

# 2007 FCAP - Housing

D_NO	Description	Recommended Correction	Cost
<b>AYCOCK RESIDENCE HALL</b>			
07-E010	THE EXISTING WIRE, PANELS, AND SWITCHES ARE REACHING THE END OF THEIR SERVICE LIVES.	COMPLETELY REWIRE AND REPLACE EXISTING PANELS AND SWITCHES.	25000
07-E032	THE EXISTING FIRE ALARM DOES NOT MEET THE FIRE CODE.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	80000
07-E033	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	55000
07-E034	THE EMERGENCY GENERATOR IS REACHING THE END OF IT'S SERVICE LIFE AND NEEDS TO BE REPLACED.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	40000
07-G220	ROOF WILL BE NEAR END OF EXPECTED LIFE	REMOVE ALL ROOF MATERIAL TO EXPOSE STRUCTURAL DECK. REPAIR DECK AND DRAINS AS NEEDED. INSTALL NEW FLASHING, EXPANSION JOINTS AND NEW INSULATION (MINIMUM R-20). INSTALL INSULATION TO INSURE POSITIVE DRAINAGE. INSTALL NEW BUILT UP ROOF OR MEMBRANE ROOF. COST ESTIMATE ASSUMES HIGH QUALITY ROOF.	240000
07-G227	ORIGINAL, ALUMINUM, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS WITH SOME OPERABLE SECTIONS, THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC	615000
07-G229	TREADS IN STAIRS AND ON EXTERIOR STEPS ARE WORN, LOOSE AND UNSAFE.	INSTALL NEW TREADS IN STAIRS AND ON STEPS AS REQUIRED BY STATE BUILDING CODE.	50000
07-G230	CEILING TILE IN CORRIDORS AND ROOMS IS NEAR END OF USEFUL LIFE.	INSTALL NEW CEILING TILE IN CORRIDORS AND ROOMS.	240000
07-G231	BUILDING HAS NO ELEVATOR FOR 5 FLOORS.	ADD ELEVATOR TO COMPLY WITH ADA GUIDELINES AND STATE BUILDING CODE.	400000
07-G232	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	135000
07-G233	DOI REPORT INDICATES THAT CORRIDOR AND STAIRWAY DOORS ARE NOT FIRE RATED AS REQUIRED BY THE STATE BUILDING CODE.	INSTALL NEW CORRIDOR AND STAIRWAY DOORS, FRAMES AND HARDWARE AS REQUIRED TO COMPLY WITH THE STATE BUILDING CODE.	325000
07-M061	STEAM RADIATORS, BUT NO STEAM PIPING, WERE REPLACED IN 2005.	RENOVATE THE ENTIRE STEAM PIPING SYSTEM, INCLUDING CONTROLS.	200000
		<b>TOTAL AYCOCK RESIDENCE</b>	<b>\$2,405,000</b>
<b>BELK RESIDENCE HALL</b>			
07-E035	THE EXISTING PANEL IS OLD AND REACHING THE END OF IT'S SERVICE LIFE.	RECOMMEND REPLACING THE OBSOLETE PANEL, WITH A PANEL THAT MEETS NEC REQUIREMENTS.	5000

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07-E036	THIS LARGE RESIDENCE HALL NEEDS AN EMERGENCY GENERATOR TO PROVIDE POWER TO EGRESS LIGHTING AND OTHER CRITICAL SYSTEMS IN THE EVENT THERE IS A POWER INTERRUPTION.	RECOMMEND INSTALLING AN EMERGENCY GENERATOR AND THE RELATED DISTRIBUTION SYSTEM.	55000
07-E037	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED	INSTALL NEW ENERGY SAVING LIGHTS	50000
07-E038	THE EXISTING SWITCH IS REACHING THE END OF ITS USEFUL LIFE. IN THE NEAR FUTURE IT WILL BECOME INOPERABLE OR UNSAFE TO OPERATE.	INSTALL A NEW PAD MOUNTED SWITCH.	30000
07-E039	THE EXISTING FIRE ALARM DOES NOT MEET THE FIRE CODE.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	150000
07-G206	SOME INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	270000
07-G207	CONCRETE STRUCTURE HAS DEVELOPED EXTENSIVE STRUCTURAL DAMAGE DUE TO FOUNDATION SETTLEMENT AND THERMAL MOVEMENT. DAMAGE HAS ALSO OCCURRED FROM WATER PENETRATION INTO STRUCTURE AND EXTERIOR BRICK WALLS. SOME FLOOR SLABS AND HANDRAILS MAY BE UNSAFE. CONDITION HAS DETERIORATED SINCE INITIAL ENGINEERING STUDY IN 1993.	REEVALUATION OF CURRENT STRUCTURAL CONDITION BY CONSULTING ENGINEER WHO DID INITIAL STUDY IS RECOMMENDED. COST ESTIMATE SHOWN FOR REPAIR OF STRUCTURE IS BASED ON THE ENGINEERING STUDY, AND SHOULD BE UPDATED. FEASIBILITY OF REPAIR AND RENOVATION SHOULD BE EVALUATED.	800000
07-G208	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	110000
07-G210	SOME PANS IN SHOWER FLOORS HAVE LEAKED AND ARE NEAR END OF USEFUL LIFE.	REPLACE PANS IN SHOWER FLOORS AND REPAIR CERAMIC TILE AS NEEDED.	100000
07-G212	ORIGINAL WINDOWS ARE DIFFICULT TO OPERATE AND MAINTAIN. WINDOWS ARE ENERGY INEFFICIENT.	REPLACE WINDOWS WITH DBL PANE CLAD LOW MAINTENANCE UNITS.	255000
07-G226	SOME EXTERIOR DOORS AND HARDWARE WILL SOON BE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	100000
07-M017	BELK HALL IS SERVED BY HOT WATER RADIATORS AND DX AIR HANDLERS IN THE MECHANICAL ROOM. WINDOW AIR CONDITIONING UNITS HAVE BEEN PROPOSED. MOST OF THE STEAM EQUIPMENT IN THE MECHANICAL ROOM HAS DETERIORATED WITH AGE AND NEEDS TO BE REPLACED. ASBESTOS PIPE INSULATION WILL NEED TO BE REMOVED. THE HEATING HOT WATER SYSTEM IS BADLY IN NEED OF REPLACEMENT IN THE MECHANICAL ROOM AND THROUGHOUT THE ENTIRE BUILDING. THE THREE STEAM TO DOMESTIC HOT WATER HEAT EXCHANGERS IN THE MECHANICAL ROOM, AND ESPECIALLY THE ASSOCIATED PIPING, IS IN VERY BAD CONDITION AND IN THE PROCESS OF FAILING.	A COMPLETE HVAC AND PLUMBING RENOVATION IS REQUIRED.	500000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-M018	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED BY THE THREE SMALL STEAM TO HOT WATER HEAT EXCHANGERS CURRENTLY INSTALLED. THE CONTROLS SYSTEM FOR THE HOT WATER HEAT EXCHANGER IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGER HAS DETERIORATED WITH AGE. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. ASBESTOS INSULATION NEEDS TO BE REMOVED.	PROVIDE A NEW DOMESTIC HOT WATER HEATER, WITH INTEGRAL TANK AND HEAT EXCHANGER, SIMILAR TO THE HEATER CURRENTLY INSTALLED AT FLETCHER DORMITORY. THIS WILL PROVIDE MUCH BETTER TEMPERATURE CONTROL. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	125000
07-M019	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL.	850000
<b>TOTAL BELK RESIDENCE</b>			<b>\$3,400,000</b>
<b>CLEMENT RESIDENCE HALL</b>			
07-E043	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS.	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	80000
07-G107	ALTHOUGH THE MAJORITY OF WINDOWS AT RESIDENCE HALL HAVE BEEN REPLACED, ORIGINAL, METAL, SINGLE GLAZED WINDOWS (LOBBY STOREFRONT SYSTEMS) ARE NEAR END OF EXPECTED LIFE, IN POOR CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS (STOREFRONT SYSTEMS) WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING.	175000
07-G108	BUILT-UP ROOF IS NEARING END OF EXPECTED LIFE.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL MEMBRANE OVER NEW INSULATION (MINIMUM R-20) AT MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT. COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	106000
07-G109	SOME INDIVIDUAL ROOM BUILT-IN CASEWORK, AND INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE. RESTROOMS AND DOOR HARDWARE ARE NOT COMPLETELY ADA ACCESSIBLE AND RESTROOMS ARE SHOWING SIGNS OF HEAVY USE. RECENT DOI ANNUAL REPORTS CITES FIRE PROTECTION ISSUES AT LOBBY AREA. SOME STAIR TREADS ARE WORN, LOOSE AND UNSAFE.	REMOVE AND REPLACE DAMAGED AND DETERIORATED INDIVIDUAL ROOM BUILT-IN CASEWORK. RENOVATE RESTROOMS, INSTALL NEW DOOR HARDWARE AND CORRECT FIRE PROTECTION CONCERNS AT LOBBY AREA. REFURBISH AND REPAINT INTERIOR FINISHES AS NEEDED. INSTALL NEW STAIR TREADS AS REQUIRED.	3500000
07-M029	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED. THE CONTROLS SYSTEM FOR THE HOT WATER HEAT EXCHANGER IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGER HAS DETERIORATED WITH AGE. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. SOME ASBESTOS INSULATION WILL NEED TO BE REMOVED.	PROVIDE A NEW, SELF CONTAINED DOMESTIC HOT WATER HEATER WITH AN INTEGRAL HEAT EXCHANGER. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	125000

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07-M030	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. STANDPIPES PROVIDE THE ONLY FIRE PROTECTION FOR THIS RESIDENCE HALL. ONE MAIN ENTERS THE MECHANICAL ROOM AND SPLITS AT THE DOMESTIC AND FIRE LINES.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL. PROVIDE A DEDICATED FIRE LINE THROUGH THE MECHANICAL ROOM TO PREVENT OVER PRESSURIZING THE DOMESTIC WATER LINES THROUGH THE FDC.	750000
		<b>TOTAL CLEMENT RESIDENCE</b>	<b>\$4,736,000</b>
<b>COTTEN RESIDENCE HALL</b>			
07-E047	THE FPE ELECTRICAL PANELS IN THIS BUILDING ARE OLD AND OBSOLETE. PROPER REPLACEMENT PARTS CANNOT BE OBTAINED.	RECOMMEND REPLACING THE EXISTING FPE ELECTRICAL PANELS AND THEIR FEEDERS.	85000
07-E048	THE EMERGENCY GENERATOR IS REACHING THE END OF IT'S SERVICE LIFE AND NEEDS TO BE REPLACED.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	40000
07-E049	THE EXIT FIXTURES ARE OLD AND WASTE ENERGY AND MAINTENANCE LABOR.	RECOMMEND REPLACING ALL OLDER EXIT FIXTURES WITH LED TYPE.	4000
07-G205	FELT LAYER UNDER CLAY TILE ROOF IS PROBABLY NEAR END OF LIFE. GUTTER IS APPARENTLY IN POOR CONDITION. QUALITY OF CLAY TILE IS NOT DETERMINED. LEAKS MAY HAVE DAMAGED SOME INTERIOR FINISHES.	REMOVE CLAY TILE, REPAIR DECK AND STRUCTURE AS REQUIRED AND REPLACE FELT, TILE AND GUTTER. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	295000
07-G218	BATHS ARE OLD, FIXTURES ARE WORN AND DIFFICULT TO OPERATE AND MAINTAIN.	RENOVATE ALL BATHROOMS.	265000
07-G228	SOME MORTAR JOINTS ARE DETERIORATED AND WATER IS MOVING THROUGH EXTERIOR WALL (ESPECIALLY AT COURTYARD LOWER MASONRY WALLS).	REPAIR AND REPOINT MORTAR JOINTS AS NEEDED. REMOVE OLD CAULK, CLEAN JOINTS AND RECAULK ON BACKER ROD. TO REDUCE MOISTURE COMING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	100000
07-M032	THE HVAC SYSTEM CONSISTS OF FAN COIL UNITS THAT HAVE DETERIORATED WITH AGE AND ARE IN POOR CONDITION. THERE IS NO OUTSIDE AIR FOR VENTILATION WITH THE CURRENT FOUR PIPE FAN COIL UNIT SYSTEM. THE PLUMBING FIXTURES ARE OLD AND DAMAGED, AND ARE OBSOLETE, SUCH THAT REPLACEMENT PARTS ARE DIFFICULT TO OBTAIN. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION.	PROVIDE A NEW HVAC SYSTEM TO REPLACE THE DETERIORATED FAN COIL UNITS. REPLACE THE PLUMBING FIXTURES AND PIPING. PROVIDE A NEW FIRE SPRINKLER SYSTEM IN THIS RESIDENCE HALL.	400000
		<b>TOTAL COTTEN RESIDENCE</b>	<b>\$1,189,000</b>
<b>FLEMING RESIDENCE HALL</b>			
07-E045	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED.	INSTALL NEW ENERGY SAVING LIGHTS.	50000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-E046	THE EXIT LIGHTING IN THIS BUILDING DOES NOT MEET CODE AND DOI STANDARDS.	INSTALL EXIT LIGHTING IN THIS BUILDING. ENSURE THAT THE NEW EXIT LIGHTS ARE LED AND THAT ALL LIGHTING CODE REQUIREMENTS ARE MET.	3000
07-G216	BATHS ARE OLD, FIXTURES ARE WORN AND DIFFICULT TO OPERATE AND MAINTAIN.	RENOVATE ALL BATHROOMS.	245000
07-G217	FELT LAYER UNDER CLAY TILE ROOF IS PROBABLY NEAR END OF LIFE. GUTTER IS APPARENTLY IN POOR CONDITION. QUALITY OF CLAY TILE IS NOT DETERMINED. LEAKS MAY HAVE DAMAGED SOME INTERIOR FINISHES.	REMOVE CLAY TILE, REPAIR DECK AND STRUCTURE AS REQUIRED AND REPLACE FELT, TILE AND GUTTER. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING 80 PERCENT OF TILE AND MINOR REPAIR OF DECK.	276000
07-G236	SOME MORTAR JOINTS ARE DETERIORATED AND WATER IS MOVING THROUGH EXTERIOR WALL.	REPAIR AND REPOINT MORTAR JOINTS AS NEEDED. REMOVE OLD CAULK, CLEAN JOINTS AND RECAULK ON BACKER ROD. TO REDUCE MOISTURE COMING THROUGH EXTERIOR WALL, A SILANE SILOXANE WATERPROOFING SHOULD BE APPLIED TO EXTERIOR AND INTERIOR SURFACES SHOULD BE COATED WITH A LOW PERM RATED PAINT.	80000
07-M031	THE HVAC SYSTEM CONSISTS OF SMALL AIR HANDLING UNITS THAT HAVE DETERIORATED WITH AGE AND ARE IN POOR CONDITION. OUTSIDE AIR PROVIDED THROUGH THE AIR HANDLING UNITS IS PROBABLY INSUFFICIENT. THE PLUMBING FIXTURES ARE OLD AND DAMAGED, AND ARE OBSOLETE, SUCH THAT REPLACEMENT PARTS ARE DIFFICULT TO OBTAIN. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. FLEMING IS ON THE SAME CHILLER AS COTTON HALL.	PROVIDE A NEW HVAC SYSTEM TO REPLACE THE DETERIORATED AIR HANDLING UNITS. REPLACE THE PLUMBING FIXTURES AND PIPING. PROVIDE A NEW FIRE SPRINKLER SYSTEM FOR THIS RESIDENCE HALL.	300000
		<b>TOTAL FLEMING RESIDENCE</b>	<b>\$954,000</b>
<b>FLETCHER RESIDENCE HALL</b>			
07-E044	THE EXISTING EMERGENCY GENERATOR IS PAST ITS USEFUL LIFE AND OBSOLETE. PROPER REPAIR AND REPLACEMENT PARTS WILL LIKELY BECOME DIFFICULT TO OBTAIN IN THE NEAR FUTURE. REPAIR SHOULD BE EXPECTED IN THE NEAR FUTURE.	RECOMMEND REPLACING THE EXISTING GENERATOR.	40000
07-G110	SOME INDIVIDUAL ROOM BUILT-IN CASEWORK, AND INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE. RESTROOMS ARE NOT COMPLETELY ADA ACCESSIBLE AND ARE SHOWING SIGNS OF HEAVY USE.	REMOVE AND REPLACE DAMAGED AND DETERIORATED INDIVIDUAL ROOM BUILT-IN CASEWORK. RENOVATE RESTROOMS, REFURBISH AND REPAINT INTERIOR FINISHES AS NEEDED.	3000000
07-G111	ALTHOUGH THE MAJORITY OF WINDOWS AT RESIDENCE HALL HAVE BEEN REPLACED, ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE NEAR/AT END OF EXPECTED LIFE, IN POOR CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING.	30000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-M046	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. STANDPIPES PROVIDE THE ONLY FIRE PROTECTION.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL. PROVIDE A DEDICATED FIRE LINE THROUGH THE MECHANICAL ROOM TO PREVENT OVER PRESSURIZING THE DOMESTIC WATER LINES THROUGH THE FDC.	800000
07-M047	THE CURRENT HVAC SYSTEM IN FLETCHER RESIDENCE HALL IS DEFICIENT AND IN NEED OF REPLACEMENT.	PROVIDE AN EXTENSIVE HVAC RENOVATION. OUTSIDE MAKEUP AIR SHOULD BE PROVIDED, WITH TWO SEPARATE HEAT CONVERTORS - ONE EACH FOR A ROOFTOP MAKEUP AIR UNIT, AND FOR MAIN BUILDING HEAT. NO OUTSIDE AIR IS CURRENTLY PROVIDED TO FLETCHER HALL.	750000
		<b>TOTAL FLETCHER</b>	<b>\$4,620,000</b>
<b>GARRETT RESIDENCE HALL</b>			
07-G112	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 51 YEAR OLD, RESIDENCE HALL ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS AND ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES (STAIRWAY EXIT DOORS) OR ADA GUIDELINES. LACK OF AN ELEVATOR LIMITS ADA ACCESS TO UPPER FLOORS. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH.	REMOVE ALL EXISTING INTERIOR SYSTEMS, AND REVISE INTERIOR PLANS AS REQUIRED BY FUNCTIONS AND CODES. REMOVE (ABATE) ANY HAZARDOUS MATERIALS ASSOCIATED WITH RENOVATION. CONSTRUCT NEW INTERIOR SPACES INCLUDING ALL ARCHITECTURAL SYSTEMS AND FINISHES. INSTALL NEW OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. INSTALL NEW LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES. RENOVATE EXTERIOR BUILDING ENTRY WAYS AND SURROUNDS (INCLUDING NEW DOORS). CONSTRUCT NEW ELEVATOR IN NEW ELEVATOR SHAFT.	10000000
		<b>TOTAL GARRETT RESIDENCE</b>	<b>\$10,000,000</b>
<b>GREENE RESIDENCE HALL</b>			
07-E041	THE EMERGENCY GENERATOR IS REACHING THE END OF IT'S SERVICE LIFE AND NEEDS TO BE REPLACED.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	40000
07-G101	INDIVIDUAL ROOM BUILT-IN CASEWORK AND INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE. RESTROOMS AND DOOR HARDWARE ARE NOT COMPLETELY ADA ACCESSIBLE AND RESTROOMS ARE SHOWING SIGNS OF HEAVY USE. RECENT DOI ANNUAL REPORTS CITES FIRE PROTECTION ISSUES AT LOBBY AREA.	REMOVE AND REPLACE DAMAGED AND DETERIORATED INDIVIDUAL ROOM BUILT-IN CASEWORK. RENOVATE RESTROOMS, INSTALL NEW DOOR HARDWARE AND CORRECT FIRE PROTECTION CONCERNS AT LOBBY AREA. REFURBISH AND REPAINT INTERIOR FINISHES AS NEEDED.	3230000
07-G102	ALTHOUGH THE MAJORITY OF WINDOWS AT RESIDENCE HALL HAVE BEEN REPLACED, ORIGINAL, METAL, SINGLE GLAZED WINDOWS (LOBBY STOREFRONT SYSTEMS) ARE NEAR/AT END OF EXPECTED LIFE, IN POOR CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS (STOREFRONT SYSTEMS) WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING.	175000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-G103	SINGLE-PLY ROOF IS IN POOR CONDITION AND IS NEAR/AT END OF EXPECTED LIFE.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL MEMBRANE OVER NEW INSULATION (MINIMUM R-20) AT MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT. COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	107000
07-M024	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. STANDPIPES PROVIDE THE ONLY FIRE PROTECTION FOR THIS RESIDENCE HALL. ONE MAIN ENTERS THE MECHANICAL ROOM AND SPLITS AT THE DOMESTIC AND FIRE LINES.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL. PROVIDE A DEDICATED FIRE LINE THROUGH THE MECHANICAL ROOM TO PREVENT OVER PRESSURIZING THE DOMESTIC WATER LINES THROUGH THE FDC.	750000
07-M025	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED, RESULTING IN TEMPERATURE SWINGS OF 40 TO 50 DEGREES F. THE CONTROLS SYSTEM FOR THE TWO HOT WATER HEAT EXCHANGERS IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGERS HAVE DETERIORATED WITH AGE. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. SOME ASBESTOS INSULATION WILL NEED TO BE REMOVED.	PROVIDE A NEW, SELF CONTAINED DOMESTIC HOT WATER HEATER WITH AN INTEGRAL HEAT EXCHANGER. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	125000
07-M026	THE CURRENT HVAC SYSTEM IS DEFICIENT AND IN NEED OF REPLACEMENT.	PROVIDE TWO NEW AIR HANDLERS, FOR MAKEUP AIR AND PRIMARY HEATING, WITH ASSOCIATED CONTROLS, PIPING, VAV BOXES AND DUCTWORK. UPGRADE WHITE AND CLEMENT HALLS SIMILARLY.	300000
		<b>TOTAL GREENE RESIDENCE</b>	<b>\$4,727,000</b>
<b>JONES RESIDENCE HALL</b>			
07-E029	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS.	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	60000
07-E030	THE EXISTING FIRE ALARM DOES NOT MEET THE FIRE CODE.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	95000
07-E031	SOME OF THE ELECTRICAL PANELS ARE OLD AND OBSOLETE. PROPER REPLACEMENT PARTS WILL LIKELY BE DIFFICULT TO OBTAIN IN THE NEAR FUTURE AND ADDITIONAL CIRCUITS ARE NEEDED.	RECOMMEND REPLACING THESE PANELS WITH ONES HAVING ADDITIONAL SPACES FOR FUTURE NEEDS.	40000
07-G221	DOI REPORT INDICATES THAT CORRIDOR DOORS ARE NOT FIRE RATED AS REQUIRED BY THE STATE BUILDING CODE.	INSTALL NEW CORRIDOR DOORS, FRAMES AND HARDWARE AS REQUIRED TO COMPLY WITH THE STATE BUILDING	270000
07-G222	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	150000
07-G223	CEILING TILE IN CORRIDORS IS NEAR END OF USEFUL LIFE.	INSTALL NEW CEILING TILE IN CORRIDORS.	50000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-G224	CONCRETE STEPS TO COLLEGE HILL DRIVE (6 SETS) ARE IN VARIOUS STATES OF DISREPAIR. HANDRAILS AND STEPS MAY POSE A TRIPPING HAZARD.	REPLACE DAMAGED, NON-UNIFORM, NON-CODE COMPLIANT, DAMAGED AND DETERIORATED STEPS AND HANDRAILS, ADJACENT TO JONES RESIDENCE HALL. GRADE AREA TO PREVENT FURTHER RUN-OFF.	150000
07-G225	ORIGINAL, ALUMINUM, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS WITH SOME OPERABLE SECTIONS, THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC	585000
07-G235	ROOF WILL BE NEAR END OF EXPECTED LIFE	REMOVE ALL ROOF MATERIAL TO EXPOSE STRUCTURAL DECK. REPAIR DECK AND DRAINS AS NEEDED. INSTALL NEW FLASHING, EXPANSION JOINTS AND NEW INSULATION (MINIMUM R-20). INSTALL INSULATION TO INSURE POSITIVE DRAINAGE. INSTALL NEW BUILT UP ROOF OR MEMBRANE ROOF. COST ESTIMATE ASSUMES HIGH QUALITY ROOF.	330000
07-M063	THE HEATING HOT WATER SYSTEM HAS BEEN UPGRADED FOR ONLY THE FIRST AND SECOND FLOORS.	CONTINUE THE HEATING HOT WATER RENOVATION FOR THE THIRD, FOURTH AND FIFTH FLOORS.	300000
		<b>TOTAL JONES RESIDENCE</b>	<b>\$2,030,000</b>
<b>SCOTT RESIDENCE HALL</b>			
07-G234	MOST ARCHITECTURAL SYSTEMS AND FINISHES IN THIS 41 YEAR OLD RESIDENCE HALL ARE PAST OR NEAR THE END OF THEIR EXPECTED USEFUL LIFE. BUILDING DOES NOT COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES.	REMOVE ALL EXISTING INTERIOR SYSTEMS AND WINDOWS. RESTORE EXTERIOR MASONRY ENVELOPE AND INSTALL NEW WINDOWS. REVISE INTERIOR PLANS AS REQUIRED BY FUNCTIONS AND CODES. CONSTRUCT NEW INTERIOR SPACES, INCLUDING ALL ARCHITECTURAL SYSTEMS AND FINISHES.	2500000
07-M012	CONDENSATE LINES AND OTHER PIPING HAS DETERIORATED WITH AGE AND NEEDS TO BE REPLACED. SOME STEAM EQUIPMENT HAS BEEN UPGRADED. THE CHILLER IS ON THE VERGE OF FAILURE. ASBESTOS PIPE INSULATION NEEDS TO BE REMOVED.	REPLACE DETERIORATED STEAM EQUIPMENT AND CONDENSATE LINES. REPLACE CHILLER.	200000
07-M013	SCOTT HALL HAS STEAM RADIATORS AND TWO-PIPE CHILLED WATER FAN COIL UNITS IN EACH ROOM. MOST CONDENSATE DRAIN LINES FROM THE FAN COIL UNITS ARE NOT PITCHED DOWNWARD, RESULTING IN CONDENSATE BACKUP UNDER THE FAN COIL UNITS. THE HEATING CONTROLS SYSTEM IS OLD AND OBSOLETE. REPLACEMENT PARTS ARE NOT AVAILABLE. THE CONTROLS SYSTEM IS INCOMPLETE, AS EVIDENCED BY MAKESHIFT REPAIRS AND MISSING COMPONENTS.	TOTAL RENOVATION OF THE HVAC SYSTEM IS REQUIRED.	400000
07-M014	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THIS DORMITORY HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL..	850000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-M015	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED. THE CONTROL SYSTEM FOR THE STEAM TO HOT WATER HEAT EXCHANGER IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGER HAS DETERIORATED WITH AGE. THE STORAGE TANK FAILED AND HAS BEEN DISCONNECTED. SOME ASBESTOS INSULATION MUST BE REMOVED.	PROVIDE A NEW DOMESTIC HOT WATER TANK WITH AN INTEGRAL HEAT EXCHANGER. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	100000
07-M016	THE CHILLER FREQUENTLY NEEDS REPAIR DUE TO REFRIGERANT LEAKS, PARTICULARLY IN THE EVAPORATOR COIL. A CATASTROPHIC CHILLER FAILURE COULD LEAD TO AN EXTENDED, UNPLANNED CHILLED WATER SHUTDOWN. THIS CHILLER IS TOO OLD TO ECONOMICALLY REPAIR.	REPLACE THE CHILLER TO ELIMINATE REFRIGERANT LEAKS.	60000
		<b>TOTAL SCOTT RESIDENCE</b>	<b>\$4,110,000</b>
<b>SLAY RESIDENCE HALL</b>			
07-E040	THE EXISTING FIRE ALARM DOES NOT MEET THE FIRE CODE.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	65000
07-G099	SINGLE-PLY ROOF AT LOBBY IS IN POOR CONDITION AND IS NEAR/AT END OF EXPECTED LIFE.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL MEMBRANE OVER NEW INSULATION (MINIMUM R-20) AT MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT. COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	40000
07-G100	FELT LAYER UNDER CLAY TILE ROOF IS LIKELY NEAR/AT END OF LIFE. GUTTER IS IN QUESTIONABLE CONDITION. QUALITY OF CLAY TILE IS NOT DETERMINED. LEAKS HAVE DAMAGED SOME INTERIOR FINISHES.	REMOVE CLAY TILE, REPAIR DECK AND STRUCTURE AS REQUIRED AND REPLACE FELT, TILE AND GUTTER. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	150000
07-M023	THE HVAC SYSTEM IN SLAY HALL IS SIMILAR TO THAT IN UMSTEAD RESIDENCE HALL. THIS SYSTEM CONSISTS ONLY OF TRANE FOUR PIPE FAN COIL UNITS WITH THREE SPEED FANS. THERE ARE NO AIR HANDLERS, AND NO OUTSIDE AIR IS BROUGHT INTO THE BUILDING. REPLACEMENT CONTROLS ARE NO LONGER AVAILABLE. UMSTEAD AND SLAY ARE ON THE SAME CHILLER.	PROVIDE A COMPLETE HVAC UPGRADE.	500000
		<b>TOTAL SLAY RESIDENCE</b>	<b>\$755,000</b>
<b>TYLER RESIDENCE HALL</b>			
07-E021	THE EXISTING PANEL IS AT THE END OF ITS SERVICE LIFE.	INSTALL A NEW MAIN DISTRIBUTION PANEL PER THE NEC.	7500
07-E022	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	45000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-G204	ORIGINAL, ALUMINUM, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS WITH SOME OPERABLE SECTIONS, THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC	350000
07-G209	SOME PANS IN SHOWER FLOORS HAVE LEAKED AND ARE NEAR END OF USEFUL LIFE. IN ADDITION, RESTROOM FINISHES AND FIXTURES ARE SHOWING SIGNS OF EXTREME WEAR.	REPLACE PANS IN SHOWER FLOORS. RENOVATE AND REPLACE FIXTURES AND FINISHES.	400000
07-G211	CARPET IS VERY WORN AND DIRTY, AND IS NEAR END OF USEFUL LIFE. CARPET IS BELIEVED TO BE ON TOP OF 8X8 ASB TILE	REPLACE CARPET WITH HEAVY DUTY CARPET OR WITH VINYL COMPOSITION TILE. ABATE ASBESTOS TILE WHERE LOCATED.	345000
07-G213	DOI REPORT INDICATES THAT CORRIDOR DOORS ARE NOT FIRE RATED AS REQUIRED BY THE STATE BUILDING CODE. ALSO BEAMS IN LOBBY ARE NOT FIRE PROOFED. IN ADDITION, PREVIOUS RACEWAY PENETRATIONS AT CORRIDORS WERE NOTED.	INSTALL NEW CORRIDOR DOORS, FRAMES AND HARDWARE AS REQUIRED TO COMPLY WITH THE STATE BUILDING CODE. ADD FIREPROOFING TO BEAMS IN LOBBY. SEAL PREVIOUS RACEWAY PENETRATIONS AT CORRIDORS.	300000
07-G214	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	140000
07-G215	PRECAST CONCRETE PANELS ARE STAINED AND DISCOLORED. SOME CAULK AND MORTAR JOINTS ARE DETERIORATED.	CLEAN WALLS, REMOVE OLD CAULK AND CLEAN JOINTS. RECAULK ON BACKER ROD AND REPAIR MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE COMING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	100000
07-G219	SUSPENDED CEILINGS ARE SAGGING, DISCOLORED, DAMAGED AND AT END OF LIFE	REPLACE CEILING WITH 2X2 SYSTEM.	225000
07-M020	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED BY THE CURRENT STEAM TO HOT WATER HEAT EXCHANGER. THE CONTROLS SYSTEM FOR THE HOT WATER HEAT EXCHANGER IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGER HAS DETERIORATED WITH AGE. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. ASBESTOS INSULATION NEEDS TO BE REMOVED.	PROVIDE A NEW DOMESTIC HOT WATER TANK WITH AN INTEGRAL HEAT EXCHANGER. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	125000
07-M021	STEAM EQUIPMENT IN THE MECHANICAL ROOM HAS DETERIORATED WITH AGE AND NEEDS TO BE REPLACED. THE HOT WATER HEATING PIPES ARE CLOGGED BECAUSE WATER TREATMENT WAS NOT CONSISTENTLY DONE IN THE PAST. SOME HOT WATER PIPES LEAK. THE HOT WATER HEAT EXCHANGER SHOULD BE REPLACED BEFORE THE TUBE BUNDLE FAILS. ASBESTOS PIPE INSULATION NEEDS TO BE REMOVED.	REPLACE THE DETERIORATED STEAM EQUIPMENT AND RENOVATE THE STEAM AND HOT WATER DISTRIBUTION SYSTEM.	100000
		<b>TOTAL TYLER RESIDENCE</b>	<b>\$2,137,500</b>
<b>UMSTEAD RESIDENCE HALL</b>			
07-G097	INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	85000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-G098	SINGLE-PLY ROOF AT LOBBY IS IN POOR CONDITION AND IS NEAR/AT END OF EXPECTED LIFE.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL MEMBRANE OVER NEW INSULATION (MINIMUM R-20) AT MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT. COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	65000
07-M022	THE EXISTING FOUR PIPE TRANE FAN COIL UNITS SYSTEM DOES NOT PROVIDE SUFFICIENT HUMIDITY CONTROL. THE HVAC SYSTEM INCORPORATES NO AIR HANDLERS, WITH NO OUTSIDE AIR PROVIDED TO THE ROOMS EXCEPT THROUGH FCU VENTS WHICH CREATE MOLD PROBLEMS. STUDENTS OPEN WINDOWS, CREATING HUMIDITY, HEATING/COOLING AND ENERGY USE ISSUES. CONTROLS FOR THE EXISTING FAN COIL UNITS ARE NO LONGER AVAILABLE. ROOFTOP MAKEUP AIR UNITS ARE FOR BATHROOMS ONLY.	PROVIDE A COMPLETE HVAC UPGRADE.	500000
		<b>TOTAL UMSTEAD RESIDENCE</b>	<b>\$650,000</b>
<b>WHITE RESIDENCE HALL</b>			
07-E014	THE EXISTING PANEL IS AT THE END OF ITS SERVICE LIFE.	INSTALL A NEW MAIN DISTRIBUTION PANEL PER THE NEC.	7500
07-E023	THE EXISTING PANEL(S) IS FULL/LOADED AND A NEW PANEL IS NEEDED.	INSTALL A NEW ELECTRICAL PANEL.	4500
07-E042	THE EMERGENCY GENERATOR IS REACHING THE END OF IT'S SERVICE LIFE AND NEEDS TO BE REPLACED.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	40000
07-G104	SOME INDIVIDUAL ROOM BUILT-IN CASEWORK, AND INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE. RESTROOMS AND DOOR HARDWARE ARE NOT COMPLETELY ADA ACCESSIBLE AND RESTROOMS ARE SHOWING SIGNS OF HEAVY USE. RECENT DOI ANNUAL REPORTS CITES FIRE PROTECTION ISSUES AT LOBBY AREA. SOME STAIR TREADS ARE WORN, LOOSE AND UNSAFE.	REMOVE AND REPLACE DAMAGED AND DETERIORATED INDIVIDUAL ROOM BUILT-IN CASEWORK. RENOVATE RESTROOMS, INSTALL NEW DOOR HARDWARE AND CORRECT FIRE PROTECTION CONCERNS AT LOBBY AREA. REFURBISH AND REPAINT INTERIOR FINISHES AS NEEDED. INSTALL NEW STAIR TREADS AS REQUIRED.	3250000
07-G105	ALTHOUGH THE MAJORITY OF WINDOWS AT RESIDENCE HALL HAVE BEEN REPLACED, ORIGINAL, METAL, SINGLE GLAZED WINDOWS (LOBBY STOREFRONT SYSTEMS) ARE NEAR END OF EXPECTED LIFE, IN POOR CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW WINDOWS (STOREFRONT SYSTEMS) WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING.	175000
07-G106	BUILT-UP ROOF IS NEARING END OF EXPECTED LIFE.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL MEMBRANE OVER NEW INSULATION (MINIMUM R-20) AT MINIMUM SLOPE OF ONE QUARTER INCH PER FOOT. COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	106000

<b>D_NO</b>	<b>Description</b>	<b>Recommended Correction</b>	<b>Cost</b>
07-M027	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. STANDPIPES PROVIDE THE ONLY FIRE PROTECTION.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM FOR THIS RESIDENCE HALL.	750000
07-M028	THE TEMPERATURE OF THE DOMESTIC HOT WATER IS NOT ACCURATELY CONTROLLED BY THE STEAM TO HOT WATER HEAT EXCHANGER. THE CONTROLS SYSTEM FOR THE HOT WATER HEAT EXCHANGER IS OLD, OBSOLETE AND UNRELIABLE. THE HEAT EXCHANGER HAS DETERIORATED WITH AGE. DEMAND FOR HOT WATER IS HIGH ONLY AT CERTAIN TIMES OF THE DAY, AND NO STORAGE TANK EXISTS TO EVEN THE LOAD. SOME ASBESTOS INSULATION WILL NEED TO BE REMOVED.	PROVIDE A NEW, SELF CONTAINED DOMESTIC HOT WATER HEATER WITH AN INTEGRAL HEAT EXCHANGER. INCLUDE ALL ASSOCIATED PIPING, VALVES AND CONTROLS.	125000
		TOTAL WHITE RESIDENCE	\$4,458,000
			Total Housing
			\$46,171,500