

WATTS TOWERS CONSERVATION OPERATIONS COMPARISON

May 28, 1997 (was July, 1996)

SUMMARY

The number of areas requiring various conservation operations, the number of cracks requiring filling, and the number of ornaments requiring cleaning are three key factors in measuring the size of the overall task on each sculpture. Comparisons of these numbers between sculptures becomes a measure of relative complexity in their conservation. Plotted and enclosed, and listed below are these data for 8 sculptures completed and others in work. Completed are the Ship of Marco Polo in March 1991, the Garden Spire in December 1991, the 'A' Tower in October 1992, the 'B' Tower in October 1993, the Chimney in February 1994, the Gazebo in June 1994, the House facade in December 1994 and the Canopy in April 1995. In work are the South Wall, North Wall, Overheads, Barbecue, Oven, Floor, East, Center and West Towers. Cost estimates where available include scaffolding and photography.

	Areas Treated	Cracks Filled	Ornaments Cleaned	Cost Est to date
SHIP *	5,478	452	4,180	\$ 100,000
GARDEN SPIRE *	1,961	112	1,111	\$ 79,000
'A' TOWER *	5,078	440	2,987	\$135,000
'B' TOWER *	1,205	52	1,126	\$ 9,000
GAZEBO *	12,332	800	10,918	\$ 394,000
CHIMNEY *	1,622	192	662	\$ 45,000
HOUSE *	1,024	248	647	\$ 75,000
CANOPY *	603	81	327	\$ 18,000
NORTH WALL	1,714	382	759	tbd
SOUTH WALL	2,900	418	2,152	\$ tbd
OVERHEADS	1,428	66	916	\$ 70,000
BARBECUE	13	0	13	\$ 500
OVEN	5	0	5	\$ 200
FLOOR	10	8	0	\$ 15,000
EAST TOWER	3,255	810	719	\$ tbd
CENTER TOWER	10,223	1,438	4,514	\$ tbd
WEST TOWER	7,054	1,277	3,146	\$ tbd
* Completed				
TOTAL	55,905	6,776	34,178	N/A

CONSERVATION APPLICATION DETAILS

Cleaning operations

	TILES	GLASS	POTTERY	SHELLS	TOTAL
*SHIP	1500	250	480	1950	4,180
*GARDEN					
SPIRE	169	135	383	424	1,111
*`A' TOWER	344	92	805	1746	2,987
*`B' TOWER	900	4	18	200	1,122
*GAZEBO	7019	1131	1891	877	10,918
*CHIMNEY	9	72	0	581	662
*HOUSE	541	50	56	0	647
*CANOPY	102	58	167	0	327
NORTH WALL	19	204	25	511	759
SOUTH WALL	654	588	409	501	2,152
OVERHEADS	157	29	44	686	916
BARBECUE	0	0	0	13	13
OVEN	0	0	0	5	5
FLOOR	0	0	0	0	0
EAST TOWER	153	354	63	149	719
CENT TOWER	2267	1173	1000	74	4,514
WEST TOWER	1005	430	1711	0	3,146
TOTAL	14,839	4,570	7,052	7,723	34,178
TOTAL ORNAMENTS CLEANED	34,178 as of May 1997				

SHIP OF MARCO POLO *

Cleaning with water/cotton swabs - 1,500 tiles; 250 glass; 480 pottery.

Cleaning and consolidation with DF104/B-72 - 1,950 shells.

Cleaning with Brasso - 1,250 tiles; 223 glass.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 7 pieces of glass.

Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - 50 places GE 162 RTV - 55 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 55 places Sikadur 23 or 31 - 31 places

GARDEN SPIRE *

Cleaning with water/cotton swabs - 169 tiles; 135 glass; 383 pottery.

Cleaning and consolidation with DF104/B-72 - 424 shells.

Cleaning with Brasso - 142 tiles; 122 glass.

Rebonding mortar-to-mortar with Sikadur 23 - 34 places

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'A' TOWER *

Cleaning with water/cotton swabs - 344 tiles; 92 glass; 805 pottery.
Cleaning and consolidation with DF104/B-72 - 1,746 shells.
Cleaning with Brasso - 332 tiles; 92 glass.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 7 pieces of glass.
Rebonding ornaments to the original mortar with Dow Corning DC 738 - 22 places
Rebonding mortar-to-mortar with Sikadur 23 - 319 places

'B' TOWER *

Cleaning with water/cotton swabs - 900 tiles; 4 glass; 18 pottery.
Cleaning and consolidation with B-72 - 200 shells.
Cleaning with Brasso - 879 tiles; 4 glass.

GAZEBO *

Cleaning with water/cotton swabs - 6,034 tiles; 740 glass; 1,891 pottery.
Cleaning and consolidation with DF104/B-72 - 802 shells.
Cleaning with Brasso - 3,912 tiles; 721 glass; 1,464 pottery.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 40 pieces of glass.
Rebonding ornaments to the original mortar with:
Dow Corning DC 738 - 5 cracks
GE 162 RTV - 3 places
Rebonding mortar-to-mortar with:
GE 162 RTV - 4 places
Sikadur 23 - 377 places

CHIMNEY *

Cleaning with water/cotton swabs - 9 tiles; 72 glass.
Cleaning and consolidation with DF104/B-72 - 581 shells.
Cleaning with Brasso - 9 tiles; 72 glass.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - N/A pieces of glass.
Rebonding ornaments to the original mortar with:
Dow Corning DC 738 - 0 places GE 162 RTV - 7 places
Rebonding mortar-to-mortar with:
GE 162 RTV - 7 places
Sikadur 23 or 31 - 55 places
Jahn mortar - 96 places
Cement mortar - 38 places

HOUSE *

Cleaning with water/cotton swabs - 541 tiles; 50 glass.
Cleaning and consolidation with DF104/B-72 - 0 shells.
Cleaning with Brasso - 541 tiles; 50 glass.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.

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Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - 0 places

GE 162 RTV - 0 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 0 places

Sikadur 23 or 31 - 48 places

Jahn mortar - 136 places

Cement mortar - 64 places

CANOPY *

Cleaning with water/cotton swabs - 102 tiles; 58 glass.

Cleaning and consolidation with DF104/B-72 - 0 shells.

Cleaning with Brasso - 102 tiles; 58 glass, 150 pottery pieces.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.

Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - 0 places

GE 162 RTV - 0 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 0 places

Sikadur 23 or 31 - 52 places

Jahn mortar - 8 places

Cement mortar - 21 places

* Completed conservation

NORTH WALL

Cleaning with water/cotton swabs - 19 tiles; 204 glass; & 25 pottery.

Cleaning and consolidation with DF104/B-72 - 511 shells.

Cleaning with Brasso - 0 tiles.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 2 pieces of glass.

Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - 4 places GE 162 RTV - 0 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 0 places

Sikadur 23 - 149 places

Jahn mortar - 97 places

Cement mortar - 105 places

SOUTH WALL (to June 1996)

Cleaning with water/cotton swabs - 654 tiles; 588 glass; 409 pottery.

Cleaning and consolidation with DF104/B-72 - 406 shells.

Cleaning with Brasso - 598 tiles.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 1 piece of glass.

Rebonding ornaments to the original mortar with:

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Dow Corning DC 738 - 6 places

GE 162 RTV - 11 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 24 places

Sikadur 23 or 31 - 117 places

Jahn mortar - 47 places

Cement mortar - 108 places

OVERHEADS (to June 1996)

Cleaning with water/cotton swabs - 142 tiles; 0 glass; 0 pottery.

Cleaning and consolidation with DF104/B-72 - 470 shells.

Cleaning with Brasso - 142 tiles; 0 glass.

BARBECUE (to June 1996)

Cleaning with water/cotton swabs - 0 tiles; 0 glass; 0 pottery.

Cleaning and consolidation with DF104/B-72 - 13 shells.

Cleaning with Brasso - 0 tiles; 0 glass.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.

Rebonding ornaments to the original mortar with: Dow Corning DC 738 - 0 places

GE 162 RTV - 0 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 0 places

Sikadur 23 or 31 - 0 places

OVEN

Cleaning with water/cotton swabs - 0 tiles; 0 glass; 0 pottery.

Cleaning and consolidation with DF104/B-72 - 5 shells.

Cleaning with Brasso - 0 tiles; 0 glass.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.

Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - 0 places GE 162 RTV - 0 places

Rebonding mortar-to-mortar with:

GE 162 RTV - 0 places Sikadur 23 or 31 - 0 places

FLOOR

Cleaning with water/cotton swabs - N/A tiles; N/A glass; N/A pottery.

Cleaning and consolidation with DF104/B-72 - N/A shells.

Cleaning with Brasso - N/A tiles; N/A glass.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - N/A pieces of glass.

Rebonding ornaments to the original mortar with:

Dow Corning DC 738 - N/A places

GE 162 RTV - N/A places

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Rebonding mortar-to-mortar with:
GE 162 RTV - N/A places
Sikadur 23 or 31 - N/A places

EAST TOWER (to May 1997)

Cleaning with water/cotton swabs - 153 tiles; 349 glass; 63 pottery.
Cleaning and consolidation with DF104/B-72 - 149 shells
Cleaning with Brasso - 153 tiles.

Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.
Rebonding ornaments to the original mortar with Dow Corning DC 738 - 21 places some temporary
Rebonding mortar-to-mortar with Sikadur 23 - 238 places Crack-filling with Jahn mortar - 209 cracks
Crack-filling with cement mortar - 274 cracks

CENTER TOWER (to May 1997)

Cleaning with water/cotton swabs - 2267 tiles; 1173 glass; 1000 pottery.
Cleaning and consolidation with DF104/B-72 - 88 shells;
Cleaning with Brasso - 731 tiles.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.
Rebonding ornaments to the original mortar with Dow Corning DC 738 - 0 places some temporary
Rebonding mortar-to-mortar with Sikadur 23 - 660 places
Crack-filling with Jahn mortar - 317 cracks
Crack-filling with cement mortar - 448 cracks

WEST TOWER (to May 1997)

Cleaning with water/cotton swabs - 1005 tiles; 430 glass; 1711 pottery.
Cleaning and consolidation with DF104/B-72 - 0 shells.
Cleaning with Brasso - 359 tiles.
Rebonding glass-to-glass with Dow Corning DC 3145 silicone - 0 pieces of glass.
Rebonding ornaments to the original mortar with Dow Corning DC 738 - 0 places some temporary
Rebonding mortar-to-mortar with Sikadur 23 - 102 places
Crack-filling with Jahn mortar - 908 cracks
Crack-filling with cement mortar - 217 cracks