

# *CHFA*

## Capital Needs Assessment and Replacement Reserve Analysis

Prepared for:

**Connecticut Housing Finance Authority**  
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and

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**Ella Grasso Manor**  
CHFA # 85049D  
Enfield Housing Authority  
Enfield, CT

February 20, 2013

*Final Report*

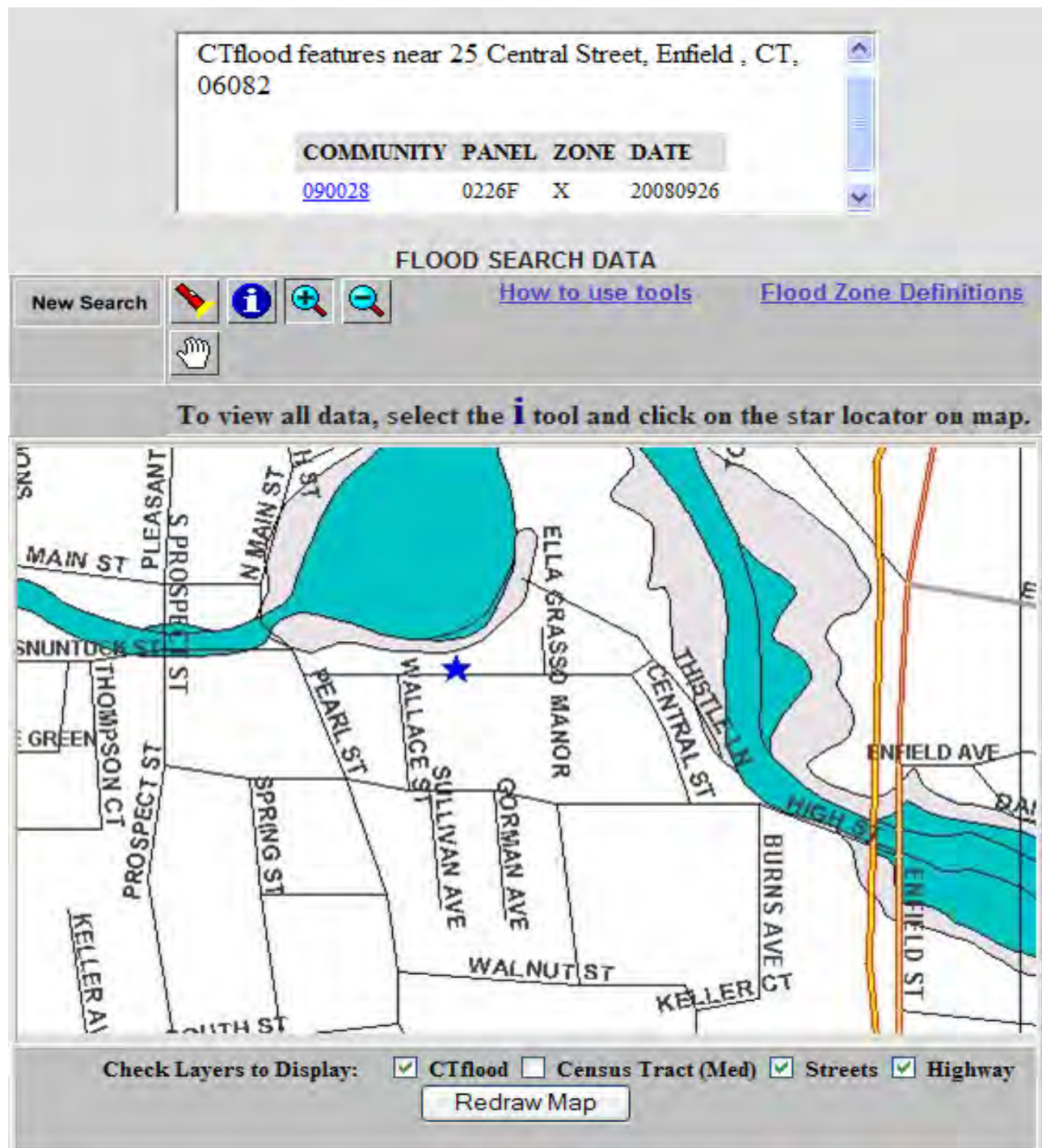




## Ella Grasso Manor

25 Central Street  
Enfield, CT 06082





## Ella Grasso Manor

25 Central Street  
Enfield, CT 06082

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

## Executive Summary

### Ella Grasso Manor

Enfield, CT

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**Ella Grasso Manor** is residential development for the elderly that is comprised of ten residential buildings and one community building. The development includes forty, one-bedroom, units with original construction dating to 1982.

Overall the development is in fair condition. As shown on the attached capital needs worksheets, the development faces significant capital needs in the near term. Based on these projections, the development is seen as requiring an adjustment to current replacement reserve funding and/or an infusion of additional capital.

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

- Asphalt-paved surfaces require crackfilling, sealcoating, and striping in the near-term.
- Concrete pedestrian walkways exhibit isolated cracks and potential trip hazards; periodic repair allowances are shown in the plan.
- Pole-mounted site lighting is original to the development and varies in condition; some poles are leaning significantly and require immediate attention to ensure they don't fall and injure residents or visitors.
- Brick veneer siding on buildings is in good condition at the present time; wood siding located between some roofline elevations exhibits age-related wear and deterioration and is in need of near-term replacement.
- No problems related to doors or windows were identified, and no near-term replacement needs are anticipated.
- Surface rusted steel lintels and worn perimeter caulking at windows is widespread; both conditions warrant near-term attention.

- All residential buildings have original asphalt shingles that exhibit significant wear/deterioration; replacement is seen as a priority.
- Finishes within the community building are in generally good condition; no near-term needs were identified.
- Heating/cooling and domestic hot water generation equipment at the community building is newer and in good condition.
- Upgrading of the original fire alarm control panel, which is beyond its expected service life, and all end devices is shown in the near-term.
- Unit painting is typically completed at turnover and addressed from operating accounts; annual allowances for as needed replacement of floor coverings are shown from Year 1 forward.
- Replacement of original, conventional-flow, toilets with low-flow models is shown in Years 1 and 2; allowances for bathtub reglazing and replacement of mixing valves and sinks are shown across the mid years of the plan.
- Cabinetry in unit kitchens is original and in generally good condition for its age; future replacement is shown in Years 5-9.
- Appliance replacement allowances, based on standard expected useful service lives, are shown from Year 1 forward.
- Ductless split system heat pumps that date to 2011 provide primary heating and cooling for the units; future replacement of this equipment, after fifteen years of service, is shown starting in Year 14. Modest annual allowances to replace the original electric resistance baseboard radiation, which augments the newer heat pump equipment, are shown from Year 1 forward.
- Unit-level domestic hot water tanks vary in age and brand of manufacture; annual replacement allowances are included throughout the plan.
- Mostly minor modifications are needed to meet handicap accessibility requirements within the community kitchen, laundry room, and common restrooms.
- Four units at the development are designated as handicap accessible; none are fully compliant at the present time.

Additional Notes:

1. The Physical Assessment of the property was conducted on November 27<sup>th</sup>, 2012. Additional information was provided to ON-SITE INSIGHT by site staff and others. OSI was represented on this assignment by Bruce Hutchinson. We would like to thank Michael Chell of The Enfield Housing Authority for his assistance.
2. 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.
3. 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.
4. 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.
5. This report is delivered subject to the conditions on Appendix A, *Statement of Delivery*



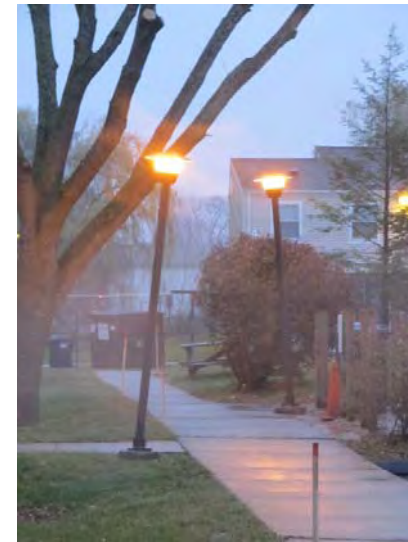
Development signage



Asphalt-paved parking area is in good overall condition



Typical concrete walkway – Isolated cracks, minor displacement and potential trip hazards noted



Loose/leaning pole-mounted site light fixtures pose potential safety hazards





Building architecture as seen at front portion of site where units are built into slope – One unit occupies upper portion of building and one unit occupies lower portion of building



Wood siding exhibits deterioration – This view in area between roof levels of building set into slope



All units are directly accessed from the exterior – Isolated missing/damaged storm doors noted



Typical windows





Steel lintels in need of surface preparation and painting and perimeter caulking in need of replacement



Asphalt shingles on roof surfaces have exceeded their service lives and are in poor condition throughout the development



Recently installed condenser unit for heat pump serving interior spaces at Community Building



Original zone-type fire alarm control panel located at Community Building



Typical finishes in unit living areas



Typical finishes and fixtures in unit bathrooms



Typical finishes and equipment in unit kitchens



Typical exterior-mounted condenser found at each unit for recently installed heat pumps

Comprehensive Capital Needs Assessment Schedule

Summary

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

Beginning Replacement Reserve Balance:	\$92,107
Annual Replacement Reserve Contribution:	\$6,420
Additional Misc. Contribution:	

	Component	Total Planned Expenditures by Year																						
		Emergency	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	Site Improvements	0	2,497	21,073	14,118	14,541	14,978	2,810	8,226	0	0	3,163	0	9,536	0	3,560	0	64,402	1,870	4,007	0	0	12,443	0
2	Building Exterior	0	17,435	9,198	0	0	0	1,047	0	0	120,733	0	5,156	5,311	5,470	5,635	5,804	1,407	0	27,977	7,998	0	0	0
3	Roofing	0	113,507	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,440	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	900	1,575	0	0	0	0	2,638	0	0	0	0	0	0	0	0	0	2,743	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Common Laundry	0	200	0	0	0	0	0	951	0	0	0	0	0	0	0	0	0	437	0	0	0	0	0
9	Common Area Restrooms	0	600	0	0	0	0	0	857	0	0	0	0	0	0	0	0	0	491	0	0	0	0	0
10	Building Boilers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Building Mechanical	0	0	0	0	0	0	0	0	1,015	0	0	0	0	0	0	0	5,294	0	0	0	0	0	0
12	Building Electrical	0	0	42,000	0	0	0	0	0	0	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	1,350	3,694	3,805	3,919	4,036	4,158	4,282	4,411	4,543	4,679	4,820	4,964	5,113	5,267	5,425	5,587	5,755	5,928	6,106	6,289	6,477	0
16	Unit Kitchens	0	0	4,144	4,269	4,397	4,529	21,358	21,999	22,659	23,339	24,039	5,407	5,570	5,737	5,909	6,086	6,269	6,457	6,651	6,850	7,056	7,267	0
17	Unit Bathrooms	0	1,998	9,598	9,886	1,483	1,527	6,245	6,433	6,626	6,824	7,029	7,240	7,457	7,681	7,911	8,149	2,114	2,178	2,243	2,310	2,380	2,451	0
18	Unit Electrical	0	0	3,120	3,214	3,310	3,409	3,512	3,617	3,725	3,837	3,952	4,071	4,193	4,319	4,448	4,582	4,719	4,861	5,007	5,157	5,312	5,471	0
19	Unit Mechanical	0	0	5,650	5,820	5,994	6,174	6,359	6,550	6,746	6,949	7,157	7,372	7,593	7,821	8,056	39,430	40,613	41,831	43,086	44,379	9,619	9,907	0
20	Annual Planned Expenditures	0	138,487	100,053	41,110	33,644	34,654	45,489	55,553	45,182	166,224	50,020	34,066	44,625	36,141	40,785	69,475	130,406	66,623	94,899	72,800	30,654	51,457	0
21	Annual Provision (indexed at 3%)			6,420	6,613	6,811	7,015	7,226	7,443	7,666	7,896	8,133	8,377	8,628	8,887	9,153	9,428	9,711	10,002	10,302	10,611	10,930	11,258	
22	Outside Capital			1,225,000																				
23	Cumulative Reserve Balance	92,107	(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266	



## Site Improvements

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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## Building Exterior

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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## Roofing

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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## Lobby / Mail Area

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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Comprehensive Capital Needs Assessment Schedule

Community Room

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
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Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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	Floor	1,685		25	30	2018				0	0	0	0	0	1,953	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
2	Kitchen Cabinets / Sink	1,575		25	25	2013				1,575	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3	Kitchen Appliances	1,170		5	20	2028				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,823	0	0	0	0					
4	Furnishings					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
5	Walls	382		5	10	2018				0	0	0	0	0	443	0	0	0	0	0	0	0	0	0	0	595	0	0	0	0					
6	Ceilings	209		5	10	2018				0	0	0	0	0	242	0	0	0	0	0	0	0	0	0	0	326	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					
8	Other					2013				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					
10	Other					2013				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					
12	Other					2013				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					
14	Other					2013				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					
16	Other					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
17	Accessibility Improvements	900		ADD	20	2013		4	900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
18																																			
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22																																			
23																																			
24																																			
25																																			
26																																			
27	Annual Planned Expenditures						0	900	1,575	0	0	0	0	0	2,638	0	0	0	0	0	0	0	0	0	0	2,743	0	0	0	0	0				
28	Cumulative Reserve Balance						92,107	(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266							

## Common Hallways

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

[illegible]



Comprehensive Capital Needs Assessment Schedule

Common Stairways

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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	Floors					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Doors					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Railings					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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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						92,107	(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266							

## Common Laundry

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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## Common Area Restrooms

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
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Number of Units:	40
Total Square Feet:	17,171
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Comprehensive Capital Needs Assessment Schedule

Building Mechanical

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
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	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	Building Fire Suppression					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Building Heating Distribution					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	Domestic Hot / Cold Water Dist.					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Building Sanitary Waste & Vent.					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Make-Up Air Unit					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
6	Ventalation & Exhaust					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7	Air Handling Units					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
8	Heat Pump	2,650		1	15	2027				0	0	0	0	0	0	0	0	0	0	0	0	0	4,008	0	0	0	0	0	0						
9	DHW Generation	850		2	8	2019				0	0	0	0	0	0	1,015	0	0	0	0	0	0	1,286	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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27	Annual Planned Expenditures							0		0	0	0	0	0	0	1,015	0	0	0	0	0	0	5,294	0	0	0	0	0	0						
28	Cumulative Reserve Balance							92,107		(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266					



Comprehensive Capital Needs Assessment Schedule

Building Electrical

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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	Switch Gear					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Emergency Generator					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	Smoke / Fire Detection	42,000		30	20	2013				42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Signaling / Communication					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Building Wiring					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						
17																																			
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22																																			
23																																			
24																																			
25																																			
26																																			
27	Annual Planned Expenditures							0		0	42,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
28	Cumulative Reserve Balance							92,107		(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266					

## Building Elevator

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

[illegible]



Comprehensive Capital Needs Assessment Schedule

Unit Living

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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	Interior Doors					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2	Walls					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
3	Ceilings					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
4	Interior Stairs					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	Floors	3,694		1	1	2013				3,694	3,805	3,919	4,036	4,158	4,282	4,411	4,543	4,679	4,820	4,964	5,113	5,267	5,425	5,587	5,755	5,928	6,106	6,289	6,477						
6	AC Sleeve					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7	Electrical Outlets					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
8	Lighting Fixtures					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						
17	Accessibility Improvements	1,350		ADD	20	2013		4	1,350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
18																																			
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24																																			
25																																			
26																																			
27	Annual Planned Expenditures						0	1,350	3,694	3,805	3,919	4,036	4,158	4,282	4,411	4,543	4,679	4,820	4,964	5,113	5,267	5,425	5,587	5,755	5,928	6,106	6,289	6,477	0						
28	Cumulative Reserve Balance						92,107	(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266							

## Unit Bathrooms

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
Default Inflation Rate:	3.0%

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Comprehensive Capital Needs Assessment Schedule

Unit Electrical

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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	Emergency Call System	1,600		1	1	2013				1,600	1,648	1,697	1,748	1,801	1,855	1,910	1,968	2,027	2,088	2,150	2,215	2,281	2,350	2,420	2,493	2,568	2,645	2,724	2,806						
2	Electrical Panel					2013				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
3	Smoke Detectors	1,520		1	1	2013				1,520	1,566	1,613	1,661	1,711	1,762	1,815	1,869	1,925	1,983	2,043	2,104	2,167	2,232	2,299	2,368	2,439	2,512	2,588	2,665						
4	Intercom					2013				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					
6	Other					2013				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					
8	Other					2013				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					
10	Other					2013				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					
12	Other					2013				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					
14	Other					2013				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					
16	Other					2013				0	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	3,120	3,214	3,310	3,409	3,512	3,617	3,725	3,837	3,952	4,071	4,193	4,319	4,448	4,582	4,719	4,861	5,007	5,157	5,312	5,471	0				
28	Cumulative Reserve Balance							92,107		(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266					

## Comprehensive Capital Needs Assessment Schedule

## Unit Mechanical

Owner Sponsor Name:	Enfield Housing Authority
Project Name:	Ella Grasso Manor
Project City / Town:	Enfield

Current Year:	2013
Budget Effective Date:	January 1, 2013
Report Date:	December 21, 2012

Number of Units:	40
Total Square Feet:	17,171
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							
2	Unit Temperature Controls					2013				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							
4	Unit DHW Generation	4,250		1	1	2013				4,250	4,378	4,509	4,644	4,783	4,927	5,075	5,227	5,384	5,545	5,712	5,883	6,059	6,241	6,429	6,621	6,820	7,025	7,235	7,452						
5	Other					2013				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							
7	Other					2013				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							
9	Other					2013				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							
11	Other					2013				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							
13	Other					2013				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							
15	Other					2013				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							
17	Unit Heat Pumps	106,000		1	15	2025				0	0	0	0	0	0	0	0	0	0	0	0	0	31,133	32,067	33,029	34,020	35,040	0	0						
18	Electric Baseboard Radiation	70,000		varies	30+	2017				1,400	1,442	1,485	1,530	1,576	1,623	1,672	1,722	1,773	1,827	1,881	1,938	1,996	2,056	2,118	2,181	2,247	2,314	2,383	2,455						
19																																			
20																																			
21																																			
22																																			
23																																			
24																																			
25																																			
26																																			
27	Annual Planned Expenditures						0	0	5,650	5,820	5,994	6,174	6,359	6,550	6,746	6,949	7,157	7,372	7,593	7,821	8,056	39,430	40,613	41,831	43,086	44,379	9,619	9,907	0						
28	Cumulative Reserve Balance						92,107	(46,380)	1,084,987	1,050,489	1,023,656	996,018	957,755	909,644	872,128	713,800	671,912	646,223	610,226	582,971	551,339	491,292	370,597	313,976	229,380	167,191	147,466	107,266							

## **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.