



**Finance and Administration Committee  
October 29, 2024**

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**Action Item**

**FAC- 4      New Capital Project - Spring Garden Apartments Roof-HVAC Replacement**

**Background Information**

Per a recent delegation by the Board of Governors under the Board's Construction Task Force, Advance Planning is authorized by the University's Board of Trustees. Once the Schematic Design phase is completed and the scope and budget have been more clearly defined, the Capital Request will be brought to the Board of Governors for approval.

Spring Garden Apartments were built in 2005. The roof is 19 years old and shows significant degradation, especially the flat portion. The building's HVAC system comprises individual heat pumps for each apartment unit. Our roof inspection company has supplied an annual inspection report stating accelerated deterioration of the single-ply membrane. The building is experiencing roof leaks that damage the apartment ceilings below. The combined project is sensible in coordinating both system replacements, as the roof can only be replaced with the removal of the heat pumps. The heat pumps use R-22 refrigerant and are mostly obsolete, making part replacement difficult for some system components. Individual heat pump system replacements are challenging, with all units on the roof requiring a crane because of roof access. Individual heat pump replacement would be expensive and disruptive to building operations.

**Estimated Project Cost: \$4,615,000**

**Recommended Action**

The Board of Trustees of The University of North Carolina at Greensboro approves the advance planning (design and commissioning) in the amount of **\$200,000** for the Spring Garden Roof-HVAC Replacement.

A handwritten signature in blue ink, reading 'Robert J. Shea, Jr.', positioned above a horizontal line.

**Robert J. Shea, Jr.**  
Vice Chancellor for Finance and  
Administration

Attachments: UNC Capital form, dated 10/29/2024  
SCO OC25, dated 10/29/2024

**THE UNIVERSITY OF NORTH CAROLINA  
CAPITAL PROJECT AUTHORIZATION FORM**

Institution: UNC Greensboro Date: 10/29/2024 Interscope Code: \_\_\_\_\_  
 Project Title: Spring Garden Roof & HVAC Replacement Interscope Item: \_\_\_\_\_

**A. CAPITAL PROJECT SCOPE AND JUSTIFICATION**

1. Name of Building(s): Spring Garden Apartments 2. Project Type: Advance Planning  
 3a. Estimated Existing GSF: 250,000 4a. Current Use: Housing 5. Land Ownership: State Owned (SCO is the AHJ)  
 3b. Estimated New or Additional GSF: 0 4b. Proposed Use: Housing  
 6. Was Adv Planning authorized by legislation or BOT? \_\_\_\_\_ BOT Authorization Date : \_\_\_\_\_ Date SD submitted to SCO: \_\_\_\_\_

7. Describe proposed project scope:

Spring Garden Apartments were built in 2005. The roof is 19 years old and is showing significant degradation, especially the flat portion of the roof. The building HVAC system is comprised of individual heat pumps for each apartment unit. Our roof inspection company has supplied an annual inspection report stating accelerated deterioration of the single ply membrane. The building is experiencing roof leaks creating damage to the apartment ceilings below.  
 The combined project is sensible to coordinate both system replacements as the roof cannot be replaced with out removal of the heat pumps. The heat pumps use R-22 refrigerant and are mostly obsolete making part replacement difficult for some systems components. Individual heat pump system replacements are extremely difficult with all units being on the roof and requiring a crane because of roof access. Individual heat pump replacement would be expensive and disruptive to building operation.

8a. Current departments and programs:

Housing & Residence Life

8b. Proposed departments and programs:

Housing & Residence Life

9. If the project is new construction or addition, describe the proposed use or disposition of the existing facility, including proposed timeline.

Trust Funds - Housing

10. Is project incl. in the 6-year capital plan? Yes If so, indicate version: FY25-27 Project Title: Spring Garden Roof & HVAC Replacement

**B. CURRENT CAPITAL PROJECT AUTHORIZATION AND FUND SOURCES**

1. Identify fund sources for proposed project. For R&R funds and carry forward funds, provide the fiscal year. For trust funds and student fees, provide specific source of funds.

Authorization Approval	By	Approval Date	Appropriated	R&R	Specify FY	Carry Forward*	Specify FY	Trust Funds	Source	Student Fees	Source	Debt Service Fees
Advance Planning	BOT							200,000	Housing			
<b>PREVIOUS AUTHORIZATION:</b>			\$200,000	\$0	\$0	\$0	\$0	\$200,000		\$0		\$0
			100%	0%	0%	0%	0%	100%		0%		0%
Incr. Authorization												
Change fund source(s)												
<b>CHANGE IN AUTHORIZATION:</b>			\$0	\$0	\$0	\$0	\$0	\$0		\$0		\$0
<b>REV. TOTAL AUTHORIZATION:</b>			#####	\$0	\$0	\$0	\$0	\$200,000		\$0		\$0
			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!		#DIV/0!

2. Provide additional details on proposed fund sources (e.g., availability of donations and gifts as of the date of the request, pledged amounts, type of federal grants, specific student fees including date and amounts already approved by the Board of Governors, etc.):

Non Appropriated Major R&R - Housing Trust Funds

3. For auxiliary-supported projects (e.g., housing, dining, parking, etc.), provide an estimate of annual revenues that will be generated by the project and the revenue source for the first five years.

Year 1		Year 2		Year 3		Year 4		Year 5	
Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source
Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing

4. For any new construction, addition, or comprehensive renovation, provide the estimated annual operations and maintenance costs and the fund source for the first five years.

Year 1		Year 2		Year 3		Year 4		Year 5	
Amount	Source	Amount	Source	Amount	Source	Amount	Source	Amount	Source
Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing



PROJECT NAME:	Spring Garden Roof & HVAC Replacement	Version 03/2024	CREATION DATE:	10/29/2024
PROJECT LOCATION:	Greensboro		SCO APPROVAL DATE:	
AGENCY OR INSTITUTION:	UNC Greensboro		BIENNIUM:	2023-2025

PROJECT DESCRIPTION: (Written description of project scope, scale, and schedule including the current status as of this OC-25, i.e. pre-funding, funded, advance planning, design phase, etc.)

Spring Garden Apartments were built in 2005. The roof is 19 years old and is showing significant degradation, especially the flat portion of the roof. The building HVAC system is comprised of individual heat pumps for each apartment unit. Our roof inspection company has supplied an annual inspection report stating accelerated deterioration of the single ply membrane. The building is experiencing roof leaks creating damage to the apartment ceilings below.

The combined project is sensible to coordinate both system replacements as the roof cannot be replaced with out removal of the heat pumps. The heat pumps use R-22 refrigerant and are mostly obsolete making part replacement difficult for some custom components. Individual heat pump custom replacements are extremely difficult with all units being on the roof and requiring a crane because of roof

ESTIMATED PROGRAM CONSTRUCTION COST ON CREATION DATE (Match Project Description)						
ITEM	DESCRIPTION	QTY	UNIT	COST PER UNIT	TOTAL	
<b>SITE CONSTRUCTION-NEW</b> (Insert Additional Rows as Required)						
Site			Acre		\$ -	
Site			LF		\$ -	
Site			Parking Space		\$ -	
<b>CONSTRUCTION-NEW</b> (Insert Additional Rows as Required)						
Demolition			GSF		\$ -	
Construction-New			GSF		\$ -	
Construction-New			GSF		\$ -	
<b>CONSTRUCTION-RENOVATION</b> (Insert Additional Rows as Required)						
Construction-Renovation	Existing Conditions/Demo	250,000	GSF	\$ 1	\$ 170,000	
Construction-Renovation	TPO Roof Replacement	8,000	GSF	\$ 45	\$ 360,000	
Construction-Renovation	Shingle Roof Replacement	40,000	GSF	\$ 15	\$ 600,000	
Construction-Renovation	HVAC Heat Pump Replacement	250,000	GSF	\$ 8	\$ 2,000,000	
Construction-Renovation	Electrical	250,000	GSF	\$ 1	\$ 250,000	
<b>Sub-Total Program Construction Cost:</b> (Total of all expected first-tier subcontractor bid packages)					\$ 3,380,000	
<b>CMR/GC Cost:</b>		<b>7.00%</b>	(14%-20% of Sub-Total Program Construction Cost)		\$ 236,600	
<b>ESTIMATED PROGRAM CONSTRUCTION COST:</b> (Total Hard Cost)					\$ 3,616,600	
<b>A. '90/10 RULE APPLYING TO TOTAL HARD COST:</b>		<b>90.0%</b>				\$ 3,254,940

OWNER'S ESTIMATED SOFT COSTS (Percentage of 'A' Above or Lump Sum)			
ITEM	% or LS	DESCRIPTION	TOTAL
ADVANCE PLANNING	1.00%	(% of 'A' Above-Includes programming, survey/topo/utilities, cost estimate)	\$ 36,166
DESIGN FEE	10.00%	(% of 'A' Above)	\$ 361,660
PRECONSTRUCTION SERVICES	0.00%	(1% of 'A' Above for CM@Risk)	\$ -
COMMISSIONING CONSULTANT	1.00%	(0.5% simple; 1.0% moderate; 1.5% complex)	\$ 36,166
SPECIAL INSPECTIONS & TESTING CONSULTANT	1.25%	(0.5% simple; 1.0% moderate; 1.5% complex)	\$ 45,208
SUSTAINABILITY	0.00%	(4% LEED Platinum/4 Globes; 3% LEED Gold/3 Globes; 2% LEED Silver/2 Globes; 1% LEED Certified/1 Globe)	\$ -
CONSTRUCTION PHASE CONTINGENCY	5.00%	(% of Estimated Construction Costs [3% New or 5% R&R])	\$ 181,651
90/10 RULE OWNER RESERVE FUNDS	10.0%		\$ 361,660

ESCALATION ANALYSIS:			
ITEM	% or LS	Project Schedule Milestones	Months
Funding Process		1. OC-25 Creation Until Project Funded	1
Designer Selection		2. Designer RFQ/Interview/Selection	1
Design Phases		3. Design Phases Duration	2
Construction		4. Bid Advertisement to Midpoint of Construction	9
<b>ESCALATION: BLS PPI ANNUAL INFLATION RATE</b>		<b>Total Months of Escalation:</b>	<b>13</b>
			<b>Monthly Escalation</b>
			<b>0.67%</b>
			<b>\$ 313,439</b>
MISCELLANEOUS	LS	Permits, Fees, Printing, Legal	\$ -
FURNITURE BY OWNER	LS	Chairs, Desks, Tables, Workspace (Add 1.75% of Cost When Using P & C)	\$ -
EQUIPMENT BY OWNER	LS	Lab, Pantry, Business	\$ -
STATE OR INSTITUTION IT EQUIPMENT	LS	Data Center, Data Recovery, LAN	\$ -
AV and TECHNOLOGY	LS	AV/Technology Equipment and Installation	\$ -
TEMPORARY SPACE REQUIREMENT	LS	Relocation/Storage/Lease Space	\$ -
LAND REQUIREMENT	LS	Acquisition Cost	\$ -
<b>B. SUB-TOTAL OWNER'S ESTIMATED SOFT COST:</b> (Total Soft Cost)			<b>\$ 660,851</b>

<b>C. ESTIMATED TOTAL PROJECT COSTS ( A + B ):</b>		<b>Year of Initial Estimate:</b>	<b>2024</b>	
			<b>\$ 4,590,889</b>	

Indicates a Required Field to be Completed by Estimator

2025	2026	2027	2028
8.00%	8.00%	8.00%	8.00%
\$ 4,958,160	\$ 5,354,813	\$ 5,783,198	\$ 6,245,854
Automatic Escalation Will Occur Annually on October 1 With No Program Changes			

APPROVED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_