

Assessment of Public Housing

Alexander County Housing Authority
AMP IL007000001 – McBride Place

November 5, 2015



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Introduction

Eggemeyer Associates Architects was contracted to survey and analyze two properties administered by the Alexander County Housing Authority (PHA). Elmwood Place (IL-7-1) and McBride Place (IL-7-2) were surveyed and analyzed to determine the scope and cost for revitalization to meet the standards of the Department of Housing and Urban Development, Section 504 accessibility, health/life safety codes, and applicable building codes.

The Elmwood Place apartments (IL-7-1) consist of 120 dwelling units in 18 buildings. The McBride Place apartments (IL-7-2) consist of 158 dwelling units in 19 buildings. Both developments are designated for family occupancy. Buildings are multi-unit, rowhouse with grade level access to each unit. All units, except the 1 bedroom units located on the 2nd floor, have 2 entrances (front & back). The developments were constructed in 1942.

Architects and Project Managers with a combined 55 years of HUD modernization experience visited the properties on multiple occasions to document conditions at the developments. This report summarizes the findings and recommendations to renovate the properties to meet the current standards and to return the developments to viable developments for the Housing Authority and create safe housing for the tenants.

The findings were input into the HUD Green Physical Needs Assessment (GPNA) tool to provide costs in a categorical format for analysis for the financial requirement to perform the necessary renovations to meet the goal of safe and viable developments.

This report summarizes the major or significant deficiencies of the properties based upon visual observations, conversations with PHA employees and tenants, and estimations of modernization that will be required within a 20-year period (per the GPNA tool). This report is not an all-inclusive investigation as no destructive investigations were performed to verify systems or construction that is not readily visible from casual observation. Quantities utilized to determine costs for replacement or refurbishment were taken from "as-built" documents provided by the PHA and field measurements taken at the developments.

The summary of the GPNA calculations is included in Appendix B of this report. The estimates are also summarized by **Category**, **Component**, and by **Needs Type**.

Site Conditions

Both developments are located in or near residential neighborhoods. Elmwood Place has residential properties on all four sides. McBride Place is more remote, with undeveloped land (wooded) to the west, undeveloped land (open lot) to the north, Public Housing to the east, and vacated structures to the south.

The buildings at both developments are arranged in a linear format with pedestrian walks or vehicle drives traversing the sites (see aerial images in Appendix A). The sites are generally open, level lots, devoid of dense foliage.

The site related items included in the GPNA have an estimated construction cost of over \$6.4 million over the 20-year period. The following site related items were noted as having a significant impact on the quality of the developments, as they were either noted to be in need of repair/replacement or improvement (new construction):

Parking and drives; existing parking is located in small, centralized lots and on-street. Vehicle drives are located between buildings, connecting the parking areas to the streets or completely bisecting the sites from street to street. (Images 1 and 2)



Image 1



Image 2

The existing paving is significantly deteriorated and has undefined edges (no curbs) which allows vehicles to leave the paving and park in the lawn areas. This leads to bare lawns and ruts that retain storm water. The McBride development is located near the river, which has caused problems with sand boils to form in numerous locations. The HA has placed large, concrete barriers in numerous locations as an effort to prevent vehicles from driving into lawns. (Image 3) The parking lots at McBride are located near the center of the site and have become a security issue for crime activities. The numerous drives bisecting the sites would appear to be an element of danger, allowing vehicles to drive through areas in which tenants gather. The HA has constructed heavy steel gates at each entrance to close the drives during evening hours. (Image 4)



Image 3



Image 4

Fencing; the perimeter of the properties are enclosed with chain-link fencing. The fence is also located throughout the sites, enclosing playgrounds, play courts, and around the buildings. (Images 5 and 6)



Image 5



Image 6

Trash containers; there are currently 13 dumpsters located at the two developments. The dumpsters are located along the street or in parking areas and are not located in defined enclosures. (Images 7 and 8)



Image 7



Image 8

Playground and Play courts; the existing playground structures are aged, in need of repair, do not have the required impact surfacing, and are not accessible to persons with disabilities. The playcourts have broken or missing equipment (tennis nets, basketball goal nets), are in need of resurfacing, and are not accessible to persons with disabilities. (Images 9 and 10)



Image 9



Image 10

Pedestrian circulation; the existing concrete walkways bisect the sites from street to street and do not limit access to any part of the site. The majority of the walks have pitted surfaces, are cracked, and have grass either growing in the joints or are partially covering the edges of the walks. This condition does not meet the ADA requirements. (Image 11)



Image 11

Lighting; the majority of the site lighting on poles and building mounted light fixtures are not working or are damaged. Casual observations found areas of both sites that appear to not be adequately covered with lighting.

Utilities; the HA reported that the electrical service was replaced and relocated to overhead 10 years ago. The gas service, water distribution, and sanitary lines have had routine problems due to the high water table and problems with sinkholes. Repairs have been performed to each of the systems over the years on an as-needed basis, but no major replacement has been undertaken to the gas, water or sanitary piping. The sanitary is reported as vitrified clay pipe (VCP) and has many problems with tree roots and silting/clogging from ground water. The storm and sanitary sewers were installed as a “common” sewer system which combines the 2 systems into common lines. This has caused problems with backup of sewage into parking areas and lawns when the piping has been clogged or charged

with heavy amounts of rainfall. Also, all yard inlets were found to be almost 100% silted full of soil and debris, preventing proper drainage of lawn areas.

Recommendations:

Remove drives and interior parking areas that are not fully visible from adjacent streets. Restore these areas to lawn areas. Construct multiple, smaller lots located along all streets to minimize the number of vehicles per parking lot, provide close access to the tenant apartment, and provide a line-of-sight to parking areas for security. Fire lane access will be required between buildings. This can be accommodated by use of narrow concrete strips or wide sidewalks, reinforced for the weight of emergency vehicles.

Chain-link fence should be removed to provide a more open and inviting site for the tenants. Utilize structural steel ornamental fence panels in specific areas of the site to help deter unwanted pedestrian circulation.

The biggest impact to improve the negative appearance of the dumpsters would be to replace the dumpsters with individual trash containers (trash cans) for each tenant. As this can be difficult to negotiate with local refuse companies, it appears to be most feasible to construct defined dumpster pads with decorative enclosures. Other PHA's have had success with decorative steel fencing and painting the containers to match the fence.

Replace playground structures with new equipment and safety surfacing that meet the current codes and ADA. Determine the play courts that are to be refurbished and make the necessary repairs. Unused play courts shall be removed and restored to lawn.

Replace all walks throughout the sites with new concrete walks. Design the new walkways to provide defined pathways to units/buildings and minimize the amount of walks. All common areas and services at the sites will be served by new walks.

Replace all pole-mounted and building mounted light fixtures with LED fixtures with protective covers. Provide additional lighting throughout the sites to provide adequate security and way-finding lighting. All lighting should be controlled with photocell controls onboard each fixture.

Replace all gas, water, storm, and sanitary lines to provide new distribution systems. Provide valves in gas and water systems to allow isolation of areas of the site without disrupting service to all tenants.

Remove and re-route sections of storm drains to avoid overcharging of the common sewer lines. The complete isolation of the 2 systems would be difficult as the City mains are common as well. However, it appears that isolated areas of the storm system could be removed from the common piping within the site and redirected to City mains. Although this would not completely correct the issue with the common sewers, it will decrease the instances of sewage backup into parking and lawn areas.

All remaining storm systems need to be flushed to remove silt and debris that has collected in the inlets.

Building Exteriors and Structure

The buildings are constructed of slab-on-grade first floor, structural concrete second floor, load-bearing exterior/interior masonry (cmu) walls. The original construction had low-slope roofs on wood framing. The roofs were overframed with steep-slope wood trusses and shingle roofing in the 1998. The original brick veneer is still visible at the Elmwood Place apartments (Image 13), but have been covered with stucco and siding at the McBride Place apartments. (Image 12)



Image 12



Image 13

The buildings at both developments show significant signs of aging. Although the structural systems of the buildings are very solid, the nature of the type of construction has particular conditions that can lead to long-term problems if not addressed and maintained properly.

The building exterior related items included in the GPNA have an estimated construction cost of almost \$10.5 million over the 20-year period. The following building exterior related items were noted as having a significant impact on the quality of the developments, as they were either noted to be in need of repair/replacement or improvement (new construction).

The siding and stucco at the McBride Place apartments is very weathered. The siding on the 2nd floor level is deteriorated from moisture and in some areas termites. The stucco needs repairs, cleaning and painting. The brick veneer at the Elmwood Place apartments needs pointed and sealed. The shingle roofing is aging and will need replacement in approximately the next 5 years. The roof trim (gutters, downspouts, fascia, soffit) need replaced in many areas, the remainder needs cleaned and repaired.

The exterior doors, frames and hardware to the apartments need replaced. Several doors were found no longer anchored to the opening. The majority of the door openings have no weatherstripping, allowing air infiltration into the unit (see thermal picture, Image 14). Several apartments were found with no working lock on the exterior doors. The screen doors are very strong, but need hardware replaced in many locations. The windows need hardware replaced and are protected with exterior vandal screens that appear to prevent most occurrences of glass breakage.

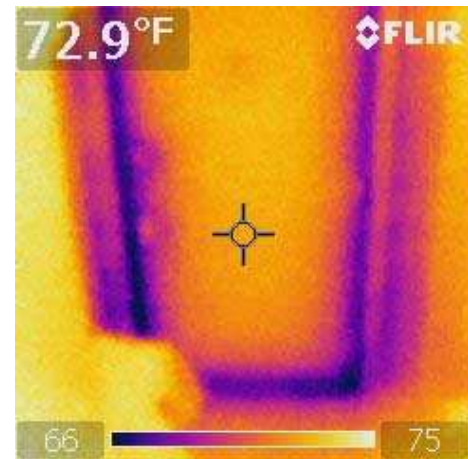


Image 14

Cable/satellite television wiring has been installed without any regard to aesthetics. (Image 15) It was noted by the HA that most of the wiring is no longer needed or working. Satellite dishes are also located on buildings without any regard to the mounting locations as it affects the building envelope.



Image 15

Metal canopies are installed at the rear door entrance to the apartments. Almost all of the awnings need some level of repair or refurbishment. (Image 16)



Image 16

Mold was found on the interior face of the exterior walls in many units. The predominant location in which mold was found was on end walls of the end apartments, around exterior openings, or along the base of the exterior walls. An observation during the site survey determined that the brick veneer weeps that allow any moisture that enters the wall cavity to drain from the walls has been covered or

are clogged with mud/debris. At the McBride Place buildings, the stucco system that was applied to the first floor level of the building has covered the brick weeps. The materials utilized in the construction of the buildings, concrete block/brick veneer must have adequate cavity drainage (weeps) to allow moisture that enters a pathway to drain from the cavity. All masonry building will capture moisture through cracks in the mortar or brick, or by absorption through older bricks. The failure of draining this moisture will allow the moisture to remain in the cavity and will eventually migrate to the warm interior of the wall. This condition will lead to mold growth in the plaster or drywall surfaces inside the apartment.

The front stoops were not constructed with a perimeter frostwall. The lack of this frostwall has allowed voids under the stoop to become a point of erosion and for the nesting of rodents. Steps at the stoops have settled and become unlevel. Railings are needed at many locations due to the height above grade. (Image 17)



Image 17

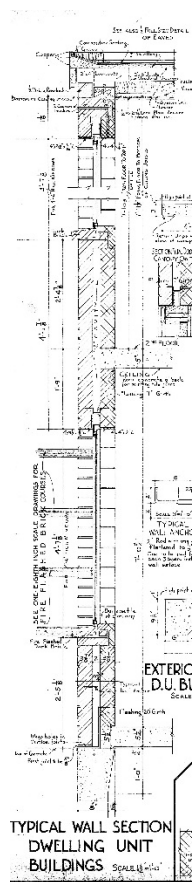


Image 18

The exterior walls are constructed of load-bearing cmu with brick veneer. An approximately 2" air-space (cavity) exists between the exterior brick and interior cmu. (Image 18) No insulation was installed in the original construction and no insulation has been known to have been installed as part of a modernization project. The addition of insulation to the wall system will be difficult as location of the insulation material in the wall could have severe negative effects. If the insulation is improperly placed, moisture could form inside the cavity, causing additional deterioration and mold problems. Application of the insulation to the interior will require furring of the interior walls, relocation of the baseboard heat piping and convector covers, modification to electrical systems, modification to all cabinets, shelving, and other equipment that abuts the exterior walls, and may create problems with tight spacing at stairs. Application of an insulation system on the exterior of the wall may be considered, but the long-term problems with maintenance of exterior insulation systems due to weathering and vandalism will be very costly if the system is damaged. Application of insulation into the cavity is not feasible or practical due to the requirement to penetrate the brick or cmu to inject insulating material. In addition, a cavity insulation will further negate the drainage of moisture from the cavity, leading to additional problems with mold as discussed above.

Recommendations:

The exterior of the buildings need to be treated for the water infiltration and management. The exposed brick veneer should be pointed as necessary, cleaned and sealed. The siding on the 2nd floor

at McBride removed and evaluated if new siding is required or the brick veneer restored. As the stucco panels on the 1st floor at McBride will be difficult to remove and the damage to the brick beneath may be significant, the stucco can be restored and sealed. However, if the stucco remains, weeps should be added to the panels to aid in the water management of the cavity wall. It would be suggested that a prototype project be performed to determine if the stucco could be removed and the brick restored.

All exterior doors and frames should be replaced, including hardware and weatherstripping. The screen doors, windows and window screens repaired.

To aid in the aesthetic value and provide a better cover for the apartment entrances, the metal awning should be removed and a framed canopy be constructed. The concrete stoop replaced with a larger stoop to match the canopies and frostwalls be constructed under the stoops to stabilize the stoop and prevent future areas for rodent nesting.

Cable/Satellite wiring should be removed and the units pre-wired for the services. Common utility boxes can be provided to allow the services to the apartments without the need for the telecom company to add wiring or equipment to the building. The HA should adopt a policy to prevent the telecom companies from installing wiring or equipment to the buildings without permission from the HA.

Roofing and roof trim will require replacement as the materials continue to age. This timeframe is difficult to determine exactly as it depends on environmental conditions. The HA should monitor the roofing and begin to prepare for replacement in phases based upon the need of each building.

Building Systems

Building systems are the components of the building mechanical, electrical, and plumbing systems that are shared by all apartments in the building. Building systems do not include those components that are specific to an apartment.

The building systems (electrical, plumbing) are past the typical anticipated useful life expectancy. The building exterior related items included in the GPNA have an estimated construction cost of over \$1 million over the 20-year period.

Problems with underslab sanitary lines and water piping were reported by the HA maintenance personnel. Repairs to these systems are difficult as it requires removal of concrete floor slab to excavate the existing lines and install new piping. Tenants would be relocated for a period as the work is performed and the plumbing is inoperable. The presence of asbestos containing flooring also adds another element of time and expense to perform this work. Repairs made to the sanitary system have resulted in exposed piping in bathrooms and kitchens as the access to the walls was not feasible. (Images 19 and 20)



Image 19



Image 20

The electric meter bases and disconnects for all apartments within a building are centrally located. Although the meter bases are aged, no current problems are reported. Each apartment is served with a 100 amp service. The meter bases are located within a cabinet and the cabinets are secured from tenant access. (Image 21)



Image 21

The building mounted security lighting located on all buildings throughout the sites are damaged and many are not working. Additional lighting is required for areas that do not have adequate lighting.

Unit Needs

The Elmwood Place and McBride Place apartments (units) currently consist of 278 apartments (120 at Elmwood Place and 158 at McBride Place). The apartments vary from 1 bedroom to 6 bedroom configurations (see *Dwelling Unit Spreadsheet* in Appendix C). The HA has performed conversions to several units, combining multiple apartments together to create larger units. 11 apartments are designated by the HA as accessible apartments, but it is noted that all do not meet the requirements of the Section 504 accessibility standards (see separate UFAS Accessibility Assessment dated June 24-26, 2014 by the Office of Fair Housing and Equal Opportunity Midwest Regional Office, Region V of the U.S. Department of Housing and Urban Development).

The condition of the apartments that were surveyed for this assessment were found in varying condition. Several were clean and well-kept by the tenant, but had problems with the equipment and finishes. Others were found in significant deteriorating condition due to either tenant lifestyle or failing equipment and finishes. Aging systems, lack of ventilation, poor or inefficient lighting, and damaged materials were found in the majority of the apartments. Numerous apartments have infestation of insects and/or rodents.

The unit related items included in the GPNA have an estimated construction cost of over \$19.6 million over the 20-year period. The following unit interior related items were noted as having a significant impact on the quality of the developments, as they were either noted to be in need of repair/replacement or improvement. Not all items of need are discussed in this section, please refer to the GPNA tool for a full account of the findings.

The kitchen deterioration varies within the apartments, but all are in need of new cabinets and countertops within the next 5 to 10 years. Many have damaged or missing doors, leaking sinks and old appliances. All apartments have had vented range hoods installed since original construction, but the hoods need replaced. Washer/dryer connections are not present in all apartments, only a small percentage have connection boxes installed. Most tenants connect clothes washers to hose connections found under the kitchen sink. (Image 23) No drain has been provided, so the tenant either drains the washer into the kitchen sink (which is not designed/sized for this use) or drains the waste out the window into the yard (which causes lawn damage and soil/suds build-up). (Image 24) Dryer vents are not present in all units. Many tenants vent the dryer out a window or allow the dryer to vent into the apartment adding uncontrolled humidity into the apartment, which leads to failing paint and mold development. (Image 25)



Image 22



Image 23



Image 24



Image 25

Bathroom fixtures have signs of wear in the porcelain finishes. Bathtub drains are aging and leak into the floor below. Toilets are not all low-flow and also have issues with leaking drains and tanks. (Image 26) No ventilation is provided in the bathrooms. A window is located in the exterior wall of the bathtub, but most tenants do not open the window to ventilate humidity. Mold growth on the wall finishes around the bathtubs was found in many apartments. (Image 27) The interior plumbing systems are aged and in need of replacement (see *Building Systems*).

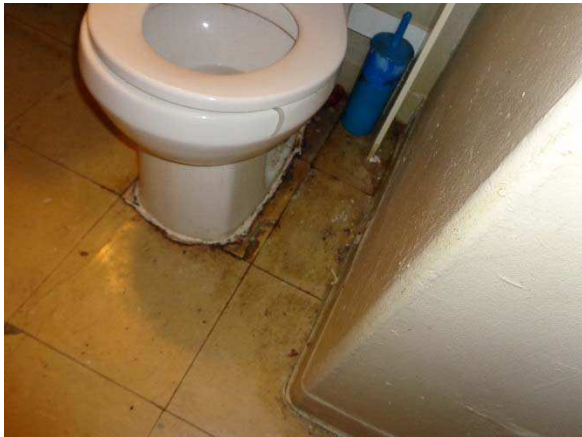


Image 26



Image 27

The apartments are heated with hot-water heating (boiler) and baseboard finned tube piping. Controls for the system are a single thermostat in the apartment. Zone valves are either not present or not working, thereby not allowing proper control of the heat in the apartment. The bypass and recirculating piping in the baseboard covers are not insulated, allowing a small amount of heat release into the apartment whether required or not. (Image 28) The lack of an air-moving system adds to the growth potential of mold in the apartments. The baseboard covers are damaged and need replaced. (Image 29) Repairs to heat piping have resulted in exposed piping installed as access to the walls is not feasible.



Image 28



Image 29

The majority of the light fixtures in the apartments are missing bulbs and the protective covers or are damaged. (Images 30 and 31) The electrical receptacles, switches, and wiring are old and need replaced.



Image 30



Image 31

Smoke and carbon monoxide detectors hard-wired 120v with battery backup. The majority of the detectors are missing, damaged or not working. (Image 32) The HA reports that tenants remove batteries, then damage or remove the detectors when the detectors "chirp" due to the missing battery.



Image 32

Interior paint finishes on the second floor ceiling are peeling in many apartments. (Image 33) This may be due to humidity levels in the apartment, or due to incompatible latex/oil based paints. The ceilings need scraped, properly primed and repainted.



Image 33

The apartments designated as accessible/504 compliant need significant improvements to comply with the Section 504 requirement. Of the 11 apartments currently designated as accessible, only 5 apartments have bathrooms located on the first floor. Chair lifts were provided at one time for some apartments, but they were not present during the survey. The UFAS assessment referenced earlier in this section lists numerous non-compliant construction in the apartments. To meet the 5% accessible apartment requirement, the HA needs to have a minimum of 14 apartments meeting the Section 504/UFAS standards. Significant renovation of the one-story apartments (1 bedroom) and conversion of multiple apartments to create compliant apartments will be required. It is apparent that additions will be required to be constructed to provide first floor accessible bathrooms and bedrooms to meet the requirement of providing accessibility in the 2, 3, 4, 5, and 6 bed apartments.

Three apartments are designated by the HA as Sight/Hearing Impaired. To meet the 2% requirement, the HA will need to provide S/H notification systems in a total of 6 apartments. The existing systems require replacement and systems installed in additional apartments.

An asbestos management plan was not available to the Architect for analysis of asbestos-containing material. Samples of flooring, mastic, and insulation were taken by a licensed asbestos inspector to determine if any materials may contain asbestos. Lab samples resulted in asbestos in the mastic (adhesive) on the floor tile. *(Please note, this should not be taken as a full asbestos sampling of the development. It is recommended that before any construction activities occur, a sampling program be undertaken in compliance with Illinois Department of Public Health requirements).*

No lead-based paint reports were provided and no sampling was performed as part of this survey.

Conclusion

The findings of the survey and assessment performed for this report have found a total 20-year need of approximately \$37.5 million. This averages over \$135,000 per unit. Of the total needs, almost \$7,595,000 are determined as immediate needs to restore the developments to a suitable housing development meeting the applicable codes and standards, to provide a safe environment for the tenants, and would be sufficient to allow the properties to pass a UPCS inspection.

In comparison, the calculated Total Development Cost (TDC) for the developments is over \$69 million and the Hard Construction Cost (HCC) is just under \$40 million. These calculations are based upon the 2015 Unit Total Development Cost (TDC) Limits published by the U.S. Department of Housing and Urban Development (see Appendix D). These calculations show that although the needs are well below the TDC limits, they are nearly equal to the amount allowed by HUD for construction of a new development of similar construction.

It is evident based upon the current funding available to the PHA through the annual Capital Fund Program grant (CFP), that the level of annual funding alone is not adequate to restore the development to a safe and viable housing development. A variety of options are available for the HA to consider, including:

- Low Income Housing Tax Credits (LIHTC); utilize private market funding available as a form of tax credits authorized by the U.S. federal government.
- Apply and convert the properties to RAD (Rental Assistance Demonstration).
- Dispose of the property and remove from the PHA inventory. Disposal can be accomplished through sale to the private market or demolition.

The decision for the future improvement or use of the developments should be based on the overall Housing Authority mission and goals. Disposal of the properties will not only have a negative impact on the tenants and the community, but also will decrease the amount of funding the HA receives for Operating Funds expenses. A decrease in funding will negatively impact the extent of improvements the HA can undertake in any given year.

Appendices



IL-7-1/Elmwood Place



IL-7-2/McBride Place



Google earth

Imagery Date: 5/4/8/2015 5:57:00/27.98° N 89°10'23.94" W elev 311 ft eye alt 11209 ft



1993

A1



IL-7-1/Elmwood Place

Google earth

© 2015 Google

Imagery Date: 5/18/2015 37°01'00.01" N 89°11'11.29" W elev 310 ft eye alt 1237 ft

1998

A2



IL-7-2/McBride Place

Dev Needs BY Category

Close

Needs for Project: IL007000001 - MC BRIDE PLACE

Development Data

Number of Sites:	2
Number of Buildings:	37
Number of Units:	278
Development Total:	\$37,543,089.99
Site Needs:	\$6,405,167.65
Building Exterior Needs:	\$10,418,323.52
Building System Needs:	\$1,087,079.40
Common Area Needs:	\$0.00
Unit Needs:	\$19,632,519.42

Site Needs

Average Need per Year:	\$320,258.00	17.06%
Average Need Per Site:	\$3,202,584.00	
Average Need Per Unit:	\$23,040.00	

Building Exterior Needs

Average Need per Year:	\$520,916.00	27.75%
Average Need Per Building:	\$281,576.00	
Average Need Per Unit:	\$37,476.00	

Building System Needs

Average Need per Year:	\$54,354.00	2.90%
Average Need Per Building:	\$29,381.00	
Average Need Per Unit:	\$3,910.00	

Common Area Needs

Average Need per Year:	\$0.00	0.00%
Average Need Per Building:	\$0.00	
Average Need Per Unit:	\$0.00	

Unit Needs

Average Need per Year:	\$981,626.00	52.29%
Average Need Per Building:	\$530,609.00	
Average Need Per Unit:	\$70,621.00	

Dev Needs BY Component

Close

Needs for Project: IL007000001 - MC BRIDE PLACE

Development Data

Number of Sites:	2
Number of Buildings:	37
Number of Units:	278
Development Total:	\$37,543,089.99
Window Needs:	\$1,278,042.26
Roof Needs:	\$1,363,813.92
Kitchen Needs:	\$2,952,135.10
Bath Needs:	\$2,140,804.90
Exterior Wall Needs:	\$5,295,462.14

Window Needs

Average Need per Year:	\$63,902.00	3.40%
Average Need Per Building:	\$34,542.00	
Average Need Per Unit:	\$4,597.00	

Roof Needs

Average Need per Year:	\$68,191.00	3.63%
Average Need Per Building:	\$36,860.00	
Average Need Per Unit:	\$4,906.00	

Bath Needs

Average Need per Year:	\$107,040.00	5.70%
Average Need Per Building:	\$57,860.00	
Average Need Per Unit:	\$7,701.00	

Kitchen Needs

Average Need per Year:	\$147,607.00	7.86%
Average Need Per Building:	\$79,787.00	
Average Need Per Unit:	\$10,619.00	

Exterior Wall Needs

Average Need per Year:	\$264,773.00	14.11%
Average Need Per Building:	\$143,121.00	
Average Need Per Unit:	\$19,048.00	

Dev Needs BY Needs Type

Close

Needs for Project: IL007000001 - MC BRIDE PLACE

Development Data

Number of Sites:	2
Number of Buildings:	37
Number of Units:	278
Development Total:	\$37,543,089.99
Replacement Needs:	\$30,142,933.26
Refurbishment Needs:	\$4,366,868.03
Sustainability Needs:	\$0.00
Marketability Needs:	\$1,925,324.10
Accessibility Needs:	\$1,107,964.60

Total Needs

Average Need per Year:	\$1,877,154.00
Average Need Per Building:	\$1,014,678.00
Average Need Per Unit:	\$135,047.00

Replacement Needs

Average Need per Year:	\$1,507,147.00	80.29%
Average Need Per Building:	\$814,674.00	
Average Need Per Unit:	\$108,428.00	

Refurbishment Needs

Average Need per Year:	\$218,343.00	11.63%
Average Need Per Building:	\$118,023.00	
Average Need Per Unit:	\$15,708.00	

Sustainability Needs

Average Need per Year:	\$0.00	0.00%
Average Need Per Building:	\$0.00	
Average Need Per Unit:	\$0.00	

Marketability Needs

Average Need per Year:	\$96,266.00	5.13%
Average Need Per Building:	\$52,036.00	
Average Need Per Unit:	\$6,926.00	

Accessibility Needs

Average Need per Year:	\$55,398.00	2.95%
Average Need Per Building:	\$29,945.00	
Average Need Per Unit:	\$3,985.00	

Dwelling Unit Spreadsheet - AMP IL007000001

Alexander County Housing Authority

Elmwood Place Apartments

Bedroom size	Quantity
1 bedroom	33
2 bedroom	45
3 bedroom	35
4 bedroom	7
5 bedroom	0
6 bedroom	0
	120

McBride Place Apartments

Bedroom size	Quantity
1 bedroom	59
2 bedroom	51
3 bedroom	30
4 bedroom	12
5 bedroom	4
6 bedroom	2
	158

Total Development Cost (TDC) Limits Calculation Worksheet

Alexander County Housing Authority

TDC Calculation

Bedroom size	Quantity	TDC Limit	Subtotal TDC cost
1 bedroom	92	\$200,749	\$18,468,908
2 bedroom	96	\$241,362	\$23,170,752
3 bedroom	65	\$292,525	\$19,014,125
4 bedroom	19	\$348,301	\$6,617,719
5 bedroom	4	\$384,213	\$1,536,852
6 bedroom	2	\$417,956	\$835,912
	278		\$69,644,268
			\$250,518.95 per du

HCC Calculation

Bedroom size	Quantity	HCC Limit	Subtotal HCC cost
1 bedroom	92	\$114,714	\$10,553,688
2 bedroom	96	\$137,921	\$13,240,416
3 bedroom	65	\$167,157	\$10,865,205
4 bedroom	19	\$199,029	\$3,781,551
5 bedroom	4	\$219,550	\$878,200
6 bedroom	2	\$238,832	\$477,664
	278		\$39,796,724
			\$143,153.68 per du

2015 UNIT TOTAL DEVELOPMENT COST (TDC) LIMITS

Number of Bedrooms

	0 500 sqft		1 700 sqft		2 900 sqft		3 1200 sqft		4 1500 sqft		5 1700 sqft		6 1900 sqft	
	HCC	TDC	HCC	TDC	HCC	TDC	HCC	TDC	HCC	TDC	HCC	TDC	HCC	TDC
Region V - Midwest														
ILLINOIS														
<i>BELLEVILLE</i>														
Detached/Semi-Detached	91,432	160,006	120,522	210,913	144,498	252,871	174,150	304,763	205,380	359,416	224,532	392,932	241,637	422,864
Row House	86,792	151,886	114,714	200,749	137,921	241,362	167,157	292,525	199,029	348,301	219,550	384,213	238,832	417,956
Walkup	70,756	123,823	97,678	170,936	123,806	216,660	161,520	282,660	201,319	352,308	226,551	396,464	251,408	439,964
Elevator	82,267	131,627	115,174	184,278	148,081	236,929	197,441	315,905	246,801	394,882	279,708	447,533	312,615	500,183
<i>CHICAGO</i>														
Detached/Semi-Detached	106,710	186,742	140,550	245,962	168,334	294,585	202,576	354,508	238,841	417,972	261,099	456,923	280,968	491,695
Row House	101,443	177,524	133,957	234,425	160,869	281,520	194,638	340,616	231,632	405,355	255,444	447,026	277,785	486,123
Walkup	82,934	145,135	114,540	200,446	145,245	254,179	189,626	331,846	236,373	413,652	266,061	465,606	295,324	516,817
Elevator	95,825	153,320	134,155	214,648	172,485	275,977	229,980	367,969	287,476	459,961	325,806	521,289	364,136	582,617
<i>EAST ST. LOUIS</i>														
Detached/Semi-Detached	91,040	159,320	119,989	209,980	143,833	251,708	173,304	303,283	204,374	357,654	223,430	391,002	240,447	420,782
Row House	86,442	151,273	114,233	199,908	137,315	240,302	166,374	291,155	198,080	346,639	218,492	382,362	237,668	415,918
Walkup	70,505	123,385	97,339	170,344	123,386	215,926	160,993	281,738	200,665	351,164	225,825	395,193	250,613	438,572
Elevator	81,887	131,019	114,641	183,426	147,396	235,834	196,528	314,445	245,660	393,056	278,415	445,464	311,170	497,871
<i>MOLINE</i>														
Detached/Semi-Detached	90,570	158,498	119,200	208,600	142,618	249,582	171,377	299,910	202,006	353,510	220,819	386,433	237,606	415,810
Row House	86,223	150,889	113,759	199,078	136,456	238,798	164,825	288,444	196,055	343,096	216,151	378,264	234,978	411,211
Walkup	70,685	123,698	97,665	170,914	123,901	216,827	161,872	283,276	201,795	353,142	227,192	397,586	252,238	441,417
Elevator	81,176	129,881	113,646	181,833	146,116	233,786	194,822	311,715	243,527	389,643	275,997	441,596	308,468	493,548
<i>SPRINGFIELD</i>														
Detached/Semi-Detached	91,510	160,143	120,591	211,034	144,526	252,921	174,091	304,660	205,292	359,260	224,431	392,754	241,521	422,662
Row House	86,912	152,096	114,835	200,962	138,009	241,515	167,161	292,532	198,998	348,246	219,494	384,114	238,742	417,798
Walkup	70,926	124,121	97,929	171,375	124,144	217,252	162,003	283,506	201,928	353,374	227,256	397,697	252,212	441,371
Elevator	82,279	131,647	115,191	184,306	148,103	236,965	197,471	315,953	246,838	394,941	279,750	447,600	312,662	500,259