



**BENITO JUAREZ MONUMENT**  
**Sieve Analysis**

Washington, D.C.

---

L. Brad Shotwell  
Associate Principal

**Final Report**  
March 1, 2010  
WJE No. 2009.5347

*Prepared for:*  
**Oehrlein and Associates Architects**  
1350 Connecticut Avenue, NW, Suite 412  
Washington, DC 20036-1701

*Prepared by:*  
**Wiss, Janney, Elstner Associates, Inc.**  
9655 Sweet Valley Drive, Suite 3  
Cleveland, OH 44125-4262  
216.642.2300 tel | 216.642.6288 fax

## **BENITO JUAREZ MONUMENT Sieve Analysis**

**Washington, D.C.**

### **INTRODUCTION**

At the request of Mr. Martin Howell, AIA, of Oehrlein and Associates, Washington, D.C., the approximate aggregate gradation for sand contained in a sample of hardened mortar was determined. The mortar contained a dark gray to black pigment. The mortar had been used to set stone at the Benito Juarez Monument. Previously, compositional studies of the mortar had been conducted<sup>1</sup>.

### **STUDIES**

Figure 1 shows the distribution of sand particles in the thin section that was used for the petrographic studies. The angular nature of the sand particles and the uniform distribution throughout the mortar is apparent.

Petrographic studies conducted previously indicated that the sand contained in the mortar was siliceous and would not be expected to dissolve in dilute hydrochloric acid. Representative fragments of the mortar were immersed in dilute acid in order to remove the cementitious matrix that encased the sand particles. The acid-insoluble fraction of the sample was then sieved into various size fractions. Representative portions of the various fractions of the aggregate are pictured in Figures 2 through 6. The results of the sieve analysis are given in Table 1.

Soft gray particles were occasionally detected in the various sand fractions (Figures 2 through 5). Closer inspection of these particles contained in each of the sieve fractions revealed that they were composed primarily of remnants of the cementitious matrix that had not dissolved during the acid-dissolution procedure. Occasionally, these soft particles were seen to contain smaller siliceous sand particles surrounded by the soft gray material (Figure 3).

The pan fraction of the sample was composed of a combination of small angular siliceous particles and even finer sized black opaque material that represents the mortar pigment (Figure 6).

---

<sup>1</sup> WJE report 2009.5347 Benito Juarez Monument, Petrographic and Chemical Studies of Mortar, January 22, 2010.

## SUMMARY AND DISCUSSION

Some of the cementitious matrix of the pigmented mortar was not completely dissolved during the acid-treatment. The cause for this incomplete dissolution was not determined by the studies.

The presence of these soft particles has skewed the resulting sieve analysis making the results appear somewhat more “coarse” for fractions of sand retained on the 30, 50, 100 and 200 mesh screens. However, this amount of deviation from the actual gradation was judged to be minimal.

Although a small amount of angular siliceous particles was detected in the pan fraction of the sand, the bulk of material retained on this screen is likely composed of the insoluble remnants of pigment contained in the mortar.

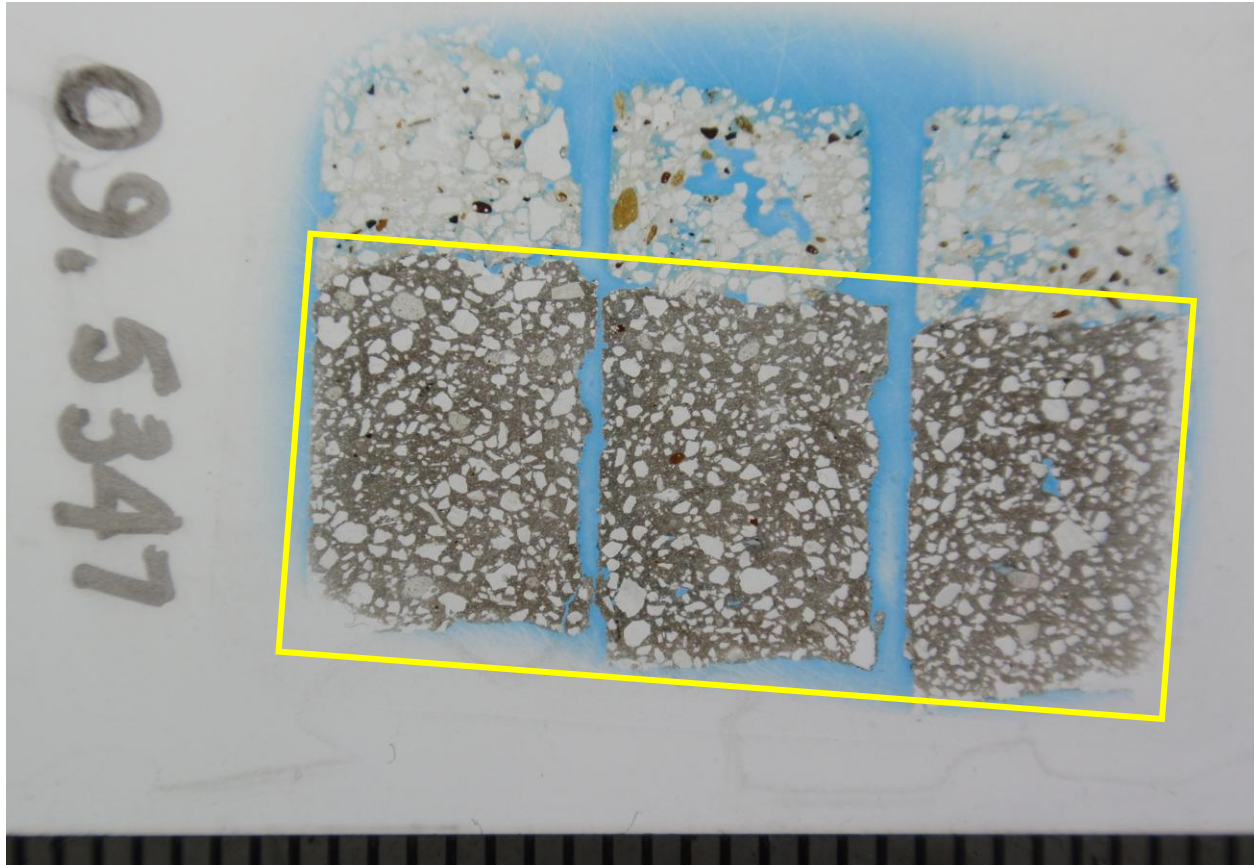
If the pan fraction of the sand is eliminated from the calculations and the results for the remaining fractions are normalized, the resulting “calculated” sieve analysis may more nearly represent the original gradation of the sand.

**Storage:** Thirty days after completion of our studies, samples will be discarded unless the client submits a written request for their return. Shipping and handling fees will be assessed for any samples returned to the client. Any hazardous materials that may have been submitted for study will be returned to the client and shipping and handling fees will apply. The client may request that WJE retain samples in storage in our warehouse. In that case, a yearly storage fee will apply.

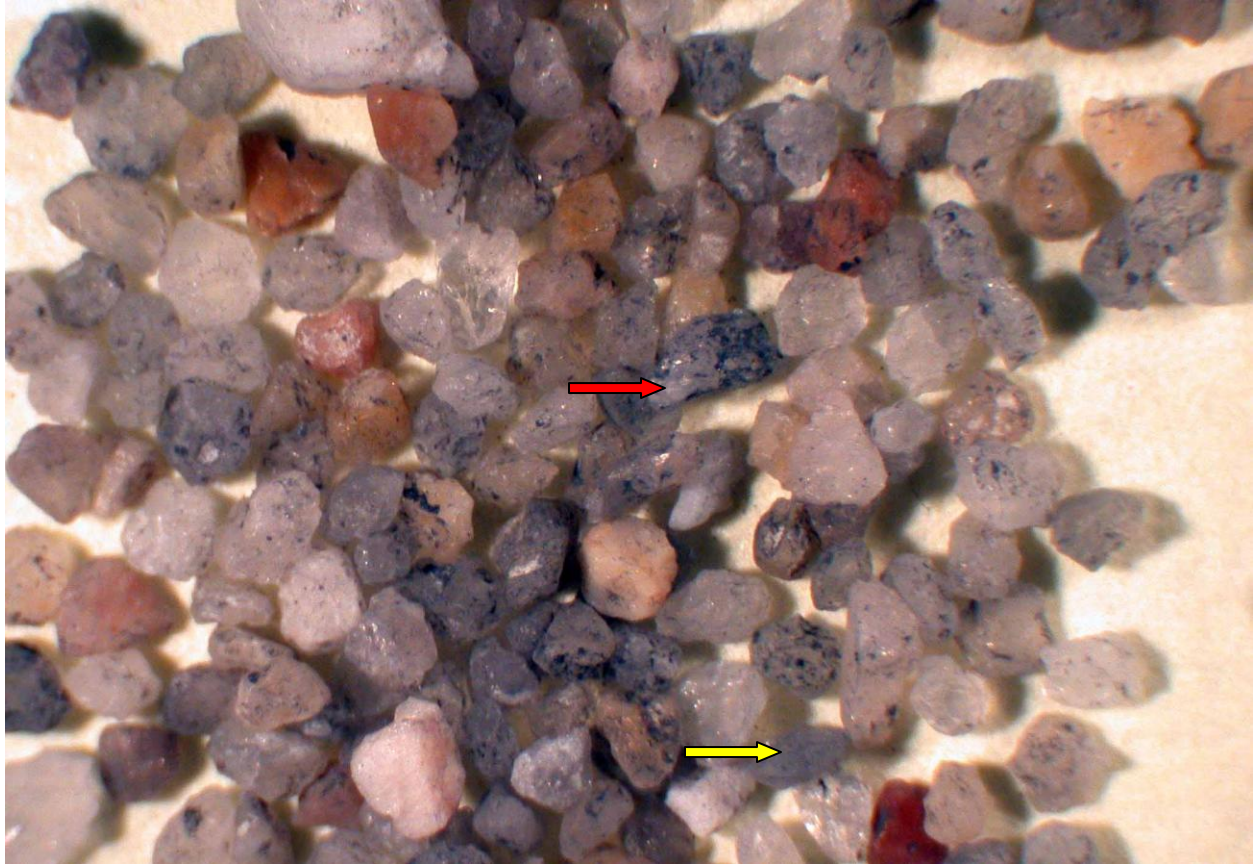
**Table 1. Sieve Analysis for Particles That Remained after Acid Digestion of Mortar**

<b>Sieve Size</b>	<b>Individual Weight Retained</b>	<b>Individual % Retained</b>	<b>Cumulative % Retained</b>	<b>Cumulative % Passing</b>
<b>3/8 in.</b>		0.0	0.0	100.0
<b>No. 4</b>		0.0	0.0	100.0
<b>No. 8</b>		0.0	0.0	100.0
<b>No. 16</b>		0.0	0.0	100.0
<b>No. 30</b>	0.64	6.7	6.7	93.3
<b>No. 50</b>	3.53	37.0	43.7	56.3
<b>No. 100</b>	2.83	29.6	73.3	26.7
<b>No. 200</b>	0.68	7.1	80.4	19.6
<b>Pan</b>	1.87	19.6	-	-
		<b>Fineness Modulus</b>	1.24	

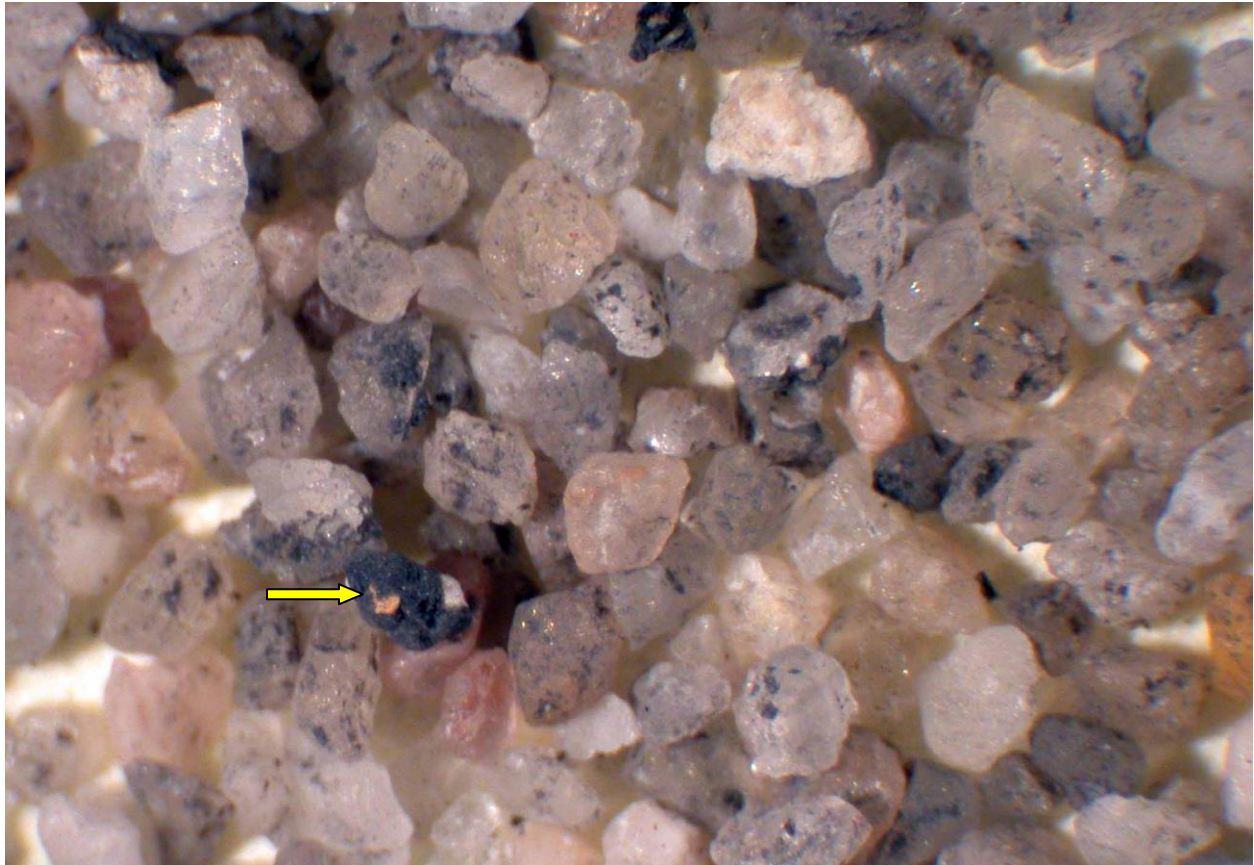
*Appendix. Appearance of the Sand Fraction Samples*



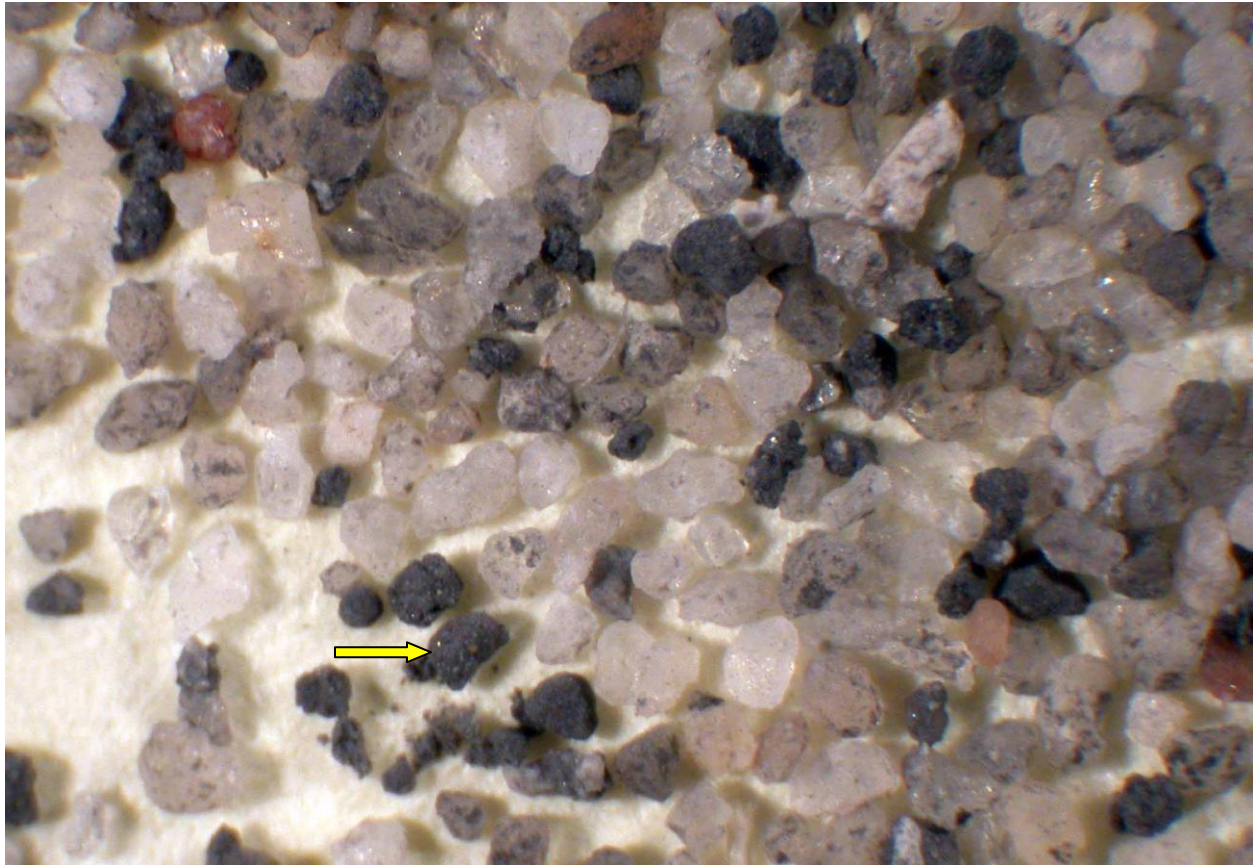
*Figure 1. A close-up of the thin section used for the petrographic studies is pictured. The distribution of the sand in the gray mortar is shown in the area outlined by the box. The width of the field of view is 1.26 inch (32 mm).*



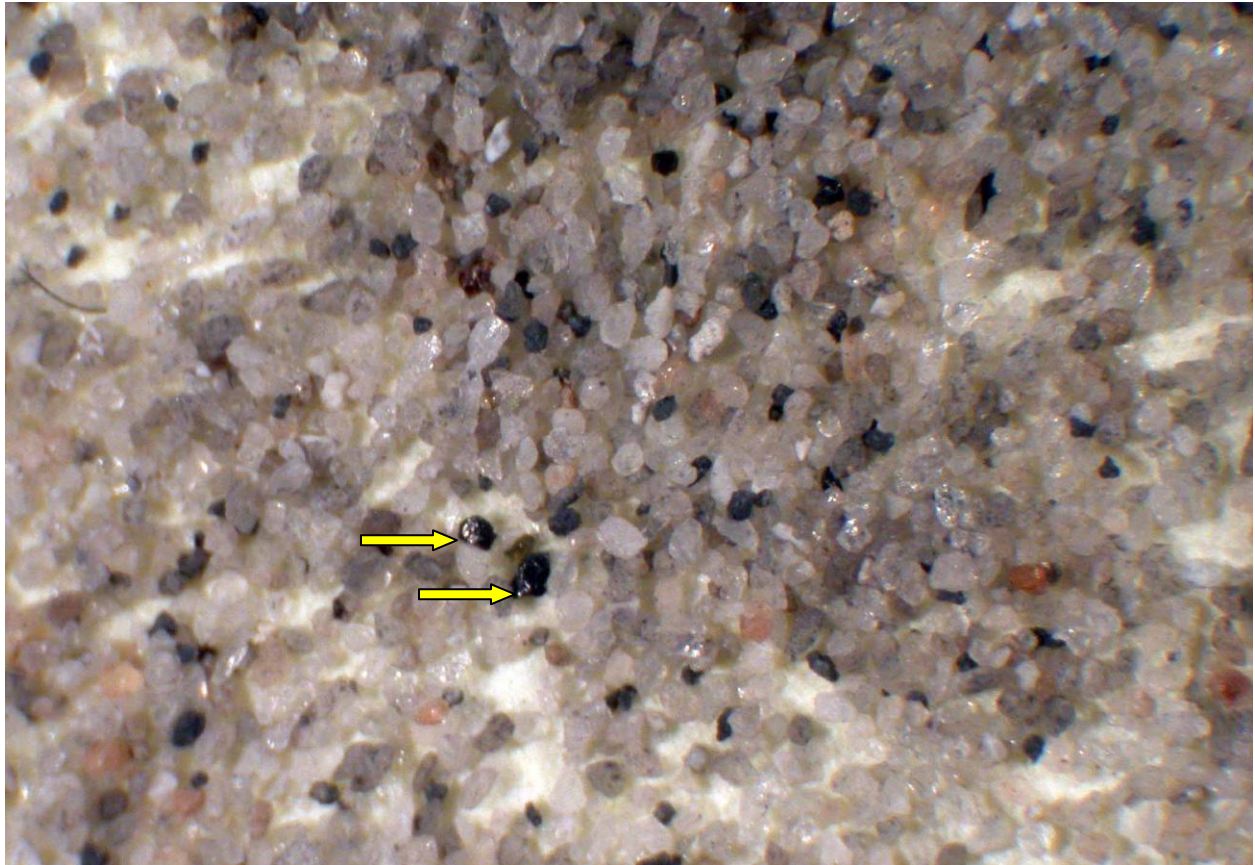
*Figure 2. A close-up of the +30 mesh fraction is pictured. The yellow arrow marks one of the many soft gray particles contained in this fraction. The red arrow marks a siliceous sand particle that is still partially coated with mortar matrix. The width of the field of view is 0.5 inch (12.7mm).*



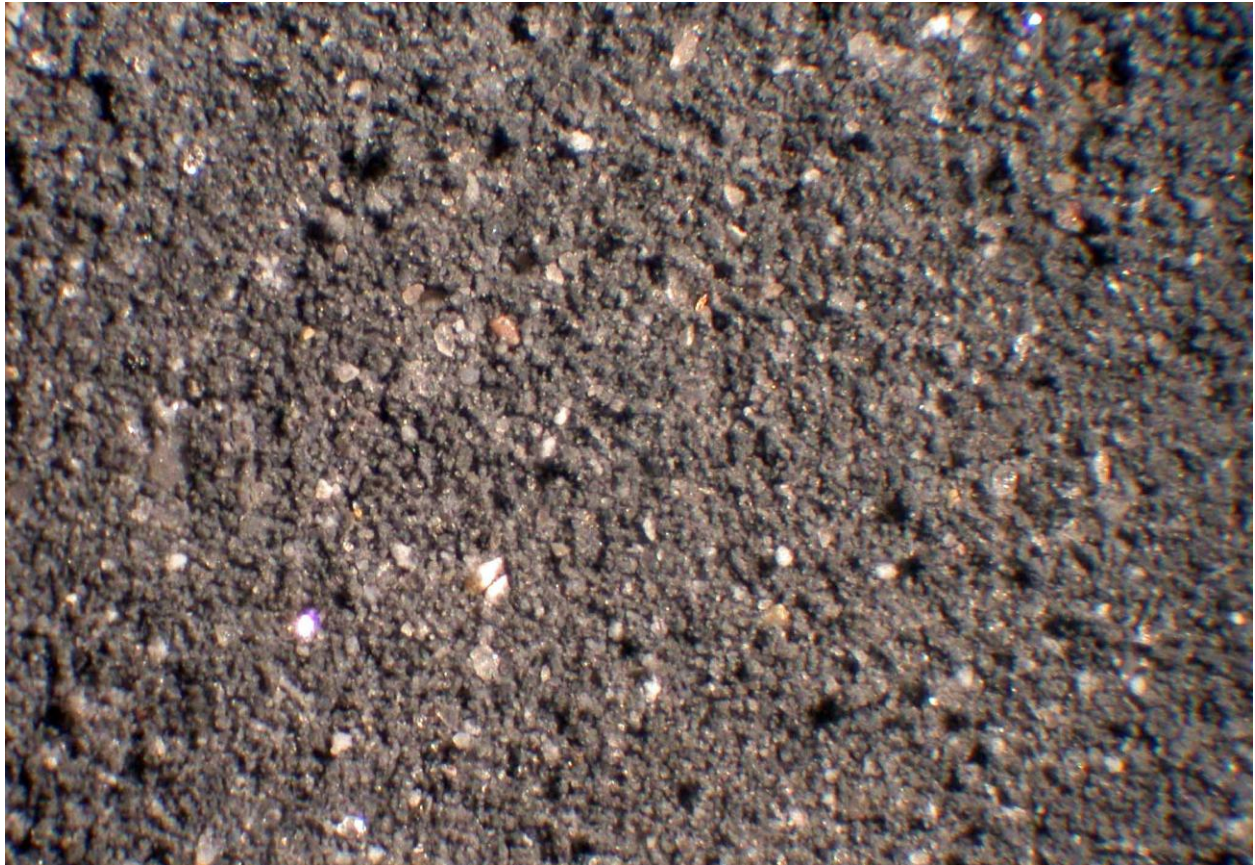
*Figure 3. A close-up of the +50 mesh fraction is pictured. The yellow arrow marks one of the many soft gray particles contained in this fraction. This particle when touched with a needle probe was easily broken and found to contain smaller sand particles that would have passed the 50 mesh screen. The width of the field of view is 0.25 inch.*



*Figure 4. A close-up of the +100 mesh fraction is pictured. The yellow arrow marks one of the many soft gray particles contained in this fraction. Some of these gray particles, when touched with a needle probe, were easily broken and found to contain smaller sand particles that might have passed the 100 mesh screen. The width of the field of view is 0.25 inch.*



*Figure 5. A close-up of the +200 mesh fraction is pictured. The photo was taken using reflected light. Most of the particles are composed of clean angular siliceous sand fragments and are generally free of coatings. However, a few medium gray soft particles are present too. Two particles tentatively identified as graphite are marked with arrows. Graphite could have been introduced with the pigment used in the mortar. The width of the field of view is 0.25 inch.*



*Figure 6. A close-up of the pan fraction is pictured. The photo was taken using reflected light. An estimated 80% of the particles are composed of friable soft remnants of matrix or pigment. These matrix particles generally did not contain smaller sand particles. Angular white quartz and feldspar fragments are also visible. The width of the field of view is 0.156 inch.*

## APPENDIX F – COST ESTIMATE

MARCH 22, 2010

BENITO PABLO JUAREZ MONUMENT CONDITION ASSESSMENT  
OEHRLEIN & ASSOCIATES ARCHITECTS

# Class C Cost Estimate

## Benito Pablo Jaurez Monument & Plaza Investigative Condition Assessment and Report

Prepared for:

**Oehrlein & Associates Architects**

1350 Connecticut Avenue, NW

Suite 412

Washington, DC 20036-1701

202-785-7336

Fax 202-785-7334

March 2, 2010

Prepared by:

**R.W. Brown & Associates**

404 Pine Street, S.E., Suite 202

Vienna, Virginia 22180-4871

703-255-2580

Fax 703-255-4927

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & R		Page 1
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B
Estimated by: R.W. Brown & Associates		3/2/10

**Project:** Benito Pablo Jaurez Monument & Plaza  
**Park:** National Mall & Memorial Parks, Washington, D.C.  
**PMIS:** 43681

### **Basis of Estimate**

**Date of Estimate:**

03/02/10

**Estimated By:**

R.W. Brown & Associates  
404 Pine Street, S.E., Suite 202  
Vienna, Virginia 22180-4871  
703-255-2580  
Fax 703-255-4927

**Supporting Material:**

100% Draft Submission Report dated January 25, 2010.

**Cost Data:**

Priced Quantities w/In place unit costs  
Unit prices based on Baltimore/Washington D.C. market experiences

**Mark-ups and Add-ons:**

**Published Location Factor:** Actual local experience - factors are not applicable.  
**Project Remoteness:** Site is within the local market labor source.  
**Federal Wage Rate Factor:** Included in unit costs.  
**Design Contingency:** 15% based on development of the supporting data.  
**Taxes: 6% Sales Tax included in Unit Costs**  
**Standard General Conditions:** Within Normal Range: 15%.  
**Government General Conditions: 10%.**  
**Bonds and Permits:** 1.5% bond included in General Conditions. No permit costs.  
**Historic Preservation Factor:** Used 10% in markups on recap.  
**Overhead:** 10%  
**Profit:** 10 %  
**Contracting Method Adjustment:** An allowance of 10% for 8A is added to the total cost.  
**Inflation Escalation:** Assume start of construction to be Spring 2011. Escalation to mid-point of construction is calculated @ 4.5% p.a.

**Comments:**

"Other Costs" are common to all options.

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment		Page 2
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B
Estimated by: R.W. Brown & Associates		3/2/10

## Project Recapitulation

<i>Page</i>	<i>Item</i>	<i>Cost Per Option</i>	<i>Recommended Cost</i>
<i>3</i>	Granite Option #1	47,280	
<i>4</i>	Granite Option #2	147,691	
<i>5</i>	Granite Option #3	166,391	166,391
<i>6</i>	Bronze Option #1	28,696	28,696
<i>7</i>	Bronze Option #2	34,082	
<i>8</i>	Waterproofing Option #1	862	
<i>9</i>	Waterproofing Option #2	10,811	
<i>10</i>	Waterproofing Option #3	11,914	11,914
<i>11</i>	Other Costs	39,425	39,425
Total Project Cost			<b>\$246,426</b>

# Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 3
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	Granite Option #1		3/2/10

## Granite Option #1

Item	Quantity	Unit	Unit Price	Total Cost
<b>STONE WORK</b>				
REMOVE GRANITE @ BASE	120	SF	8.00	960
REMOVE PAVERS WHERE PONDING	150	SF	5.50	825
CONCRETE LEVELING	150	SF	10.00	1,500
SETTING BED	150	SF	4.50	675
RESET PAVERS	150	SF	30.00	4,500
PREP/RESET BASE GRANITE	120	SF	18.00	2,160
RAKE & POINT MONUMENT MORTAR JOINT	330	LF	6.00	1,980
CAULK & BACKER ROD - PLAZA PAVING	680	LF	4.50	3,060
NEW WEEPS	24	EA	36.00	864
REMOVE/RESET CURB STONES	83	LF	10.00	830
CLEAN GRANITE	1,148	SF	4.00	4,592
<b>Subtotal Direct Construction Costs</b>				<b>\$21,946</b>
<b>Published Location Factor</b>	Included in Unit Costs			-
<b>Remoteness Factor @</b>	NA			-
<b>Federal Wage Rate Factor</b>	Included in Unit Costs			-
<b>Design Contingency @</b>	15%			\$3,292
<b>Total Direct Construction Costs</b>				<b>\$25,238</b>
<b>Standard General Conditions @</b>	15%			\$3,786
<b>Government General Conditions @</b>	10%			\$2,524
<b>Historic Preservation Factor</b>	10%			\$2,524
<b>Subtotal NET Construction Cost</b>				<b>\$34,071</b>
<b>General Contractor's Overhead @</b>	10%			\$3,407
<b>General Contractor's Profit @</b>	10%			\$3,407
<b>Estimated NET Construction Cost</b>				<b>\$40,885</b>
<b>Contracting Method Adjustment (8A)</b>	10%			\$4,089
<b>Inflation Escalation to Spring 2011</b>	5.64%			\$2,306
<b>Total Estimated NET Cost of Construction</b>				<b>\$47,280</b>

# Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 4
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	Granite Option #2		3/2/10

## Granite Option #2

Item	Quantity	Unit	Unit Price	Total Cost
STONE WORK				
REMOVE GRANITE @ BASE	328	SF	8.00	2,624
REMOVE PAVERS	820	SF	5.50	4,510
CONCRETE LEVELING	820	SF	10.00	8,200
MEMBRANE WATERPROOFING	820	SF	7.00	5,740
SETTING BED	820	SF	4.50	3,690
RESET PAVERS	820	SF	30.00	24,600
PREP/RESET BASE GRANITE	328	SF	18.00	5,904
RAKE & POINT MONUMENT MORTAR JOINTS	390	LF	6.00	2,340
CAULK & BACKER ROD - PLAZA PAVING	680	LF	4.50	3,060
NEW WEEPS	24	EA	36.00	864
REPLACE METAL CRAMPS	8	EA	50.00	400
REPAIR CRACKS IN GRANITE	3	EA	400.00	1,200
REMOVE/RESET CURB STONES	83	LF	10.00	830
CLEAN GRANITE	1,148	SF	4.00	4,592
Subtotal Direct Construction Costs				\$68,554
Published Location Factor		Included in Unit Costs		-
Remoteness Factor @		NA		-
Federal Wage Rate Factor		Included in Unit Costs		-
Design Contingency @		15%		\$10,283
Total Direct Construction Costs				\$78,837
Standard General Conditions @		15%		\$11,826
Government General Conditions @		10%		\$7,884
Historic Preservation Factor		10%		\$7,884
Subtotal NET Construction Cost				\$106,430
General Contractor's Overhead @		10%		\$10,643
General Contractor's Profit @		10%		\$10,643
Estimated NET Construction Cost				\$127,716
Contracting Method Adjustment (8A)		10%		\$12,772
Inflation Escalation to Spring 2011		5.64%		\$7,203
Total Estimated NET Cost of Construction				\$147,691

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 5
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Granite Option #3</b>		3/2/10

### Granite Option #3

Item	Quantity	Unit	Unit Price	Total Cost
<b>STONE WORK</b>				
REMOVE GRANITE @ BASE	328	SF	8.00	2,624
REMOVE PAVERS	820	SF	5.50	4,510
CONCRETE LEVELING	820	SF	10.00	8,200
MEMBRANE WATERPROOFING	820	SF	7.00	5,740
SETTING BED	820	SF	4.50	3,690
RESET PAVERS	820	SF	30.00	24,600
PREP/RESET BASE GRANITE	328	SF	18.00	5,904
RAKE & POINT MONUMENT MORTAR JOINTS	970	LF	6.00	5,820
CAULK & BACKER ROD - PLAZA PAVING	680	LF	4.50	3,060
NEW WEEPS	24	EA	36.00	864
REPLACE METAL CRAMPS	8	EA	50.00	400
REPAIR CRACKS IN GRANITE	6	EA	400.00	2,400
REPAIR SPALL IN GRANITE	8	EA	500.00	4,000
REMOVE/RESET CURB STONES	83	LF	10.00	830
CLEAN GRANITE	1,148	SF	4.00	4,592
<b>Subtotal Direct Construction Costs</b>				<b>\$77,234</b>
<b>Published Location Factor</b>			Included in Unit Costs	-
<b>Remoteness Factor @</b>			NA	-
<b>Federal Wage Rate Factor</b>			Included in Unit Costs	-
<b>Design Contingency @</b>			15%	\$11,585
<b>Total Direct Construction Costs</b>				<b>\$88,819</b>
<b>Standard General Conditions @</b>			15%	\$13,323
<b>Government General Conditions @</b>			10%	\$8,882
<b>Historic Preservation Factor</b>			10%	\$8,882
<b>Subtotal NET Construction Cost</b>				<b>\$119,906</b>
<b>General Contractor's Overhead @</b>			10%	\$11,991
<b>General Contractor's Profit @</b>			10%	\$11,991
<b>Estimated NET Construction Cost</b>				<b>\$143,887</b>
<b>Contracting Method Adjustment (8A)</b>			10%	\$14,389
<b>Inflation Escalation to Spring 2011</b>			5.64%	\$8,115
<b>Total Estimated NET Cost of Construction</b>				<b>\$166,391</b>

# Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 6
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Bronze Option #1</b>		3/2/10

## Bronze Option #1

Item	Quantity	Unit	Unit Price	Total Cost
<b>BRONZE WORK</b>				
REPAIR MAJOR CRACKS IN BRONZE	1	LS	2,500.00	2,500
FILL HOLES IN BRONZE SURFACE	1	LS	2,000.00	2,000
REMOVE FERROUS PINS/FILL	1	LS	500.00	500
CLEAN & WAX BRONZE SURFACE	200	SF	30.00	6,000
LIFTING EQUIPMENT	1	LS	2,000.00	2,000
REPAIR LETTER ANCHORAGE	8	EA	40.00	320
<b>Subtotal Direct Construction Costs</b>				<b>\$13,320</b>
<b>Published Location Factor</b>			Included in Unit Costs	-
<b>Remoteness Factor @</b>			NA	-
<b>Federal Wage Rate Factor</b>			Included in Unit Costs	-
<b>Design Contingency @</b>			15%	\$1,998
<b>Total Direct Construction Costs</b>				<b>\$15,318</b>
<b>Standard General Conditions @</b>			15%	\$2,298
<b>Government General Conditions @</b>			10%	\$1,532
<b>Historic Preservation Factor</b>			10%	\$1,532
<b>Subtotal NET Construction Cost</b>				<b>\$20,679</b>
<b>General Contractor's Overhead @</b>			10%	\$2,068
<b>General Contractor's Profit @</b>			10%	\$2,068
<b>Estimated NET Construction Cost</b>				<b>\$24,815</b>
<b>Contracting Method Adjustment (8A)</b>			10%	\$2,482
<b>Inflation Escalation to Spring 2011</b>			5.64%	\$1,400
<b>Total Estimated NET Cost of Construction</b>				<b>\$28,696</b>

# Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 7
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Bronze Option #2</b>		3/2/10

## Bronze Option #2

Item	Quantity	Unit	Unit Price	Total Cost
BRONZE WORK				
REPAIR CRACKS IN BRONZE - COMPLETE	1	LS	4,000.00	4,000
FILL HOLES IN BRONZE SURFACE	1	LS	3,000.00	3,000
REMOVE FERROUS PINS/FILL	1	LS	500.00	500
CLEAN & WAX BRONZE SURFACE	200	SF	30.00	6,000
LIFTING EQUIPMENT	1	LS	2,000.00	2,000
REPAIR LETTER ANCHORAGE	8	EA	40.00	320
Subtotal Direct Construction Costs				\$15,820
Published Location Factor	Included in Unit Costs		-	
Remoteness Factor @	NA		-	
Federal Wage Rate Factor	Included in Unit Costs		-	
Design Contingency @	15%		\$2,373	
Total Direct Construction Costs				\$18,193
Standard General Conditions @	15%		\$2,729	
Government General Conditions @	10%		\$1,819	
Historic Preservation Factor	10%		\$1,819	
Subtotal NET Construction Cost				\$24,561
General Contractor's Overhead @	10%		\$2,456	
General Contractor's Profit @	10%		\$2,456	
Estimated NET Construction Cost				\$29,473
Contracting Method Adjustment (8A)	10%		\$2,947	
Inflation Escalation to Spring 2011	5.64%		\$1,662	
Total Estimated NET Cost of Construction				\$34,082

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 8
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Waterproofing Option #1</b>		3/2/10

### Waterproofing Option #1

Item	Quantity	Unit	Unit Price	Total Cost
WATERPROOFING				
REPLACE METAL FLASHING IN PLACE	16	SF	25.00	400
Subtotal Direct Construction Costs				\$400
Published Location Factor	Included in Unit Costs			-
Remoteness Factor @	NA			-
Federal Wage Rate Factor	Included in Unit Costs			-
Design Contingency @	15%			\$60
Total Direct Construction Costs				\$460
Standard General Conditions @	15%			\$69
Government General Conditions @	10%			\$46
Historic Preservation Factor	10%			\$46
Subtotal NET Construction Cost				\$621
General Contractor's Overhead @	10%			\$62
General Contractor's Profit @	10%			\$62
Estimated NET Construction Cost				\$745
Contracting Method Adjustment (8A)	10%			\$75
Inflation Escalation to Spring 2011	5.64%			\$42
Total Estimated NET Cost of Construction				\$862

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 9
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Waterproofing Option #2</b>		3/2/10

### Waterproofing Option #2

Item	Quantity	Unit	Unit Price	Total Cost
WATERPROOFING				
DISCONNECT ANCHORAGE/LIFT STATUE	1	LS	2,500.00	2,500
MEMBRANE WATERPROOFING	16	SF	15.00	240
SEAT & CAULK REGLET	16	LF	8.00	128
NEOPRENE GASKET	10	LF	15.00	150
RESET STATUE	1	LS	2,000.00	2,000
Subtotal Direct Construction Costs				\$5,018
Published Location Factor	Included in Unit Costs			-
Remoteness Factor @	NA			-
Federal Wage Rate Factor	Included in Unit Costs			-
Design Contingency @	15%			\$753
Total Direct Construction Costs				\$5,771
Standard General Conditions @	15%			\$866
Government General Conditions @	10%			\$577
Historic Preservation Factor	10%			\$577
Subtotal NET Construction Cost				\$7,790
General Contractor's Overhead @	10%			\$779
General Contractor's Profit @	10%			\$779
Estimated NET Construction Cost				\$9,349
Contracting Method Adjustment (8A)	10%			\$935
Inflation Escalation to Spring 2011	5.64%			\$527
Total Estimated NET Cost of Construction				\$10,811

## Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 10
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	<b>Waterproofing Option #3</b>		3/2/10

### Waterproofing Option #3

Item	Quantity	Unit	Unit Price	Total Cost
WATERPROOFING				
DISCONNECT ANCHORAGE/LIFT STATUE	1	LS	2,500.00	2,500
MEMBRANE WATERPROOFING	16	SF	15.00	240
METAL FLASHING	16	SF	30.00	480
SEAT & CAULK REGLET	16	LF	10.00	160
NEOPRENE GASKET	10	LF	15.00	150
RESET STATUE	1	LS	2,000.00	2,000
Subtotal Direct Construction Costs				\$5,530
Published Location Factor		Included in Unit Costs		-
Remoteness Factor @		NA		-
Federal Wage Rate Factor		Included in Unit Costs		-
Design Contingency @		15%		\$830
Total Direct Construction Costs				\$6,360
Standard General Conditions @		15%		\$954
Government General Conditions @		10%		\$636
Historic Preservation Factor		10%		\$636
Subtotal NET Construction Cost				\$8,585
General Contractor's Overhead @		10%		\$859
General Contractor's Profit @		10%		\$859
Estimated NET Construction Cost				\$10,302
Contracting Method Adjustment (8A)		10%		\$1,030
Inflation Escalation to Spring 2011		5.64%		\$581
Total Estimated NET Cost of Construction				\$11,914

# Class C Cost Estimate

Project: Benito Pablo Jaurez Monument & Plaza - Investigative Condition Assessment & Report			Page 11
Architect: Oehrlein & Associates Architects		RWB Job # 09-88-B	
Estimated by: R.W. Brown & Associates	Other Costs		3/2/10

## Other Costs

Item	Quantity	Unit	Unit Price	Total Cost
<b>LANDSCAPE RESTORATION</b>				
REMOVE SHRUBS - ALLOW	20	EA	40.00	800
SOD	350	SY	12.00	4,200
TREES	2	EA	900.00	1,800
SHRUBS	20	EA	150.00	3,000
PRUNE EXISTING TREES	1	LS	2,500.00	2,500
<b>OTHER COSTS</b>				
MISCELLANEOUS PATCH & REPAIR OF				
CONCRETE APPROACHES - ALLOW	1	LS	2,000.00	2,000
PERMITS & FEES	1	LS	4,000.00	4,000
<b>Subtotal Direct Construction Costs</b>				<b>\$18,300</b>
<b>Published Location Factor</b>			Included in Unit Costs	-
<b>Remoteness Factor @</b>			NA	-
<b>Federal Wage Rate Factor</b>			Included in Unit Costs	-
<b>Design Contingency @</b>			15%	\$2,745
<b>Total Direct Construction Costs</b>				<b>\$21,045</b>
<b>Standard General Conditions @</b>			15%	\$3,157
<b>Government General Conditions @</b>			10%	\$2,105
<b>Historic Preservation Factor</b>			10%	\$2,105
<b>Subtotal NET Construction Cost</b>				<b>\$28,411</b>
<b>General Contractor's Overhead @</b>			10%	\$2,841
<b>General Contractor's Profit @</b>			10%	\$2,841
<b>Estimated NET Construction Cost</b>				<b>\$34,093</b>
<b>Contracting Method Adjustment (8A)</b>			10%	\$3,409
<b>Inflation Escalation to Spring 2011</b>			5.64%	\$1,923
<b>Total Estimated NET Cost of Construction</b>				<b>\$39,425</b>

## APPENDIX G – E-MAIL REGARDING FUNDIDORES ARTISTICOS IN MEXICO CITY

From: Quesnel Melendez, Carlos [cquesnel@sre.gob.mx]  
To: Jennifer\_Talken-Spaulding@nps.gov; Martin Howell  
RE: Assistance with foundry in Mexico City

Dear Jennifer,

I tried to contact you last week to let you know that unfortunately Fundidores Artisticos is out of business. I found a person related to the former owner (Otilia Montano, who is the owner of another foundry), but she does not have any information on the Juarez statue.

I also appreciate Martins' questionnaire. However since FA is no longer in existence we haven't been able to locate anyone in a position to answer these questions.

We know that the author of the statue was Enrique Alciati, and the 2 reproductions of this work were cast in 1969 (the other was given as gift from the government of Mexico to the government of Guatemala). The foundry, Fundidores Artísticos, ceased operations around 1976. The only information we have is that the last name of the owners was Portilla, and that they had a cousin named Francisco Cortina Portilla, whom we have unfortunately not been able to locate.

Last week I spoke over the phone with Mrs. Montano, whose husband had a relationship with Fundidores Artísticos. However, she has no information or background on the sketches or the crafting of these sculptures. However, she told us that most of the sculptures cast there received a black or dark brown finish (Patina), and that she believes the original patina for this sculpture was dark Brown, since it was the most classical one (the statue's present greenish color is the result of exposure to the elements over the years).

I hope this information is useful for you. Please let me know if you need anything else, and I will be glad to be of assistance.

Here's the information of Otilia Montano's foundry, just in case you need it. And please do not hesitate to let me know if you want me to talk to somebody in Spanish.

Taller Otilia Montano  
Address: Poniente 108 #96 Colonia Defensores de la República Delegación A. Madero  
Tel: 55 67 58 08  
Fax: 53 68 87 91

Best regards  
Carlos

Carlos Quesnel-Meléndez  
Counselor for Legal Affairs  
Embassy of Mexico  
Tel. 202.7281688  
Fax 202.7281783

Advertencia: el contenido de este correo y archivos adjuntos es confidencial y para el uso exclusivo de su(s) destinatario(s). Si usted ha recibido este correo por error, por favor notifíquelo al remitente y bórralo de su sistema. Está prohibido el uso, distribución, copia o divulgación por cualquier medio de la información contenida en el mismo por persona distinta al destinatario de este mensaje.

Disclaimer: The content of this email and any of its attachments is confidential and intended solely for the use of its addressee(s). If you have received this email by mistake, please notify the sender immediately and delete it from your system. Disclosing, copying, distributing or taking any action in reliance on the contents of this information by anyone other than the intended recipient(s) is strictly prohibited.