



REPORT FOR:



Perez Architecture

68 34th St., Ste C-650 Brooklyn, NY 11232 T: 917.966.1777

2RW.com

100 10th St. NE, Ste 202 Charlottesville, VA 22902 Arlington, VA 22207 T: 434.296.2116

3200 Lee Highway T: 800.948.1748





TABLE OF CONTENTS

ABBREVIATIONS EXECUTIVE SUMMARY	
General Observations	
Critical Needs / Immediate Threats	
·	
Capital Needs for Renovation	
Summary	
Methodology DESCRIPTION OF EXISTING CONDITIONS	
Property Description	9
Site	9
Building Exterior	10
Building Systems	10
Common Areas	12
UnitsCRITICAL NEEDS / IMMEDIATE THREATS	
Poor Site Drainage	17
Rebuild Retaining Wall Outside of Community Room	18
Replace Metal Stairs Leading to the Rear of Each Unit	19
Redesign Egress from Accessible Units	20
Replace Flooring Throughout Units and Community Room	21
Install A Lightning Protection System	22
Environmental TestingADDITIONAL SHORT-TERM PHYSICAL NEEDS	
Remove 3-Inch Curb at Community Room Door	27
Replace Roofing Over Backdoor Entrances	28
Replace Wood Siding on Building Exterior	29
Pressure Wash Building Exterior	30
Install Grease Shields at All Units	31
Replace Shower Bodies and Tubs in All Units	32
Replace Dropped Acoustical Tile Ceiling in Common Area	33
Replace Cabinets, Countertops, and Appliances in All Units ADDITIONAL LONG-TERM PHYSICAL NEEDS	
Install Fall Protection in Boiler Room	35
Provide Landscaping at Apartment Entrance	36
Replace Fixtures and Finishes in Bathrooms in All Units	37
Replace Storm Doors	38





Replace Door Knobs with Lever Handles	39
Scrape and Repaint Back Door Lintels	
TOTAL PHYSICAL NEEDS SUMMARY	
Basis for Cost Estimates	41
Component Inventory	1
Development Projection Outlook – Years 1 through 10	4
Development Projection Outlook – Years 11 through 15	7





ABBREVIATIONS

A Amp

A/C air-conditioning

ADA Americans with Disabilities Act

BR bedroom

DHW domestic hot water

ECM energy conservation measure

EUL expected useful life

°F degrees Fahrenheit
gpf gallon per flush
gpm gallon per minute
hp horsepower

HPS high pressure sodium

HVAC heating, ventilation, and air-conditioning

kgal kilogallon kWh kilowatt hour

LED light emitting diode

MBH Thousand British thermal units per hour

MMBtu Million British thermal unit PHA Peekskill Housing Authority PNA physical needs assessment

UFAS Uniform Federal Accessibility Standards

VCT Vinyl composition tile





EXECUTIVE SUMMARY

Perez Architecture and 2RW Consultants, Inc. have been engaged by the Peekskill Housing Authority (PHA) to perform a physical needs assessment for Dunbar Heights. Constructed in 1951, the row/townhouse buildings consist of 96 dwelling units. Five of these units are Section 504 designated for elderly/disabled. The focus of this PNA is to assess existing conditions and identify physical deficiencies and repair/replacement needs over the next 15 years.

This report details Perez Architecture and 2RW's observations and recommendations based on a review of past energy audit and PNA reports, data provided by PHA, interviews with facility management, and on-site observation of conditions.

General Observations

Based upon the site observations of Dunbar Heights in July 2018, the site and building appear to be in generally satisfactory condition. However, some of the building systems and components in the 67-year-old facility are at the end of their service lives. Additionally, some components have experienced heavy use and, although not nearing their typical end of service lives, are also approaching a point in which the Housing Authority should consider replacement.

Critical Needs / Immediate Threats

Critical needs and immediate threats are conditions that threaten the health and safety of building occupants or the integrity of building systems. Immediate threats should be addressed by the Owner as soon as possible. Immediate threats identified during the July 2018 site visit include:

- Poor site drainage.
- The retaining wall outside of the community room is failing and is at risk of collapsing.
- Many of the steel stairs attached to the back doors of units exhibit advanced rusting and section loss
 - Stair treads have rusted through and are not connected to the stringers
 - Landings are seriously deteriorated with holes where the metal has rusted through
- The rear egress at some of the units is not compliant with the Americans with Disabilities Act (ADA).
- Finish flooring throughout Dunbar Heights' common area and residential units is in poor condition.
- Install lightning protection system.
- Perform environmental testing.

Capital Needs for Renovation

The PHA should plan and budget for replacement of a component/system:

- As it reaches the end of its Expected Useful Life (EUL).
- When it fails prematurely and cannot, or soon will not be, able to perform its intended function.

The following table summarizes the estimated capital needs for infrastructure renewal at Dunbar Heights over the 15-year period from 2018 to 2032. Critical needs and immediate threats at Dunbar Heights are estimated to cost \$1.3 million. The short-term physical needs are estimated to cost \$6.8 million with an additional \$6.4 million anticipated during Years 2 through 15. The preponderance of the capital needs through Year 15 are for site and unit renewals. (All dollar amounts are in 2018 dollars).

Table 1 presents the critical needs/immediate threats that must be addressed as soon as possible. Table 2 presents the short-term physical needs that will need to be addressed within the next 12 months. Table 3 presents the long-term physical needs that will need to be addressed over the next 15 years. Table 4 and Table 5 present information on the specific costs of certain items that are short term and long-term physical needs, respectively.





Table 1: Critical Needs / Immediate Threats

Category	Cost		
Repair Site Drainage	\$	21,440	
Rebuild Retaining Wall Outside of Community Room	\$	8,820	
Replace Metal Stairs Leading to the Rear of Each Unit	\$	251,740	
Redesign Egress from Accessible Units	\$	16,950	
Replace Flooring Throughout Units and Community Room	\$	975,600	
Install Lightning Protection	\$	40,452	
Perform Environmental Testing		-	
Total	\$ 1	,315,002	

Table 2: Short Term Physical Needs

Category	Year 1
Site	\$ 843,295.28
Building Exterior	\$ 1,034,358.85
Building Systems	\$ 253,703.81
Common Areas	\$ 353,492.43
Unit	\$ 4,299,983.75
Total	\$ 6,784,834.12

Table 3: Long Term Physical Needs

Category	Years 2-5	Years 6-10	Years 11-15	Total Needs
Site	\$ 48,354.14	\$ 606,486.78	\$ 3,711.75	\$ 658,552.67
Building Exterior	\$ 6,436.80	\$ 272,692.15	\$ 6,436.80	\$ 285,565.75
Building Systems	\$ 129,067.96	\$ 71,027.73	\$ 607,614.69	\$ 807,710.38
Common Areas	\$ 35,710.14	\$ 73,423.54	\$ 48,081.28	\$ 157,214.96
Unit	\$ 366,014.88	\$ 3,412,785.60	\$ 703,479.32	\$ 4,482,279.80
Totals	\$ 585,583.92	\$ 4,436,415.80	\$ 1,369,323.84	\$ 6,391,323.56





Table 4: Specific Costs of Additional Short-Term Physical Needs

Category	Cost
Remove 3" Curb at Community Room Door	\$ 3,630
Replace Roofing Over Back Door Entrances	\$ 14,415
Replace Wood Siding on Building Exterior	\$ 43,316
Pressure Wash Building Exterior	\$ 11,201
Install Grease Shields at All Units	\$ 5,073
Replace Shower Bodies and Tubs in All Units	\$ 414,258
Replace Dropped Acoustical Tile Ceiling in Common Area	\$ 18,737
Replace Cabinets, Countertops, and Appliances in All Unit	\$ 1,743,564
Total	\$ 2,254,194

Table 5: Specific Costs of Additional Long-Term Physical Needs

Category	Cost
Install Fall Protection in Boiler Room	\$ 15,750
Provide Landscaping at Apartment Entrance	\$ 21,250
Replace Fixtures and Finishes in Bathrooms in All Units	\$ 633,726
Replace Storm Doors	\$ 191,614
Replace Door Knobs with Lever Handles	\$ 40,957
Scrape and Repaint Back Door Lintels	\$ 9,024
Total	\$ 912,321

Dunbar Heights has a number of systems that have reached the end of their expected service lives. This fact is not to be interpreted as systems that have already failed. However, the PHA should budget and schedule for replacements immediately. A full list of systems that are past their expected service lives can be found in the Total Physical Needs Summary.

These amounts do not include the following:

- Preventative maintenance of building systems and components.
- On-going operating and maintenance costs for existing systems.
- Improvements to the facility to bring the site into compliance with present government laws, regulations, codes, accessibility requirements, or other mandates or industry recommendations.
- Upgrades to improve marketability of the dwelling units.
- Environmental testing and problem remediation.
- Building system testing and remediation of problems.

These costs are a major component in the calculation of Deferred Maintenance as defined by the Statement of Federal Financial Accounting Standard 40 issued by the Federal Accounting Standards Advisory Board.

Over the next 15 years, infrastructure renewal at Dunbar Heights is estimated to cost \$13.2 million, of which over half will be required inside the dwelling units.





INTRODUCTION

Summary

Perez Architecture and 2RW performed a PNA for the Peekskill Housing Authority (PHA). The assessment consisted of a building survey of dwelling units, maintenance, utility, laundry and other common spaces and a site survey.

Table 6 summarizes the number and size of dwelling units at Dunbar heights.

Table 6: PHA Site and Unit List

Site	Gross Area	0BR	1BR	2BR	3BR	4BR	5BR	Total
Dunbar Heights	87,140		11	64	11	10		96

In 2015, a roof replacement was completed at buildings A through J. A roof replacement was completed at the remaining three buildings, K through M in 2017. The boilers were replaced in 2015, and the exterior lighting was replaced in 2016.

Methodology

The primary authors of the PNA report are Perez Architecture and 2RW Consultants, Inc. Perez Architecture, founded in 1940, is 100% Woman and Minority owned, multidisciplinary firm providing a full range of in-house services including architecture, design-build, construction, landscape architecture, planning, interior design, and real estate development. 2RW is a professional engineering firm, established in 1985, with more than 30 years of experience in multi-family design and analysis.

The PNA followed four major steps.

- 1. The Perez Architecture team conducted site visits to gather information about the properties. Perez visited a representative sampling of dwelling units at the site. Perez also visited community spaces, office spaces, and central mechanical rooms. A staff member of the management company accompanied Perez and 2RW during the field visit. The visit included an observation of the site, building envelope, space heating and cooling systems, ventilation, lighting, domestic hot water (DHW) systems, plumbing fixtures, ancillary systems, and appliances. Inventories and measurements of building systems conducted during the site visit have been compared to other documentation (drawings, previous energy audits and assessments, etc.) for verification.
- 2. Based on field observations, drawings, and previous PNAs an inventory of facility systems and components was prepared.
- 3. The building system and component inventory, replacement costs, and other data were determined.
- 4. The PNA report was prepared.

The PNA team used current editions of building codes, laws, regulations, and standards during preparation of this report.





DESCRIPTION OF EXISTING CONDITIONS

Dunbar Heights, AMP NY082000002, 81 Highland Avenue, Peekskill, NY

Property Description

Located at 81 Highland Avenue in Peekskill, New York, Dunbar Heights consists of thirteen (13) multi-level dwelling buildings, built in 1951. A breakdown of the units by bedroom size is as follows:

Number of Bedrooms	0BR	1BR	2BR	3BR	4BR	5BR	6BR	Total	Common Space
Number of Units	0	11	64	11	10	0	0	96	Mechanical Room
Square Footage	0	840	850	910	1349	0	0	87,140	

In accordance with the agreement between the PHA, NY and Perez Architecture dated July 6, 2018, a PNA was conducted for Dunbar Heights.

A walkthrough visual observation of the property was completed on July 31, 2018 and included 100% of the site and non-dwelling buildings, a sampling of 20% of the dwelling buildings, and 10% of the dwelling units. As part of the overall PNA, review and recommendation for this site, the site amenities, unit size, layout, and functional obsolescence were given full consideration.

Site

PHA built Dunbar Heights in 1951. The site appears to be well maintained, and generally in good condition. There are issues with site drainage that are primarily caused by inadequate grading. The 49,276 square feet of asphalt parking lots appear to be in good condition and provide parking for the residents of the PHA. Asphalt replacement is not immediately needed. The 56,828 square feet of pedestrian concrete walk ways are in good condition with only minimal repairs needed. The primary issue being the failing retaining wall outside of the community room. Lawn areas appear to be well maintained, and trees appear to be pruned away from buildings so as not to damage the buildings.

Accessibility

The Uniform Federal Accessibility Standards (UFAS) and Section 504 compliance requirements were studied and observed with site and building items during the onsite walkthrough, included parking, accessible routes, and entryways. The housing authority made reasonable accommodations to the project for ease of access by providing designated and conveniently located parking spaces.

Site Observations

- Poor site drainage. During heavy rain events, and due to the sloped site, water pools at the base of the hills.
- The retaining wall outside of the community room is failing.
- When repainting the parking lot striping, the international symbol for accessibility should be re-applied following the details outlined in UFAS.
- Uniform Accessibility Standards only require that the sign not be obstructed by a vehicle parked in the space. Similarly, ADA Accessibility Guidelines do not specify a height for parking signs. A height of at least 60 inches (measured to the bottom edge) is advised, allowing for sign space, although a higher height is better for signs at van spaces.





Building Exterior

Building exteriors and systems for the Dunbar Heights buildings appear to be well maintained and in good condition. The two story row/townhouse type buildings are built over crawlspace foundations that are naturally vented through grates and over soil. The buildings are clad with brick and wood building exteriors. The exterior brick and second story wood siding are in fair condition, and the wood appears to have been recently painted. Although it has been painted recently, it is recommended that the wood be replaced with a more resilient product in the near future. The double-pane, aluminum frame windows were installed in 1995 and are generally in good condition. Therefore, they are not considered for replacement. The roofs at Dunbar Heights are gable style asphalt shingle type construction and were replaced between 2015 and 2017. Each unit has a wall-mounted mailbox located at the front door.

Building Exterior Observations

- While the roofs have been replaced, many awnings/coverings over backdoors are in poor condition
- Replace Wood Siding on Building Exterior
- Brick exterior needs to be pressure washed.
- Storm doors are in poor condition and need replacement.
- Lintels over back doors need to be scraped and repainted.
- Some paths into units from main walkways have more than a 24-inch drop from path surface to the ground below. These require a railing.
- Rainwater has washed out much of the soil behind the paved areas leading to the apartments, resulting in a scenario in which there is a larger then 24" drop from path surface to the ground below.

Building Systems

Heating, Ventilation, and Air-Conditioning Systems

Space Heating

Space heating at Dunbar Heights is provided by a central heating system, consisting of two 5,578 MBH fuel oil-fired hot water Supreme boilers (Model D4-125-4) located in the mechanical room. The mechanical room is large, with a sidewall exhaust fan to provide indirect combustion air. Manufactured in 2015, these boilers are in good condition. Hot water is distributed underground to the thirteen buildings by two 7.5 hp circulation pumps. There are total of 527 cast iron radiators in Dunbar Heights equipped with non-electric thermostatic control valves, and they are generally in good condition.

Space Cooling

Residents provide window air-conditioners for space cooling in their apartments. These window air-conditioners can vary widely in capacity, efficiency and condition. The maintenance shop and offices are also cooled by window air conditioning units.

The community room is served by a 3-ton split-system NCA air conditioning system installed in 2006. The system is controlled by a wall-mounted thermostat and is in overall excellent condition.

Ventilation

The bathroom in each dwelling unit contains a switched exhaust fan which exhausts into the building attic spaces. There is no other mechanical ventilation serving the dwelling units.

The boiler room is equipped with a sidewall exhaust fan which is manually controlled.





HVAC Observations

Important observations of the Dunbar Heights HVAC systems are given below.

• Resident mounted A/C units should not be installed in windows, as it causes damage to the windows and exterior walls and are at risk of falling. Units should be installed through the wall.

Plumbing Systems

Plumbing Fixtures

Each apartment has a full bathroom, with water closet, shower tub, and lavatory. Each kitchen has a single-basin stainless steel sink. Each dwelling unit is also equipped with washer/dryer hookups, including recessed wall washing machine outlet boxes consisting of hot and cold-water connections as well as a drain. Tenants must provide their own washers and dryers.

Domestic Hot Water

Domestic hot water at Dunbar Heights is generated via a water-to-water heat exchanger served by the two fuel oil boilers. Underground piping from the boilers is assumed to be original and the materials, insulation, and present condition is unknown; however, there have been no reports of leaks or issues. A ceiling-mounted storage tank (estimated 1000 gallon) holds the domestic hot water, which is circulated to the dwelling units, community room, and maintenance shop through a 3 HP inline pump that appears to run at constant speed.

Plumbing Systems Observations

Notable observations concerning the plumbing systems at Dunbar Heights are as follows:

 Many tenants have replaced the housing authority stocked 2.0 gpm showerhead with individually purchased showerheads.

Electrical Systems

Service

Each dwelling unit is served by an individual electric meter provided by the Con Edison utility company. Con Edison is in the process of replacing the existing dial meters with digital meters which can be read remotely.

Dwelling units are equipped with 125A load centers, which vary in age and appear to have been replaced over time. Westinghouse, Siemens and Cutler-Hammer models were identified during the site visit.

Exterior Lighting

The exterior site lighting at Dunbar Heights consists of a total of 15 pole-mounted light emitting diode (LED) fixtures, which were replaced in 2016 and are in excellent condition.

The buildings are also equipped with wallpack fixtures. Approximately 80% of the existing high-pressure sodium (HPS) fixtures were replaced with LED fixtures during a 2016 lighting retrofit project. These LED fixtures are in good condition, but some are inoperable due to electrical wiring issues during the retrofit (which are currently being repaired). The remaining HPS fixtures are in poor condition. Photo-sensors are used to control the exterior site lighting.

Each dwelling unit also has exterior entrance lighting at both front and rear doors. Most of the front entrance lighting is provided by the wallpacks described above. Rear entrance fixtures are circular fixtures that appear to be in good condition. These fixtures primarily contain compact fluorescent lamps.





Interior Lighting

Interior lighting at Dunbar Heights is primarily fluorescent, including Circline, linear, compact and some U-shape fixtures. Some LED replacements were done during apartment turn-over renovations. Because fixtures are replaced during unit turnover renovations, the age and condition of interior lighting is varied, with some 20 years old and in fair condition, while others have been replaced in the last five years and are in excellent condition.

Inside the dwelling units are the following dominant light fixtures:

- Kitchen/Dining: fluorescent (linear and Circline)
- Bathroom: Mix of linear fluorescent and compact fluorescent above vanity mirror
- Hallway/Foyer: Mix of Circline fluorescent and compact fluorescent

The community room and maintenance shop are primarily illuminated by 4ft linear fluorescent lightning with three T8 lamps per fixture that were installed in 1995.

Compact fluorescent exit signs are installed over the exit doors of community room and are in fair condition.

Fire Protection Systems

Dunbar Heights does not have a fire protection system.

Fire Detection Systems

Hard-wired smoke detectors are located in the living rooms and corridors outside of bedroom doors in each dwelling unit. The community room has a smoke detector in its kitchen area. The current fire code requires one smoke detector to be in each bedroom.

Communications Systems

Dunbar Heights is served by two communications systems:

- Television cable
- Telephone

Dunbar Heights has television cable service available for its residents. Land-line telephone service is also available to each of the apartments. Each apartment has wall-mounted telephone jacks.

Security Systems

A camera surveillance system provides security for Dunbar Heights. Security for all PHA sites is monitored at Bohlmann Towers.

Security cameras are all fixed mini dome CCTV and either one or two cameras were observed on the exterior walls of each building. Cameras appear to be in good condition.

Emergency Call System

Dunbar Heights does not have an emergency call system installed.

Electrical Systems Observations

- There is a variety of interior lighting fixtures as replacement fixtures have not been consistent in turn-over renovations.
- Types (make and model) of load centers vary throughout the development but are generally in good condition.

Common Areas

Common areas located within Dunbar Heights, including the community room and maintenance shop are in fair overall condition. Ceiling tiles and common area flooring inside of the public areas are somewhat worn.





Accessibility

The Uniform Federal Accessibility Standards (UFAS) and Section 504 compliance requirements were studied and observed with site and building items during the onsite walkthrough, included parking, accessible routes, and entryways. The Authority made reasonable accommodations to the project for ease of access by providing designated and conveniently located parking spaces. When repainting the parking lot striping, the international symbol should be reapplied following the details outlined in UFAS. ADA Accessibility Guidelines do not specify a height for parking signs and the Uniform Accessibility Standards only require that the sign not be obstructed by a vehicle parked in the space. A height of at least 60 inches (measured to the bottom edge) is advised, allowing for sign space, although a higher height is better for signs at van spaces.

Signage

Common area spaces and fire escapes are not identified with signs that have raised letters and Braille characters for sight impaired occupants.

Exit signs are located at exit doors of the community room.

Restrooms

There are men's and women's public restrooms in the community room. The restrooms are equipped with lavatories, flush-valve toilets, and a flush-valve urinal in the men's room. The restrooms were renovated in 1995 and appear to be in good condition. The maintenance shop has two restrooms, one equipped with a lavatory and tank-style toilet that appears to be about 20 years old and has original plumbing and the other with a plastic utility sink in good condition and a newer dual flush tank-style toilet.

Appurtenances and Finishes

Ceilings

The community room, including the public restrooms and kitchen, has acoustic ceiling tiles. The tiles are showing their age and recommended for replacement in the near future.

Walls

Walls in public spaces generally are gypsum board with vinyl baseboard. In service spaces, such as the mechanical room, walls are white-painted concrete masonry units, while the walls in electrical room are unpainted concrete masonry units. Walls in public restrooms are ceramic tile-covered, while walls in shop restrooms are painted concrete masonry units. Finally, the shop has a combination of painted concrete masonry units and dark brick/concrete wall.

Flooring

Floors in Dunbar Heights public spaces are vinyl composition tile. Restroom and kitchen floors are tile and they look to be original surfaces. Service areas, such as mechanical and electrical rooms have bare concrete floors. Shop flooring is vinyl.

Interior Doors

Interior doors in public spaces are wood doors. Door hardware is plated with a brass or nickel finish. Some of the interior doors have lever handles, while others have nickel-plated knobs.

Appurtenances

A wood handrail is installed along one wall of the vestibule of the common area. The handrail assists the elderly occupants who have mobility issues.





Appliances

There is a kitchen in the community room. It has painted, wooden countertops. It does not have any grease shield or a kitchen hood. The kitchen appliances include a 30-inch, four-burner gas range, GE refrigerator (model no. TBX18SAXGLWW) and a microwave. Kitchen equipment was installed in 2012 and appears to be in good condition.

The maintenance shop is equipped with a similar style refrigerator and microwave.

Common Area Observations

- The retaining wall outside of the community room is failing.
- Flooring throughout Dunbar Heights is in poor condition.
- The lay-in tile ceilings are in moderate condition, and some shows signs of water damage.
- There is a 3-inch curb at the accessible entrance of the community room.
- Inadequate fall protection in boiler room.

Units

The units located at Dunbar Heights were assessed with an overall condition of fair. Unit kitchens are in fair condition and show signs of normal wear and tear. The cabinets, countertops, and appliances are in fair condition. Unit baths are in moderate condition and should be considered for modernization. Unit flooring is in poor condition and should be replaced. Interior lighting throughout Dunbar Heights is primarily fluorescent and could be upgraded to energy efficient LED lighting.

Accessibility

At present, five of the apartments at Dunbar Heights are designated as UFAS accessible. As such, the following is for information purposes only, as Dunbar Heights appears to comply. UFAS Section 4.1.4, Occupancy Classifications, paragraph (11) Residential, states that accessible housing shall be provided for federally funded, multifamily housing, in "5 percent of the total, or at least one unit, whichever is greater, in projects of 15 or more dwelling units, or as determined by the appropriate Federal agency following a local needs assessment conducted by local government bodies or states under applicable regulations." Five percent of the 98 dwelling units at Bohlmann Towers would be five accessible dwelling units.

The following modifications would need to be implemented to convert existing dwelling units to accessible units:

- Kitchen
 - o Install a height-adjustable countertop in place of existing countertops in the work area.
 - o Provide refrigerator with a bottom freezer.
 - Install a sink that has a depth no greater than 6.5 inches.
 - The sink should have a faucet with a goose neck and single lever controls.
 - Eliminate padding on the sink trap. Install padding on the trap.
 - o Install electrical receptacles on the front of the counter.
 - o Move all controls (light switches, range hood controls) to the front of the counter.
- Bathroom
 - o Reconfigure the bathroom to provide a five-foot (minimum) turning radius for a wheelchair.
 - Provide a roll-in shower stall.
 - Install grab bars in the shower.
 - Provide a transfer bench.
 - Install an adjustable shower head.
 - Provide single lever controls for the shower.
 - Install a lavatory having:
 - A faucet with a gooseneck and lever handle control.
 - A padded the trap beneath the lavatory.





- A sloped mirror above the lavatory.
- o Install bathroom accessories (toothbrush holder, glass holder, toilet tissue dispenser) in an accessible location
- Install grab bars in the vicinity of the lavatory.

Electrical

- Relocate the electrical load center so that the top of the panel is no more than 48 inches above the floor
- Verify that electrical receptacles, telephone jacks, and television jacks are at least 18 inches above the floor.
- o Verify that light switches are no more than 48 inches above the floor.

Interiors

- Install new main entry doors and frames that have:
 - Fire rating equal to that required for the egress corridor.
 - Lever handles
 - Dead bolt mounted no higher than 48 inches above the floor.
 - A peephole should be provided at a height so that an individual in a wheelchair can see out.
 - Self- closer that requires no more than five pounds of force to open.
- Doors would need to have a minimum width of 32 inches.
 - Install lever handles on all interior hinged doors.
- Install open storage with accessible shelves.
- o Clothes rods cannot be more than 54 inches above the floor.

Appurtenances and Finishes

Ceilings

Ceilings in the Dunbar Heights dwelling units are painted gypsum board. Some bathroom ceilings exhibit water damage from leaks in the bathroom of the floor above.

Walls

Unit walls are painted gypsum board. Bathroom walls are a combination of ceramic tile and gypsum board. Some small cracks were identified in walls. Overall, wall and current paint are adequate. Windows are double pane, and some have security guards.

Floors

Apartment floors are vinyl tile throughout. Bathroom floors have tiles throughout. Vinyl composition tile (VCT) is in despair in most occupied units. When units are turned over, VCT is patched and areas are replaced. It is recommended that the VCT be replaced throughout, as soon as possible.

Interior Doors

The dwelling units have hollow core, white-painted wood doors. The doors have knobs, not lever handles. Door hardware is brass plated.

Appurtenances

The galley type kitchens have wood base and upper cabinets and plastic laminate countertops. The cabinets and countertops are not in terrible condition but are recommended to be replaced in the relatively near future. Kitchens have one stainless steel sink. The condition of bathrooms vanities varies from unit to unit.





Appliances

Most apartments are equipped with a 30-inch, four-burner gas range provided by the Housing Authority, while ADA units are equipped with a 30-inch, four-burner electric range. Each apartment has a circulating range hood. The gas ranges were installed in 1998 and appear to be in good condition. Some apartments have grease shields protecting the wall behind the range. All kitchens have a GE double-door refrigerator (model no. GTH17BBZ2RWW or comparable) and are in good condition.

Unit Observations

- Many of the metal stairs/railings attached to the back doors of units are rusted/corroded.
 - Stair treads are not connected to wall strings anymore.
 - Some landings have visible holes where the sheet has rusted away.
- There are no grease shields behind the gas ranges to protect the wall in some apartments.
- Kitchen millwork/countertops are in poor condition and will need replacement in the coming five to ten
 years
- Wall tile in bathrooms showing cracking and separation from the wall.
- Storm doors require replacement.
- Door handles are knobs, not lever handles. Knobs are more difficult for the elderly occupants.





CRITICAL NEEDS / IMMEDIATE THREATS

Poor Site Drainage

SUMMARY

The extreme grade change from the front of the site to the back creates an untenable volume of water for the existing site drainage system to handle. The site drainage systems inability to compensate for the volume of runoff is further hindered by the hardscape installed by many tenants in the form of expansive paver systems outside of their units. The effects of the site drainage system not being able to handle the volume of water are flooding at the drain and low-point locations, erosion of soil around pathways, and failure of retaining walls.

We recommend that a civil engineering consultant be engaged to design this work. It is assumed that this work will be packaged with other site work.





Figure 1 Example of Poor Site Drainage

COST ESTIMATE

Table 7 presents the cost estimate to repair the poor site drainage.

Table 7: Repair Site Drainage Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Landscaping and adding additional drain locations	8	Each	\$4,840	\$38,720





Rebuild Retaining Wall Outside of Community Room

SUMMARY

The retaining wall outside of the community room is in danger of failing. It is our recommendation that it be demolished and replaced with a CMU retaining wall that is appropriately designed with a spread footing below the frost line to resist overturning. Proper drainage shall be included at the base of the footing and below the soil surface to stop runoff over the top of the retaining wall. Additionally, the height of the retaining wall shall be increased near the building, with the adjacent grade increased as well, to promote positive drainage away from the building rather the along it and over the top of the retaining wall.

We recommend that a civil engineering consultant be engaged to design this work. It is assumed that this work will be packaged with other site work.



Figure 2 Retaining Wall Outside Community Room

COST ESTIMATE

Table 8 presents the cost estimate to demolish and replace the retaining wall at the entrance to the community room.

Table 8: New CMU Retaining Wall Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
New 6' Retaining Wall	30	LF	\$940	\$28,200





Replace Metal Stairs Leading to the Rear of Each Unit

SUMMARY

Years of weathering have caused the metal stairs that lead to the back of each ground floor unit to deteriorate. Many stair treads are disconnected from their stringers, and in some cases treads and landings have visible holes where the metal has rusted away. It is recommended that these stairs be replaced as soon as possible. Proper preventative maintenance; in the form of rust removal, priming, and painting of the stairs at regular intervals, can keep the newly installed stairs from experiencing the same failures.

We recommend that an architect and structural engineering consultant be engaged to design this work. It is assumed that this work will be packaged with other work.



Figure 3: Examples of Rusted Stairs and Railings

COST ESTIMATE

Table 9 presents the cost estimate associated with removal and replacement of steel stairs at the back of each unit.

Table 9: Replace Steel Stairs and Railings Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
New Steel Stair	82	Each	\$3,070	\$251,740





Redesign Egress from Accessible Units

SUMMARY

The egress from the kitchen of the accessible units requires traversal of a slope steeper than 1:12. To conform with accessibility requirements the landing outside of the door is required to have a 5' turning radius, railings are required on both sides of the ramp leading to the back of the unit, and proper clearance is required adjacent to the door. Remediating these deficiencies will require a redesign of the exterior egress system from these units.

We recommend that an architect be engaged to design this work. It is assumed that this work will be packaged with other site work.





Figure 4 Egress in Accessible Units

COST ESTIMATE

Table 10 presents the cost estimate associated with redesigning egress from non-complying accessible units.

Table 10: Accessible Egress Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Egress Redesign	5	Units	\$7,810	\$39,050





Replace Flooring Throughout Units and Community Room

SUMMARY

The flooring throughout units and common areas in Dunbar Heights is vinyl composition tile. The VCT is in poor condition and shows the signs of its age and its level of wear. In some cases, individual rooms have had VCT replaced in kind, but the quality of the installation has caused the newly installed tile to peel and chip. New VCT will ensure safe surfaces for tenants as well as protect the integrity of the entire floor construction.





Figure 5 Example of VCT

COST ESTIMATE

Table 10 presents the cost estimate to replace the flooring throughout the units and community room.

Table 11: Accessible Egress Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Ceramic Tile in Community Room	268	SF	\$27.75	\$7,437
Tile Baseboard in Community Room	71	LF	\$29.34	\$2,083
Resilient Floor in Community Room	2333	SF	\$5.47	\$12,762
Resilient Baseboard in Community Room	416	LF	\$6.83	\$2,841
Resilient Floor in Units	117,456	SF	\$5.47	\$642,484
Wood Baseboard in Units	36,492	LF	\$8.44	\$307,993





Install A Lightning Protection System

SUMMARY

The National Fire Protection Association (NFPA), Section 780, "Standard for the Installation of Lightning Protection Systems ", publishes a protocol to assess the risk to a structure from lightning strikes, with the object of "... determining the risk of damage or injury due to lightning" (Annex L).

Annex L, Section L.1.1, lists several situations where "serious consideration" should be given to the installation of a lightning protection system regardless of the outcome of the assessment calculations. These include:

- Buildings housing large crowds,
- Continuity of critical service,
- High lightning flash sequence,
- Tall isolated structure,
- Building containing an explosive or flammable material,
- Building containing irreplaceable cultural heritage.

ASSESSMENT

Methodology

The Simplified Risk Assessment methodology (Section L.5) is based on two calculated quantities, the Annual Threat of Occurrence (N_c) and the Tolerable Lightning Frequency (N_c), as summarized below.

Annual Threat of Occurrence (N_d)

The Annual Threat of Occurrence, N_d , is the yearly lightning strike frequency to the structure. N_d is defined by the equation below:

$$N_d = N_g * A_e * C_1 * 10^{-6}$$

where

N_g is the lightning ground flash density (flashes/km²/year)

A_e is the equivalent collection area of the structure (m²)

$$A_e = (L^*W) + [6^*H^*(L+W)] + (9^*\pi^*H^2)$$

L = building length (m)

W = building width (m)

H = building height (m)

 C_1 is an environmental coefficient

Tolerable Lightning Frequency (N_c)

The Tolerable Lightning Frequency, N_c , is the "... measure of the risk to the damage of the structure ...". N_c is defined by the following equation:

$$N_c = (1.5 * 10^{-3}) / C$$

where

$$C = C_2 * C_3 * C_4 * C_5$$

where

C₂ = Construction Coefficient

C₃ = Determination of Structure Contents





C₄ = Determination of Structure Occupancy

C₅ = Determination of Lightning Consequence

Values for C_2 , C_3 , C_4 , and C_5 are tabulated in Standard 780, part L.5.2.

Risk Calculation

If the Annual Threat of Occurrence, N_d , exceeds the Tolerable Lightning Frequency, N_c , the NFPA recommends a lightning protection system for the structure.

Annual Threat of Occurrence Calculation Results

1) Lightning Ground Flash Density (Ng)

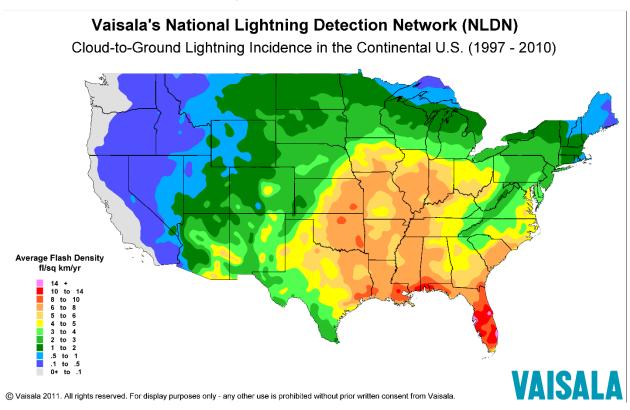


Figure 6: Vaisala's National Lightning Detection Network

2) Equivalent Collection Area (Ae)

L = 30.28 m

W = 9.29 m

H = 6.5 m

 $A_e = [(30.28)*(9.29)] + [6*(6.5)*(30.28+9.29)] + (9*\pi*6.5^2)$

 $A_e = 3,019.12$





Table 12: Environmental Coefficient (C₁)

Relative Structure Location	C_1
Structure surrounded by taller structures or trees within a distance of 3H	0.25
Structure surrounded by structures of equal or lesser height within a distance of 3H	0.5
Isolated structure, with no other structures located within a distance of 3H	1
Isolated structure on hilltop	2

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014 (Note: Selection for this Analysis is highlighted)

3) Annual Threat of Occurrence (N_d)

 $N_d = (2.5) * (3,019.2) * (0.5) * (10^{-6})$

 $N_d = 0.00377$

Tolerable Lightning Frequency Calculation Results

Table 13: Construction Coefficient (C₂)

Structure	Metal Roof	Nonmetallic Roof	Combustible Roof
Metal	0.5	1.0	2.0
Nonmetallic	1.0	1.0	2.5
Combustible	2.0	2.5	3.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014 (Note: Selection for this Analysis is highlighted)

Table 14: Determination of Structure Contents (C₃)

Structure Contents	C ₃
Low Value and Noncombustible	0.5
Standard Value and noncombustible	1.0
High value, moderate combustibility	2.0
Exceptional value, flammable liquids, computer or electronics	3.0
Exceptional value, irreplaceable cultural items	4.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014 (Note: Selection for this Analysis is highlighted)

Table 15: Determination of Structure Occupancy (C₄)

Structure Occupancy	C ₄
Unoccupied	0.5
Normally Occupied	1.0
Difficult to evacuate or risk of panic	3.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014 (Note: Selection for this Analysis is highlighted)

Table 16: Determination of Lightning Consequence (C₅)

Lightning Consequence	C ₅
Continuity of facility services not required, no environmental impact	1.0
Continuity of facility serves required, no environmental impact	5.0
Consequences to the environment	10.0

Citation: National Fire Protection Association 780 – Installation of Lightning Protection Systems Handbook, Annex L, 2014





(Note: Selection for this Analysis is highlighted)

1) Tolerable Lightning Frequency (N_c)

$$C = (3)*(2)*(1)*(1) = 6$$

 $N_C = (1.5*10^{-3})/6$

 $N_c = 0.00025$

Conclusion: Since N_d > N_c a lightning protection system is recommended.

SCOPE OF WORK

General

- Design a lightning protection system in accordance with LPI and NFPA 780.
 - o Size conductors to handle current flows per LPI protocols.
 - Submit calculations to Owner for review.
- Prepare scale drawings and specifications to illustrate the design
 - Drawings shall indicate the following:
 - Location of aerials
 - Size and location of conductors
 - Details illustrating conductor and aerial mounting techniques
 - Location and sizing of ground loops and rods
 - Drawings Shall be sealed by a professional engineer with a current license in the Commonwealth of Pennsylvania

INSTALLATION

- Install lightning protection system per the drawings, the codes and standards of the City of Philadelphia and the Commonwealth of Pennsylvania, and UL/LPI code requirements.
- Contractor shall secure building permits as necessary.
- Upon completion, an independent third party shall commission the installation, verifying conductor resistance and grounds.
- Upon satisfactory completion and testing of the lightning protection system, the Contractor shall post a framed UP/LPI certification of the system at a prominent location near the door onto the roof of the building.
- Contractor shall take care so that the roof warranty is not voided by the lightning protection system installation.
- Installation shall include restoration of the site to its original condition after installation of the ground loop.

COST ESTIMATE

Table 17 presents the cost estimate to install a lightning protection system on the entire building.

Table 17: Install Lightning Protection System Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Lightning Protection System	Each	1	\$40,452	\$40,452





Environmental Testing

SUMMARY

To satisfy code and regulatory requirements or HUD initiatives, environmental and health and safety tests are needed periodically. These tests will also be used to diagnose facility problems and/or assess facility condition.

The following diagnostic tests are required by law, code, or Standard.

- Asbestos Inspections
- Radon Gas Tests
- Lead-Based Paint Tests
- Potable Water Lead Tests
- Legionella in Domestic Hot Water Systems





ADDITIONAL SHORT-TERM PHYSICAL NEEDS

Remove 3-Inch Curb at Community Room Door

SUMMARY

The concrete curb threshold at the accessible entrance to the community room is both 3" above the finished floor of the community room and 3" above the landing of the ramp that leads to the community room. The existing door should be removed, the curb should be demolished, and the door should be reset at ground level. The 2010 ADA Standards for Accessible Design state (404.2.5) that "Thresholds, if provided at doorways, shall be ½ Inch (13m) high maximum.



Figure 7 Entrance into Community Room

COST ESTIMATE

Table 18 presents the cost estimate associated with removing the threshold at the community room door.

Table 18: Community Room Door Replacement Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
New Community Room Door	1	Each	\$3,630	\$3,630





Replace Roofing Over Backdoor Entrances

SUMMARY

Each building in Dunbar Heights underwent a roof replacement in 2017. While these new roofs are in pristine condition, the small roofing installations that cover back door entrances are failing. Whether from age, water infiltration, or neglect, these methods of access and egress must be maintained for the safety of each tenant and for the preservation of all existing building systems.



Figure 8 Roof Over Backdoor Unit Entrance

COST ESTIMATE

Table 26 presents the cost estimate of replacing the roof over the backdoor entrances.

Table 19: Roof Replacement Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Asphalt Shingles	2,080	SF	\$6.93	\$14,414.40





Replace Wood Siding on Building Exterior

SUMMARY

The recessed entrance to each unit at Dunbar Heights is clad in wooden siding. Additionally, Some buildings have exterior wooden siding on their second floor, courtyard-facing facades. Not covered in the roof replacement and mainly related to the amount of traffic and exposure that the siding receives on the ground level, all wooden siding should be removed and replaced with a more resilient, wood-like material.



Figure 9 Typical Wood Siding

COST ESTIMATE

Table 26 presents the cost estimate of replacing the wood siding on the building exterior.

Table 20: Replace Wood Siding Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Wood-like Siding	2,800	SF	\$15.47	\$43,316





Pressure Wash Building Exterior

SUMMARY

The façade of the building is largely brick and is in generally good condition. There is significant staining due to the age of the building, and the proximity of the brick to the areas that tenants have chosen to landscape themselves. As a matter of general maintenance, it is recommended that the building be fully pressured wash.

This work will does not require a design consultant. An experienced façade contractor shall be able to perform the work.





Figure 10 Typical Facade Condition

COST ESTIMATE

Table 21 presents the cost estimate to pressure wash the building exterior.

Table 21: Pressure Wash Building Exterior

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Powerwash Facade	112,017	SF	\$.10	\$11,201





Install Grease Shields at All Units

SUMMARY

It is recommended that a full height backsplash, in the same material as the countertop, or a stainless-steel metal grease shield be installed on the wall adjacent to and above all over the kitchen stove. This will extend the life of the wall, allowing for less invasive renovations to occur during turnover, while also safeguarding against the potential for a grease fire or major injury to occur if a catastrophe occurs while utilizing the kitchen stove. This work does not require a design consultant.



Figure 11 Typical Unit Gas Stove

COST ESTIMATE

Table 22 presents the cost estimate to install grease shields at all units.

Table 22: Install Grease Shields at All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Stainless Steel Grease Shield	96	Each	\$52.84	\$5,073





Replace Shower Bodies and Tubs in All Units

SUMMARY

Installed against a ceramic tile wall, the current shower/tub bodies are beginning to fail. Many bathrooms are showing signs of water damage, and many rooms below or adjacent to bathrooms are showing damage as well. Water damage caused by failing tub bodies causes a substantial inconvenience to the occupant of the unit that has the issue and to the occupants of adjacent units if the water damage impacts them. Further, once the leak has occurred, the effort and cost to repair is exacerbated as adjacent finishes; gypsum board, ceramic tile, or otherwise, need to be repaired. It is recommended that all shower bodies and tubs be replaced as soon as possible to avoid future water damage, tenant disruption, and undue costs incurred due to finish and equipment replacement.

It is recommended that a plumbing engineer be hired to perform the design services required for the shower body work. It is also recommended that an architect be hired to perform the design services for repairing, and replacing where necessary, tubs and finishes. It is assumed that this work will be packaged with other architecture and engineering work.



COST ESTIMATE

Table 23 presents the cost estimate to replace all of the shower bodies in all units. The cost estimates include the price of the fixtures.

Table 23: Replace Shower and Bathtubs in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Bathtubs / Shower Units	112	Each	\$3,698.73	\$414,258





Replace Dropped Acoustical Tile Ceiling in Common Area

SUMMARY

Suspended acoustic, two by four lay-in tiles are the predominant ceiling system in Dunbar Heights common area. The acoustic ceiling tiles have held up well over time but are exhibiting their age. It is apparent that tiles have been replaced and that others are slated for replacement due to leaks or other similar damage. It is recommended that the ceilings be replaced throughout to ensure a uniform appearance and a clean environment for all occupants.



Figure 12 Acoustic Tile Ceiling in Community Room

COST ESTIMATE

Table 24 presents the cost estimate to replace the dropped acoustical tile ceiling in the common area.

Table 24: Replace Dropped Acoustical Tile Ceiling in Common Area

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Suspended Acoustic Panel	2,285	SF	\$8.20	\$18,737





Replace Cabinets, Countertops, and Appliances in All Units

SUMMARY

Unit kitchens are in decent condition and show signs of normal wear and tear, with certain cases of extremely heavy use and advanced wear and tear. The cabinets, countertops, and appliances are in fair condition and should be considered for upgrading and replacement. Current building maintenance staff has done an admirable job over the recent years in repairing cabinets as units have turned over. However, the wear and tear of tenants and shoddy repair that occurred prior to the current building maintenance staff is apparent. It is recommended that the kitchen cabinets and countertops in all the units be replaced with quality materials that will stand up to normal wear and tear over the years. Additionally, it is recommended that appliances be replaced with new energy efficient items that will provide a reasonable ROI for the housing authority.

This work will require an architectural consultant. It is assumed that this work will be packaged with other work required to be completed by an architect.





Figure 13 Typical Kitchen

COST ESTIMATE

Table 25 presents the cost estimate to replace cabinets, countertops, and appliances in All Units.

Table 25: Replace Fixtures and Finishes in Bathrooms in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Wall Cabinets	2,124	LF	\$432.60	\$ 918,843
Base Cabinets	1,195	LF	\$478.71	\$ 572,059
Countertops	970	LF	\$ 87.07	\$ 84,458
Range / Stove	96	Each	\$658.55	\$ 63,221
Range Hood	96	Each	\$218.46	\$ 20,973
Refrigerator	96	Each	\$875.10	\$ 84,010





ADDITIONAL LONG-TERM PHYSICAL NEEDS

Install Fall Protection in Boiler Room

SUMMARY

The building code requires 42" above finished floor fall protection be installed if the unprotected height is 30" or more. The guardrails preventing worker injury in the boiler room are not of adequate height at the level above the stairs, or at the stair landing.



Figure 14 Inadequate Fall Protection in Boiler Room

COST ESTIMATE

Table 26 presents the cost estimate of installing adequate railing in the Dunbar Heights boiler room.

Table 26: New 42" Railing Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
New 42" Railing	450	LF	\$35	\$15,750





Provide Landscaping at Apartment Entrance

SUMMARY

The grading of Dunbar Heights is steep from front to back. Over the years, rainwater has washed out much of the soil behind paved areas leading to apartments. If any ledge or pathway is adjacent to grade that is 24" below the surface of the path, a railing is required. Adding backfill around these paths and creating positive drainage away from the pathway and buildings will ensure the safety of residents and protection of the building systems for years into the future.



Figure 15 Typical Grading Condition

COST ESTIMATE

Table 26 presents the cost estimate to provide landscaping to ensure apartment entrances are no more than 24-inches above grade without a railing.

Table 27: Landscaping Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Landscape Redesign and Infill	50	CY	\$ 425	\$ 21,250





Replace Fixtures and Finishes in Bathrooms in All Units

SUMMARY

The bathrooms are in moderate condition and should be considered for modernization. The toilets installed throughout Dunbar Heights are primarily 1.6 gpf type toilets and are generally fairly new. However, to the extent feasible, replacing with dual flush, super low flow toilets should be considered. It is recommended that the vanities, sinks, and ceramic tile floor and walls be replaced in the relatively near future as all have approached, or exceeded, their useful life. This is ultimately because of heavy use from the tenants.

This work will require an architectural consultant. It is assumed that this work will be packaged with other work required to be completed by an architect.





Figure 16 Typical Bathroom Condition

COST ESTIMATE

Table 28 presents the cost estimate to replace fixtures and finishes in the bathrooms of all the units.

Table 28: Replace Fixtures and Finishes in Bathrooms in All Units

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Toilet	112	Each	\$1,038.96	\$116,364
Sink with Fixtures	112	Each	\$1,006.75	\$112,756
Bathroom Vanity	101	Each	\$ 215.27	\$ 21,743
Ceramic Tile Floor	6,276	SF	\$ 23.75	\$149,055
Ceramic Tile Wall Surface	13,843	SF	\$ 16.89	\$233,808





Replace Storm Doors

SUMMARY

Currently each unit at dunbar heights has a storm door that helps protect the exterior door from weather and allows ventilation on days where the weather is nice, while maintaining a barrier to entering each unit. From the field team's observations, most of the doors were hard to operate. Not only were the storm doors hard to operate, but also many residents voiced displeasure at the orientation of screen door handle to the wooden door handle. Residents would prefer the hinges of the storm door be on the same side of the door frame as their wooden door.





COST ESTIMATE

Table 29 presents the cost estimate to replace the storm doors.

Table 29: Replace Storm Doors Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Storm Doors	197	Each	\$972.66	\$191,614





Replace Door Knobs with Lever Handles

SUMMARY

The doors throughout the units are all operated with a standard knob. Knob handles provide a benefit in their affordability and availability but are generally harder to operate by the elderly and those with certain disabilities. It is recommended that the housing authority consider replacing all door knobs with levers to mitigate any of these issues.





COST ESTIMATE

Table 29 presents the cost replace door knobs with lever handles.

Table 30: Replace Door Knobs with Lever Handles

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Interior Door Lever Handles	776	Each	\$34.18	\$ 26,534
Front Door Lever Handles	192	Each	\$75.12	\$ 14,423





Scrape and Repaint Back Door Lintels

SUMMARY

Perhaps a product of the failures of the back-door roofing structures, most lintels over the back doors at dunbar heights exhibited rust and paint flaking. In the worst-case scenario, a cracked lintel can lead to failure of the system and extensive damage. At a minimum a rusted lintel can crack through the grout of the façade, potentially damaging rows of face brick themselves. When scraping and refinishing lintels, care should be taken to ensure that as the brick façade soaks water, there are still adequate means for water to escape being trapped on top of the door lintel, creating a pool that degraded the steel and brick.





Figure 17 Degrading Lintels

COST ESTIMATE

Table 29 presents the cost estimate to scrape and repaint back door lintels.

Table 31: Scrape and Repaint Back Door Lintels Cost Estimate

Component	Quantity	Unit of Measure	Cost per unit	Total Cost
Scrape and Repaint Back Door Lintels	96	Each	\$ 94	\$ 9,024





TOTAL PHYSICAL NEEDS SUMMARY

Basis for Cost Estimates

The cost estimates presented in the PNA report are largely based upon the values published by the RS Means Company in its suite of 2018 manuals. In areas where standard unit prices are not sufficient, such as recessing electrical conduit in apartments, estimates were built considering the material cost, labor rates, and estimated hours to complete the work. This type of estimating provides a more accurate cost for discrete areas of work where labor is the primary driver of the overall cost. The cost estimates are derived from applicable line items, modified by applying appropriate multipliers as documented in the following table.

Please note the following about the multiplier values:

- A contingency of 20% is utilized. This contingency amount is to intended cover the costs of incidental
 equipment (such as small valves, electrical connections to equipment, etc.) and minor hidden conditions. It
 is not intended to cover new components or systems not presently part of the building's major
 environmental remediation (e.g., asbestos removal), or accommodation/correction of a major hidden
 condition.
- Unless otherwise noted, the cost multipliers include design costs for architectural and engineering services.
- The cost estimating multipliers do not include identification, employee and occupant protection, abatement, encapsulation or transport of asbestos, lead paint, lead piping, or other hazardous materials that may be affected during project and implementation.
- These multipliers do not include the cost of construction management, commissioning or other professional services.





	Cost Estimating	Multipliers		
So	urce: 2018 Means Cost Estima	ting Manuals (Unless No	ted)	
Description	Line No.	Architectural	Electrical	Mechanical
Professional Fees				
- Architectural	01-11-31.10-0090	16%		
- Other Disciplines	01-11-31.30-0300/1100		10.1%	10.1%
Contingency				
- Conceptual Design	01-21-16.50-0020	20%	20%	20%
Construction Factors				
- Cut/Patch (Max)	01-21-53.50-0550	5%M / 9%L	5%M / 9%L	5%M / 9%L
- Dust Protection (Max)	01-21-53.50-0850	4%M / 11%L	4%M / 11%L	4%M / 11%L
- Equipment Curtailment (Avg. Min & Max)	01-21-53.50-1100/1150	2%M / 5.5%L	2%M / 5.5%L	2%M / 5.5%L
- Materials Handling/Storage	01-21-53.50/1450	6%	6%	6%
- Protect Existing Work (Avg. Min & Max)	01-21-53.50-1700/1750	3.5%M / 4.5%L	3.5%M / 4.5%L	3.5%M / 4.5%L
Job Conditions				
- Work Space Unavailable	01-21-55.50-1400	5% M,L	5% M,L	5% M,L
- Sales Tax (New York)		7.375% M,L	7.375% M,L	7.375% M,L
Insurance				
- Builders Risk (Avg. Min & Max)	01-31-13.30-0020/0050	0.44% M,L	0.44% M,L	0.44% M,L
- Public Liability	01-31-13.30-0600	2.02% M,L	2.02% M,L	2.02% M,L
	01-31-13.30-1000		5.22%L	
Madrada Carra a a Mar (Ara)	01-31-13.30-1550			8.27%L
- Worker's Compensation (Avg.)	01-31-13.30-1450			6.94%L (Plumbing)
	01-31-13.30-2100	11.53%L		
Sub-contractor Overhead & Profit	01-31-13.80-0350	25%	25%	25%
Performance Bond (Max)	01-13-13.90-0100	2.5%	2.5%	2.5%
Permits (Avg. Min & Max)	01-41-26.50-0020/0100	1.25%	1.25%	1.25%
Geographic Multipliers				
- Site	.913M / 1.112L			
- All Other Disciplines (Avg.)		1.034M / 1.323L	0.975M / 1.7L	1.041M / 1.417L

*Avg: Average; L: Labor; M: Materials; Max: Maximum; Min: Minimum

Note: The cost estimating multipliers do not include identification, employee and occupant protection, abatement, encapsulation or transport of existing environmental, hazards such as asbestos-containing materials, lead-based paint, underground oil storage tanks, etc.





Component Inventory

Line ID	Component	Line Item	Install Year (in yrs)	Estimated Useful Life (in yrs)	Remaining Useful Life (in yrs)	Method	Total Quantity	Cost Per Quantity	One time replacement Cost (\$)
1007	Fensing and Cates	Site Chain Link - 4' High	2013	10	-	LF	3340	\$ 23.32	\$ 77,888.80
1007	Fencing and Gates Fencing and Gates	Chain Link - 4 High	2013	10		LF	55		
1221	Mailboxes/Project Signs	Metal Site Signs	2011	20		Each	32		
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	2007	10		LF	1825		
1331	Parking Lots/Driveways/Roads Parking Lots/Driveways/Roads	Parking Asphalt (Sealing)	2006	25	18		15357		
1341	Parking Lots/Driveways/Roads Parking Lots/Driveways/Roads	Parking, Asphare (Sealing) Parking, Bollards	1951	75		Each	31		
1370	Parking Lots/Driveways/Roads Parking Lots/Driveways/Roads	-	1951	50	-17		678		
1431	Play Areas and Equipment	Curbing - Concrete Basketball Backboard	1996	30		Each	3		
1450		Site Furniture	2001	20		Each	18		,,
1450	Play Areas and Equipment Play Areas and Equipment	Play Structure/Play Equipment	2001	20		Each	2		
1510	Refuse Disposal	Dumpster/Trash Enclosure	1951	50	-17		450		
1610	Retaining Walls	Retaining Wall, Concrete	1951	50	-17		3012		
1710	Walkways/Steps	Pedestrian Paving - Concrete	2010	25	17		17711		
1750	Walkways/Steps Walkways/Steps	Sidewalk Handrails	1951	75		LF	804		
1810		Pole Mounted Lighting	2016	20		Each	16		
1840	Lighting Electrical System	Underground Electrical Distribution	1951	40		Each	10	\$ 290,218.33	
1910	Sanitary System	Site Sanitary Line	1963	50		LF	900		
1920	Domestic Water	Site Water Lines	1973	40		LF	900		
1920		Storm Drain Lines	1973	50		LF	900		
1930	Storm Drainage Plumbing	Site Gas Lines	1951	75		LF	900		
Site Subtotals		Site das Lines	1931	/3	0	LF	900	\$ 342.00	\$ 1,702,999.81
Site Subtotals		Building Exterior							\$ 1,702,999.81
2220	Roofs	Asphalt Shingles - Bldgs A-J	2015	40	37	CF	41927	\$ 3.93	\$ 164,773.11
2220	Roofs	Asphalt Shingles - Bldgs M-K	2015	40	39		12550		
2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	2017	40	37		22765		
2290	Roofs	Attic/Ceiling Insulation	1951	50	-17		48190		
2290	Floors	Floor Insulation	1951	50	-17		43570		
2291	Walls	Wall Insulation	1951	50	-17		54415		
2312	Walls	Brick Or Concrete Block	1951	60	-17		49428		
2341	Walls	Vinyl Siding	1996	30		SF	2187		
2343	Walls	Wood Shingle, Clapboard, Plywood, Stucco	1951	75		SF	2800	\$ 15.47	
2370	Walls	Caulking & Sealant	1995	20		LF	15406	\$ 4.45	
2380	Walls	Soffit/Fascia (Metal Or Vinyl or Hardboard or Stucco)	1951	75		LF	20324		
2392	Walls	Wall Mounted Mailbox	2010	10		Each	96		
2420	Doors/Exterior	Aluminum/Hollow Metal and Glass	1995	50		Each	197		
2420	Doors/Exterior	Storm/Screen Doors	1995	20		Each	197		
2430	Windows	Windows	1995	50	27		10034		
2430	Windows	Storm/Screen Windows	1995	40	17		10034		
2431	Windows	Window Security Bars	1995	40		Each	200		
	rior Subtotals	William Security bals	1993	40	1/	Lacii	200	2,230.87	\$ 4,080,810.65





		Building Systems							
2510	Fire Protection	Smoke/Fire Detection Infrastructure	2015	15	12	SF	127618	\$ 3.26	\$ 416,034.68
2522	Communication Systems	Phone System	1995	50	27	SF	127618	\$ 3.05	\$ 389,234.90
2523	Communication Systems	Television Cable	2010	50	42	SF	127618	\$ 1.54	\$ 196,531.72
2630	Lighting	Building Mounted Exterior Lighting	2016	6	4	Each	196	\$ 658.51	\$ 129,067.96
2630	Lighting	Building Mounted Exterior Lighting	2012	6	0	Each	49	\$ 658.51	\$ 32,266.99
2631	Security	Security System	1958	15	-45	SF	127618	\$ 1.02	\$ 130,170.36
2831	Central HVAC	Heating Hot Water Circulation Pump	2015	15	12	Each	2	\$ 15,122.53	\$ 30,245.06
2839	Central HVAC	Boiler	2015	30	27	Each	2	\$ 436,480.17	\$ 872,960.34
2844	Central HVAC	Boiler Room Piping	1951	75	8	LF	66	\$ 86.64	\$ 5,718.24
2846	Central HVAC	Boiler Room Valves	2015	40	37	Each	2	\$ 331.80	\$ 663.60
2847	Central HVAC	Boiler Temperature Controls	2015	50	47	Each	2	\$ 1,367.95	\$ 2,735.90
2848	Central HVAC	Hydronic Piping	1951	50	-17	LF	584	\$ 122.10	\$ 71,306.40
2915	Domestic Water	Domestic Water Booster Pump	1995	15	-8	Each	1	\$ 19,960.06	\$ 19,960.06
2917	Domestic Water	Hot Water Storage Tank	1995	50		Each	1		
2940	Sanitary System	Sanitary Distribution - Cast Iron	1983	40	5	LF	250	\$ 132.17	\$ 33,042.50
Building Syste		,							\$ 2,409,593.80
		Common Areas							
3151	Local HVAC	Thermostat	2006	15	3	Each	1	\$ 377.22	\$ 377.22
3152	Local HVAC	Split System Air Conditioner	2006	20	8	Each	1	\$ 9,796.32	\$ 9,796.32
3156	Local HVAC	Wall Radiator	1951	50	-17	Each	9	\$ 118.32	\$ 1,064.88
3160	Fire Protection	Smoke/Fire Detectors	2004	15	1	SF	6009	\$ 3.05	\$ 18,327.45
3172	Emergency/Fire Exits	Exit Signs/Lights	1995	20	-3	Each	3	\$ 861.61	\$ 2,584.83
3174	Lighting	Lighting Fixtures - 2'x2'	1998	20	0	Each	14	\$ 989.30	\$ 13,850.20
3175	Lighting	Lighting Fixtures - Surface Mounted Incandescent	1998	20	0	Each	8	\$ 454.04	\$ 3,632.32
3177	Lighting	Lighting Fixtures - Surface Mounted Flourescent 1'x4'	1998	20	0	Each	19	\$ 398.68	\$ 7,574.92
3178	Lighting	Lighting Fixtures - Surface Mounted Flourescent 2'x4'	1998	20	0	Each	9	\$ 453.21	\$ 4,078.89
3181	Domestic Water	Hot and Cold Water Distribution - Copper/PVC	1951	50	-17	LF	250	\$ 861.61	\$ 215,402.50
3193	Electrical	Electrical Distribution System	1970	50	2	SF	6009	\$ 2.83	\$ 17,005.47
3220	Floors/Stairs	Unfinished	1951	50	-17	Riser	22	\$ 1,562.82	\$ 34,382.04
3224	Floors/Stairs	Rubber Stair Coating	1998	10	-10	LF	33	\$ 60.40	\$ 1,993.20
3230	Accessibility	Interior Railings	1951	50	-17	LF	8	\$ 109.35	\$ 874.80
3310	Doors/Interior	Door, Interior	1993	30	5	Each	24	\$ 677.67	\$ 16,264.08
3312	Windows	Blinds and Drapes	2005	20		SF	240	\$ 16.94	\$ 4,065.60
3330	Ceiling	Suspended Acoustic Panel	1996	20	-2	SF	2285	\$ 8.20	\$ 18,737.00
3420	Floors	Ceramic/Quarry Tile/Terrazzo	1951	75	8	SF	268	\$ 27.75	\$ 7,437.00
3430	Floors	Resilient	1998	15	-5	SF	2333	\$ 5.47	\$ 12,761.51
3460	Floors	Baseboard (Wood or Resilient)	1998	15	-5	LF	416	\$ 6.83	\$ 2,841.28
3461	Floors	Baseboard (Tile)	1998	15	-5	LF	71	\$ 29.34	\$ 2,083.14
3530	Walls	Wall Surface - Gypsum Board	1951	75	8	SF	3328	\$ 5.73	\$ 19,069.44
3580	Walls	Wall Surface - Ceramic Tile/Stone	1998	50	30	SF	568	\$ 17.89	\$ 10,161.52
3610	Kitchen	Wall Cabinets	1995	15	-8	LF	16	\$ 432.60	\$ 6,921.60
3611	Kitchen	Base Cabinets	1995	15	-8	LF	13	\$ 478.71	\$ 6,223.23
3612	Kitchen	Counter Top	1995	20	-3	LF	12	\$ 87.07	\$ 1,044.84
3620	Kitchen	Sink with Fixtures	1998	35	15	Each	1	\$ 349.03	\$ 349.03
3630	Kitchen	Range/Stove	1998	15	-5	Each	1	\$ 658.55	\$ 658.55
3640	Kitchen	Refrigerator	1998	15	-5	Each	1	\$ 875.10	\$ 875.10
3710	Restrooms/Pool Structures	Public Toilet and Bath Accessories	1995	7	-16	Each	6	\$ 2,340.67	\$ 14,044.02
3711	Restrooms/Pool Structures	Public Urinal and Accessories	1995	30	7	Each	1	\$ 2,747.08	\$ 2,747.08
3720	Restrooms/Pool Structures	Public Restroom and Bath Plumbing Fixtures	1995	35	12	Each	6	\$ 3,809.93	\$ 22,859.58
3730	Restrooms/Pool Structures	Public Restroom and Bath Partitions	1995	35	12	Each	4	\$ 1,932.89	\$ 7,731.56
3731	Restrooms/Pool Structures	Shower, Fiberglass	1995	35	12	Each	1	\$ 1,452.92	\$ 1,452.92
3810	Laundry Room	Laundry Sink w/Fixtures	1995	20	-3	Each	1	\$ 1,863.58	\$ 1,863.58
Common Are	as Subtotals								\$ 491,136.70





		II-la						
4134	Local HVAC	Thermostatic Control Valve (Radiator)	2010	20	12 Each	540 Å	247.86	\$ 128.391.48
						518 \$		+ =====================================
4138 4155	Local HVAC Local HVAC	Wall Radiator	1951 1951	50 50	-17 Each -17 LF	518 \$ 7643 \$	118.32 35.79	, , , , , , , , , , , , , , , , , , , ,
		Hydronic Piping						
4160	Smoke Detectors	Smoke/Fire Detectors	2004	15	1 Each	400 \$	334.97	
4171	Lighting	Interior Lighting (In Unit)	1995	20	-3 Each	96 \$	475.67	
4172	Lighting	Interior Lighting (In Unit) - Surface Mounted Incandescent	1995	20	-3 Each	42 \$	454.04	/
4173	Lighting	Lighting Fixtures - Surface Mounted Flourescent 1'x4'	1995	20	-3 Each	321 \$	398.68	
4181	Domestic Water	Hot and Cold Water Distribution - Copper / PVC	1951	50	-17 LF	8505 \$	30.40	
4194	Electrical	Electrical Distribution System	1951	50	-17 LF	123732 \$	2.03	
4221	Floors/Stairs	Wood	1951	40	-27 Flight	92 \$	4,995.53	
4310	Doors/Interior	Door, Interior	1993	30	5 SF	804 \$	677.67	+
4311	Doors/Interior	Sliding Door, Interior	1993	29	4 Each	136 \$	685.76	\$ 93,263.36
4312	Windows	Blinds and Drapes	2013	20	15 Each	11765 \$	16.94	\$ 199,299.10
4350	Ceiling	Gypsum Board or Plaster	1951	75	8 SF	123732 \$	6.74	
4420	Floors	Ceramic/Quarry Tile/Terrazzo	1951	75	8 SF	6276 \$	27.75	\$ 174,159.00
4430	Floors	Resilient	1998	18	-2 SF	117456 \$	5.47	\$ 642,484.32
4460	Floors	Baseboard (Wood or Resilient)	1998	15	-5 SF	36492 \$	8.44	\$ 307,992.48
4530	Walls	Wall Surface - Gypsum Board	1951	75	8 SF	276555 \$	5.73	\$ 1,584,660.15
4580	Walls	Wall Surface - Ceramic Tile/Stone	1951	75	8 SF	15381 \$	17.89	\$ 275,166.09
4610	Kitchen	Wall Cabinets	1995	15	-8 SF	2124 \$	432.60	\$ 918,842.40
4611	Kitchen	Base Cabinets	1995	15	-8 SF	1195 \$	478.71	\$ 572,058.45
4612	Kitchen	Counter Tops	1995	20	-3 SF	970 \$	87.07	\$ 84,457.90
4620	Kitchen	Sink with Fixtures	1998	35	15 LF	96 \$	784.16	\$ 75,279.36
4630	Kitchen	Range / Stove	1998	15	-5 LF	96 \$	658.55	\$ 63,220.80
4632	Kitchen	Range Hood	1998	15	-5 Each	96 \$	218.46	\$ 20,972.16
4633	Kitchen	Grease Shield	1998	15	-5 Each	23 \$	52.84	\$ 1,215.32
4640	Kitchen	Refrigerator	1998	15	-5 Each	96 \$	875.10	\$ 84,009.60
4710	Bathroom	Bath Accessories	2007	10	-1 Each	112 \$	45.81	\$ 5,130.72
4720	Bathroom	Bathtubs / Shower Units	1997	35	14 Each	112 \$	3,698.73	
4721	Bathroom	Toilet	1997	25	4 Each	112 \$		\$ 138,763.52
4722	Bathroom	Sink with Fixtures	1997	35	14 Each	112 \$	1,006.75	
4740	Bathroom	Bathroom Vanities	1997	20	-1 Each	101 \$	215.27	
4750	Bathroom	Medicine Cabinets	1997	20	-1 Each	112 \$	339.77	
4760	Bathroom	Exhaust Fans	2002	10	-6 Each	112 \$	266.50	,
4831	Laundry	Residential Dryer Hookup	2008	30	20 Each	96 \$	94.26	
4832	Laundry	Residential Washer Hookup	1998	10	-10 Each	96 \$	136.41	
Unit Subtotal		nesidential Waster Hookup	1330	10	-IO Edili	30 3		\$ 9,017,816.89
Onic Subtotal	3	GRAND TOTAL						5,517,610.05





Development Projection Outlook – Years 1 through 10

Category	2018	2019	2020	2021		2022		2023	2024	2025		2026		2027
Site				Years 1 - 5	\$	891,649.42						Years 6 - 10	\$	606,486.78
Chain Link - 4' High	\$ -	\$ -	\$ -	\$ -	\$		\$	77,888.80 \$		\$ -	\$		\$	-
Chain Link - 6' High	\$ -	\$ -	\$ -	\$ 1,941.50	\$		\$	- \$		\$ -	\$		\$	-
Metal Site Signs	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$		\$ -	\$	-	\$	813.12
Parking Stripes And Curb Painting (Traffic Paint)	\$ 1,770.25	\$ -	\$ -	\$ -	\$	-	\$	- \$		\$ -	\$	-	\$	-
Parking, Asphalt (Sealing)	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Parking, Bollards	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$	-	\$ -	\$	75,508.25	\$	-
Curbing - Concrete	\$ 18,082.26	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$		\$	-
Basketball Backboard	\$ -	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	16,850.49	\$	-
Site Furniture	\$ -	\$ -	\$ -	\$ 25,985.34	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Play Structure/Play Equipment	\$ -	\$ -	\$ -	\$ 20,427.30	\$		\$	- \$	-	\$ -	\$	-	\$	-
Dumpster/Trash Enclosure	\$ 54,729.00	\$ -	\$ -	\$ -	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Retaining Wall, Concrete	\$ 366,319.44	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	-	\$	-
Pedestrian Paving - Concrete	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$		\$ -	\$	-	\$	-
Sidewalk Handrails	\$ -	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	80,826.12	\$	-
Pole Mounted Lighting	\$ -	\$ -	\$ -	\$ -	Ś	-	Ś	- Š		\$ -	S	-	Ś	
Underground Electrical Distribution	\$ 290.218.33	\$ -	\$ -	\$ -	Ś		Ś	- Ś		\$ -	Ś		Ś	-
Site Sanitary Line	\$ 15,372.00	\$ -	\$ -	\$ -	Ś	-	Ś	- \$		Š -	Ś	-	Ś	-
Site Water Lines	\$ 96,804.00	\$ -	Š -	\$ -	Ś		Ś	- Š		\$ -	Ś		Ś	
Storm Drain Lines	\$ -	\$ -	\$ -	\$ -	Ś		Ś	46.188.00 S		\$ -	Ś		Ś	-
Site Gas Lines	Š -	\$ -	Š -	\$ -	Ś		Ś	- Ś		\$ -	Ś	308,412.00	Ś	-
	\$ 843,295.28	\$ -	\$ -	\$ 48,354,14	Ś		Ś	124,076.80 \$		\$ -	Ś	481,596,86	Ś	813.12
Building Exterior	* 0.0,200.20	*	*	Years 1-5		1,040,795.65	•	an iyer elee		*		Years 6 - 10	Š	272,692.15
Asphalt Shingles - Bldgs A-J	\$ -	\$ -	\$ -	\$ -	Š	1,040,733.03	\$	- Ś		\$ -	Ś		Š	2/2,032.23
Asphalt Shingles - Bldgs M-K	\$ -	\$ -	\$ -	\$ -	ć		3	- 5	-	\$.	Ś	-	Ś	
Roof Drainage Exterior (Gutter And Fascia)	š -	\$ -	\$ -	\$ -	č	-	Ś	- 5	-	\$ -	č	-	Ś	
Attic/Ceiling Insulation	\$ 162,882.20	\$ -	\$ -	\$ -	Ś	-	Ś	- \$		\$ -	5	-	Ś	
Floor Insulation	\$ 194,757.90	\$ -	\$ -	\$ -	Š	-	Ś	- 5		\$ -	Ś		Ś	
Wall Insulation	\$ 144,199.75	\$ -	\$ -	\$ -	Ś	-	Ś	- 5		\$ -	5	-	Ś	
Brick Or Concrete Block	\$ 272,348.28	\$ -	\$ -	-	2	-	Ś	¥		\$ -	Ś	-	Ś	
		*	*	\$ -	\$	-	\$	<u>.</u>		\$ -	2		*	
Vinyl Siding	\$ - \$ -	\$ -	\$ -	\$ -	\$	-	-	- \$	-	\$ -	\$	16,380.63	\$	-
Wood Shingle, Clapboard, Plywood, Stucco		*	7	\$ -	*	-	\$	Ÿ	-	7	\$	43,316.00	\$	-
Caulking & Sealant	\$ 68,556.70	\$ -	\$ -	\$ -	\$		\$	- \$	-	\$ -	\$	-	\$	-
Soffit/Fascia (Metal Or Vinyl or Hardboard or Stucco)	\$ -	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	212,995.52	\$	-
Wall Mounted Mailbox	\$ -	\$ -	\$ 6,436.80	\$ -	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Aluminum/Hollow Metal and Glass	\$ -	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	-	\$	-
Storm/Screen Doors	\$ 191,614.02	\$ -	\$ -	\$ -	\$	-	\$	- \$		\$ -	\$		\$	-
Windows	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Storm/Screen Windows	\$ -	\$ -	\$ -	\$ -	\$	-	\$	- \$	-	\$ -	\$	-	\$	-
Window Security Bars	\$ -	\$ -	\$ -	\$ -	\$		\$	- \$		\$ -	\$	-	\$	-
	\$ 1,034,358.85	\$ -	\$ 6,436.80	\$ -	\$		\$	- \$		\$ -	\$	272,692.15	\$	





Cotonon	2018	2019	2020	2021		2022	2023	2024	2025	2026	2027
Category Building Systems	2018	2019	2020	Years 1 - 5	\$	382,771.77	2025	2024	2025	Years 6 - 10	\$ 71,027.73
Smoke/Fire Detection Infrastructure	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Phone System	\$ -	Š -	\$ -	Š -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Television Cable	\$ -	\$ -	\$ -	Š -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Building Mounted Exterior Lighting	\$ -	\$ -	\$ -	Š -	Ś	129.067.96	\$ -	\$ -	\$ -	\$ -	\$ -
Building Mounted Exterior Lighting	\$ 32,266.9	9 5 -	Š -	\$ -	Ś	-	\$ -	\$ 32,266.99	\$ -	\$ -	\$ -
Security System	\$ 130,170.3		\$ -	Š -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Heating Hot Water Circulation Pump	\$ -	\$ -	\$ -	š -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler	Š -	\$ -	\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Boiler Room Piping	Š -	Š -	š -	š -	Š	-	\$ -	Š -	\$ -	\$ 5.718.24	\$ -
Boiler Room Valves	\$ -	\$ -	\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ 5,710.24	\$ -
Boiler Temperature Controls	\$ -	\$ -	\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Hydronic Piping	\$ 71,306.4	*	\$ -	\$ -	Š		\$ -	\$ -	ė .	\$ -	\$ -
Domestic Water Booster Pump	\$ 19,960.0		\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
Hot Water Storage Tank	\$ 19,960.0	\$ -	\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	Ś		\$ 33.042.50	\$ -	\$ -	\$ -	\$.
Sanitary Distribution - Cast Iron	\$ 253,703.8	*	\$ -	\$ -	\$	129.067.96	\$ 33,042.50	\$ 32,266.99	*	\$ 5,718.24	\$ -
Common Areas	\$ 253,703.8	1 5	÷ -	Years 1-5	3	389,202,57	\$ 33,042.50	\$ 32,266.99	\$ -		\$ 73,423.54
Thermostat	\$ -	s -	\$ -	\$ 377.22		389,202.57	\$ -	\$ -	\$ -	Years 6 - 10	\$ 73,423.54
Split System Air Conditioner	\$ -	\$ -	\$ -	\$ 377.22	Ś	-	\$ -	\$ -	\$ -	\$ 9,796.32	\$ -
Wall Radiator	\$ 1.064.8	*	\$ -	\$ -	Ś	-	\$ -	\$ -	\$ -	\$ 9,790.32	\$ -
	\$ 1,064.8	\$ 18,327,45	\$ -	\$ -	Š	-	\$ -	\$ -	\$ -	*	\$ -
Smoke/Fire Detectors	*		*	*	*		*	*	·	*	*
Exit Signs/Lights	\$ 2,584.8		\$ -	*	\$	-	Ŧ	\$ -		\$ -	7
Lighting Fixtures - 2'x2'	\$ 13,850.2		\$ -	\$ -	\$	-	\$ -	\$ -	7	\$ -	7
Lighting Fixtures - Surface Mounted Incandescent	\$ 3,632.3		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Lighting Fixtures - Surface Mounted Flourescent 1'x4'	\$ 7,574.9		\$ -	7	\$	-	\$ -	\$ -	7	\$ -	7
Lighting Fixtures - Surface Mounted Flourescent 2'x4'	\$ 4,078.8		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Hot and Cold Water Distribution - Copper/PVC	\$ 215,402.5	- ·	\$ -	*	\$	-	\$ -	\$ -	\$ -	\$ -	7
Electrical Distribution System	\$ -	\$ -	\$ 17,005.47	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Unfinished	\$ 34,382.0	_	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Rubber Stair Coating	\$ 1,993.2	-	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Railings	\$ 874.8	_	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$
Door, Interior	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 16,264.08	\$ -	\$ -	\$ -	\$ -
Blinds and Drapes	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ 4,065.60	\$ -	\$
Suspended Acoustic Panel	\$ 18,737.0		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Ceramic/Quarry Tile/Terrazzo	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ 7,437.00	\$ -
Resilient	\$ 12,761.5		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Wood or Resilient)	\$ 2,841.2	-	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Baseboard (Tile)	\$ 2,083.1	_	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Surface - Gypsum Board	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ 19,069.44	\$ -
Wall Surface - Ceramic Tile/Stone	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Wall Cabinets	\$ 6,921.6		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Base Cabinets	\$ 6,223.2		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Counter Top	\$ 1,044.8	_	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Sink with Fixtures	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Range/Stove	\$ 658.5		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Refrigerator	\$ 875.1		\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Public Toilet and Bath Accessories	\$ 14,044.0		\$ -	\$ -	\$	-	\$ -	\$ -	\$ 14,044.02	\$ -	\$ -
Public Urinal and Accessories	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ 2,747.08	\$ -	\$ -
Public Restroom and Bath Plumbing Fixtures	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Public Restroom and Bath Partitions	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Shower, Fiberglass	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$	\$ -
Laundry Sink w/Fixtures	\$ 1,863.5	8 \$ -	\$ -	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ 353,492,4	3 \$ 18,327.45	\$ 17,005.47	\$ 377.22	¢		\$ 16,264.08	\$ -	\$ 20,856,70	\$ 36,302.76	\$ -





Category Units	2018	2019	2020		2021 Years 1 - 5	\$	2022 4,665,998.63		2023	2024	2025	2026 Years 6 - 10	\$	2027 3,412,785.60
Thermostatic Control Valve (Radiator)	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Wall Radiator	\$ 61,28	9.76 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$	\$ -	\$	-
Hydronic Piping	\$ 273,54	2.97 \$ -	\$	- 5	\$ -	\$		\$		\$ -	\$	\$ -	\$	-
Smoke/Fire Detectors	\$	- \$ 133,988.00	\$	- 5	\$ -	\$		\$	-	\$ -	\$	\$ -	\$	-
Interior Lighting (In Unit)	\$ 45,66	1.32 \$ -	\$	- 5	\$ -	\$		\$		\$ -	\$ -	\$ -	\$	-
Interior Lighting (In Unit) - Surface Mounted Incandescent	\$ 19,06	9.68 \$ -	\$	- 5	\$ -	\$		\$		\$ -	\$ -	\$ -	\$	-
Lighting Fixtures - Surface Mounted Flourescent 1'x4'	\$ 127,97	5.28 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Hot and Cold Water Distribution - Copper / PVC	\$ 258,55	2.00 \$ -	\$	- 5	\$ -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
Electrical Distribution System	\$ 251,17	5.96 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Wood	\$ 459,58	3.76 \$ -	\$	- 5	s -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
Door, Interior	\$	- \$ -	\$	- 5	\$ -	\$		\$	544,846.68	\$ -	\$ -	\$ -	\$	-
Sliding Door, Interior	\$	- \$ -	\$	- 5	\$ -	\$	93,263.36	\$	-	\$ -	\$ -	\$ -	\$	-
Blinds and Drapes	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Gypsum Board or Plaster	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ 833,953.68	\$	-
Ceramic/Quarry Tile/Terrazzo	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ 174,159.00	\$	-
Resilient	\$ 642,48	1.32 \$ -	Ś	- 5	<u>.</u>	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Baseboard (Wood or Resilient)	\$ 307,99	2.48 \$ -	Š	-	5 -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Wall Surface - Gypsum Board	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ 1,584,660.15	\$	-
Wall Surface - Ceramic Tile/Stone	S	- S -	S	- 5	\$ -	\$		\$		\$ -	\$ -	\$ 275,166.09	\$	-
Wall Cabinets	\$ 918,84	2.40 \$ -	\$	- 5	š -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Base Cabinets	\$ 572,05	3.45 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Counter Tops	\$ 84,45	7.90 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Sink with Fixtures	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Range / Stove	\$ 63,22	0.80 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Range Hood	\$ 20,97	2.16 \$ -	S	- 5	\$ -	\$		\$		\$ -	\$ -	\$ -	\$	-
Grease Shield	\$ 1,21	5.32 \$ -	\$	- 5	\$ -	\$		\$		\$ -	\$ -	\$ -	\$	-
Refrigerator	\$ 84,00	9.60 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Bath Accessories	\$ 5,13	0.72 \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Bathtubs / Shower Units	\$	- \$ -	\$	- 5	\$ -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Toilet	\$	- \$ -	\$	- 5	\$ -	\$	138,763.52	\$	-	\$ -	\$ -	\$ -	\$	-
Sink with Fixtures	Š	- Š -	Š	-	5 -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Bathroom Vanities	\$ 21,74	2.27 \$ -	\$	-	· -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
Medicine Cabinets	\$ 38,05	1.24 \$ -	\$	-	ş -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Exhaust Fans	\$ 29,84	3.00 \$ -	\$	- 5	· -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
Residential Dryer Hookup	\$	- \$ -	\$	-	ş -	\$		\$	-	\$ -	\$ -	\$ -	\$	-
Residential Washer Hookup	\$ 13,09	5.36 \$ -	\$	- 5	· -	\$	-	\$	-	\$ -	\$ -	\$ -	\$	-
	\$ 4,299,98	3.75 \$ 133,988.00) \$	-	s -	\$	232,026.88	\$	544,846.68	\$ -	\$ -	\$ 2,867,938.92	\$	-
	\$ 6,784,83	.12 \$ 152,315,4	\$ 23,44	2.27	\$ 48,731.36	S	361,094.84	Ś	718,230.06	\$ 32,266.99	\$ 20,856.70	\$ 3,664,248.93	S	813.12





Development Projection Outlook – Years 11 through 15

Cohorne		2028		2029	2030		2031		2032
Category		2028		2029	2030	,	Years 11 - 15	\$	3,711.75
Chain Link - 4' High	Ś		\$		\$ -	\$	redis 11 - 15	Š	3,711.73
Chain Link - 6' High	Ś		Ś		\$ -	Ś	1.941.50	Ś	
Metal Site Signs	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Parking Stripes And Curb Painting (Traffic Paint)	Ś	1,770.25	Ś	-	\$ -	Ś	-	Ś	-
Parking, Asphalt (Sealing)	\$	-	Ś	-	\$ -	Ś	-	Ś	-
Parking, Bollards	\$		Ś	-	\$ -	\$	-	\$	-
Curbing - Concrete	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Basketball Backboard	\$	-	\$	-	\$ -	\$	-	Ś	-
Site Furniture	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Play Structure/Play Equipment	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Dumpster/Trash Enclosure	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Retaining Wall, Concrete	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Pedestrian Paving - Concrete	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Sidewalk Handrails	\$	-	Ś	-	\$ -	\$	-	\$	-
Pole Mounted Lighting	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Underground Electrical Distribution	\$	-	Ś	-	\$ -	Ś	-	Ś	-
Site Sanitary Line	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Site Water Lines	\$	-	Š	-	\$ -	Ś	-	Ś	-
Storm Drain Lines	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Site Gas Lines	Ś		Ś	-	\$ -	Ś	-	Ś	-
	Ś	1,770.25	Ś		\$ -	Ś	1,941.50	Ś	-
Building Exterior						1	Years 11 - 15	\$	6,436.80
Asphalt Shingles - Bldgs A-J	\$		Ś		\$ -	Ś	-	Ś	,
Asphalt Shingles - Bldgs M-K	\$	-	Ś		\$ -	Š	-	Ś	-
Roof Drainage Exterior (Gutter And Fascia)	Ś		\$	-	\$ -	\$	-	\$	-
Attic/Ceiling Insulation	Ś		Ś	-	\$ -	Ś	-	Ś	-
Floor Insulation	Ś		Ś	-	\$ -	Ś	-	Ś	-
Wall Insulation	Ś	-	\$	-	\$ -	Ś	-	Ś	-
Brick Or Concrete Block	Ś	-	Ś	-	\$ -	\$	-	Ś	-
Vinyl Siding	Ś	-	Ś		\$ -	Ś	-	Ś	-
Wood Shingle, Clapboard, Plywood, Stucco	Ś	-	Ś		\$ -	Ś	-	Ś	-
Caulking & Sealant	\$		\$	-	\$ -	Ś	-	Ś	-
Soffit/Fascia (Metal Or Vinyl or Hardboard or Stucco)	\$	-	Ś	-	\$ -	Ś	-	Ś	-
Wall Mounted Mailbox	Ś	-	Ś	-	\$ 6,436.80	_	-	Ś	-
Aluminum/Hollow Metal and Glass	\$	-	Ś	-	\$ -	Ś	-	\$	-
Storm/Screen Doors	\$	-	Ś	-	\$ -	Š	-	\$	-
Windows	\$	-	Ś	-	\$ -	Ś	-	\$	-
Storm/Screen Windows	Ś	-	Ś	-	\$ -	Ś	-	Ś	-
Window Security Bars	Ś		Ś	-	\$ -	Ś	-	Ś	-
	Š	-	Ś		\$ 6,436.80	_	-	Ś	-





Cohenny				2020				2031			
Category Building Systems		2028		2029		2030	٠,	Years 11 - 15	\$	2032 607,614.0	
imoke/Fire Detection Infrastructure	\$		\$		\$	416,034.68	\$	rears 11 - 15	\$	607,614.	
hone System	Š		\$	-	\$	410,034.00	\$	-	\$		
elevision Cable	\$	-	Ś	-	\$	-	\$	-	\$		
	\$	129.067.96	Ś		Ś	-	\$	-	Š		
Building Mounted Exterior Lighting	Ś		_		-		-		ŝ		
Building Mounted Exterior Lighting	_	-	\$	-	\$	32,266.99	\$	-	_	-	
ecurity System	\$	-	\$	-	\$	-	\$	-	\$	-	
Heating Hot Water Circulation Pump	\$	-	\$		\$	30,245.06	\$	-	\$	-	
Boiler	\$		\$	-	\$	-	\$	-	\$	-	
Boiler Room Piping	\$	-	\$		\$		\$	-	\$	-	
Boiler Room Valves	\$	-	\$	-	\$	-	\$	-	\$	-	
Boiler Temperature Controls	\$	-	\$	-	\$	-	\$	-	\$	-	
łydronic Piping	\$	-	\$	-	\$	-	\$	-	\$	-	
Domestic Water Booster Pump	\$	-	\$	-	\$	-	\$	-	\$	-	
lot Water Storage Tank	\$	-	\$	-	\$		\$		\$	-	
ianitary Distribution - Cast Iron	\$	-	\$		\$		\$		\$	-	
	\$	129,067.96	\$		\$	478,546.73	\$		\$	-	
Common Areas							1	Years 11 - 15	Ś	48,081.	
hermostat	\$		\$		\$		\$		\$		
plit System Air Conditioner	Ś	-	Ś	-	Ś	-	Ś		Ś	-	
Vall Radiator	Š	-	Ś	-	Ś	-	Ś	-	Ś		
moke/Fire Detectors	Š	-	Ś	-	Ś	-	Ś	-	Ś		
xit Signs/Lights	Š	-	Ś	-	\$	-	Ś	-	Ś		
ighting Fixtures - 2'x2'	\$	-	Ś	-	\$	-	\$	-	\$		
	\$	-	Ś	-	\$		\$		\$		
ighting Fixtures - Surface Mounted Incandescent		-	_	-	•	-	_	-	•		
ighting Fixtures - Surface Mounted Flourescent 1'x4'	\$		\$		\$		\$		\$		
ighting Fixtures - Surface Mounted Flourescent 2'x4'	\$	-	\$	-	\$	-	\$	-	\$		
Hot and Cold Water Distribution - Copper/PVC	\$	-	\$	-	\$	-	\$	-	\$	-	
Electrical Distribution System	\$	-	\$	-	\$	-	\$	-	\$	-	
Infinished	\$	-	\$	-	\$	-	\$	-	\$	-	
Rubber Stair Coating	\$	1,993.20	\$		\$	-	\$	-	\$	-	
nterior Railings	\$	-	\$	-	\$	-	\$	-	\$	-	
Door, Interior	\$	-	\$	-	\$	-	\$	-	\$	-	
Blinds and Drapes	\$	-	\$	-	\$	-	\$		\$	-	
uspended Acoustic Panel	\$	-	\$	-	\$		\$		\$	-	
Ceramic/Quarry Tile/Terrazzo	\$	-	\$	-	\$	-	\$		\$	-	
Resilient	\$	-	\$	-	\$	-	\$		\$	-	
Baseboard (Wood or Resilient)	\$	-	\$	-	\$	-	\$		\$	-	
Baseboard (Tile)	\$	-	Ś		\$		Ś		Ś		
Vall Surface - Gypsum Board	Š		Ś		Ś		Ś		Ś		
Vall Surface - Ceramic Tile/Stone	Š		Ś	-	Ś		Ś		Š		
Vall Cabinets	Š	-	Ś	-	Ś	-	Ś		Ś		
lase Cabinets	Š		Ś		Ś		Ś	-	Ś		
Counter Top	\$	-	Ś		\$		\$	-	\$		
ink with Fixtures	Ś	-	Ś		Ś		Ś	-	Ś		
	_		-		_		-		_		
lange/Stove	\$	-	\$	-	\$	-	\$		\$		
tefrigerator	\$	-	\$		\$	-	\$	-	\$		
ublic Toilet and Bath Accessories	\$	-	\$	-	\$	-	\$	-	\$	14,044.	
ublic Urinal and Accessories	\$	-	\$	-	\$	-	\$	-	\$		
ublic Restroom and Bath Plumbing Fixtures	\$	-	\$	-	\$	22,859.58	\$	-	\$		
Public Restroom and Bath Partitions	\$	-	\$	-	\$	7,731.56	\$	-	\$		
hower, Fiberglass	\$	-	\$	-	\$	1,452.92	\$		\$		
aundry Sink w/Fixtures	\$	-	\$	-	\$	-	\$		\$		
	\$	1,993.20	\$		\$	32.044.06	\$	-	\$	14,044.	





Category Units		2028		2029		2030		2031		2032
		2020	2023		2030		Years 11 - 15		\$	703,479.32
Thermostatic Control Valve (Radiator)	Ś		Ś		Ś	128,391.48	Ś	-	Ś	-
Wall Radiator	Ś		Ś	-	\$	-	Ś	-	\$	-
Hydronic Piping	Ś		Ś	-	\$	-	Ś	-	\$	
Smoke/Fire Detectors	Ś	-	Ś		\$	-	Ś	-	Ś	-
Interior Lighting (In Unit)	\$	-	\$		\$	-	\$	-	\$	-
Interior Lighting (In Unit) - Surface Mounted Incandescent	\$	-	\$		\$	-	\$	-	\$	-
Lighting Fixtures - Surface Mounted Flourescent 1'x4'	\$	-	Ś		\$	-	Ś	-	\$	-
Hot and Cold Water Distribution - Copper / PVC	Ś	-	Ś		\$	-	Ś	-	Ś	-
Electrical Distribution System	\$	-	\$		\$	-	\$	-	\$	-
Wood	\$	-	\$	-	\$		\$	-	\$	-
Door, Interior	Ś	-	Ś		\$	-	Ś	-	Ś	-
Sliding Door, Interior	Ś	-	Ś		Ś	-	Ś	-	Ś	-
Blinds and Drapes	Ś	-	Ś		\$	-	Ś	-	Ś	-
Gypsum Board or Plaster	\$	-	\$	-	\$	-	\$	-	\$	-
Ceramic/Quarry Tile/Terrazzo	Ś		Ś	-	Ś	-	Ś	-	Ś	-
Resilient	Ś	-	Ś	-	Ś	-	Ś	-	Ś	-
Baseboard (Wood or Resilient)	Ś	-	Ś		Ś		Ś	-	Ś	-
Wall Surface - Gypsum Board	Ś	-	Ś		Ś		Ś	-	Ś	-
Wall Surface - Ceramic Tile/Stone	Ś	-	Ś	-	Ś	-	Ś	-	Ś	-
Wall Cabinets	Ś	-	Ś	-	\$	-	Ś	-	Ś	-
Base Cabinets	Ś	-	Ś	-	\$	-	Ś	-	Ś	-
Counter Tops	Ś	-	Ś		\$		Ś	-	Ś	-
Sink with Fixtures	Ś	-	Ś		\$		Ś		Ś	
Range / Stove	Ś		Ś		Ś		Ś	-	Ś	
Range Hood	Š	-	Ś		\$		\$		Ś	-
Grease Shield	Ś	-	Ś	-	\$	-	Ś	-	Ś	-
Refrigerator	Ś	-	Ś	-	Ś	-	Ś	-	Ś	-
Bath Accessories	Ś	5,130.72	Ś	-	\$	-	Ś	-	Ś	-
Bathtubs / Shower Units	\$	-	\$	-	\$	-	\$	-	Ś	414,257.76
Toilet	Ś		Ś		Ś	-	Ś	-	Ś	-
Sink with Fixtures	Ś		Ś		\$	-	\$	-	Ś	112,756.00
Bathroom Vanities	Ś	-	Ś		Ś	-	Ś	-	Ś	-
Medicine Cabinets	Ś	-	Ś		\$	-	Ś	-	Ś	-
Exhaust Fans	Ś	29.848.00	Ś		\$	-	Ś	-	Ś	-
Residential Dryer Hookup	Ś	-	Ś		Ś	-	Ś	-	Ś	-
Residential Washer Hookup	Ś	13.095.36	Ś		\$	-	Ś	-	Ś	-
	Š	48,074.08	Ś		\$	128,391.48	Ś	-	\$	527,013.76
	Š	180,905.49	Š		Ś	645,419.07	Š	1,941.50	Š	541,057.78