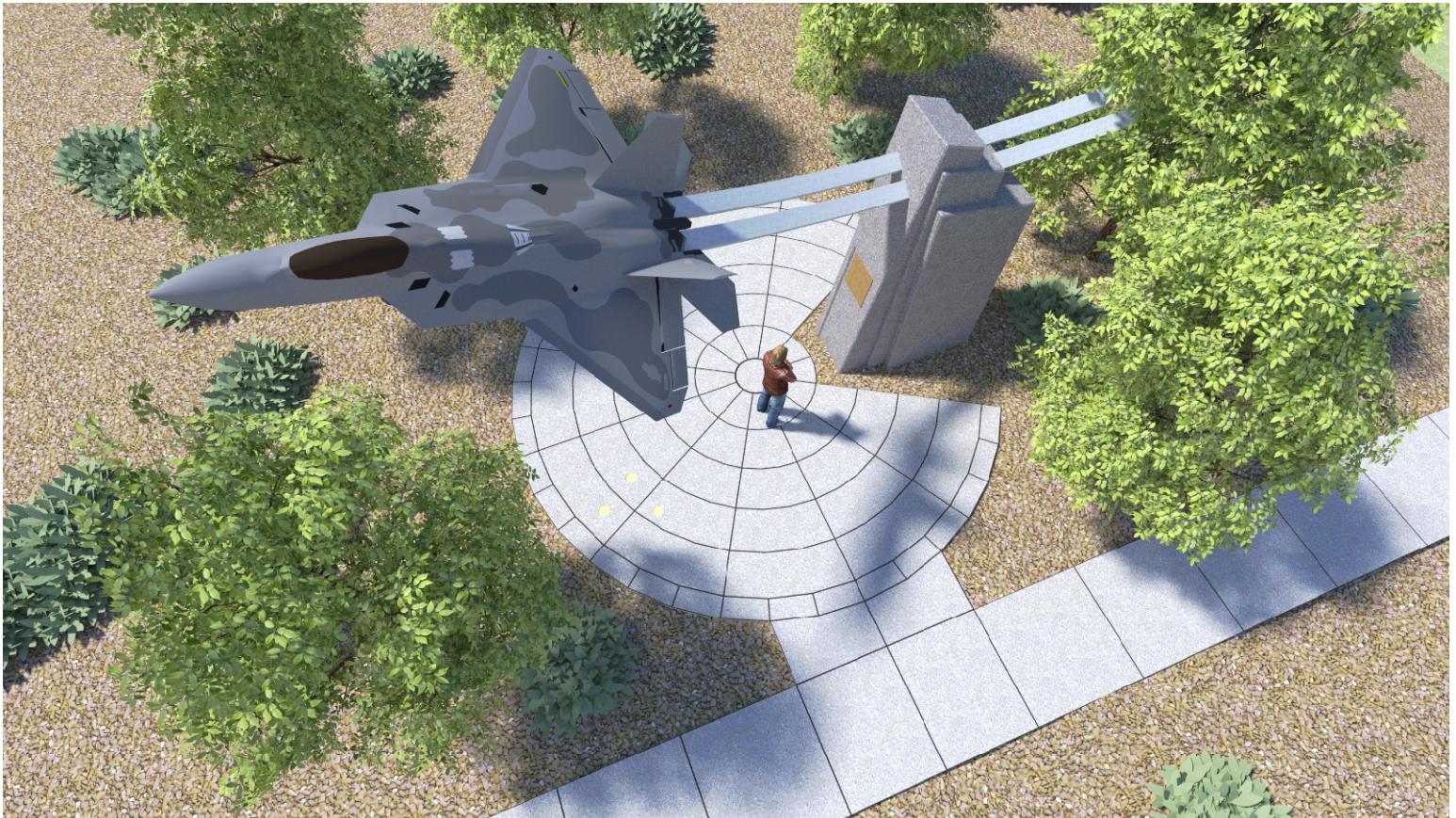
Concept Version 2





Sample 3D Rendering

Once the concept is decided we fill in the detailing in order to provide a representation of the finished construction. These are especially useful along with animations for fundraising and other presentations.



F 22 Monument Final



RAPTOR PARK F-22 DISPLAY

Las Vegas, Nevada



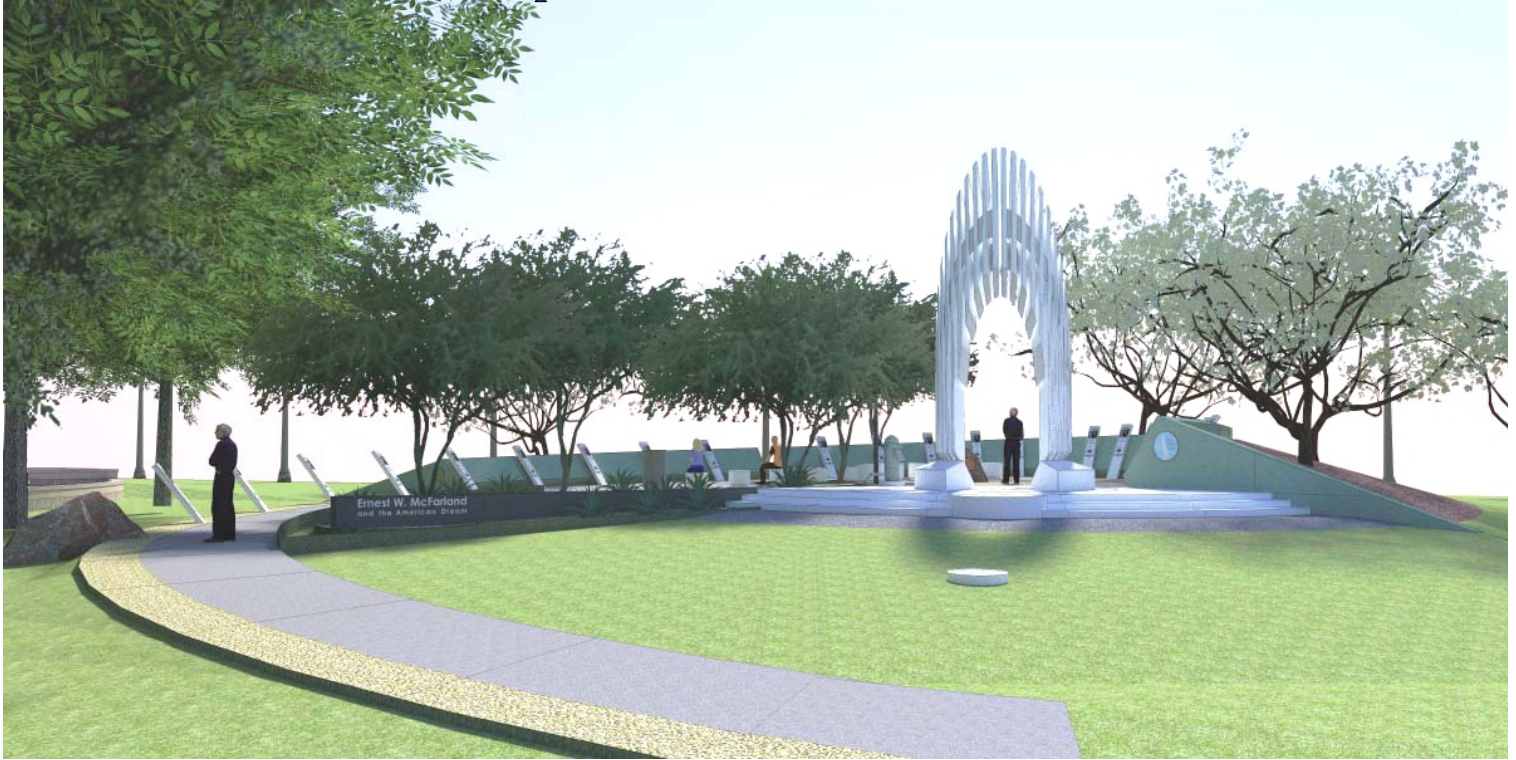
With the final concept decided upon the architectural plans were finalized and the structural engineering calculations completed. At that point the permitting process was begun along with the fabrication of the replica air frame. Local contractors were retained for the concrete work with Digital supplying the specialized aluminum tubing in advance of the airframe delivery.



F 22 Monument



Monument Arizona State Capital



THE ERNEST W. MCFARLAND MEMORIAL

at Wesley Bolin Plaza Phoenix, AZ



The Ernest W. McFarland Memorial is unlike any other on Bolin Plaza. The memorial surpasses commemoration alone because the public of today requires and deserves explanation of the life and legacy of Ernest McFarland—a name once familiar to all Arizonans. In February 2002, The Arizona Republic recognized Mac as being one of the top four people in history who positively influenced the growth of Arizona. The re-visioned design seamlessly weaves a thematic, illustrated narrative of Mac's life into the symbolic, monumental architecture. The story and structure form four parts based upon Mac's pursuit of his American Dream for justice and opportunities for all citizens. Re-visioning and renewal of the deteriorated memorial provides the opportunity to

- assure greater longevity and lower maintenance with sustainable materials and design,
- provide physical accessibility to the entire structure for all visitors,
- interpret Mac's achievements in terms of relevance in the lives of today's visitors, and
- enhance the memorial more with the respect, simplicity, and spirit that Mac deserves.



Guardian Displays



Phoenix, AZ



Brooklyn, NY

Outdoor guardian displays custom designed for any setting. Engineered for exposure to the local climate these displays offer a long service life with minimal maintenance.

Guardian Display Tyndal AFB



Final

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Historical Markers Hoover Dam



HOOVER DAM BY-PASS BRIDGE PLAZA

at the Arizona Nevada border

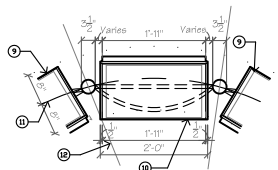


The Hoover Dam is recognized as one of the greatest engineering wonders of the world. The new US-89 By-pass Bridge has been sensitively designed to complement the dam's form as well as defer to its monumentality. In order to allow travelers to experience these modern marvels from many viewpoints, the Federal Highway Administration and the Bureau of Reclamation determined to provide a walkway on the dam side of the 1,500-foot-long bridge.

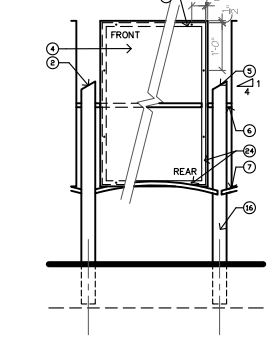
In order to provide ascenic pedestrian approach to the bridge, FHWA contracted with HDR, Inc. and Ryden Architects, Inc. to design an interpretive plaza and accessible trail. These structures link the parking area at the historic switchyard towers to the Nevada end of the bridge walkway. The shape of plaza is derived from the concept of "journey" as expressed in the local Native American rock art. Two linked and opposing spirals form this hypnotic glyph. Still today the Southern Paiutes conduct healing pilgrimages between Nevada's Goldstrike Canyon and Arizona's Sugarloaf Mountain.



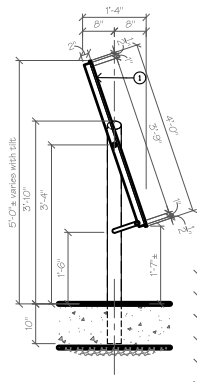
The plaza straddles a ridge near the rim of Black Canyon. A dramatic, narrow passageway cut 25-feet deep through the solid rock of the ridge connects the two opposing, circular terraces of the plaza. A high, curved concrete wall with a sloping top shelters each terrace nestled into the hillside. Here interpretive displays explain the history of transportation through the Mohave Desert and tell the story of the bridge's construction. The Visitor Plaza combines forms and materials of the dam and bridge. Its proportions express those of organic growth. In following the intent of the dam's architect, Gordon Kaufman, Ryden Architects, Inc. has created a lasting place whose sculptural character is intended to betimeless, without reference to a specific architectural style, but responsive to the play of light and shade traveling on its surfaces.



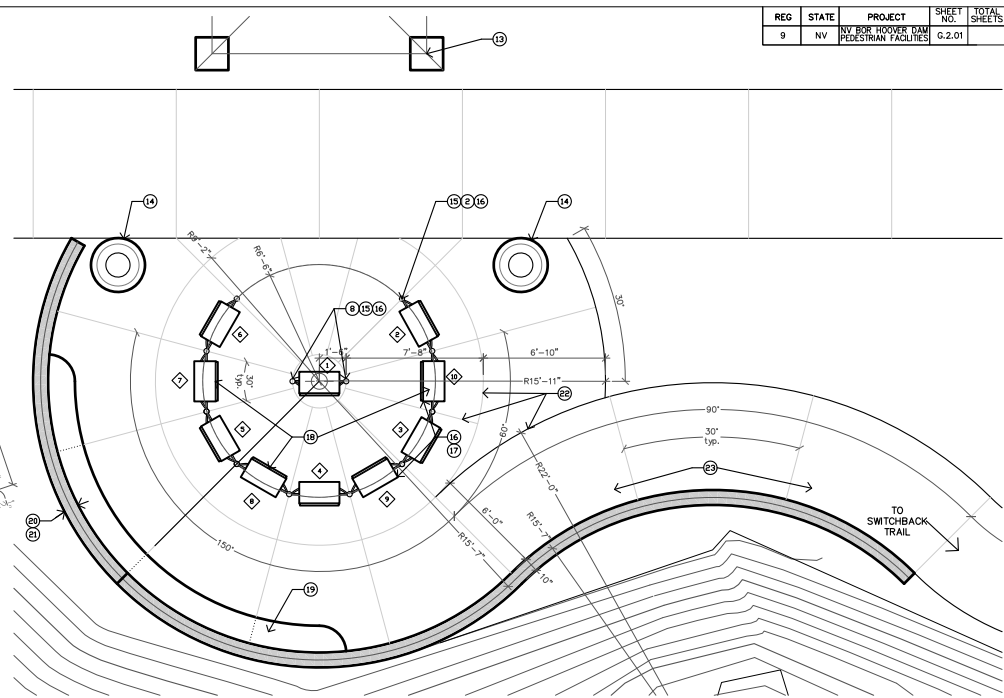
③ Plan
SCALE: 1/2" = 1'-0"



④ Front and Rear Elevation
SCALE: 1/2" = 1'-0"



② Side Elevation
SCALE: 1/2" = 1'-0"



① Trailhead Plaza Plan
SCALE: 3/16" = 1'-0"

- | | | | | |
|--|---|---|---|---|
| <p>1 Tilt angle varies to keep top and bottom edges within 1'-4" width of spiral pattern on concrete slab.</p> <p>2 Place the high point of the slope-topped pattern in a clockwise pattern.</p> <p>3 1" x 2" x 3/8" steel tube frame with mitered corners.</p> <p>4 Etched metal exhibit panel bolted to mounting frame.</p> <p>5 1/4" thick elliptical closer plate welded at top of steel pipe. Grind, prime and paint.</p> <p>6 3/4"-diam. steel rod through mounting frame (welded) and extending to steel pipes. Length of pivot rod will vary. Trim in field to fit snugly. Weld and grind.</p> | <p>7 3/4"-diam steel rod bowed to act as strut for mounting frame. Adjust & trim to proper length in field. Weld and grind connections at steel pipes and frame.</p> <p>8 Place high points of the slope-topped inward to panel.</p> <p>9 Panel tilts outward.</p> <p>10 Panel tilts inward.</p> <p>11 Centerline of panel layout pattern at plaza.</p> <p>12 30 degree score line of concrete slab.</p> <p>13 Existing tower</p> <p>14 Prefab concrete trash/ash container aligned on plaza scorelines</p> | <p>15 See detail on sheet F.1.13 for installation of exhibit panel mounting posts</p> <p>16 Steel pipes at 30° score lines. Core-drill slab for posts after pattern has been installed to assure alignments.</p> <p>17 2'-0" x 4'-0" panels are tilted for easier viewing.</p> <p>18 Panels alternate in direction of facing and tilting as indicated on plan.</p> <p>19 See F sheets for integral concrete bench.</p> <p>20 See F sheets for concrete slab and walls.</p> <p>21 Provide aesthetic reveals on both front and back of wall</p> <p>22 Scorelines in concrete slab</p> | <p>23 Salt-finish concrete walkway and plaza slab.</p> <p>24 Pre-drilled holes (typ. of 8) in steel mounting frame for installation of exhibit panels w/bolts and tamper proof connectors. Coordinate hardware size and type and bolt/hole locations with panel fabricator prior to beginning work.</p> | <p>GENERAL NOTE:
A. Prime and Paint the steel exhibit mounting structure and hardware to match railing of plaza.
B. Provide shop drawings of Exhibit mounting hardware to CO for review by Architect.</p> |
|--|---|---|---|---|

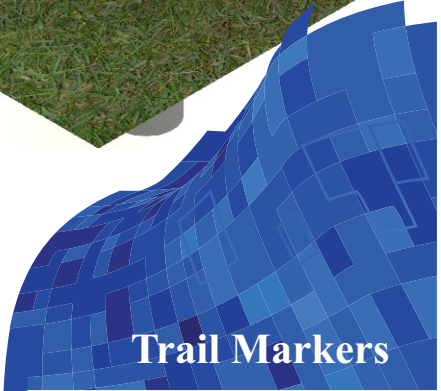
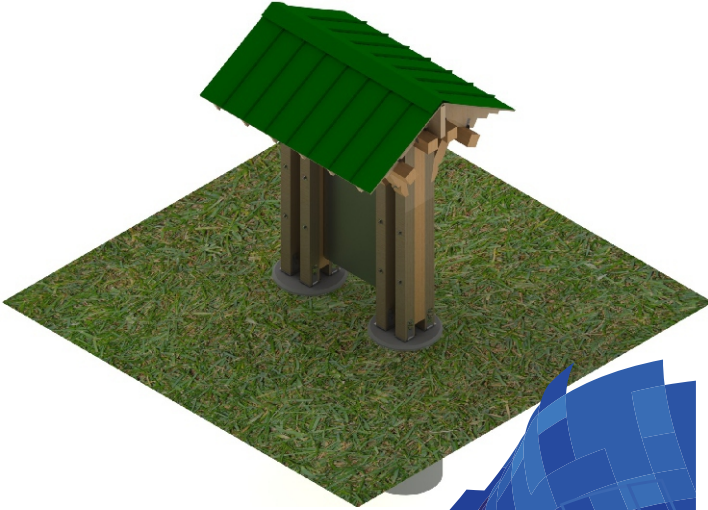
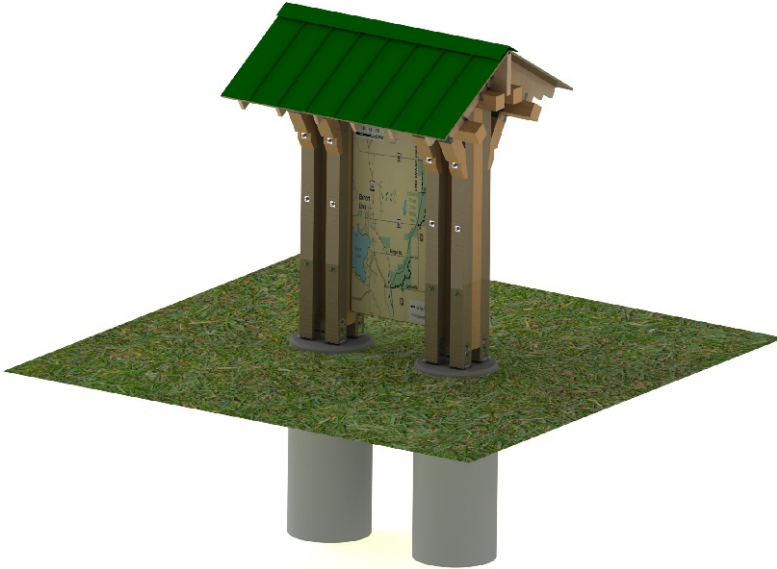
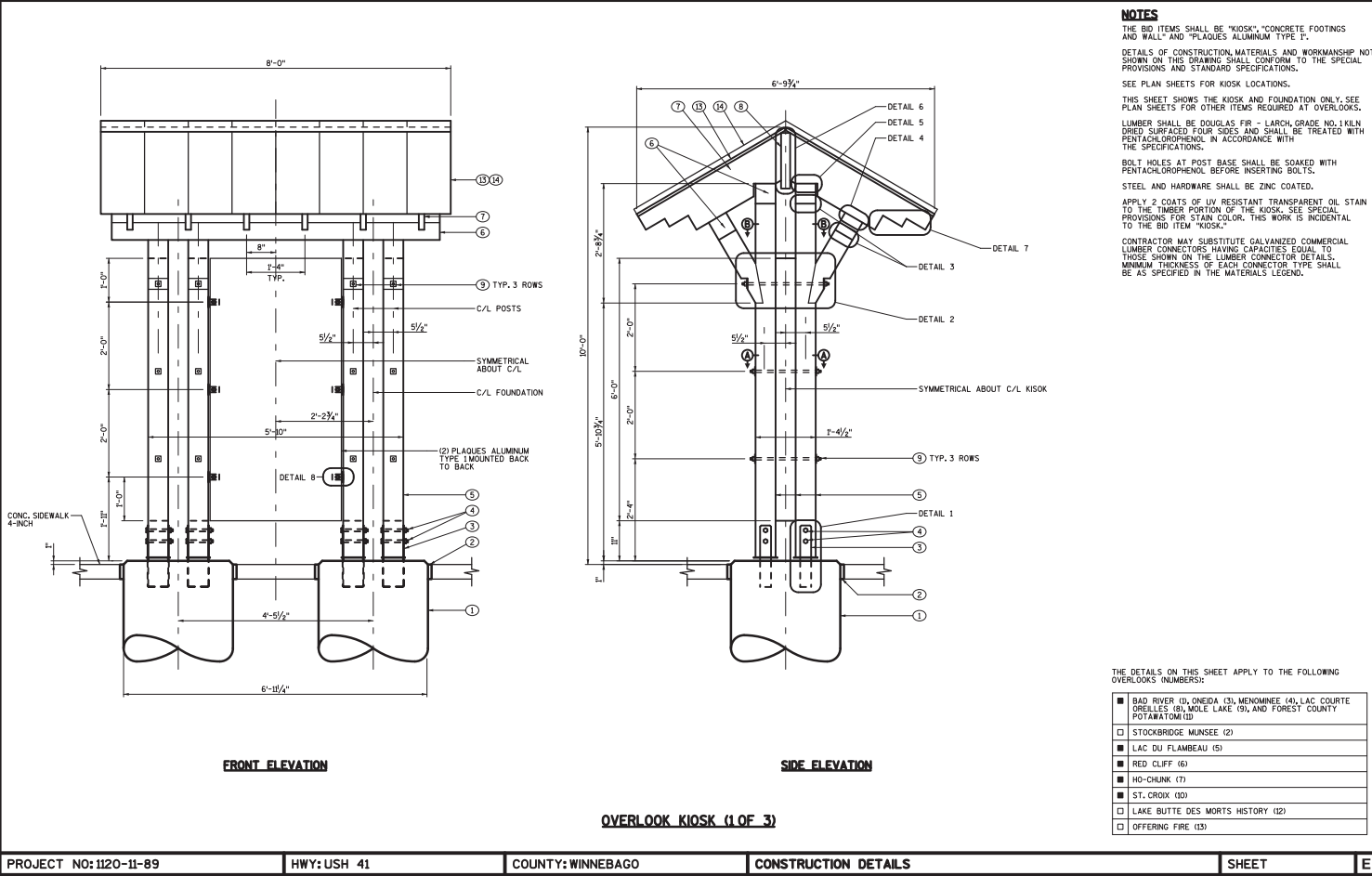
**100%
SUBMITTAL**

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
NV PEDESTRIAN PLAZA TRAILHEAD PLAZA & EXHIBIT PANEL DETAIL	
DESIGNED BY: EMM	DRAWN BY: PCS
CHECKED BY: JCS	DATE: 06/26/20



Trail Markers

Historical Trail Markers



Historical Trail Markers



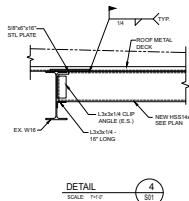
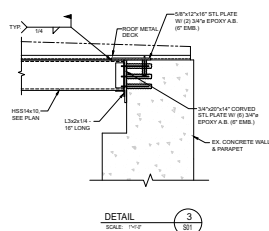
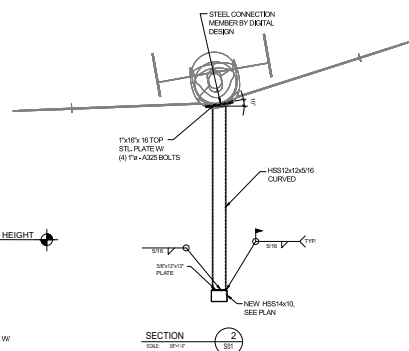
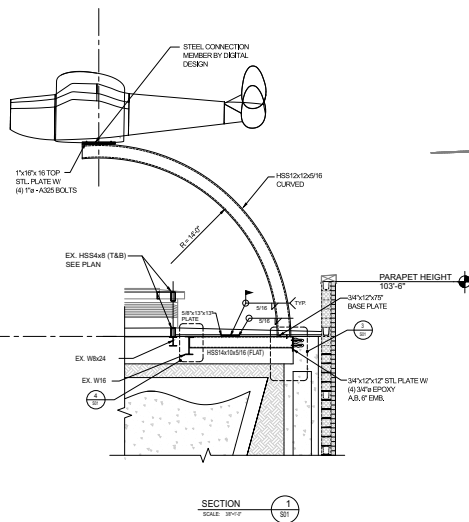
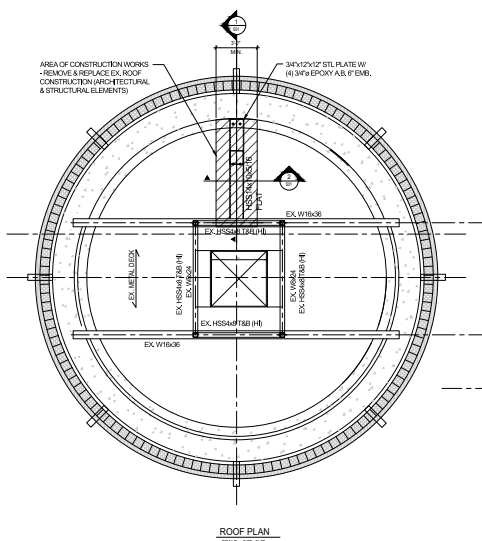
Final

Guardian Monument



Digital Design LLC
www.DigitalDesignLLC.com

**Ercoupe Guardian
Ercoupe Factory Site
Collage Park, MD**



CAFRITZ PROPERTY
at RIVERDALE PARK
**DETAILED SITE PLAN
& SPECIAL PERMIT**
RIVERDALE PARK, MD

Owner:
Ercoupe Park, LLC
1000 E. Ercoupe Rd., Suite 200
P.O. Box 1000
P.O. Box 1000
P.O. Box 1000

City Engineer:
SOLTESZ
Licensing Agency
1000 E. Ercoupe Rd., Suite 200
P.O. Box 1000
P.O. Box 1000
P.O. Box 1000

Professional Engineer:
MVA
Maryland Vehicle Inspection
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P.O. Box 1000
P.O. Box 1000

Project Designer:
SOM
SOM Architecture & Planning
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P.O. Box 1000
P.O. Box 1000
P.O. Box 1000

REV.	ISSUE	DATE
001	ISSUE FOR PERMIT	03.28.13
002	ISSUE FOR PERMIT	04.24.13
003	ISSUE FOR PERMIT	05.23.13

MUPCC APPROVALS			
PROJECT NAME	CAFRITZ PROPERTY	PROJECT NUMBER	00P-13000
APPROVED	DATE	APPROVED	DATE

PROJECT NAME
ROOF PLAN AND SECTION
PROJECT NUMBER
S01

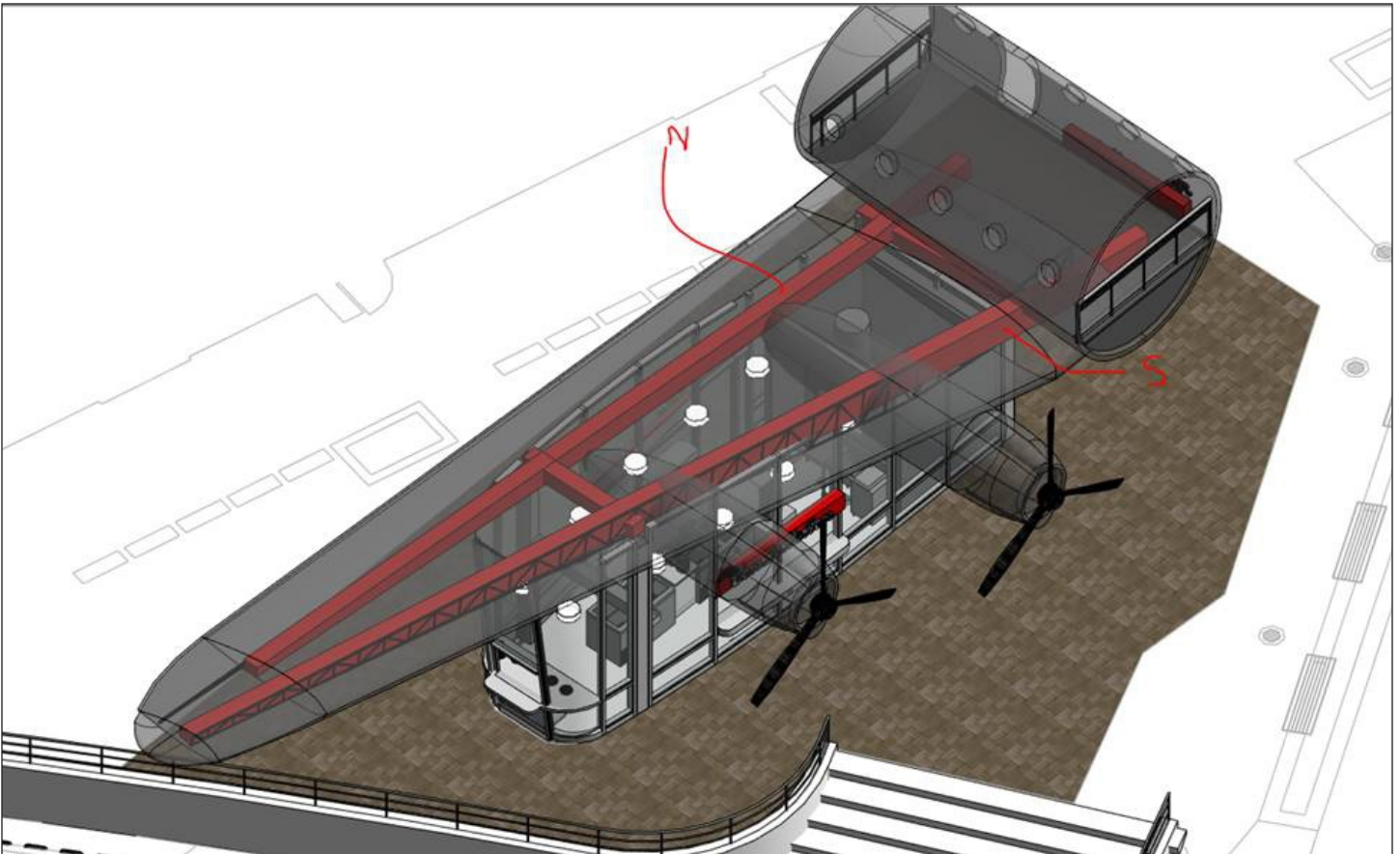
Guardian Monument





Constellation Ice Cream Stapleton Airport Area Denver, Co

Little Man Ice Cream a local fixture in the Denver area is known for unique and interesting architectural designs. Wanting to make a distinctive landmark in the properties being developed at the old Stapleton Airport location They approached us to help. Working with the local team we developed an art deco design reminiscent of air travel from the 1950's. The wing and 30 feet of fuselage is a recreation of the Lockheed Constellation the most popular long distance airliner of the period. This project took a little over two years to design, build and install becoming a signature landmark for the area and a favorite of locals and tourists alike.





The Constellation Ice Cream Shop

“This unique project to build an ice cream shop under an airplane wing has been a challenge and a joy for each of us, the kind of project that happens once in a career. It took an entire team of professionals, each playing at the top of their game, to put this project together.”

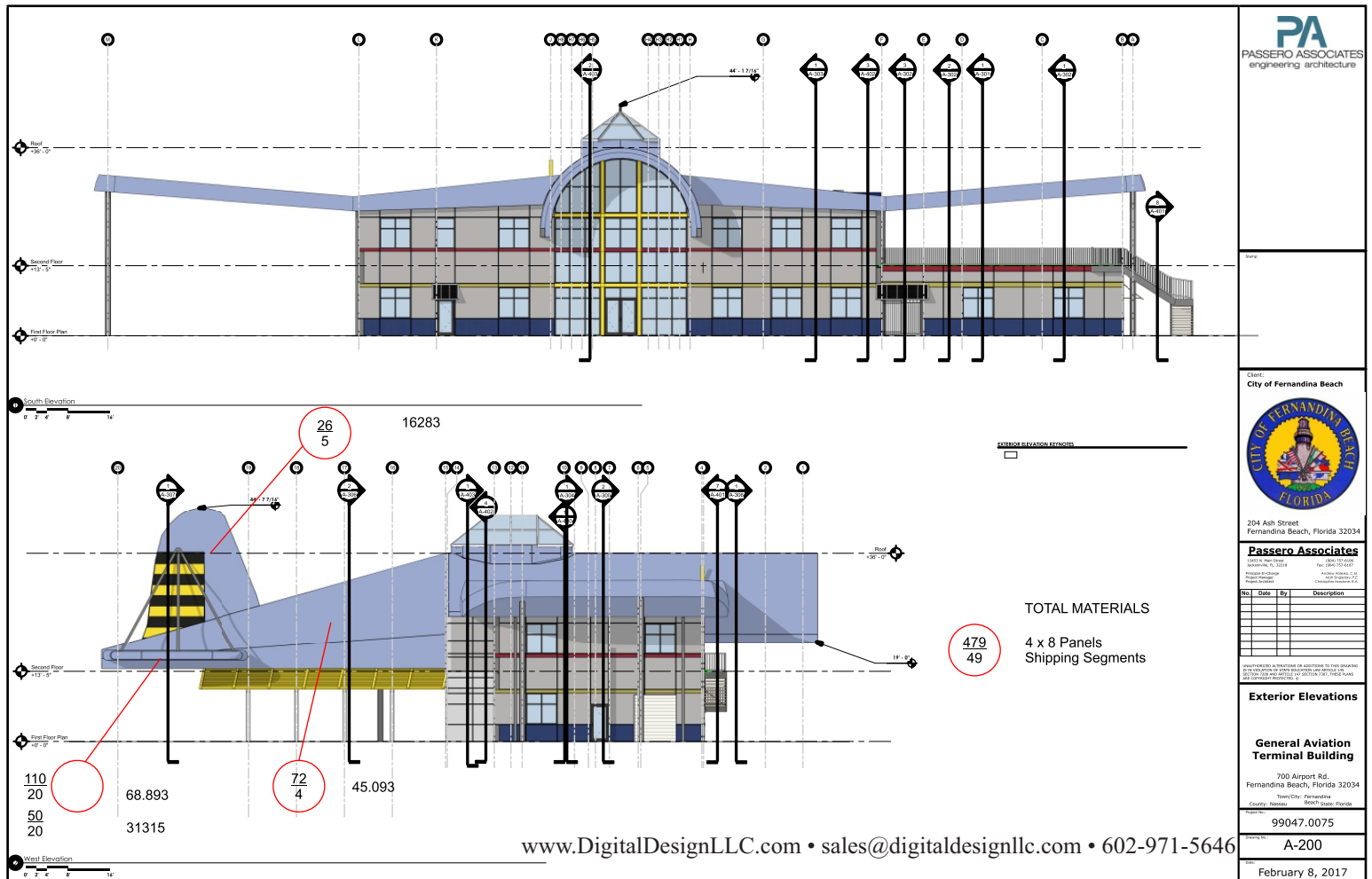
Michael Koch, Architect



Specialized Construction



Airport Terminal Building Fernandina Beach ,Florida

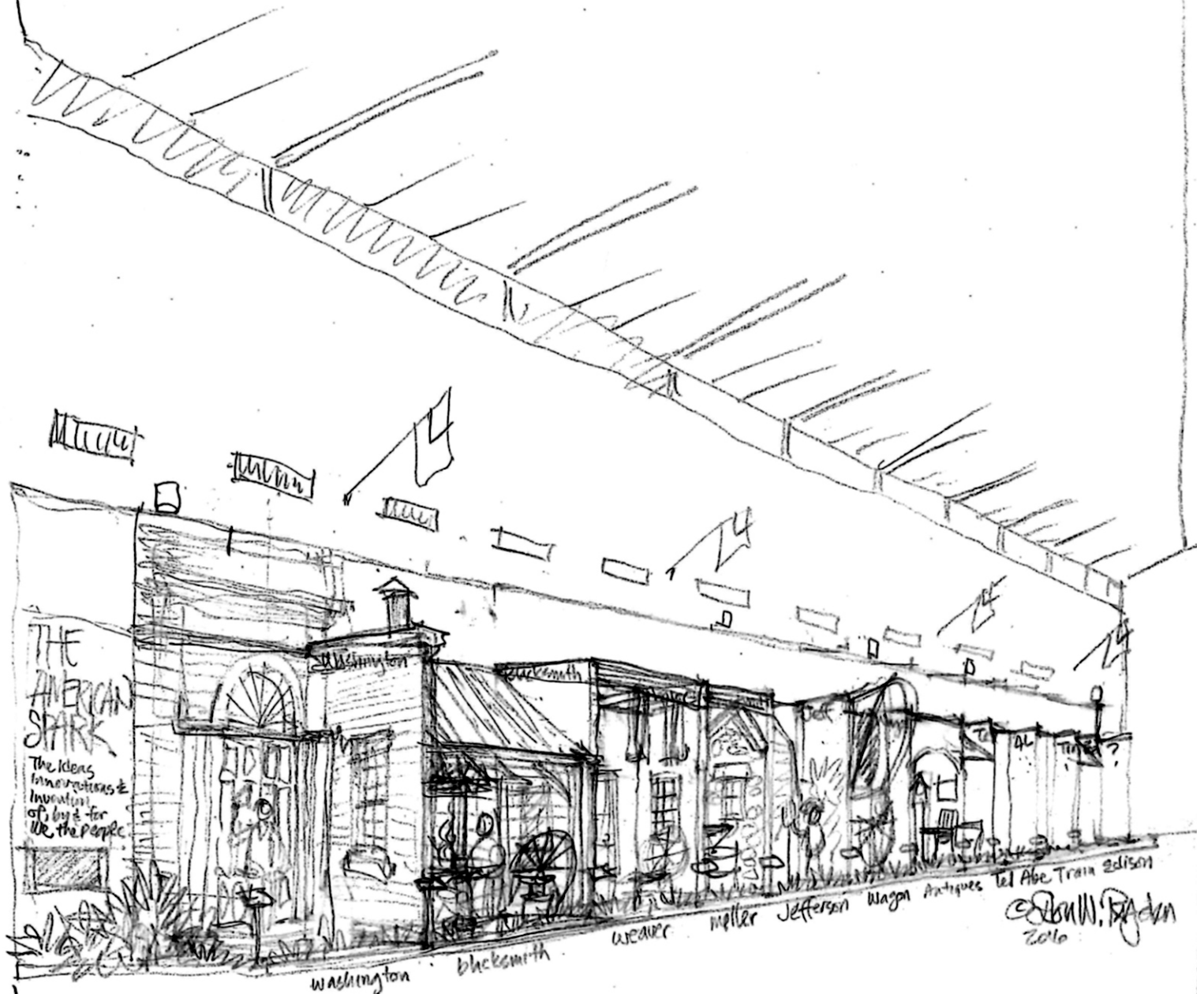


Fernandina Beach Airport



THE AMERICAN SPARK History Exhibits
FIRST ARRAY of Exhibits in Atrium
GALLERY FURNITURE Richmond, TX

**American History Original Concept
Children's Interactive Exhibits
Richmond, Texas**

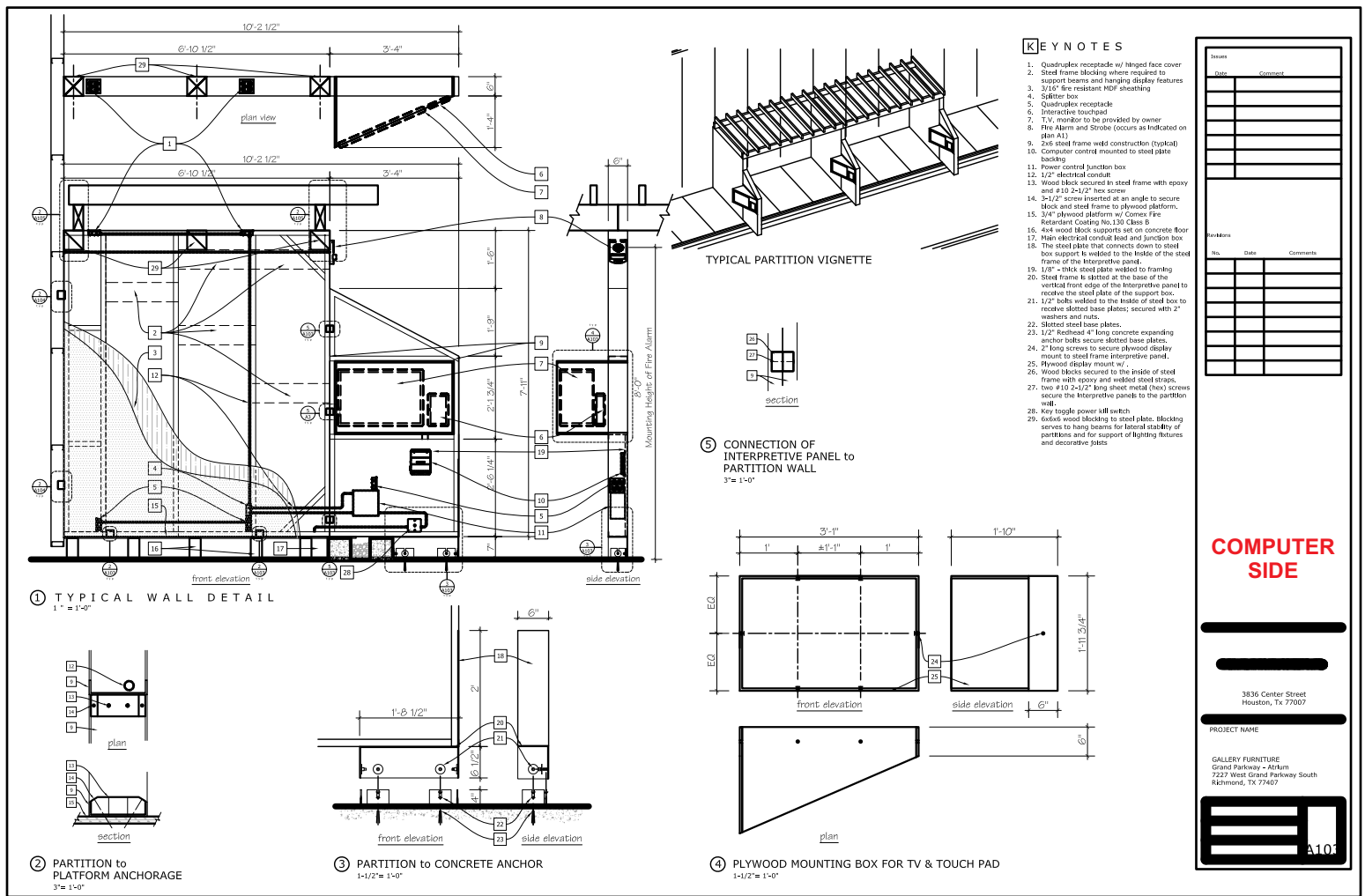




Historical Interactive Display

Beginning with George Washington and ending with George Bush we designed and produced 30 individual exhibits featuring presidents and other notable American figures and inventions. Each cell features an interactive video presentation with quiz questions tailored for middle school students. The exhibit contains life size bronze figures, a 30 foot steam train layout and a space shuttle flight simulator covering almost a 2 acre enclosed area.



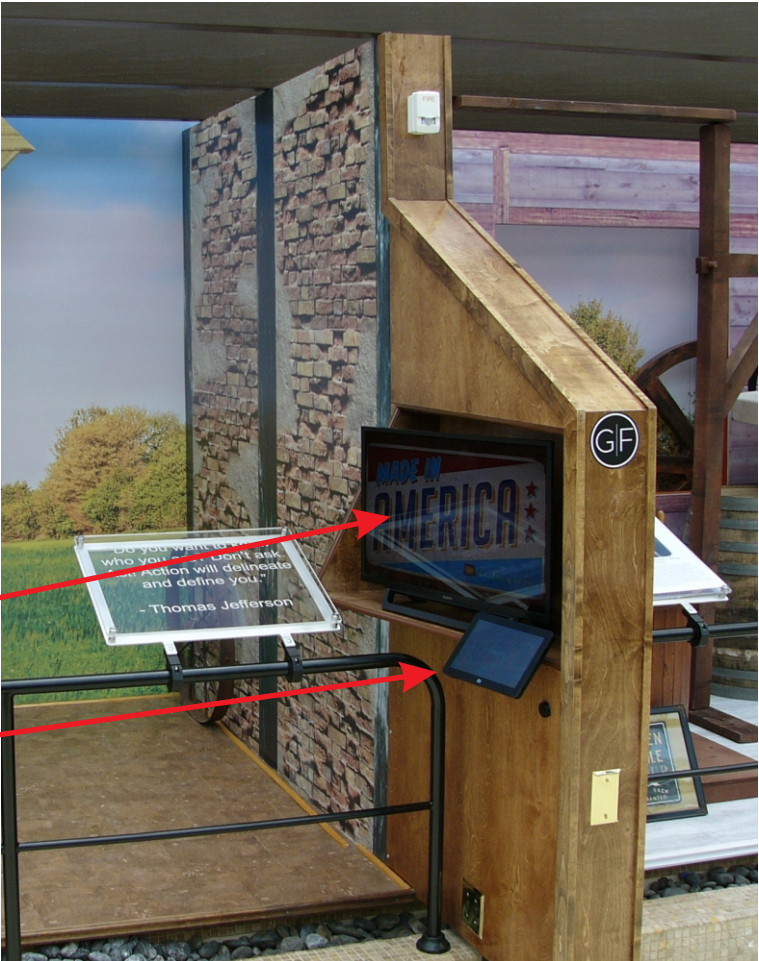


Interactive Wall Unit

Each cell in the display has an interactive wall unit. These walls contain custom industrial computer systems with custom written software. Each unit is activated by touching the pad which begins a 2-4 min video presentation about the cell contents. At the end of each presentation there is a multiple choice quiz for the students to answer. In addition to running the presentation the computer system activates power circuits to the cells interactive mechanical and electronic displays.

30" Display Monitor

Touch Pad

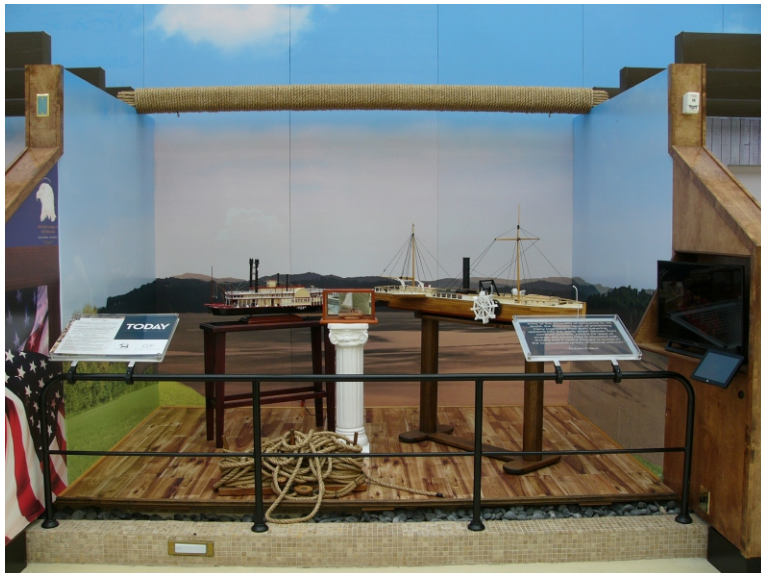




Wright Brothers



1930's Radio Station

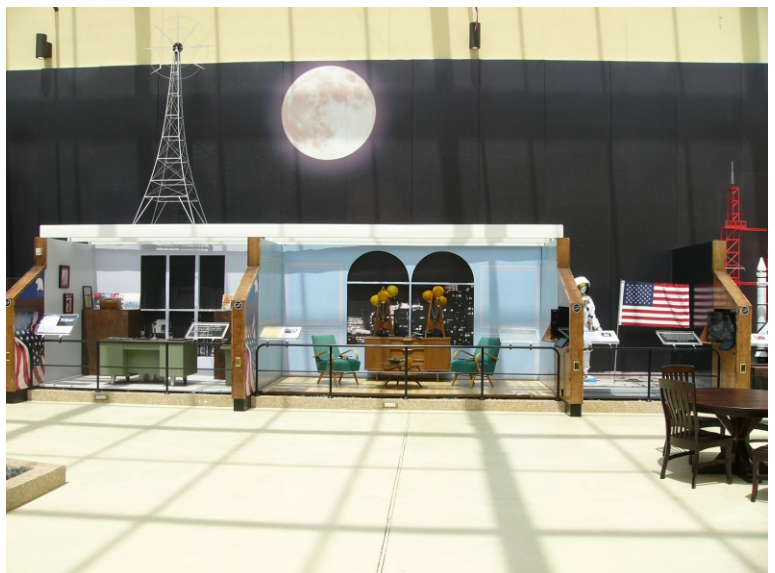


Robert Fulton and Steam Power



Restored Ford Model T

Constructed along two walls of an enclosed atrium the individual cells are placed in from of a 300 x 20 foot sky scape. In addition to the presentation system most cells contain lighting, motion and sound effects to bring the presentation to life.





CONTACT INFORMATION

Commercial Services

Website www.DigitalDesignLLC.com
Email Sales@DigitalDesignLLC.com

Retail Services

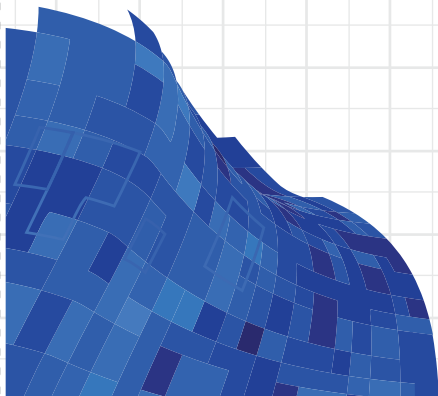
Website www.ArizonaModels.com
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