

CHFA Capital Needs Assessment and Replacement Reserve Analysis

Prepared for:

Connecticut Housing Finance Authority

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and

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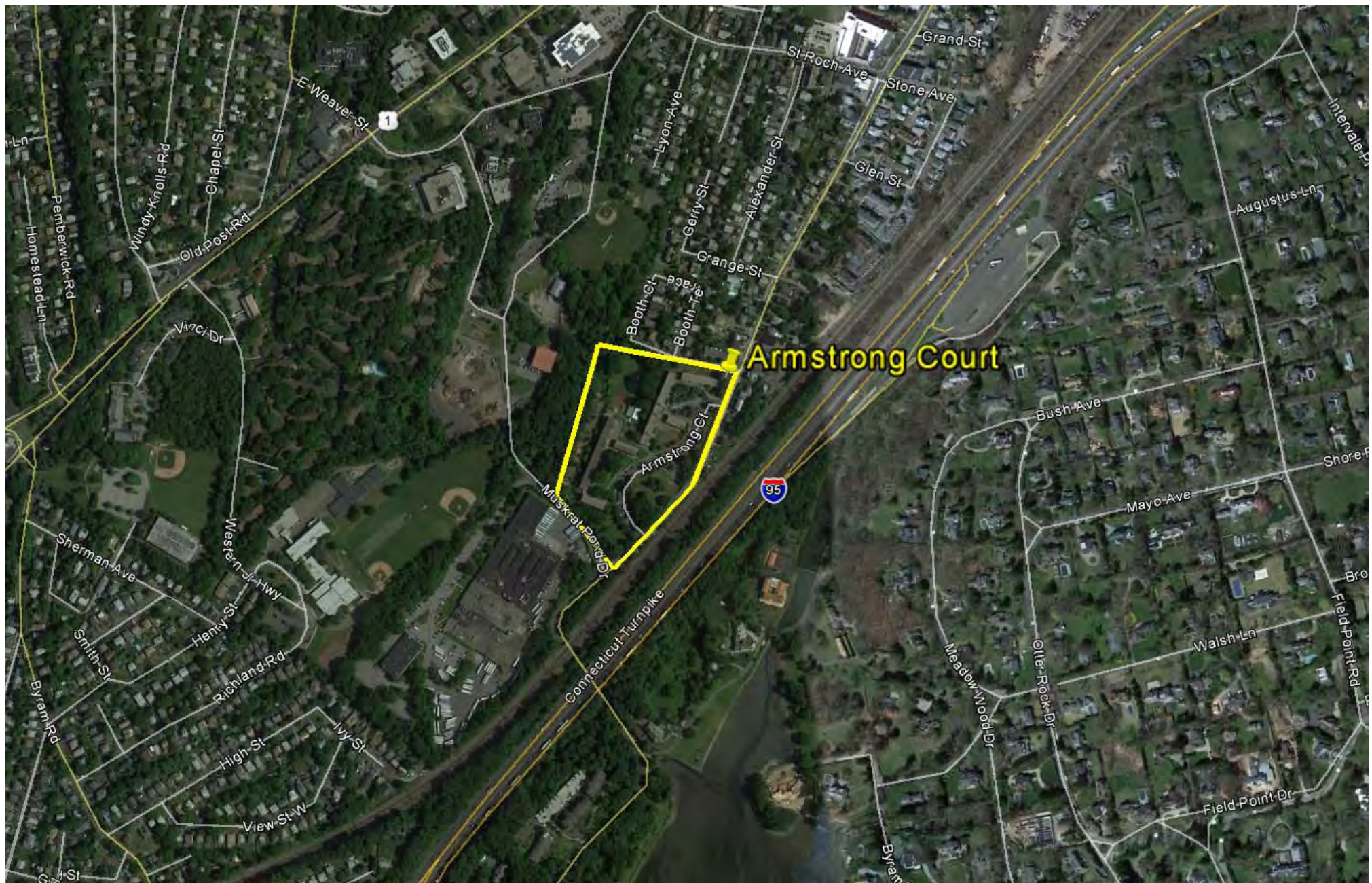
Armstrong Court

CHFA # 85060D

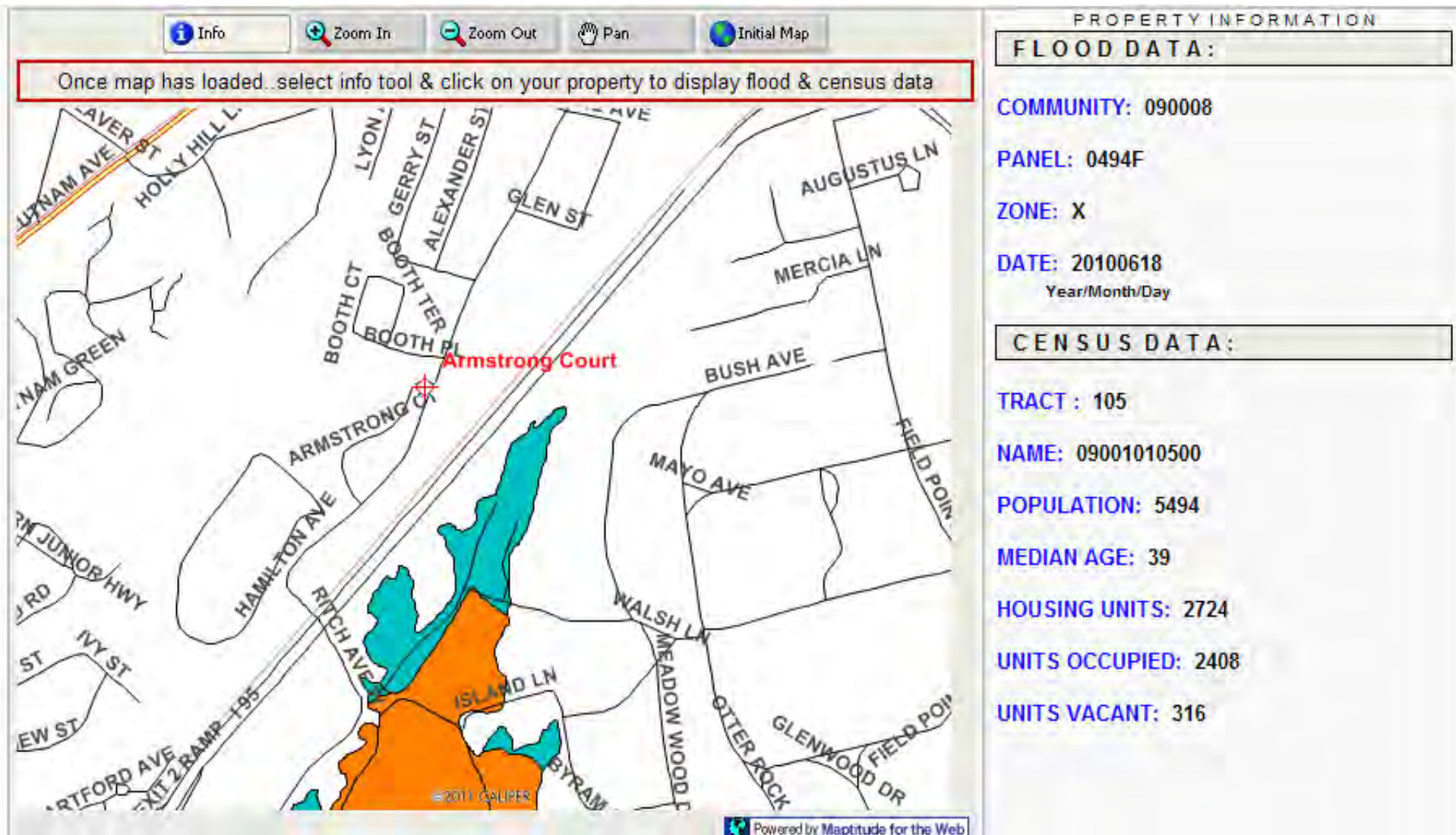
Greenwich Housing Authority
Greenwich, CT

July 11, 2013

Final Report



Armstrong Court
1-5 Armstrong Court
Greenwich, CT 06830



Armstrong Court

1-5 Armstrong Court
Greenwich, CT 06830

Zone X = Outside the 500-year floodplain and
Outside the 1% and 0.2% annual chance floodplains

Executive Summary

Armstrong Court

Greenwich, CT

Armstrong Court is a residential development for families. The development is comprised of 6 residential buildings containing a total of 144 units (12 one-bedroom, 108 two-bedroom, and 24 three-bedroom units). The “First Steps” daycare school building is also located on site, reportedly built in 1999. A separate daycare facility (“Kid’s Corner”) is located at the basement level of one of the residential buildings. Original construction of the development’s residential buildings dates to 1951. There are no handicap accessible units at this property.

Overall the development is in fair to good condition. As shown on the attached capital needs worksheets, the property faces significant capital expenditures over the term of the plan. Greenwich Housing Authority representatives report that there is approximately \$291,243 of Reserve Funding in place for this development. Based on projections, the development is seen as requiring an increase of replacement reserve funding and/or an infusion of additional capital.

Key findings identified as part of this assessment include the following:

- The roadways are maintained by the municipality. Parking areas are shown for resurfacing in Years 2 and 3. Periodic repair allowances for retaining walls are shown throughout the plan. Most site walks have recently been resurfaced / replaced. Periodic repair and sealcoating allowances are shown in the plan. Walks and curbing along Armstrong are due to be replaced and upgraded. Costs for this work are shown in Years 2-3. Wood post and rail fencing along these walks is shown being replaced as well. The basketball court is shown for resurfacing work in Year 2. The playground area’s equipment and ground cover are to be replaced / upgraded in 2013. Landscaping is generally maintained from operations. Tree pruning and removal allowances are shown in the plan. Site signage is

shown being updated starting in Year 2 and again in Year 15. Site heating and domestic hot water supply and return lines are original, and site staff noted continual leak concerns. On-site replacement costs are shown in Year 2.

- Building exteriors are primarily clad with brick masonry (EIFS at “First Steps” Daycare). Cracking and mortar deterioration were observed at several locations, and repairs are shown starting in Years 2 and 19. EIFS surfaces outside the daycare building are shown for repair and refinishing in Years 3 and 19. Concrete balconies display spot spalling, and railings are rusting. Concrete repairs and refinishing of railings are included in the plan in Years 1 and 16. Access into the community room and laundry facilities would be enhanced by replacement of entrance door systems (wider). Unit entrance doors, balcony doors, and storm doors are due to be replaced with more energy efficient models, and costs are shown over time for this work. Service doors to mechanical rooms and from balconies into stairways are to be upgraded as well. Most windows are over thirty years in age, and some operation and hardware problems were reported. Drafts are an additional concern as well. Window replacement is shown in Years 2-6. Stairway window systems are shown for future upgrades in Years 15-16. The daycare building’s windows are shown for future replacement in Year 17. Exterior lighting upgrades are shown starting in Years 3 and 19. Standing seam metal roofing at the daycare building should be monitored. Ballasted membrane and rolled asphalt roofing at the residential buildings varies in age. There were no reported leaks, but significant ponding concerns were noted at some roofing sections. Interim repairs are handled from operations. Replacement costs are shown in Years 3-5.
- Interior common areas are limited to the community room (seldom used) and adjoining restrooms, two laundry room facilities, and common stairways. Periodic allowances for painting these facilities are shown in the plan. Flooring upgrades in the community room are also anticipated. Laundry equipment is maintained from a service provider. The community room’s restrooms need to be expanded to meet accessibility requirements. Costs are shown accordingly. The daycare facilities interior finishes are shown being updated twice in the plan. Kitchen spaces and appliances are shown for upgrades accordingly as well.
- Heating boilers and domestic hot water generation equipment are anticipated for replacement in the early years of the plan. Costs are shown accordingly, including replacement of distribution and return piping lines throughout the buildings. Costs are shown pending engineering of the new systems. HVAC equipment serving the daycare facilities is also shown being updated. A fire detection / monitoring master panel system is to also be installed (per Fire Marshal’s requirements), and costs are pending engineering.

- Unit interior finishes and fixtures are shown being updated over time. Painting is usually performed on unit turnover, from operations. Vinyl tile flooring varies condition, and replacement allowances are shown annually. Bathroom tub re-glazing and ceramic tile surround repairs are anticipated in most years of the plan. Vanities, sinks, wall accessories, medicine cabinets, toilets, and ventilation / exhaust fans are shown being upgraded over time. Kitchen cabinetry displays hard use and deterioration. Replacements are shown starting in Year 2. Refrigerators are the resident's responsibility. Most ranges are nearing the end of their EUL, and replacements are shown accordingly. Rangehoods may be replaced with combination microwave. Local ring smoke / fire / CO detection devices are replaced as needed. Electrical circuit breaker panels are older models, and replacement is anticipated in the early years of the plan.

Additional Notes:

1. The Physical Assessment of the property was conducted on Monday, June 10th, 2013; Tuesday, June 11th, 2013; and Wednesday, June 12th, 2013. Additional information was provided to ON-SITE INSIGHT by site staff and others. OSI was represented on this assignment by Craig Torres. We would like to thank Ms. Sardis Solano; Mr. Terry Mardula; Mr. Joe Derubeis; Mr. Bruno Lacaria, and the site staff for their assistance.
2. There were no "drawings" or "blueprints" available for this development. Dimensional information used in this report was procured via field measurements during the assessment of the property and via aerial images of the development utilizing the GoogleMaps website program.
3. Cost estimates used in this assessment are based on data from *RS Means Facilities and Construction Cost Data*. These cost estimates have been applied uniformly across the entire study portfolio to help ensure consistency of future projections. Actual owner and/or site pricing could vary significantly.
4. Unless required by fire, safety, or accessibility codes, items are typically shown being replaced in kind and do not include any planned upgrades or potential upgrade opportunities.
5. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.
6. This report is delivered subject to the conditions on Appendix A, *Statement of Delivery*.



1. River through site to be dredged



2. View of community gardens and associated fencing



3. Parking area paving



4. Paving at dumpsters, poor conditions



5. Newer site walks, good conditions



6. Walks and curbing along Armstrong



7. View of the First Steps Daycare facility on site



8. Typical building front elevations



9. Typical building rear elevations



10. Typical balconies and stairway access doors



11. Spot spalling of concrete balconies



12. Spot rebar exposure at balconies



13. Spot masonry cracking and mortar deterioration



14. Spot mortar deterioration, patch repairs done



15. Some roofing fascia flashing damage



16. Ponding at one roof surface, due to clogged drains and poor pitch



17. Community room finishes, to update



18. Community restrooms to upgrade for accessibility



19. First Steps daycare finishes and furnishings



20. Kitchenette serving First Steps daycare to eventually upgrade



21. Kids Corner daycare facility finishes



22. Typical stairway finishes



23. Some rusting of stair structures



24. Typical laundry room finishes and equipment



25. Heating plant equipment due to be upgraded



26. DHW equipment to be upgraded



27. Basement-crawl space structure and distribution piping



28. Spot leaks of heating and DHW service line piping



29. AC condenser serving Kids Corner daycare - to replace



30. HVAC equipment serving First Steps daycare



31. AC condensers serving First Steps HVAC systems



32. Fire detection - monitoring serving daycare facility



33. Typical unit bath fixtures and finishes



34. Typical unit bath tub and surround conditions



35. Typical unit kitchen cabinetry



36. Spot damage and deterioration of kitchen cabinetry

Comprehensive Capital Needs Assessment Schedule

Summary

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

Beginning Replacement Reserve Balance:	\$291,243
Annual Replacement Reserve Contribution:	\$0
Additional Misc. Contribution:	

	Component	Total Planned Expenditures by Year																						Revitalization
		Emergency	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
				2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
1	Site Improvements	0	0	127,915	530,222	157,905	45,635	11,832	11,173	20,463	5,534	22,559	16,310	47,037	0	21,235	0	8,130	8,374	58,447	141,506	38,305	0	0
2	Building Exterior	0	10,300	345,180	652,798	516,158	539,638	361,883	372,739	3,331	3,431	3,534	361,533	375,947	376,152	393,601	405,409	126,331	639,390	81,711	8,834	285,652	273,427	0
3	Roofing	0	0	0	0	183,124	185,005	190,555	0	0	0	0	0	0	0	0	0	0	0	0	0	5,629	0	0
4	Lobby - Mail Area	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Community Room	0	0	0	9,108	7,288	9,603	13,360	25,722	3,382	3,484	0	0	0	7,229	4,181	4,306	2,901	7,790	18,538	0	11,525	11,871	0
6	Common Hallways	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Common Stairways	0	0	0	6,180	6,365	6,556	43,395	75,128	31,344	0	0	0	0	0	0	56,621	58,319	9,348	9,628	9,917	0	0	0
8	Common Laundry	0	0	0	2,803	0	0	0	0	0	3,347	0	0	0	0	0	3,997	0	0	0	0	0	4,773	0
9	Common Area Restrooms	0	20,000	20,000	0	0	0	0	0	0	0	0	0	0	1,353	0	0	0	0	0	0	0	0	0
10	Building Boilers	0	0	0	1,571,445	0	2,322	0	0	0	0	0	0	0	0	0	0	71,186	151,220	22,065	54,957	0	0	0
11	Building Mechanical	0	0	0	10,099	10,742	11,064	0	0	0	0	0	0	0	0	0	0	0	0	0	45,831	38,587	0	0
12	Building Electrical	0	0	0	172,113	10,185	10,490	15,237	20,258	11,463	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Building Elevator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Building Structural	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	Unit Living	0	0	36,457	37,551	38,677	39,837	41,033	42,264	43,531	44,837	46,183	47,568	48,995	50,465	51,979	53,538	55,144	56,799	58,503	60,258	62,065	63,927	0
16	Unit Kitchens	0	0	0	167,602	189,243	194,921	200,768	18,154	0	0	0	0	0	14,785	23,570	24,277	25,005	25,755	26,528	27,324	54,803	37,718	0
17	Unit Bathrooms	0	0	16,667	35,570	36,637	37,736	38,869	40,035	41,236	42,473	43,747	45,059	46,411	47,803	49,237	50,715	45,572	39,401	0	0	0	20,741	0
18	Unit Electrical	0	0	0	85,034	87,585	90,212	92,919	0	0	22,433	23,106	23,799	0	0	0	0	0	28,417	29,270	30,148	0	0	0
19	Unit Mechanical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Annual Planned Expenditures	0	30,300	546,219	3,280,523	1,243,910	1,173,020	1,009,849	605,472	154,750	125,540	139,129	494,269	518,390	497,787	543,802	598,862	392,590	966,494	304,690	378,775	496,567	412,457	0
21	Annual Provision (indexed at 3%)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22	Outside Capital			13,766,400																				
23	Cumulative Reserve Balance	291,243	260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249	

Site Improvements

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Building Exterior

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

	Component	Current Total Replacement Cost	Expected Annual Rate of Inflation	Current Age	Total Expected Useful Life	Initial Replacement Year	Planned Expenditures by Year																												
							Code	Emergency	Code	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Revitalization				
											2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
1	Exterior Doors					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
2	Glass Doors (Sliders)					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
3	Exterior Walls - Masonry					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
4	Exterior Walls - EIFS					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
5	Ext. Walls - Vinyl Siding					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
6	Ext. Walls - Wood Siding					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
7	Windows					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
8	Exterior Soffits and Fascia					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
9	Caulking					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
10	Unit Balconies / Decks					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
11	Railings					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
12	Fire Escape / Cat Walks - repair and refinish allowances	8,000		29	10	2013				8,000	0	0	0	0	0	0	0	0	10,751	0	0	0	0	0	0	0	0	0	0						
13	Balconies / Decks & Railings - conc. spalling, railings rusting	326,880		62	15	2013				326,880	0	0	0	0	0	0	0	0	0	0	0	0	0	0	509,268	0	0	0	0						
14	Service Doors (Metal to Mech. Rooms - Stairs to Balcs.)	156,560		29	30	2014				0	161,257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
15	Accessibility Improvements (Doors to Cmnty. & Laundry)	10,300		29	20	2013			4	10,300	10,300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
16	Exterior Common Doors (Daycare Fac.) - Upgrades	19,176		17	20	2016				0	0	0	20,954	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
17	Unit Doors / Storm-Screen Doors (Balcony) - Replace	156,240		varies	25+	2014				0	32,185	33,151	34,146	35,170	36,225	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
18	Unit Stairway Entrance Doors - Replace / Update over time	92,700		varies	20+	2014				0	19,096	19,669	20,259	20,867	21,493	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
19	Storm/Screen Doors (future replacements)	35,568		varies	10+	2025				0	0	0	0	0	0	0	0	0	0	10,142	10,447	10,760	11,083	11,415	0	0	0	0							
20	Exterior Walls (Brick) - pointing/repair allowances	459,424		14-62	15+	2014				0	157,736	162,468	167,342	0	0	0	0	0	0	0	0	0	0	0	0	0	260,713	268,534							
21	"F.S." Daycare Ext. Walls (EIFS) - Repair / Refinish	11,859		14	15+	2015				0	0	12,582	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20,190	0							
22	Exterior Ceilings - Refinishing Allowances	5,345		62	<10	2014				0	5,505	0	0	0	0	0	0	6,974	0	0	0	0	0	0	0	8,834	0	0							
23	Windows (Alum. D/H) - some operation, hardware problems	1,344,750		>30	30+	2014				0	277,019	285,329	293,889	302,706	311,787	0	0	0	350,919	361,446	372,290	383,458	394,962	0	0	0	0	0							
24	Windows (Alum. Awning Type) - at Stairways	152,813		18	30+	2027				0	0	0	0	0	0	0	0	0	0	0	0	0	0	115,571	119,038	0	0	0	0						
25	Windows (Alum. Framed) - at "F.S." Daycare	43,806		14	30+	2029				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70,296	0	0	0							
26	Exterior Lighting (Unit Fixtures) - varying ages, conditions	27,900		varies	15+	2015				0	0	2,960	3,049	3,140	3,234	3,331	3,431	3,534	3,640	3,750	3,862	0	0	0	0	0	0	4,750	4,892						
27	Annual Planned Expenditures							0		10,300	345,180	652,798	516,158	539,638	361,883	372,739	3,331	3,431	3,534	361,533	375,947	376,152	393,601	405,409	126,331	639,390	81,711	8,834	285,652	273,427	0				
28	Cumulative Reserve Balance							291,243		260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249					

Roofing

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

13388 - Armstrong Court - FINAL SS 7/11/2013

Lobby / Mail Area

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Community Room

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Common Hallways

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Common Stairways

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Common Laundry

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Comprehensive Capital Needs Assessment Schedule

Common Area Restrooms

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

	Component	Current Total Replacement Cost	Expected Annual Rate of Inflation	Current Age	Total Expected Useful Life	Initial Replacement Year	Planned Expenditures by Year																													
							Code	Emergency	Code	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Revitalization					
											2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
1	Walls					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Ceilings					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	Sinks					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Toilets					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Partitions					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
6	Accessories					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7	Floor					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
8	GFI Outlet					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
9	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
10	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
11	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
12	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
13	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
14	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
15	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
16	Accessibility Improvements (Modify Restroom)	20,000		62	20	2013			4	20,000	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
17	Walls / Ceilings (Future Refinishing Costs)	477		varies	10+	2024					0	0	0	0	0	0	0	0	0	0	661	0	0	0	0	0	0	0	0	0						
18	Floors (Vinyl Tile) - some seam separation - Replace	500		>20	15	2024					0	0	0	0	0	0	0	0	0	0	692	0	0	0	0	0	0	0	0	0						
19	Restroom Fixtures / Accessories (see "Access")			varies	20+	2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
20																																				
21																																				
22																																				
23																																				
24																																				
25																																				
26																																				
27	Annual Planned Expenditures							0		20,000	20,000	0	0	0	0	0	0	0	0	0	1,353	0	0	0	0	0	0	0	0	0	0					
28	Cumulative Reserve Balance							291,243		260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249						

Building Boilers

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Building Mechanical

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

13388 - Armstrong Court - FINAL SS 7/11/2013

Building Electrical

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Comprehensive Capital Needs Assessment Schedule

Building Elevator

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

	Component	Current Total Replacement Cost	Expected Annual Rate of Inflation	Current Age	Total Expected Useful Life	Initial Replacement Year	Planned Expenditures by Year																												
							Code	Emergency	Code	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Revitalization				
											2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032					
1	Shafts and Doorways					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Cabs					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
6	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
8	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
9	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
10	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
11	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
12	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
13	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
14	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
15	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
16	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
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22																																			
23																																			
24																																			
25																																			
26																																			
27	Annual Planned Expenditures						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
28	Cumulative Reserve Balance						291,243	260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249							

Comprehensive Capital Needs Assessment Schedule

Building Structural

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

	Component	Current Total Replacement Cost	Expected Annual Rate of Inflation	Current Age	Total Expected Useful Life	Initial Replacement Year	Planned Expenditures by Year																													
							Code	Emergency	Code	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Revitalization					
											2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032						
1	Foundation / Floor Slab					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
2	Framing & Columns					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
3	Steel					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
4	Wood Framing					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
5	Masonry Bearing Walls					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
6	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
7	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
8	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
9	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
10	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
11	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
12	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
13	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
14	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
15	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
16	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
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23																																				
24																																				
25																																				
26																																				
27	Annual Planned Expenditures							0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
28	Cumulative Reserve Balance							291,243		260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249						

Unit Living

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Unit Bathrooms

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Unit Kitchens

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

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Unit Electrical

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

[illegible]

Comprehensive Capital Needs Assessment Schedule

Unit Mechanical

Owner Sponsor Name:	Greenwich Housing Authority
Project Name:	Armstrong Court
Project City / Town:	Greenwich, CT

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	July 11, 2013

Number of Units:	144
Total Square Feet:	142,150
Default Inflation Rate:	3.0%

	Component	Current Total Replacement Cost	Expected Annual Rate of Inflation	Current Age	Total Expected Useful Life	Initial Replacement Year	Planned Expenditures by Year																															
							Code	Emergency	Code	Deferred	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Revitalization							
											2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032								
1	Radiators					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Unit Temperature Controls					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3	Air Conditioning Unit / Sleeve					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
4	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
6	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
10	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
14	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	Other					2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	Air Conditioning (Resident's Responsibility)			varies		2013					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20																																						
21																																						
22																																						
23																																						
24																																						
25																																						
26																																						
27	Annual Planned Expenditures							0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Cumulative Reserve Balance							291,243		260,943	13,481,124	10,200,601	8,956,692	7,783,671	6,773,822	6,168,350	6,013,600	5,888,060	5,748,931	5,254,663	4,736,272	4,238,486	3,694,683	3,095,821	2,703,232	1,736,738	1,432,049	1,053,274	556,706	144,249								

Appendix A: Statement of Delivery

Our Capital Needs Assessment (the "CNA" or the "Report") on the subject property is delivered subject to the following terms and conditions:

1. This report and analysis are based upon observations for the visible and apparent condition of the building and its major components on the date of the fieldwork. Although care has been taken in the performance of this assessment, ON-SITE INSIGHT, Inc. (and/or its representatives) makes no representations regarding latent or concealed defects that may exist and no warranty or guarantee is expressed or implied. This report is made only in the best exercise of our ability and judgment.
2. We have undertaken no formal evaluation of environmental concerns, including but not limited to asbestos containing materials (ACMs), lead-based paint, chlorofluorocarbons (CFCs), polychlorinated biphenyls (PCBs), and mildew/mold.
3. Conclusions in this report are based on estimates of the age and normal working life of various items of equipment and/or statistical comparisons. Actual conditions can alter the useful life of any item. When an item needs immediate replacement depends on many factors, including previous use/misuse, irregularity of servicing, faulty manufacture, unfavorable conditions, Acts of God and unforeseen circumstances. Certain components that may be working when we made our inspection might deteriorate or break in the future without notice.
4. To prepare this report, we used historic data on capital activities and costs, blueprints (when available), and current prices for capital actions. We have not independently verified this information, have assumed that it is reliable, but assume no responsibility for its accuracy.
5. Unless otherwise noted in the report, we assume that all building components meet code requirements in force when the property was built.
6. If accessibility issues are referenced in the report, the site elements, common areas, and dwelling units at the development were examined for compliance with the requirements of the Uniform Federal Accessibility Standards (UFAS), and for Massachusetts properties, the Massachusetts Architectural Accessibility Board (AAB). The methodology employed in undertaking this examination is adapted from a Technical Assistance Guide (TAG-88-11) titled "Supplemental Information About the Section 504 Transition Plan Requirements" published by the Coordination and Review section of the U.S. Department of Justice Civil Rights Division, and the AAB Rules and Regulations, 521 CMR effective July 10, 1987. The Guide also incorporates the requirements of UFAS, published April 1, 1988 by the General Services Administration, the Department of Defense, the Department of Housing and Urban Development, and the U.S. Postal Service. Changes in legislation and/or regulations may make some observations moot.
7. Response Actions and estimated costs of responses were developed by ON-SITE INSIGHT, Inc. If additional structural work is necessary, costs for some Response Actions may exceed estimates. Whenever the Response Action is to remove, reposition, or modify walls, a competent structural engineer should be retained before any work is done, because such investigation may disclose that a Response Action is either more costly than estimated, or is not possible.
8. Conclusions reached in this report assume current and continuing responsible ownership and competent property management.
9. Regular updates of this plan are recommended to ensure careful monitoring of major building systems and to adjust the program to accommodate unanticipated circumstances surrounding the buildings, operations, and/or occupants.