#### Center for Technology & Innovation, Inc.

321 Water Street, Binghamton, NY 13901 607-723-8600 www.ctandi.org

Future home of Tech Works! museum

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Emily V. Wade Museum Institute for Teaching Science Boston, MA PRESS RELEASE - 17 May 2012

The Center for Technology and Innovation (CT&I) has selected a design team for development of Tech Works!, a center to showcase upstate New York's concentration of inventions and explore the innovation process. We have confidence that the team lead by the Bucher Borges Group can deliver the desired product in the most cost effective and timely manner.

The primary partners in the Tech Works! design team are Bucher Borges Group, Washington, DC; Delta Engineering, Endwell, NY; Eisterhold Associates, Kansas City, MO; and the Public Archaeology Facility at BU, along with other nearby firms. Survey, testing, and design will proceed through the end of 2012, with construction documents targeted for bid in January 2013. Construction is expected to be performed largely by local companies, beginning in Spring 2013. Phasing of Tech Works! construction will be determined by funding availability.

The Tech Works! design team was selected from six teams who submitted thoughtful proposals in response to a formal request for proposals in March. Eighteen firms participated in the pre-bid site visit and more in the pre-bid Q/A conference call.

CT&I's challenge was to find a team that offered an integrated approach to the wide variety of donor-driven expertise required for the timely development of Tech Works!. The design skill sets for Tech Works! include respectful rehabilitation of vintage buildings, storm water management, outdoor experiences for multi-generational audiences, Smithsonian quality artifact handling, displays, and environmental controls, principles of green design, with an emphasis on geothermal and emerging 21st century energy technologies. The team led by Bucher Borges Group offered the most integrated, complete, and cost effective proposal.

In particular, the Tech Works! concept plan calls for a new approach to engaging teenagers, adults, and life-long learners in the innovative processes of science, technology, engineering and entrepreneurship. We have confidence that the Tech Works! interpretation of technical and creative processes for adults and life-long learners will lead to continuing the tradition of technical creativity that has been the hallmark of upstate New York for more than a century.

For more details of the TechWorks! design team experience, visit www.ctandi.org/TechWorks! or contact Susan Sherwood, 607-723-8600.





# **TEAM PROFILE**



























### RELEVANT EXPERIENCE: SITE IMPROVEMENTS





### **RELEVANT EXPERIENCE: BUILDING CODES & ADA**









OCCUPANCY & EGRESS CALCULATIONS

BUCHER/BORGES GROUP PLLC 30-Jan-11

321 Water Street Binghamton, NY

#### ALLOWABLE FLOOR AREA TABLE

SPACE	EXISTING AREA SF	CONSTRUCTION TYPE	USE	ALLOWABLE AREA SF TABLE 503	200% SPRINKLER INCREASE	FRONTAGE	TOTAL ALLOWABLE AREA
A1 (1912 Engine)	4,000	IIIB (Brick w/ Wood Frame)	S2 (Low Hazard)	in B1 area			
B1 (1912 Engine)	2,903	III8 (Brick w/ Wood Frame)	A3 (Museum)	9,500	19,000	601	29,101
C1 (1912 Tile Room)	3,783	IIIB (Brick w/ Wood Frame)	A3 (Museum)	in B1 area			
D1 (1912 Cooler)	448	IIIB (Brick w/ Wood Frame)	S2 (Low Hazard)	in B1 area			
E1 (1946 Storage)	1,169	IIIB (Brick w/ Steel Frame)	S2 (Low Hazard)	in 81 area			
F1 (1946 Garage)	3,262	IIIB (Brick w/ Steel Frame)	52 (Low Hazard)	in B1 area			
G1 (1972 Metal Bldg)	4,350	IIB (Steel Walls & Frame)	A3 (Museum)	in B1 area			
1st Floor Subtotal	19,915			9500	19,000	601	29,101
A2 (1912 entire 2nd)	8,987	IIIB (Brick w/ Wood Frame)	52 (Low Hazard)	26000	52000	1646	79646
TOTAL BUILDING	28,902						

#### Notes:

Due to the mixed occupancy, the A3 use has been used to determine the maximum permitted building area for the 1st floor.

The existing building is 2 stories in height.

Per Table 508.3.3 no fire separation is required between A-3 and S-2 occupancies.

Although the frontage increase was calculated, this increase is not necessary and therefore calculations are not included herein.



### RELEVANT EXPERIENCE: RESPECTFUL REHABILITATION



























### RELEVANT EXPERIENCE: RESPECTFUL REHABILITATION







# RELEVANT EXPERIENCE: CONSTRUCTION PHASE









### RELEVANT EXPERIENCE: ARTIFACT EXHIBITS











# RELEVANT EXPERIENCE: ARTIFACT EXHIBITS





# RELEVANT EXPERIENCE: STORY EXHIBITS



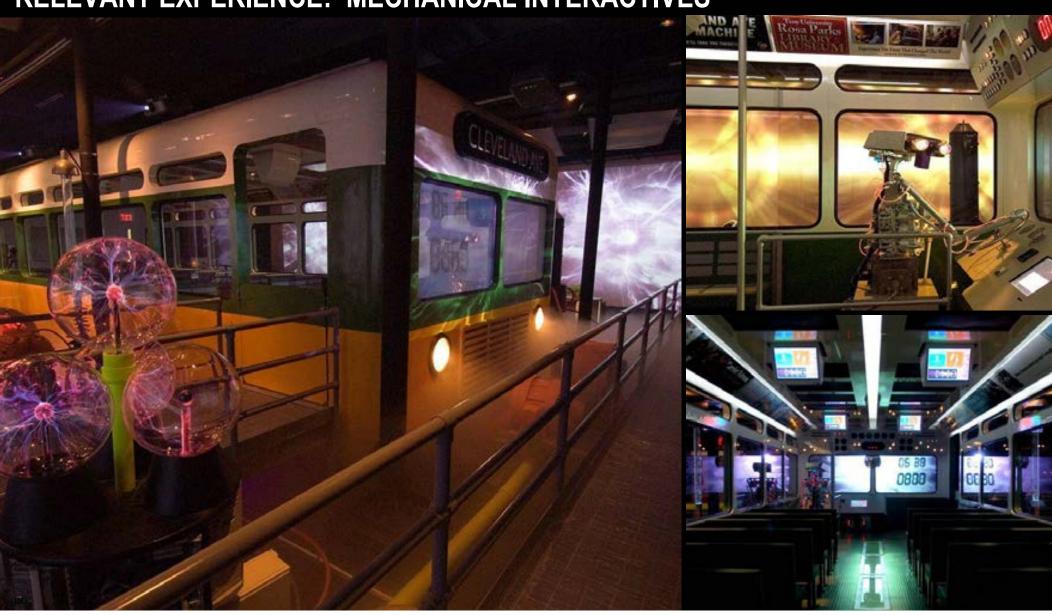


### RELEVANT EXPERIENCE: ABSTRACT / HIGHER ORDER EXHIBITS





### RELEVANT EXPERIENCE: MECHANICAL INTERACTIVES





### RELEVANT EXPERIENCE: HIGH TECH INTERACTIVES





### RELEVANT EXPERIENCE: SIGNAGE AND WAYFINDING









# RELEVANT EXPERIENCE: OUTDOOR SCULPTURE







### **ISSUES**

**GREEN DESIGN** 

**VISITOR EXPERIENCE** 

**HISTORIC REVIEW** 

**LOCAL FOCUS / WORLD-CLASS DESTINATION** 

**STRUCTURAL** 

**INDOOR / OUTDOOR EXHIBITS** 

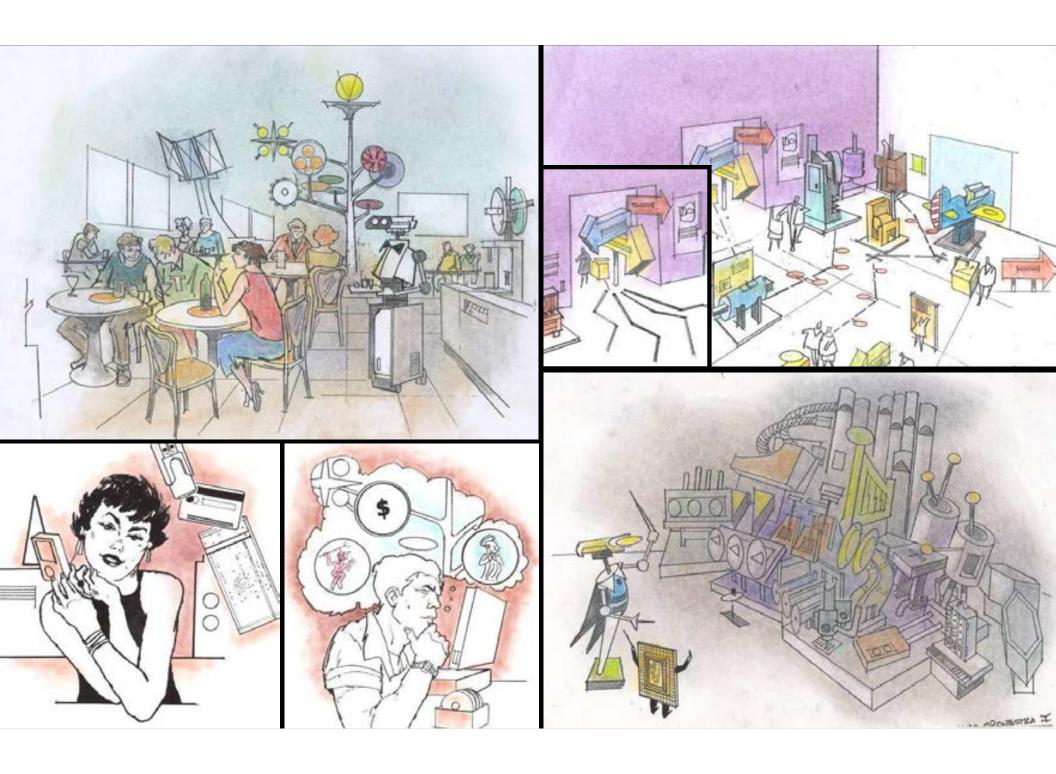
FLOOD / STORM WATER

**HISTORIC RENOVATIONS** 

**SMITHSONIAN EXPERIENCE** 

**PROTOTYPING PROCESS** 

**SEAMLESS TECHNOLOGY** 





#### PROJECT DATA: BUCHER/BORGES GROUP

MCCORMICK-GOODHEART MANSION

**Client Contact:** 

Gustavo Torres, Executive Director, CASA de MD 301.431.4185 x1021 qtorres@casamd.org

**Services Provided:** 

Architectural, Structural, Mechanical, Electrical, Geothermal, Construction Administration, Historic Tax Credit, LEED Certification

**Dates of Service:** 1/1/2007 – 3/31/2011

Location:

Langley Park, MD

Role:

A/E Prime Contractor

Contract Value (Construction/Assigned): \$6.4M / 500K

**DECATUR HOUSE** 

301.948.6412

Client Contact:
Henry Handler, Vice President, Oak Grove Restoration

hank@oakgroverestoration.com

**Services Provided:** 

Architectural, Historic Structure Report

**Dates of Service:** 

1/1/2010 - Present

Location:

Washington, DC

Role:

Subcontractor to Contractor

**Contract Value** 

(Construction/Assigned):

\$3.5M / 134K

**PURPLE HAZE** 

Client Contact: Nancy Levenson

302.644.0379

nrlevens@scj.com

**Services Provided:** 

Architectural, Mechanical, Electrical, Structural,

**Historic Approvals** 

**Dates of Service:** 

1/1/2009 - 11/30/2009

Location:

Lewes, DE

Role:

A/E Prime Contractor

**Contract Value** 

(Construction/Assigned):

\$1.5M / 128K



### PROJECT DATA: EISTERHOLD ASSOCIATES

LIVING TRIBUTES TO AMERICA'S WARRIORS

**Client Contact:** 

Vince Ellwood, HDR Architects 972.960.4091 vince.ellwood@hdrinc.com

**Services Provided:** 

Master Planning, Schematic Design

**Dates of Service:** 

10/20/2008 - Present

Location:

Walter Reed Hospital, Bethesda, MD

Role:

Subcontractor to Architect

**Contract Value:** 

\$25M+

NATIONAL HURRICANE MUSEUM & SCIENCE CENTER

**Client Contact:** 

Jill Kidder, Owners Representative 225.408.4030 iill.kidder@nhmsc.org

**Services Provided:** 

Master Planning, Schematic Design

**Dates of Service:** 

10/15/2008 - 11/10/2010

Location:

Lake Charles, LA

Role:

Subcontractor to Architect

**Contract Value:** 

\$60M

INTERNATIONAL CIVIL RIGHTS CENTER & MUSEUM

**Client Contact:** 

McArthur Davis 336.285.9122

mcarthur@ndpii.com

**Services Provided:** 

Master Planning, Exhibit Design

**Dates of Service:** 

4/1/2004 - 2/1/2010

Location:

Greensboro, NC

Role:

Lead / Contractor

**Contract Value:** 

\$23M



### PROJECT DATA: DELTA ENGINEERS

CORNING MUSEUM BUILDING STUDIO EXPANSION

Client Contact:
John Aranda, Site Engineer
607.974.8518

arandajc@corning.com

**Services Provided:** 

Architectural, Mechanical, Electrical, Civil, and Structural Design, as well as Construction Administration

**Dates of Service:** 

10/1/2000 - 10/30/2001

Location: Corning, NY

Role:

Subcontractor to Architect

Contract Value (Construction/Assigned):

\$5.69M / 90K

CORNING MUSEUM HOT GLASS SUMMER STAGE AND HOT GLASS ROAD SHOW DESIGN

**Client Contact:** 

John Aranda, Site Engineer 607.974.8518 arandajc@corning.com

**Services Provided:** 

Architectural, Mechanical, Electrical, Civil, and Structural Design

**Dates of Service:** 4/15/2000 – 7/15/2001

**Location:** Corning, NY

Role:

Subcontractor to Architect

**Contract Value:** 

(Construction/Assigned):

\$2.1M / 100K

CORNING MUSEUM HOT GLASS UPPER LEVEL GALLERY AIR HANDLING UNIT REPLACEMENT & COMMISSIONING

**Client Contact:** 

Frederick Bierline, Operations Manager 607.974.8518

bierlinefj@cmog.org

**Services Provided:** 

Mechanical, Electrical, and Commissioning

**Dates of Service:** 

11/10/2008 - 12/31/2009

Location: Corning, NY

Role:

Subcontractor to Architect

**Contract Value:** 

\$308K / 47K



# **ISSUES: GREEN DESIGN**





# **ISSUES: GREEN DESIGN**









# **ISSUES: HISTORIC REVIEW**











# ISSUES: STRUCTURAL





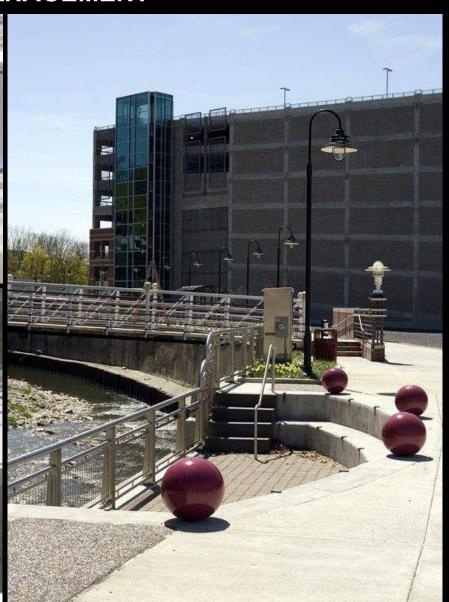




# **ISSUES: FLOOD & STORM WATER MANAGEMENT**







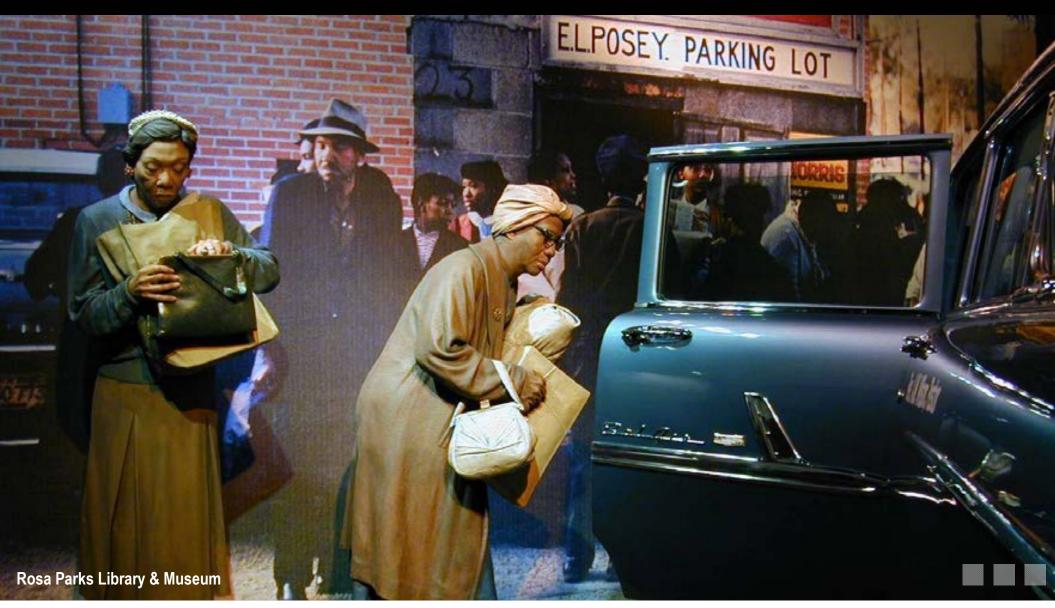


# **ISSUES: VISITOR EXPERIENCE**





### **ISSUES: LOCAL FOCUS / WORLD-CLASS DESTINATION**





### **ISSUES: LOCAL FOCUS / WORLD-CLASS DESTINATION**





### **ISSUES: LOCAL FOCUS / WORLD-CLASS DESTINATION**





# **ISSUES: INDOOR/OUTDOOR EXHIBITS**

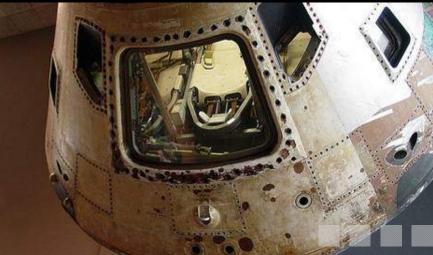




### **ISSUES: SMITHSONIAN EXPERIENCE**









### **ISSUES: SMITHSONIAN EXPERIENCE**





# **ISSUES: SMITHSONIAN EXPERIENCE**





**Food for Thought** 



# **ISSUES: PROTOTYPING PROCESS**





# **ISSUES: SEAMLESS TECHNOLOGY**

