Thornton Tomasetti

Appendix B: Fire Escape Repair Recommendations



Fire Escape **Repair Quantity Totals**

Project Name: 220 South State - Fire Escape

TT Project #: C20178.00

Engineer: JA

Date: 4/19/2021

ITEM	REPAIR TYPE	DESCRIPTION	UNIT	IN-FIELD QUANTITY
1	PAINT	Wire brush existing paint & provide new coating	per floor	19
2	IRON	Full replacement of handrail post	ea	4
3	IRON	Partial-replacement of handrail post	ea	20
4	IRON	Replace missing or deteriorated bolts	ea	7
5	IRON	Replace tread connection	ea	29
6	IRON	Fall hazard at Level 4, install handrails	ea	1
7	IRON	Reinforce existing cantilevered members	ea	23
8	IRON	Reinforce grating support angles with section loss	ea	41
9	IRON	Stair stringer reinforcement	ea	0
9	IRON	Replacement of stringer bottom chord brace	ea	2
10	IRON	Plug weld existing holes at handrail posts	ea	5
11	DEMO	Remove loose decorative piece at handrail posts	ea	1
12	DEMO	Removal of existing stand pipe	per floor	19
13	IRON	Replace deterioirated stringer hook connection	ea	22
14	IRON	Provide new handrail to stringer connection	ea	27
15	IRON	Tread connection	ea	26
15	IRON	Provide plate & bolt at stringer bottom connections	ea	16



Photo 1: Item #1: Wire brush existing paint & provide new coating



Photo 2: Item #2: Full replacement of handrail post

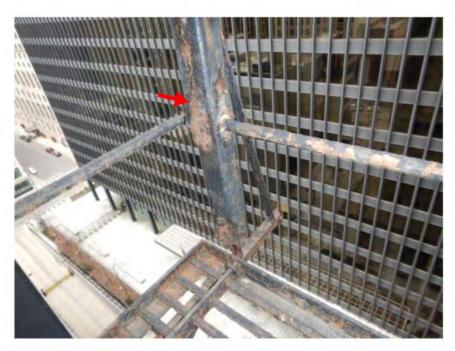


Photo 3: Item #3: Partial-replacement of handrail post (remove deteriorated components and weld new steel)



Photo 4: Item #4: Replace missing or deteriorated bolts



Photo 5: Item #5: Replace tread connection (weld or bolt)



Photo 6: Item #6: Fall hazard at Level 4, install handrails



Photo 7: Item #7: Reinforce (with new plates) existing cantilevered members



Photo 8: Item #8: Reinforce grating support angles with section loss



Photo 9: Item #9: Replacement of stringer bottom chord brace (angle) at Level 14



Photo 10: Item #9: Replacement of stringer bottom chord brace (angle) at Level 20

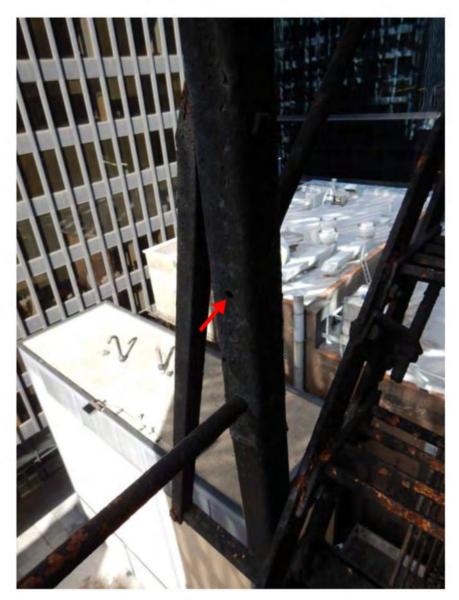


Photo 11: Item #10: Plug weld existing holes at handrail posts

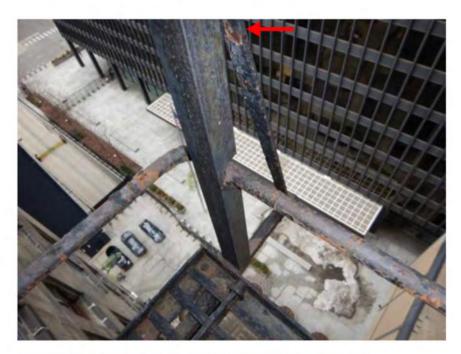


Photo 12: Item #11: Remove loose decorative piece at handrail posts



Photo 13: Item #12: Removal of existing stand pipe



Photo 14: Item #13: Replace deterioirated stringer hook connection



Photo 15: Item #14: Provide new handrail to stringer connection



Photo 16: Item #15: Provide plate & bolt at stringer bottom connections (replace deteriorated components as needed)