

2007 FCAP All DEFICIENCIES BY BUILDING

Tuesday, July 15, 2008

D_NO	Description	Recommended Correction	Cost
14TH STREET WAREHOUSE			
07-E083	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$15,000
		TOTAL 14TH STREET	\$15,000
ADA STUDY			
07-G203	SOME BUILDINGS ARE NOT FULLY COMPLIANT WITH ADA GUIDELINES AND STATE BUILDING CODE.	A STUDY TO DETERMINE ADA DEFICIENCIES AND ESTIMATED COST OF CORRECTIONS THAT ARE REMAINING IS RECOMMENDED.	\$125,000
		TOTAL ADA STUDY	\$125,000
ADMIN SUPPORT ANNEX			
07-E071	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.	\$7,500
07-E072	THERE IS NO EMERGENCY POWER SOURCE TO RUN PUMPS , FANS, MOTORS, AND ANY OTHER REQUIRED EQUIPMENT UNDER ADVERSE SITUATIONS.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	\$40,000
07-E073	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	RECOMMEND INSTALLING A FIRE ALARM SYSTEM IN ACCORDANCE WITH NC DEPARTMENT OF INSURANCE STANDARDS.	\$10,000
07-G161	INTERIOR AND EXTERIOR FINISHES ARE SHOWING SIGNS OF DETERIORATION. EXTERIOR IS EXHIBITING MINOR CRACKING. MOISTURE IS ENTERING BUILDING, (EITHER THROUGH FAILURE OF ROOFING AND FLASHING OR THROUGH EXTERIOR MASONRY WALLS).	LOCATE AND CORRECT MOISTURE INTRUSION INTO INTERIOR OF BUILDING. REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.	\$25,000
07-G162	ORIGINAL, METAL FRAMED, SINGLE GLAZED WINDOWS ARE AT END OF EXPECTED LIFE, ARE IN POOR OPERATING CONDITION, AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT OF OCCUPANTS. IN ADDITION, SOME EXTERIOR AND INTERIOR DOORS AND HARDWARE ARE ALSO IN POOR CONDITION.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REPLACE DAMAGED AND DETERIORATED EXTERIOR AND INTERIOR DOOR FRAMES, DOORS AND HARDWARE.	\$30,000
07-G163	SINGLE-PLY ROOF IS IN POOR CONDITION AND AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$42,000
		TOTAL ADMIN SUPPORT ANNEX	\$154,500

ALL HSC CAMPUS BUILDINGS

D_NO	Description	Recommended Correction	Cost
07-M021	THE CURRENT ELECTRIC CONDENSATE PUMPS REQUIRE MAINTENANCE ABOUT TWICE A YEAR, PRINCIPALLY INVOLVING PUMP SEALS, IMPELLERS AND FLOATS. THE ELECTRIC CONDENSATE PUMPS ARE ALSO DEPENDENT ON CONTINUOUS ELECTRICAL SUPPLY.	REPLACE THE ELECTRIC CONDENSATE PUMPS THROUGHOUT ALL THE CAMPUS BUILDINGS WITH AIR OR STEAM POWERED CONDENSATE PUMPS AND RECEIVER TANK ASSEMBLIES.	\$400,000
		TOTAL ALL HSC CAMPUS	\$400,000
AUSTIN			
07-G027	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 43 YEAR OLD, CLASSROOM BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, STONE LANDING, DECORATIVE MASONRY, STEPS AND RAILING AT ENTRY WAYS ARE IN A STATE OF DISREPAIR.	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.	\$11,050,000
		TOTAL AUSTIN	\$11,050,000
AYCOCK RESIDENCE HALL			
07-E010	THE EXISTING WIRE, PANELS, AND SWITCHES ARE REACHING THE END OF THEIR SERVICE LIVES.	COMPLETELY REWIRE AND REPLACE EXISTING PANELS AND SWITCHES.	\$25,000
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.	\$80,000
07-E033	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	\$55,000
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.	\$40,000
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.	\$240,000
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 RENOVATION.	\$615,000
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.	\$50,000
07-G230	CEILING TILE IN CORRIDORS AND ROOMS IS NEAR END OF USEFUL LIFE.	INSTALL NEW CEILING TILE IN CORRIDORS AND ROOMS.	\$240,000
07-G231	BUILDING HAS NO ELEVATOR FOR 5 FLOORS.	ADD ELEVATOR TO COMPLY WITH ADA GUIDELINES AND STATE BUILDING CODE.	\$400,000
07-G232	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	\$135,000

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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.	\$325,000
07-M061	STEAM RADIATORS, BUT NO STEAM PIPING, WERE REPLACED IN 2005.	RENOVATE THE ENTIRE STEAM PIPING SYSTEM, INCLUDING CONTROLS.	\$200,000
TOTAL AYCOCK RESIDENCE HALL			\$2,405,000
BATE			
07-E064	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$60,000
07-E065	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.	\$120,000
07-E066	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED.	INSTALL NEW ENERGY SAVING LIGHTS.	\$75,000
07-G141	ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS.	UPGRADE ELEVATORS AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$250,000
07-G142	SOME FIXED SEATS IN CLASSROOMS (MOSTLY AT FIRST FLOOR LEVEL) ARE DAMAGED AND NEAR/AT END OF USEFUL LIFE. IN ADDITION, SOME FINISHES AT CLASSROOMS ARE ALSO AT END OF LIFE.	REPAIR OR REPLACE FIXED SEATING AS NEEDED. REPLACE, REPAIR AND REPAINT DAMAGED AND DETERIORATED FINISHES.	\$625,000
07-G143	MOST STEP TREADS AT STAIRWELLS ARE NEARING END OF LIFE AND MAY POSE A TRIPPING HAZARD.	REPLACE DAMAGED AND DETERIORATED STEP TREAD AT STAIRWELLS.	\$50,000
07-G144	PAINT (INTERIOR AND EXTERIOR) WILL SOON BE NEARING THE END OF EXPECTED LIFE.	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED. REPAIR AND REPAINT METAL PORCH RAILING AT REAR OF BUILDING.	\$325,000
07-G145	BUILT-UP ROOF IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$665,000
07-G146	EXTERIOR WALL APPARENTLY HAS GOOD WATERPROOFING AND NO DAMAGE TO INTERIOR WALLS FROM FUNGAL GROWTH WAS NOTED. SOME CAULK JOINTS ARE DETERIORATED. WALLS BELOW GRADE APPARENTLY HAVE GOOD WATERPROOFING AND STORM DRAINAGE.	CLEAN AND RECAULK JOINTS AS NEEDED. TO REDUCE MOISTURE MOVING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	\$75,000
07-G147	SOME INTERIOR DOOR HARDWARE REQUIRES EXTENSIVE MAINTENANCE AND IS NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DAMAGED, DETERIORATED AND NON-ADA COMPLIANT DOORS AND HARDWARE AS NEEDED.	\$125,000
07-M039	THE STEAM DISTRIBUTION ROOM IN BATES BUILDING HAS INADEQUATE VENTILATION.	UPGRADE VENTILATION TO THE STEAM DISTRIBUTION ROOM.	\$25,000
07-M065	THE OUTER AREAS OF BATES CLASSROOM BUILDING HAVE VAV REHEAT BOXES. THE INTERIOR AREAS OF BATE BUILDING HAVE NO REHEAT. HEAT IS NEEDED FOR THE BUILDING CORE FOR COMFORT AND HUMIDITY CONTROL. AIR HANDLER COILS ARE CLOGGED WITH DUST AND DIRT.	ADD VAV BOXES FOR REHEAT IN THE INTERIOR PORTIONS OF BATE BUILDING. PROVIDE VARIABLE FREQUENCY DRIVES FOR ONE RETURN AND TWO SUPPLY FAN MOTORS. THIS WILL ALLOW CONTROL VANE ASSEMBLIES AT THE AIR HANDLER TO BE DISCARDED. CLEAN THE AIR HANDLER COILS TO IMPROVE EFFICIENCY.	\$200,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	BATE	\$2,595,000
BELK RESIDENCE HALL				
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.		\$5,000
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.		\$55,000
07-E037	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED	INSTALL NEW ENERGY SAVING LIGHTS		\$50,000
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.		\$30,000
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.		\$150,000
07-G206	SOME INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.		\$270,000
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.		\$800,000
07-G208	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.		\$110,000
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.		\$100,000
07-G212	ORIGINAL WINDOWS ARE DIFFICULT TO OPERATE AND MAINTAIN. WINDOWS ARE ENERGY INEFFICIENT.	REPLACE WINDOWS WITH DBL PANE CLAD LOW MAINTENANCE UNITS.		\$255,000
07-G226	SOME EXTERIOR DOORS AND HARDWARE WILL SOON BE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.		\$100,000
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.		\$500,000

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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.	\$125,000
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.	\$850,000
TOTAL BELK RESIDENCE HALL			\$3,400,000
BETHEL CLINIC #2			
07-E001	THIS MEDICAL FACILITY SERVES THE NEEDS OF THE COMMUNITY. DURING OUTAGES EMERGENCY POWER IS NEEDED SO THAT MEDICAL NEEDS CAN BE MET.	RECOMMEND INSTALLING AN EMERGENCY GENERATOR LARGE ENOUGH TO CARRY THIS SMALL FACILITY.	\$35,000
07-G001	WATER LEAKING THROUGH FOUNDATION WALL IN BASEMENT HAS CAUSED DETERIORATION OF STEEL COLUMNS, WHICH HAVE BEEN REPAIRED. STANDING WATER AND EXCESS MOISTURE IN BASEMENT CREATES HIGH HUMIDITY IN HVAC SYSTEM AND PROMOTES GROWTH OF MOLD. ALSO, MOWERS HIT AND DAMAGE STUCCO WALL FINISH. SOME PATCHING WAS DONE.	EXCAVATE FOUNDATION WALL, INSTALL WATERPROOFING AND RESTORE FINISH GRADE. CLEAN AND DISINFECT BASEMENT SPACE AND HVAC SYSTEM. UNTIL WALL IS WATERPROOFED, ADD VENTILATION EXHAUST FAN IN VERTICAL SHAFT OR IN AREAWAY RECESSED AT GROUND LEVEL. INSTALL PAVERS ON GROUND ALONG EAST SIDE TO PROTECT WALL FROM MOWERS.	\$28,000
07-G002	ON MAIN SECTION, BUILT-UP ROOF WILL BE IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED TO STOP LEAKS BEFORE REPLACEMENT.	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.	\$65,000
07-G003	BUILDING IS NOT FULLY COMPLIANT WITH ADA GUIDELINES AND STATE BUILDING CODE. ENTRANCE DOOR IS NOT MOTOR OPERATED. A COVERED ENTRANCE IS NOT PROVIDED FOR PATIENTS IN WHEELCHAIR OR ON GURNEY. HEAT IS PROVIDED BY OIL FIRED FURNACE WITH NO CARBON MONOXIDE DETECTOR.	A STUDY OF ADA DEFICIENCIES TO INCLUDE COST OF RENOVATION IS RECOMMENDED. INSTALL MOTOR OPERATED ENTRANCE DOOR. CONSTRUCT A CANOPY AT ENTRANCE FOR WEATHER PROTECTION. INSTALL A CARBON MONOXIDE DETECTOR.	\$12,000
07-G004	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND CRACKS. CONDITION VARIES DEPENDING ON INITIAL QUALITY, TRAFFIC LOAD, AND MAINTENANCE. ONE CONCRETE SECTION HAS CRACKS AND UNEVEN SURFACE.	REPAIR APPROPRIATELY FOR CONDITION OF ASPHALT SURFACE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO ACHIEVE A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. LOT MAY NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$8,000
07-G005	EXTERIOR DOORS AND FRAMES ARE IN POOR CONDITION AND NOT ADA COMPLIANT.	REPLACE 4 EXTERIOR DOORS WITH LOW MAINTENANCE INSULATED UNITS AND ADA HARDWARE.	\$4,000
07-G006	CARPET IS WORN AND DISCOLORED.	REPLACE CARPET WITH HEAVY DUTY CARPET.	\$16,000

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07-M001	AS NOTED BY THE DEPARTMENT OF INSURANCE, THIS WOOD FRAME BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION.	PROVIDE AN AUTOMATIC FIRE SPRINKLER SYSTEM.	\$30,000
07-M002	THE TWO FUEL OIL HEATERS IN THE BASEMENT OF THE BETHEL CLINIC ARE AGING AND MAY BE INEFFICIENT.	VERIFY THE OPERATING CONDITION OF THE FUEL OIL HEATERS FOR SAFETY AND EFFICIENCY.	\$5,000
07-M003	ATTIC INSULATION IS NEEDED. THE DOMESTIC HOT WATER HEATER MAY BE INEFFICIENT. BASEMENT SUMP PUMPS ARE DETERIORATED. OUTDOOR INSULATION ON THE DX REFRIGERANT LINES IS DETERIORATED.	ADD ATTIC INSULATION. INSTALL INSTANTANEOUS HOT WATER HEATERS. REPLACE BOTH BASEMENT SUMP PUMPS TO AVOID POTENTIAL BASEMENT FLOODING. REPLACE INSULATION ON DX LINES.	\$15,000
		TOTAL BETHEL CLINIC #2	\$218,000
BIOTECHNOLOGY			
07-E016	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	\$50,000
07-E017	THE EXISTING EXIT FIXTURES WASTE ENERGY AND MAINTENANCE LABOR TO KEEP THEM WORKING.	RECOMMEND REPLACING ALL EXIT FIXTURES WITH LED TYPE. THE PAYBACK WILL BE JUST A FEW YEARS IN ENERGY AND LABOR SAVINGS.	\$3,000
07-E018	THE EXISTING EXIT FIXTURES WASTE ENERGY AND MAINTENANCE LABOR TO KEEP THEM WORKING.	RECOMMEND REPLACING ALL EXIT FIXTURES WITH LED TYPE. THE PAYBACK WILL BE JUST A FEW YEARS IN ENERGY AND LABOR SAVINGS.	\$3,000
07-G032	SOME EXTERIOR DOORS AND HARDWARE, INCLUDING SLIDING DOOR, WILL SOON BE NEAR END OF USEFUL LIFE. AUTOMATIC DOORS ARE DIFFICULT TO MAINTAIN.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$24,000
07-G033	2 ORIGINAL PASSENGER ELEVATORS ARE DIFFICULT TO MAINTAIN.	UPGRADE ELEVATORS WITH NEW SOLID STATE CONTROLS, AND RENEW MOVING PARTS. REFURBISH CABS.	\$60,000
07-G034	SOME INTERIOR DOOR HARDWARE WILL SOON BE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOOR HARDWARE AS NEEDED.	\$12,000
07-G035	SINGLE PLY ROOF IS IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$185,000
07-G036	CAULKING IN EXPANSION JOINTS AND AT WINDOWS WILL SOON BE NEAR END OF USEFUL LIFE.	REPLACE CAULKING IN EXTERIOR WALLS WHEN NEEDED.	\$14,000
07-G037	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	\$26,000
		TOTAL BIOTECHNOLOGY	\$377,000
BLDG 127			
07-E085	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.	\$30,000

D_NO	Description	Recommended Correction	Cost
07-G184	SINGLE-PLY ROOF (LIKELY 12+ YEARS OLD) IS NEARING END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$85,000
		TOTAL BLDG 127	\$115,000
BLDG 206			
07-G180	MASONRY WALL ALONG SIDE STREET IS SHOWING SIGNS OF DETERIORATION. SLIDING METAL DOOR AT BACK, AND WOOD DOORS ALONG SIDE OF BUILDING ARE ALSO IN A STATE OF DISREPAIR. METAL FACADE AT FRONT IS ALSO IN POOR CONDITION.	REPAIR AND POINT-UP DETERIORATED MASONRY WALL ALONG SIDE STREET. REPLACE SLIDING METAL DOOR AT BACK, AND WOOD DOORS ALONG SIDE OF BUILDING. REBUILD AND REPAIR METAL FACADE AT FRONT.	\$85,000
07-G181	ASPHALT SHINGLE ROOF APPEARS TO BE IN POOR CONDITION (AT BACK OF BUILDING). METAL ROOF (5V METAL PANELS) OVER FRONT PORTION OF BUILDING IS ALSO IN POOR CONDITION AND HAS A MAJOR LEAK ALONG RIDGELINE. IN ADDITION, METAL ROOF APPEARS TO BE "BUCKLED" ALONG RIDGE.	REMOVE ALL ROOF MATERIALS (ASPHALT SHINGLES) TO EXPOSE STRUCTURAL DECK, AND REPAIR AS REQUIRED. INSTALL NEW ASPHALT SHINGLES. REMOVE METAL PANELS AND CORRECT ANY STRUCTURAL CONCERNS WITH RIDGE. REPAIR OR REPLACE METAL ROOFING.	\$75,000
		TOTAL BLDG 206	\$160,000
BLDG 214			
07-G190	DUE TO AGE AND CONSTANT USE, GARAGE DOOR ARE NEAR/AT END OF MAINTAINABLE LIFE.	REMOVE AND REPLACE DETERIORATED AND DAMAGED GARAGE DOOR, CLOSER AS NECESSARY.	\$4,000
		TOTAL BLDG 214	\$4,000
BLDG 214-B			
07-G186	DUE TO AGE AND CONSTANT USE, GARAGE DOORS ARE NEARING END OF MAINTAINABLE LIFE.	REMOVE AND REPLACE DETERIORATED AND DAMAGED GARAGE DOORS, CLOSERS AS NECESSARY.	\$21,000
		TOTAL BLDG 214-B	\$21,000
BLDG 214-C			
07-G187	DUE TO AGE AND CONSTANT USE, GARAGE DOORS ARE NEAR/AT END OF MAINTAINABLE LIFE.	REMOVE AND REPLACE DETERIORATED AND DAMAGED GARAGE DOORS, CLOSERS AS NECESSARY.	\$8,000
		TOTAL BLDG 214-C	\$8,000
BLDG 214-D			
07-G188	APPROXIMATELY 40% OF THE EXTERIOR METAL SIDING IS IN POOR CONDITION. BACK WALL HAS BEEN PUSHED OUT OF PLUMB. INSULATION IS ALSO IN POOR CONDITION. FINISH AT REMINDER OF EXTERIOR IS ALSO SHOWING SIGNS OF DETERIORATION.	REPAIR/REPLACE DETERIORATED METAL SIDING AND REALIGN BACK WALL. REPLACE DAMAGED INSULATION. REPAINT REMAINDER OF STRUCTURE.	\$30,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	BLDG 214-D	
\$30,000				
BLDG 214-E				
07-G189	DUE TO AGE AND CONSTANT USE, GARAGE DOORS ARE NEARING END OF MAINTAINABLE LIFE.	REMOVE AND REPLACE DETERIORATED AND DAMAGED GARAGE DOORS, CLOSER AS NECESSARY.		\$16,000
		TOTAL	BLDG 214-E	\$16,000
BLDG 215				
07-E086	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.		\$25,000
07-G192	SOME SECTIONS OF METAL COVERED WOOD TRIM, VINYL SIDING AND ASPHALT SHINGLE ROOF ARE IN A STATE OF DISREPAIR.	REPAIR AND REFURBISH EXISTING TRIM, SIDING AND ASPHALT SHINGLE ROOF AS REQUIRED.		\$15,000
		TOTAL	BLDG 215	\$40,000
BLDG 215-A				
07-G193	SINGLE-PLY ROOF (FRONT, NORTH SECTION) APPEARS TO BE IN VERY POOR CONDITION. ACCESS TO ROOF WAS NOT AVAILABLE AT TIME OF SURVEY.	VERIFY CONDITION AND QUANTITY OF DETERIORATED ROOF. 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.		\$120,000
		TOTAL	BLDG 215-A	\$120,000
BLDG 215-B				
07-G194	SOME SECTIONS OF METAL ROOF AND GUTTER ARE IN A STATE OF DISREPAIR.	REPAIR AND REFURBISH METAL ROOF AND GUTTERS AS REQUIRED.		\$5,000
		TOTAL	BLDG 215-B	\$5,000
BLDG 215-C				
07-E087	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.		\$30,000
		TOTAL	BLDG 215-C	\$30,000
BLDG 216				

D_NO	Description	Recommended Correction	Cost
07-G195	SECTIONS OF BUILT-UP ROOF AND SKYLIGHTS ARE IN A STATE OF DISREPAIR. MASONRY CHIMNEY AND ELEVATED WATER TOWER IS ALSO IN QUESTIONABLE CONDITION.	WEATHERPROOF, REPAIR AND REFURBISH BUILT-UP ROOF AND SKYLIGHTS AS REQUIRED. DETERMINE CONDITION OF BOTH MASONRY CHIMNEY AND ELEVATED WATER TANK. PERFORM NECESSARY REPAIRS TO PRESERVE STRUCTURAL INTEGRITY, (BUILDING, MASONRY CHIMNEY AND WATER TOWER).	\$265,000
		TOTAL BLDG 216	\$265,000
BLOUNT HOUSE			
07-G138	MASONITE SIDING, SOME EXTERIOR WALL STRUCTURE AND WOOD TRIM IS SHOWING MAJOR SIGNS OF DETERIORATION. WOOD SIDING AT FRONT PORCH IS IN POOR CONDITION. THE MAJORITY OF SIDING AT/OR NEAR GRADE LEVEL IS ALSO IN POOR CONDITION. ORIGINAL, WOOD FRAMED, SINGLE GLAZED WINDOWS ARE AT END OF EXPECTED LIFE, AND ARE IN POOR OPERATING CONDITION. SOME WOOD FRAMED EXTERIOR DOOR FRAMES, DOORS AND HARDWARE ARE ALSO IN POOR CONDITION.	REMOVE DAMAGED AND DETERIORATED MASONITE AND WOOD SIDING AND TRIM, INSTALL INSULATING HOUSE WRAP OR SIMILAR PRODUCT. INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REMOVE AND REPLACE DAMAGED AND DETERIORATED WOOD DOOR FRAMES, DOORS AND HARDWARE. INSTALL NEW CEMENTIOUS BOARD SIDING AND TRIM. PAINT EXTERIOR SURFACES.	\$95,000
07-G139	THERE IS NO INSULATION AT THE WOOD FLOOR SYSTEM AT PARTIAL BASEMENT.	INSTALL BATT TYPE INSULATION AT PARTIAL BASEMENT CEILING.	\$6,000
07-M066	THE HVAC LOAD ON BLOUNT HOUSE HAS INCREASED WITH THE CONVERSION TO USE AS THE CAMPUS POLICE DEPARTMENT. SUMMER COOLING IS THE MAIN CONCERN WITH THE HEAVY THERMAL LOAD FROM ELECTRONIC EQUIPMENT.	CONDUCT AN ENGINEERING STUDY TO DETERMINE THE MOST FEASIBLE WAY TO HANDLE THE HEAVIER THERMAL LOAD AT BLOUNT HOUSE. THE NEW HVAC SYSTEM SHOULD ALLOW THE REMOVAL OF THE CURRENT WINDOW	\$50,000
		TOTAL BLOUNT HOUSE	\$151,000
BLOXTON			
07-G078	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 55 YEAR OLD, CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, WOOD, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. SINGLE PLY ROOF IS ALSO AT OR NEAR END OF MAINTAINABLE LIFE.	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. 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). COST ESTIMATE ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT REFLECTIVE SURFACE.	\$650,000
		TOTAL BLOXTON	\$650,000
BREWSTER - A			

D_NO	Description	Recommended Correction	Cost
07-G031	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 37 YEAR OLD, SOCIAL SCIENCES BUILDING ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, SOME EXTERIOR CONCRETE FASCIA IS CRACKED AND MAY NOT BE STRUCTURALLY SOUND. BRICK AND CONCRETE WALLS ARE DISCOLORED. ENTRANCE DOORS, SLIDING GATES AND CONCRETE COURTYARD IS IN POOR CONDITION. STEPS AND RAILINGS AT ENTRY WAYS ARE ALSO IN A STATE OF DISREPAIR. ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS AND REQUIRE CONSTANT MAINTENANCE. NOTE: ALL FOUR SECTIONS OF BUILDINGS ARE INCLUDED IN THIS DEFICIENCY.	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. REPAIR CONCRETE PANELS AND FASCIA. CLEAN EXTERIOR WALLS AND RE-CAULK AND REPAIR MORTAR JOINTS. REPLACE OR REPAIR EXTERIOR DOORS, HARDWARE AND SLIDING GATES. RENOVATE COURTYARD AND EXTERIOR STEPS. UPGRADE ELEVATORS AS NEEDED.	\$25,400,000
TOTAL BREWSTER - A			\$25,400,000
BRODY			
07-E005	THE EXISTING FIRE ALARM DOES NOT MEET THE FIRE CODE.	REWIRE CARD READER DOORS TO ALLOW ACCESS WHEN THE FIRE ALARM IS ACTIVATED.	\$50,000
07-E006	THE EXISTING SWITCHGEAR IS REACHING THE END OF ITS USEFUL LIFE.	REPLACE THE EXISTING SWITCHGEAR	\$500,000
07-E008	THE EXISTING GE LOW VOLTAGE LIGHTING CONTROLS ARE NO LONGER WORKING. CONSTANT FAILURES HAVE MADE THEM UNUSABLE.	RECOMMEND INSTALLING A NEW LIGHTING SYSTEM WHERE CONTROL OF LIGHTS CAN BE ACCOMPLISHED IN ONE LOCATION.	\$30,000
07-E009	THE EXISTING SWITCHGEAR IS REACHING THE END OF ITS USEFUL LIFE.	REPLACE THE EXISTING SWITCHGEAR	\$600,000
07-E010	THE EXISTING TRANSFER SWITCH IS REACHING THE END OF ITS USEFUL LIFE.	REPLACE THE EXISTING TRANSFER SWITCH	\$90,000
07-E011	THE MOTOR CONTROL CENTER NEEDS TO BE UPGRADED.	UPGRADE, REPAIR, OR REPLACE THE EXISTING MCC	\$100,000
07-E014	THE TRANSFORMER IS LEAKING OIL.	REPLACE THE EXISTING TRANSFORMER	\$500,000

D_NO	Description	Recommended Correction	Cost
07-G***	THIS 25 YEAR OLD BUILDING IS UTILIZED BEYOND ORIGINAL DESIGN CAPACITY. MOST SYSTEMS INCLUDING FINISHES, MECHANICAL, ELECTRICAL, PLUMBING AND ELEVATORS ARE VERY WORN DUE TO HEAVY USE AND ARE NOT ADEQUATE TO MEET CURRENT DEMAND AND NEEDS. THE BUILDING IS NOT CONFIGURED FOR OPTIMAL CURRENT USE OF SPACE. OTHER DEFICIENCY REPORTS AND ESTIMATES DETAIL ONGOING MAINTENANCE AND OPERATIONAL ITEMS NECESSARY TO CONTINUE EFFECTIVE USE OF THE BUILDING. DUE TO HEAVY USE DEMAND AND EVOLVING REQUIREMENTS, THIS BUILDING SHOULD UNDERGO A COMPLETE, PHASED, RENOVATION.	PROVIDE A COMPLETE RENOVATION TO INCLUDE ADDRESSING PROGRAM REQUIREMENTS AND RECONFIGURING SPACES AS NEEDED. RENOVATE OR REPLACE ALL SYSTEMS AS NEEDED TO INCLUDE ELECTRICAL, LIGHTING, MECHANICAL, PLUMBING, LABORATORIES, FLOOR, WALL AND CEILING FINISHES, WINDOWS, INTERIOR AND EXTERIOR DOORS AND HARDWARE, ELEVATORS, SPECIALIZED EQUIPMENT AND LABORATORIES, CLASSROOMS AND LECTURE HALLS, AUDIO-VISUAL SYSTEMS, FIRE AND SMOKE DETECTION, SECURITY SYSTEMS, FIRE SUPPRESSION, ROOFS, AND REPAIR OF LEAKING WALLS AND WALL CAVITIES. THIS BUILDING CANNOT BE VACATED THEREFORE A PHASED RENOVATION IS REQUIRED. THE FORMER TWO-STORY LIBRARY SPACE SHOULD BE RENOVATED FIRST AND UTILIZED AS FLEXIBLE SWING SPACE WHILE OTHER PHASES OF THE BUILDING ARE RENOVATED. DUE TO THE SPECIALIZED NATURE OF THE BUILDING AND THE NEED TO CONTINUE OPERATIONS, THE PER SQUARE FOOT COST OF RENOVATION WILL BE HIGHER THAN TYPICAL FOR A BUILDING THIS SIZE. THE ESTIMATE IS FOR A COMPLETE RENOVATION AND ASSUMES ITEMS DETAILED IN SEPARATE DEFICIENCY REPORTS WOULD BE ADDRESSED AS PART OF THE RENOVATION.	\$105,000,000
07-G005	GASKETS IN OPERABLE WINDOWS ARE NEAR END OF USEFUL LIFE.	REPLACE GASKETS FROM INSIDE.	\$12,000
07-G006	2 ORIGINAL PASSENGER ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS FOR ADA, OPERATION AND MAINTENANCE. 2 PASSENGER ELEVATORS HAVE BEEN UPGRADED. ANOTHER ELEVATOR IS NEEDED IN EXISTING EMPTY SHAFT. 2 ORIGINAL FREIGHT ELEVATORS NEED UPGRADING.	UPGRADE ELEVATORS AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA AND OPERATIONAL GUIDELINES. UPGRADE TWO PASSENGER ELEVATORS, TWO FREIGHT ELEVATORS, AND STUDY IF ONE NEW PASSENGER ELEVATOR IS NEEDED.	\$1,200,000
07-G007	IN FIRST FLOOR CORRIDOR AND LIBRARY, FLOOR SLAB HAS SETTLED AND IS APPARENTLY STABLE.	ADJUST SLOPE OF FLOOR WHEN CARPET IS REPLACED.	\$6,000
07-G008	DOI REPORT INDICATES THAT LATCHES ON ALL CORRIDOR AND OFFICE DOORS DO NOT COMPLY WITH STATE BUILDING CODE. SERVICE ENTRANCE DOORS AND SOME STAIR EXIT DOORS ARE NOT ADEQUATE.	INSTALL NEW HOLD OPEN DEVICES AND CLOSER HARDWARE CONNECTED TO FIRE ALARM SYSTEM AS REQUIRED TO COMPLY WITH THE STATE BUILDING CODE. RELOCATE SERVICE ENTRANCE DOORS. REPLACE SOME STAIR EXIT DOORS AND EXTERIOR DOORS THAT ARE NOT ADEQUATE.	\$75,000
07-G009	TREADS AND FLOORS IN 4 STAIRS ARE WORN, SLIPPERY AND UNSAFE. 2 STAIRS HAVE BEEN COMPLETED.	INSTALL NEW TREADS AND FLOORING IN STAIRS AND ON STEPS AS REQUIRED BY STATE BUILDING CODE.	\$36,000
07-G010	MECHANICAL CLOSET SPACES ON EACH FLOOR HAVE OPENING IN FLOOR FOR VERTICAL CONDUIT CHASE. WATER CAN RUN THROUGH CHASE. WATER ON TOILET FLOORS CAN LEAK THROUGH FLOOR.	INSTALL CONCRETE CURB AROUND OPENINGS IN FLOORS AND SEAL AROUND CURB. WATERPROOF TOILET FLOORS.	\$190,000
07-G011	SUSPENDED TILE CEILINGS IN VARIOUS AREAS ARE NEAR END OF USEFUL LIFE.	REPLACE CEILINGS WHERE NEEDED WITH 2X2 SUSPENDED SYSTEM	\$540,000
07-G012	SOME INTERIOR DOORS AND DOOR HARDWARE WILL SOON BE NEAR END OF USEFUL LIFE. SOME DOORS ARE DAMAGED BY CARTS. MOST DOOR HARDWARE IS NOT ADA COMPLIANT.	REPLACE DOOR HARDWARE THROUGHOUT THE BUILDING AS NEEDED WITH HEAVY DUTY ADA COMPLIANT LEVER ACTION HARDWARE. REPLACE HINGES AND LOCKSETS AS NEEDED.	\$285,000

D_NO	Description	Recommended Correction	Cost
07-G013	FIXED SEATS, CARPET, STAGE CURTAINS, PAINT AND LIGHTING IN AUDITORIUM ARE NEAR END OF USEFUL LIFE.	RENOVATE AUDITORIUM AND STAGE, INCLUDING SEATING, CARPET AND OTHER ITEMS TO UPGRADE FUNCTIONAL PERFORMANCE AS NEEDED.	\$380,000
07-G014	\$400,000 WAS SPENT TO CLEAN BRICK, RECAULK WINDOWS, AND CLEAN WEEP HOLES. CONTRACTOR DRILLED OUT WEEP HOLES AND PENETRATED SHEATHING ON CAVITY WALL. HIGH WINDS DRIVE WATER THROUGH WEEP HOLES AND INTO SPACE AT WINDOW FRAME IN CAVITY WALL CAUSING DAMAGE TO INTERIOR WALL AND FLOOR. WATER IN CAVITY IS LIKELY CAUSING RUST AND MOLD GROWTH. PENTHOUSE WALLS AND DOORS AND CANOPY AT WEST ENTRANCE ARE RUSTED.	INVESTIGATE DAMAGE INSIDE CAVITY WALL BY CUTTING OPENINGS FOR EXAMINATION OF WALL CAVITY. IDENTIFY EXTENT OF DAMAGE AND DEVELOP A DESIGN AND COST ESTIMATE. REPLACE ALL WATER DAMAGED MATERIALS. MODIFY WEEP HOLES AND PATCH PENETRATIONS IN SHEATHING. TO REDUCE MOISTURE THROUGH EXTERIOR WALL, CONSIDER A SILANE/SILOXANE WATERPROOFING. REPAINT STEEL CANOPY FRAME AT WEST ENTRANCE AND PENTHOUSE WALLS AND REPLACE DOORS.	\$325,000
07-G015	FASCIA BOARD ON EXTERIOR CORRIDOR (MRI CORRIDOR) IS CRACKING AND DETERIORATING.	REPLACE EXTERIOR FACIA. EXISTING FACIA BOARD MAY CONTAIN ASBESTOS.	\$125,000
07-G016	CARPET AND FLOOR TILE IN MANY AREAS THROUGHOUT THE BUILDING ARE DAMAGED, WORN, FRAYED AND BEYOND END OF USEFUL LIFE.	REPLACE CARPET AND TILE WHERE NEEDED. SHEET TILE OR OTHER TYPE OF FLOORING SHOULD BE CONSIDERED FOR LABS AND CLASSROOMS WHERE LIQUIDS CAN REACH THE FLOOR TO REDUCE RESIDUE BUILD UP IN SEAMS.	\$565,000
07-G017	FORMICA (AND SOME STEEL) COUNTERTOPS IN LABS, CLASSES ARE ORIGINAL, DAMAGED, WORN, DIFFICULT TO CLEAN.	REPLACE COUNTERTOPS THROUGHOUT THE BUILDING.	\$175,000
07-G018	ROOFS OVER AUDITORIUM AND EXTERIOR CORRIDOR ARE AT END OF LIFE AND HAVE SOME LEAKS.	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	\$375,000
07-G019	EXTERIOR DOORS ARE AT END OF USEFUL LIFE AND DIFFICULT TO OPERATE AND MAINTAIN.	REPLACE ENTRANCE DOORS WITH STOREFRONT AUTOMATIC SLIDING DOORS. INSTALL AIRLOCKS WHERE FEASIBLE.	\$65,000
07-G020	FIXED SEATS, CARPET, STAGE CURTAINS, PAINT AND LIGHTING IN AUDITORIUM ARE NEAR END OF USEFUL LIFE.	RENOVATE LECTURE ROOM, INCLUDING SEATING, CARPET AND OTHER ITEMS TO UPGRADE FUNCTIONAL PERFORMANCE AS NEEDED.	\$370,000
07-M004	THE HVAC CONTROLS SYSTEM IS APPROXIMATELY 21 YEARS OLD AND IS BECOMING OBSOLETE FOR A MEDICAL FACILITY. THE CONTROL SYSTEM LACKS FEATURES WHICH ARE NEEDED FOR RELIABLE PERFORMANCE AND ENERGY CONSERVATION. MODIFICATIONS HAVE BEEN MADE TO THE BUILDING, WITHOUT ADJUSTMENTS TO THE CHILLED WATER, HOT WATER AND AIR DISTRIBUTION SYSTEMS. SUPPLY AIR AND VENTILATION AIR FLOWS DIFFER FROM RECOMMENDED AIR FLOW RATES, CAUSING POTENTIAL FUME HAZARDS AND INDOOR AIR QUALITY CONCERNS. OIL FROM THE SCREW COMPRESSOR ENTERS THE PNEUMATIC CONTROLS SYSTEM, RESULTING IN CONTROL PROBLEMS.	UPGRADE AND EXPAND THE HVAC CONTROLS SYSTEM. BALANCE THE AIR DISTRIBUTION SYSTEM, CHILLED WATER SYSTEM AND HOT WATER SYSTEM. PROVIDE BETTER ACCESS TO FIRE DAMPERS. REPLACE THE SCREW COMPRESSOR, AND FOULED LINES AS NECESSARY.	\$300,000
07-M005	THE WATER PURIFICATION SYSTEM IS OLD (25 YEARS), OBSOLETE, AND THE PIPING HAS DETERIORATED. DI WATER PIPING LEAKS ON THE FIFTH FLOOR. THE DI SYSTEM PRODUCES ONLY 4 GALLONS PER MINUTE OF WATER, AND THE DI SYSTEM CAN NOT AFFORD A MAJOR LEAK.	REPLACE THE ULTRA-PURE WATER SYSTEM AND PIPING. A BID OF \$118,000 HAS BEEN RECEIVED FOR THIS WORK.	\$118,000

D_NO	Description	Recommended Correction	Cost
07-M006	THE STEAM AND CONDENSATE PIPING IS RUSTED, LEAKING AND IS IN POOR CONDITION.	REPLACE ALL DAMAGED STEAM AND CONDENSATE PIPING. THE MOST CRITICAL LINE TO REPLACE IS THE CONDENSATE LINE BETWEEN THE STEAM PLANT AND THE OLD LSB (VIVARIUM) BUILDING. LARGER MANHOLES OR WALKABLE TUNNELS ARE NEEDED.	\$2,000,000
07-M010	THE BLOWDOWN WATER RETURN SYSTEM FOR BRODY BUILDING'S 22 AUTOCLAVES WASTES AN ESTIMATED 20,000 GALLONS OF WATER PER DAY.	UPGRADE THE BLOWDOWN WATER RETURN SYSTEM FOR BRODY'S AUTOCLAVES.	\$500,000
07-M011	THE ENERGY WHEELS IN AC-1 AND AC-7 IN BRODY BUILDING DISINTEGRATED AND WERE REMOVED.	REPLACE THE MISSING ENERGY WHEELS IN UNITS AC-1 AND AC-7.	\$500,000
07-M012	THE FIRE AND JOCKEY PUMPS IN BRODY BUILDING ARE OLD AND IN NEED OF REPLACEMENT.	REPLACE THE FIRE AND JOCKEY PUMPS. VERIFY THAT ALL SPRINKLER HEAD INSPECTION REQUIREMENTS OF NFPA 25 HAVE BEEN CONDUCTED.	\$100,000
07-M013	THIRTY TO FORTY EXHAUST FANS AT BRODY BUILDING ARE CONTROLLED WITH PNEUMATICALLY ACTUATED VANES INSTEAD OF VFDs.	INSTALL VARIABLE FREQUENCY DRIVES FOR THE EXHAUST FANS TO SAVE ENERGY, IMPROVE VENTILATION CONTROL AND IMPROVE MAINTENANCE.	\$200,000
07-M014	THE CHILLED WATER COIL IN AIR HANDLER AC-6 IS OLD AND CORRODED.	REPLACE THE CHILLED WATER COIL IN AC-6.	\$100,000
07-M015	ON THE NORTH SIDE OF THE MECHANICAL ROOM, HE SPRINKLER HEADS ARE ABOVE THE DUCTWORK. THIS BLANKS OUT SPRINKLER COVERAGE BELOW THE DUCTS.	UPFIT THE SPRINKLER PIPING IN THE MECHANICAL ROOM TO PROVIDE SPRINKLER COVERAGE ABOVE AND BELOW THE DUCTWORK.	\$30,000
07-M016	CHILLED WATER PIPING IS VERY RUSTY AT MANY COIL CONNECTIONS. THE CONDENSATE TRAYS ARE RUSTED OUT IN AC-1 AND IN SEVERAL OTHER AIR HANDLERS.	REPLACE CORRODED PIPING AND CONDENSATE TRAYS IN THE AIR HANDLERS.	\$200,000
07-M017	THE COOLING TOWER WATER EQUALIZING LINES AT THE STEAM PLANT DO NOT HAVE SUFFICIENT CAPACITY TO AVOID THE OVERFLOW OF COOLING WATER FROM THE CATCH BASINS DURING PERIODS OF UNEVEN COOLING TOWER LOAD.	PROVIDE LARGER EQUALIZING LINES BETWEEN THE SIX COOLING TOWERS.	\$100,000
07-M018	AIR HANDLERS 1, 2 AND 3 IN MECHANICAL ROOM 041 ARE CORRODED AND NEED REPLACEMENT. STEAM LINES NEXT TO AHU-1 LEAK AND NEED REPLACEMENT. A NEARBY BURIED CONDENSATE RETURN LINE HAS RUSTED OUT. MAJOR ENERGY WASTE CONTINUES BECAUSE OF THESE LEAKS.	REPLACE AIR HANDLERS AND ALL CORRODED ADJACENT LINES. REPLACE THE RUSTED CONDENSATE RETURN LINE TO THE STEAM PLANT.	\$500,000
07-M019	THE BELOW-GRADE VAULT FOR THE FIRE LINE HAS NO DRAIN AND NO TAMPER SWITCHES ON EITHER SIDE OF THE BACKFLOW PREVENTER. CONFINED SPACE RULES APPLY WHEN ENTERING THE VAULT FOR MAINTENANCE.	PROVIDE HEATED, ABOVE-GRADE VAULTS FOR THE FIRE AND DOMESTIC WATER LINES. PROVIDE ONE LARGE PAD TO ACCOMMODATE BOTH VAULTS.	\$250,000
07-M020	DAMAGE CAN OCCUR IF THE 12 PSI STEAM PRESSURE REGULATOR FAILS OPEN, IF 100 PSI STEAM IS SUPPLIED UPSTREAM OF THE PRV.	REPIPE THE INCOMING STEAM LINES TO STEP THE PRESSURE DOWN IN STAGES OF 100 PSI TO 45 PSI TO 12 PSI.	\$100,000
07-M022	THE VACUUM PUMPS IN ROOM GW 58 ARE OLD, WITH PARTS DIFFICULT TO OBTAIN. CURRENTLY, THERE IS NO VACUUM SERVICE TO THE SOUTH SIDE OF BRODY BUILDING. VACUUM ON THE SOUTH SIDE OF THE BUILDING IS PROVIDED BY POINT OF USE WATER VENTURIS, WHICH WASTE A LOT OF DOMESTIC WATER.	PROVIDE NEW VACUUM PUMPS. EXTEND VACUUM LINES TO THE SOUTH SIDE OF BRODY BUILDING. POINT OF USE VACUUM SHOULD BE PROVIDED BY SMALL ELECTRIC VACUUM PUMPS TO ELIMINATE WATER WASTE.	\$250,000
07-M023	THE DOMESTIC WATER BOOSTER PUMP IN ROOM GW 58 IS 30 YEARS OLD AND PARTS ARE BECOMING INCREASINGLY DIFFICULT TO OBTAIN.	REPLACE THE DOMESTIC WATER BOOSTER PUMP.	\$30,000

D_NO	Description	Recommended Correction	Cost
07-M024	A SECOND BACKFLOW PREVENTER ASSEMBLY IS NEEDED IN ROOM GW 58 OF THE BRODY BUILDING TO ALLOW MAINTENANCE ON THE SINGLE CURRENT BACKFLOW PREVENTER ASSEMBLY.	INSTALL A SECOND BACKFLOW PREVENTER ASSEMBLY.	\$40,000
07-M025	THE THREE MAIN FIRE LINE SHUTOFF VALVES IN ROOM GW 58 OF THE BRODY BUILDING ARE CORRODED, WITH PACKING LEAKING.	REPLACE OR REBUILD THE THREE MAIN FIRE LINE SHUTOFF VALVES.	\$15,000
07-M026	THE SINGLE FLOW-RITE DOMESTIC HOT WATER HEATER IN ROOM GW 58 NEEDS A BACKUP UNIT OR REPLACEMENT WITH A DUAL UNIT. ALL DOMESTIC HOT WATER FOR THE GROUND FLOOR AND FLOORS 1 AND 2 IS PROVIDED BY THIS HEATER.	PROVIDE A BACKUP DOMESTIC HOT WATER HEATER.	\$30,000
07-M027	THE AGING GATE VALVES IN BRODY BUILDING CAN DROP A SEAT IF OVERTIGHTENED.	REPLACE THE GATE VALVES WITH BALL VALVES OR OS&Y VALVES FOR IMPROVED VALVE RELIABILITY.	\$25,000
07-M028	THE SPACING OF SPRINKLER HEADS IN MECHANICAL ROOM 8S-08 MAY BE INADEQUATE.	REVIEW THE SPACING OF SPRINKLER HEADS IN ROOM 8S-08. ADD ADDITIONAL SPRINKLER HEADS AS REQUIRED.	\$5,000
07-M032	ALL OF THE WATER FAUCETS IN BRODY BUILDING NEED TO BE CHANGED OUT. SEVERAL YEARS AGO, A FAUCET BLEW OUT DUE TO CORROSION AND CAUSED LOCALIZED FLOODING. BRASS FITTINGS HAVE BEEN CHANGED TO STAY AHEAD OF THE CORROSION, BUT THE LABS NEED A GENERAL PLUMBING UPGRADE. VACUUM BREAKERS ARE NEEDED AT EACH FAUCET TO PREVENT POSSIBLE BACKFLOW ON THAT FLOOR. BACKFLOW PREVENTERS ISOLATE EACH FLOOR AGAINST BACKFLOW FROM OTHER FLOORS, BUT NOT BACKFLOW WITHIN A GIVEN FLOOR. THE EAST, WEST AND SOUTH LABS IN BRODY BUILDING GENERALLY DO NOT HAVE COMPRESSED AIR, NATURAL GAS OR VACUUM.	PROVIDE COMPLETE PLUMBING UPGRADE INCLUDING WATER, COMPRESSED AIR, NATURAL GAS AND VACUUM.	\$800,000
07-M033	THE CURRENT STEAM SYSTEM IS OLD AND NEEDS FREQUENT MAINTENANCE. THE OLD STEAM TO DOMESTIC HOT WATER HEAT EXCHANGER IS AGING AND COULD BLOW A TUBE. THE MAIN (HIGH PRESSURE) STEAM VALVE IN THE DOWNSTAIRS LSB MECHANICAL ROOM IS FROZEN, SO THE STEAM SUPPLY TO THE NEW LSB BUILDING COULD NOT BE SECURED AT THE LSB IN AN EMERGENCY. THE WHOLE MEDICAL CAMPUS STEAM SYSTEM WOULD HAVE TO BE SHUT DOWN AT THE STEAM PLANT IF THERE WERE A STEAM EMERGENCY AT THE NEW LSB.	IN THE LSB MECHANICAL ROOM, RESTRUCTURE THE STEAM SYSTEM ON THE WALL NEXT TO AHU-1 TO FACILITATE STEAM SERVICE TO THE OLD AND NEW SECTIONS OF THE LIFE SCIENCE BUILDING. THE OBJECTIVE OF THIS STEAM SYSTEM RESTRUCTURING IS TO EXTEND THE DOMESTIC HOT WATER AND DOMESTIC COLD WATER LINES FROM THE NEW LSB TO THE CORRIDOR OF THE OLD LSB FOR HOOKUP TO AN UPGRADED SYSTEM IN THE OLD LSB MECHANICAL ROOM. THIS WILL PUT ALL OF THE LSB STEAM COMPONENTS IN THE OLD LSB MECHANICAL ROOM FOR BETTER ACCESS AND MAINTENANCE. REPLACE THE FROZEN VALVE IN THE MAIN STEAM LINE.	\$400,000
07-M034	THE CURRENT CONDENSATE LIFT PUMPS IN THE RODENT CAGE WASHERS ROOM ARE OVER 30 YEARS OLD AND AT RISK OF FAILURE.	REPLACE THE CONDENSATE LIFT PUMPS AT THE CAGE WASHERS	\$10,000
07-M035	IN MECHANICAL ROOM 155 OF THE NEW LIFE SCIENCES BUILDING, THE MEDICAL AIR DRYER IS NOT WORKING, CAUSING BOTTLED AIR TO BE REQUIRED FOR MONKEY RESEARCH. DEWPOINT MONITORING OF THE MEDICAL AIR SUPPLY IS REQUIRED AS PART OF THE BUILDING MONITORING SYSTEM.	REPLACE THE MEDICAL AIR DRYER. PROVIDE DEWPOINT MONITORING OF THE MEDICAL AIR SUPPLY, WITH ALARM FUNCTIONS AS APPROPRIATE.	\$10,000

D_NO	Description	Recommended Correction	Cost
07-M036	THERE IS NO BYPASS WATER SUPPLY LINE, WITH BACKFLOW PREVENTER, AT THE NEW LIFE SCIENCE BUILDING. THIS PROVIDES NO BACKUP IN CASE OF MAINTENANCE PROBLEMS WITH THE SINGLE EXISTING BACKFLOW PREVENTER.	INSTALL A BYPASS DOMESTIC WATER SUPPLY LINE, WITH BACKFLOW PREVENTER, IN THE MAIN MECHANICAL ROOM. FOR IMPROVED MAINTENANCE ACCESS, REPIPE THE EXISTING DOMESTIC WATER LINE AND BFP TO FLOOR LEVEL. THE EXISTING LINE AND BFP IS LOCATED OVER THE CHILLED WATER SUPPLY AND RETURN LINES, AND THE BFP IS DIFFICULT TO REACH FOR MAINTENANCE.	\$40,000
07-M037	THE DOMESTIC HOT WATER HEATER IS CORRODED BADLY AT THE DRAIN FITTING. PIPING IS ALSO BADLY CORRODED AND COULD BLOW WITHOUT WARNING AT THE HIGH PRESSURE STEAM TAKEOFF ABOVE THE CLEAN STEAM GENERATOR, CSG-1.	REPLACE THE DOMESTIC HOT WATER HEATER WITH A DUAL INSTANTANEOUS STEAM HOT WATER HEATER. REPLACE ALL CORRODED PIPING.	\$50,000
07-M038	TWO LOADING DOCKS, ON THE EAST AND WEST SIDES OF THE HEALTH SCIENCE BUILDING, ARE UNSPRINKLERED.	INSTALL DRY SPRINKLER SYSTEMS AT THE EAST AND WEST SIDE LOADING DOCKS.	\$150,000
TOTAL BRODY			\$118,447,000
BUILDING 165 (DAILY REFLECTOR BLDG 2)			
07-E080	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	RECOMMEND INSTALLING A FIRE ALARM SYSTEM IN ACCORDANCE WITH NC DEPARTMENT OF INSURANCE STANDARDS.	\$1,000
07-E081	THE EXIT AND EGRESS LIGHTING IN THIS BUILDING DOES NOT MEET CODE AND DOI STANDARDS.	INSTALL EXIT AND EGRESS LIGHTING IN THIS BUILDING. ENSURE THAT THE NEW EXIT LIGHTS ARE LED AND THAT ALL LIGHTING CODE REQUIREMENTS ARE MET.	\$5,000
TOTAL BUILDING 165 (DAILY)			\$6,000
BUILDING 172 (WASH HOUSE)			
07-E082	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$13,000
07-G175	ORIGINAL, METAL FRAMED (ALUMINUM STOREFRONT SYSTEM) SINGLE GLAZED WINDOWS ARE AT/NEAR END OF EXPECTED LIFE, ARE IN POOR OPERATING CONDITION, AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT OF OCCUPANTS. IN ADDITION, EXTERIOR DOORS AND HARDWARE ARE ALSO IN POOR CONDITION.	INSTALL NEW, WINDOWS (STOREFRONT SYSTEM) WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. INSTALL NEW DOORS AND HARDWARE.	\$68,000
07-G176	SOIL AT REAR CORNER OF BUILDING IS ERODING INTO CREEK. REAR WALL AT BUILDING HAS CRACKS.	STABILIZE AND BACKFILL REAR CORNER OF BUILDING. INSTALL RETAINING WALL AT CREEK BED TO PREVENT FUTURE EROSION. REPAIR DAMAGED BUILDING WALL.	\$65,000
07-G177	SINGLE-PLY ROOF IS APPARENTLY IN VERY POOR CONDITION AND APPEARS TO BE AT END OF EXPECTED LIFE. DUE TO CONTINUOUS LEAKS, UNDERSIDE OF STEEL DECKING IS EXTREMELY RUSTY. LACK OF GUTTER AT BACK HAS ADDED TO EROSION PROBLEM. NO ROOF ACCESS WAS AVAILABLE AT TIME OF SURVEY.	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.	\$65,000
TOTAL BUILDING 172 (WASH)			\$211,000

D_NO	Description	Recommended Correction	Cost
BUILDING 198 (ONLINE)			
07-E084	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$12,000
07-G178	ASPHALT SHINGLE ROOF IS NEAR END OF USEFUL LIFE.	REMOVE ALL ROOF MATERIALS (SHINGLES) TO EXPOSE THE STRUCTURAL DECK AND REPAIR AS REQUIRED. PROPERLY INSTALL NEW ASPHALT SHINGLES AND FLASHING.	\$10,000
07-G179	MOST OF THE EXTERIOR WOOD TRIM IS DETERIORATED FROM WATER DAMAGE. THE ALUMINUM COVERED FASCIA AT REAR OF BUILDING IS ALSO IN POOR CONDITION. BUILDING HAS WIDE OVERHANGS.	REPAIR OR REPLACE WOOD AND ALUMINUM COVERED EXTERIOR TRIM WHERE IT IS DAMAGED. INSTALL NEW GUTTER AND DOWNSPOUT SYSTEM.	\$10,000
TOTAL BUILDING 198 (ONLINE)			\$32,000
BUILDING 214 HAS BEEN DEMOLISHED			
07-G185	STRUCTURE WAS RECENTLY BURNED AND THE EXTEND OF DAMAGE SUSTAINED, COMBINED WITH THE COST OF BRINGING A TWENTY FIVE YEAR OLD BUILDING INTO COMPLIANCE WITH CURRENT CODES IS COST PROHIBITIVE, RELATIVE, TO THE COST OF THE CONSTRUCTION OF A NEW BUILDING, AS OUTLINED IN EVALUATION PREPARED BY MHA WORKS, DATED AUGUST 21, 2007.	DEMOLISH EXISTING WAREHOUSE AND CONSTRUCT NEW BUILDING WITH APPROXIMATELY SAME SQUARE FOOTAGE.	\$1,510,000
TOTAL BUILDING 214 HAS BEEN			\$1,510,000
CAMPUS HEAT DISTRIBUTION CENTER			
07-M033	THE CONDENSATE RECEIVER TANKS ARE ADVANCED IN AGE AND LIKELY TO FAIL IN THE NEAR FUTURE. THE TANKS APPEAR TO BE UNDERSIZED FOR THE CURRENT CAMPUS DEMAND.	REPLACE THE CONDENSATE RECEIVER TANKS. THE NEW TANKS SHOULD BE SIZED TO MEET THE CURRENT AND PROJECTED CAMPUS DEMAND. A STRUCTURAL ANALYSIS MAY BE REQUIRED FOR PROPER INSTALLATION OF THE NEW TANKS.	\$300,000
07-M034	THE MECHANICAL ROOM IS PRONE TO FLOODING, AND NEEDS AN ADEQUATELY SIZED SUMP PUMP TO REMOVE ANY STANDING WATER.	PROVIDE A SUMP PUMP SYSTEM FOR THE MECHANICAL ROOM.	\$25,000
TOTAL CAMPUS HEAT			\$325,000
CAMPUS WIDE			
07-E061	SEVERAL FACILITIES NEED ADDITIONAL EGRESS LIGHTING.	AS NOTED DURING THE CAMPUS INSPECTION, SOME FACILITIES HAD NO EMERGENCY EGRESS LIGHTS AND SOME OTHERS NEEDED ADDITIONAL LIGHTING ADDED.	\$50,000
TOTAL CAMPUS WIDE			\$50,000
CAREER SERVICES			
07-E024	THIS BUILDING DOES NOT HAVE A FIRE ALARM SYSTEM.	RECOMMEND INSTALLING A FIRE ALARM SYSTEM IN ACCORDANCE WITH NC DEPARTMENT OF INSURANCE STANDARDS.	\$10,000
07-G079	SOME EXTERIOR (BASEMENT ENTRY DOORS) AND INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$15,000

D_NO	Description	Recommended Correction	Cost
07-G080	ALTHOUGH PAINTED, STANDING SEAM ROOF WAS RECENTLY SEALED, CONDITION OF METAL IS IN QUESTIONABLE SHAPE AND LIKELY, NEAR 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 A STANDING SEAM COPPER ROOF.	\$60,000
07-G081	ORIGINAL, WOOD, 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 RENOVATION.	\$50,500
07-G082	INTERIOR FINISHES AND TRIM ARE NEARING END OF USEFUL LIFE. IN ADDITION, PARTIAL BASEMENT IS SHOWING SIGNS OF MOISTURE INFILTRATION. STAIRWAY TO BASEMENT FLOOR INTERSECTION IS ALSO IN VERY POOR CONDITION.	REPAIR INTERIOR TRIM AND REPAINT. REPAIR FOUNDATION WALL TO PREVENT WATER INFILTRATION INTO BASEMENT. REPLACE DAMAGED AND DETERIORATED BASEMENT STAIRWAY.	\$25,000
07-G083	ATTIC VENTILATION IS NOT ADEQUATE AS REQUIRED BY STATE BUILDING CODE. WOOD CEILING AREA IS USED FOR STORAGE OF COMBUSTIBLE MATERIALS.	IMPROVE ATTIC VENTILATION AS REQUIRED BY THE STATE BUILDING CODE. REMOVE COMBUSTIBLE STORAGE FROM CEILING AREAS.	\$5,000
TOTAL CAREER SERVICES			\$165,500
CHANCELLOR'S RESIDENCE			
07-E050	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.	\$20,000
07-E051	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED.	INSTALL NEW ENERGY SAVING LIGHTS.	\$4,000
07-G113	MORTAR JOINTS IN SLATE PATIO ARE DETERIORATED AND PORTIONS OF PATIO HAS SETTLED. FRONT PORCH HAS CRACKS IN QUARRY TILE AND DRAINAGE IS INADEQUATE. SOME MORTAR JOINTS ARE DETERIORATED AND WATER IS MOVING THROUGH EXTERIOR WALL.	REPAIR MORTAR JOINTS IN SLATE PATIO. DEMOLISH AND REBUILD FRONT PORCH AS REQUIRED FOR ADEQUATE DRAINAGE. REPAINT RUSTY METAL HANDRAILS. REPAIR AND REPOINT MORTAR JOINTS AS NEEDED. REMOVE OLD CAULK, CLEAN JOINTS AND RECAULK ON BACKER ROD. TO REDUCE MOISTURE INFILTRATION THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	\$125,000
TOTAL CHANCELLOR'S			\$149,000
CHRISTENBURY GYM			
07-E006	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$50,000
07-E007	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE	INSTALL A NEW TRANSFORMER.	\$8,000
07-G028	SINGLE PLY ROOF IS IN POOR CONDITION AND 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.	\$315,600

D_NO	Description	Recommended Correction	Cost
07-G029	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 55 YEAR OLD, ATHLETIC BUILDING ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, DECORATIVE MASONRY, STEPS AND RAILING AT ENTRY WAYS ARE IN A STATE OF DISREPAIR AND BUILDING DOES NOT HAVE AN ELEVATOR.	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. CONSTRUCT NEW ELEVATOR IN NEW EXTERIOR SHAFT. RENOVATE EXTERIOR BUILDING ENTRY WAYS AND SURROUNDS.	\$9,250,000
07-G030	ASPHALT SHINGLE ROOF IS NEAR/AT END OF USEFUL LIFE.	REMOVE ALL ROOF MATERIALS (SHINGLES) TO EXPOSE THE STRUCTURAL DECK AND REPAIR AS REQUIRED. PROPERLY INSTALL NEW ASPHALT SHINGLES AND FLASHING.	\$12,000
TOTAL CHRISTENBURY GYM			\$9,635,600
CLEMENT RESIDENCE HALL			
07-E043	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS.	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	\$80,000
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.	\$175,000
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.	\$106,000
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.	\$3,500,000
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.	\$125,000

D_NO	Description	Recommended Correction	Cost
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.	\$750,000
		TOTAL CLEMENT RESIDENCE	\$4,736,000
COTANCHE BUILDING			
07-E076	THERE ARE NO EXIT OR EGRESS LIGHTS IN THIS BUILDING.	INSTALL EXIT AND EGRESS LIGHTING IN THIS BUILDING. ENSURE THAT THE NEW EXIT LIGHTS ARE LED AND THAT ALL LIGHTING CODE REQUIREMENTS ARE MET.	\$4,000
07-E077	THE NEW PANEL REQUIRES A NEW FEEDER.	INSTALL A NEW FEEDER TO THE PANEL SIZED IN ACCORDANCE WITH THE NEC.	\$15,000
07-E078	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.	\$75,000
07-E079	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$65,000
07-G237	ECU MOVED INTO THIS FORMER NEWSPAPER BUILDING IN 2002, AND NOW USES IT AS ECU'S PRIMARY INFORMATION TECHNOLOGY FACILITY. BECAUSE OF MUCH HEAVIER INFO TECHNOLOGY EQUIPMENT LOADS, CHILLER, HVAC AND OTHER SYSTEMS ARE MAXED OUT. THIS, IN TURN, LIMITS ECU'S OPPORTUNITIES IN ACADEMIC AREAS REQUIRING EXPANDED IT CAPABILITIES.	COMPLETE A LONG TERM STUDY OF INFORMATION TECHNOLOGY NEEDS AND THE INFRASTRUCTURE TO SUPPORT THESE NEEDS. UPGRADE THE EXISTING COTANCHE BUILDING OR MOVE INFORMATION TECHNOLOGY TO A LARGER FACILITY AS APPROPRIATE.	\$5,000,000
		TOTAL COTANCHE BUILDING	\$5,159,000
COTTEN RESIDENCE HALL			
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.	\$85,000
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.	\$40,000
07-E049	THE EXIT FIXTURES ARE OLD AND WASTE ENERGY AND MAINTENANCE LABOR.	RECOMMEND REPLACING ALL OLDER EXIT FIXTURES WITH LED TYPE.	\$4,000
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.	\$295,000
07-G218	BATHS ARE OLD, FIXTURES ARE WORN AND DIFFICULT TO OPERATE AND MAINTAIN.	RENOVATE ALL BATHROOMS.	\$265,000
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.	\$100,000

D_NO	Description	Recommended Correction	Cost
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.	\$400,000
TOTAL COTTEN RESIDENCE HALL			\$1,189,000
CROATAN			
07-G066	BUILT-UP ROOF IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS. NUMBER OF DRAINS ARE INADEQUATE.	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.	\$85,000
07-G067	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 37YEAR OLD, FOOD SERVICE BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL , SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES (PRIMARILY, RESTROOMS AND ACCESS TO AND THROUGH BUILDING IS EXTREMELY LIMITED). 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 WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. RENOVATE EXTERIOR BUILDING ENTRY WAYS (INCLUDING DOOR FRAMES, DOORS, HARDWARE AND SURROUNDS). INSTALL NEW LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES.	\$1,025,000
TOTAL CROATAN			\$1,110,000
CSDI			
07-E054	THIS BUILDING DOES NOT HAVE A FIRE/SMOKE DETECTION AND ALARM SYSTEM. FIRE ALARM IS CRITICAL IN BOTH PROTECTING LIVES AND PROTECTING STATE-OWNED PROPERTY, FOR WHICH THE STATE IS SELF INSURED.	DESIGN, FURNISH, AND INSTALL A FIRE/SMOKE DETECTION AND ALARM SYSTEM WITH EMERGENCY POWER. THE ALARM SYSTEM SHOULD BE EQUIPPED WITH A DIGITAL ALARM COMMUNICATOR FOR AUTOMATIC TRANSMISSION OF ITS ALARM TO A NFPA APPROVED 24-HOUR ANSWERING SERVICE. INSTALLATION MUST MEET N.C. BUILDING CODE AND DOI STANDARDS.	\$13,000

D_NO	Description	Recommended Correction	Cost
07-G126	ORIGINAL, ALUMINUM, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR END OF EXPECTED LIFE, ARE IN POOR OPERATING CONDITION, AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT. IN ADDITION, SOME EXTERIOR DOORS, DOOR FRAMES (STOREFRONT SYSTEMS) AND HARDWARE ARE ALSO AT/OR NEAR END OF LIFE.	INSTALL NEW WINDOWS WITH SOME OPERABLE SECTIONS, THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REPLACE DAMAGED AND END OF LIFE DOOR FRAMES (STOREFRONT SYSTEMS) DOORS, AND HARDWARE. COORDINATE WITH ANY HVAC RENOVATION.	\$45,000
07-G127	PAINT IS NEAR END OF EXPECTED LIFE.	REPAIR AND REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.	\$25,000
		TOTAL CSDI	\$83,000
DEVELOPMENT EVALUATION CLINIC			
07-G160	ORIGINAL, WOOD AND METAL FRAMED, SINGLE GLAZED WINDOWS ARE NEAR/AT END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT OF OCCUPANTS. IN ADDITION, SOME EXTERIOR DOORS AND HARDWARE ARE ALSO IN POOR CONDITION.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$20,000
		TOTAL DEVELOPMENT	\$20,000
DOWDY-FICKLEN STADIUM			
07-E009	THESE DEVICES ARE REACHING THE END OF THERE USEFUL LIVE.	REPLACE THE SWITCHES AND TRANSFORMERS TO ENSURE RELIABILITY	\$50,000
07-E057	THE MDP, ASSOCIATED PANELS AND DISCONNECTS ARE LOCATED IN A PUBLIC WALKWAY.	RELOCATE THIS EQUIPMENT TO A SECURE AREA.	\$60,000
07-E059	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$150,000
07-E060	THIS 600 AMP PANEL SHOULD BE REPLACED IN THE NEAR FUTURE DUE TO GENERAL DEGRADING AND INABILITY TO OBTAIN REPLACEMENT PARTS IN THE FUTURE.	RECOMMEND REPLACING THE ELECTRICAL PANEL.	\$12,000
07-E089	THE EXISTING LIGHTS AND THE ASSOCIATED POLE NEEDS TO BE REWORKED FOR SAFETY.	THE HARDWARE ASSOCIATED WITH THESE 3 POLES AND LIGHTS NEED TO BE TESTED. SOME ASSEMBLIES WILL NEED TO BE RETORQUED AND OTHERS WILL NEED TO BE REPLACED.	\$120,000
07-E090	THESE CABLES NEEDS TO BE REWORKED AND REPLACED, PRIOR TO A FAILURE ON GAME DAY.	INSTALL NEW DUCT BANK STEEL REINFORCED WITH STEEL CONDUIT TO PROTECT THE NEW CABLES.	\$50,000
07-G134	ON D LEVEL PRESS BOX, ROOF IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$75,000

D_NO	Description	Recommended Correction	Cost
07-G135	DUE TO THE AGE OF THE STADIUM STRUCTURE AND INADEQUATE MAINTENANCE IN RECENT YEARS, MAJOR DEFICIENCIES HAVE DEVELOPED: RUST ON PAINTED STEEL STRUCTURE; SPALLED AND CRACKED CONCRETE; DETERIORATION OF STRUCTURAL CONNECTIONS, SEATING, HANDRAILS, AND EXPANSION JOINTS; AND GROUT POCKETS DAMAGED BY WATER PENETRATION. NOTE: SOME PORTIONS OF STUDY AS RECOMMENDED MAY HAVE BEEN INSTITUTED BUT COULD NOT BE VERIFIED AT TIME OF WRITING.	SOME WORK HAS BEEN DONE, PRIMARILY PAINTING OF STEEL STRUCTURE. CONTINUED DETERIORATION CREATES UNSAFE CONDITIONS. THEREFORE, MAJOR REPAIR AND RECONSTRUCTION AS RECOMMENDED IN STUDY PREPARED BY STROUD ENGINEERING, P.A. SHOULD BE COMPLETED IMMEDIATELY.	\$100,000
07-G136	ELEVATOR (SOUTH SIDE) DOES NOT COMPLY WITH CURRENT STANDARDS.	UPGRADE ELEVATOR AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$225,000
07-G137	SOME RESTROOMS, LOCKER ROOMS AND CONCESSION BUILDINGS AT GROUND AND CONCOURSE LEVELS, EXTERIOR PAINT, DOORS, PARTITIONS, CEILINGS, INTERIOR FINISHES AND PLUMBING FIXTURES ARE NEAR END OF EXPECTED LIFE. GLASS ROOF AT PRESS BOX LEAKS AND DAMAGES INTERIOR. SINGLE GLASS IS NOT ENERGY EFFICIENT. NOTE: SOME RESTROOMS HAVE BEEN RECENTLY RENOVATED. IN ADDITION, MOUNTING ATTACHMENT FOR FLAG POLES (AT PERIMETER OF STADIUM) ARE A CONTINUOUS MAINTENANCE ISSUE.	COMPLETE RENOVATION OF EXTERIOR WALLS AND INTERIOR SPACES IS RECOMMENDED. REPLACE GLASS, WINDOWS AT PRESS BOX. INSTALL NEW WINDOWS WITH INSULATED GLASS AND LOW E COATINGS IN THERMAL BREAK FRAMES. REWORK FASCIA AND CONCESSION SERVING OPENINGS AT STANDS.	\$725,000
07-M035	A LOCKINVAR BOILER, LOCATED IN A GROUND LEVEL MECHANICAL ROOM BUT PROVIDING HEATING HOT WATER TO THE CLUB LEVEL, NEEDS FREQUENT MAINTENANCE ON THE CARBON TIP IGNITORS. THIS BOILER HAS DETERIORATED WITH AGE. A SIMILAR BOILER IN ANOTHER ROOM AT THE STADIUM WAS REPLACED WITH TWO INSTANTANEOUS HOT WATER HEATERS WHICH PROVIDE GOOD SERVICE.	REPLACE THE DETERIORATED BOILER WITH AN INSTANTANEOUS HOT WATER HEATER.	\$40,000
07-M036	SOME EXISTING TOILET FIXTURES ARE OLD, DAMAGED AND OBSOLETE.	REPLACE DEFECTIVE TOILET FIXTURES.	\$125,000
07-M060	THE SOUTH SIDE PRESS BOX AT DOWDY-FICKLIN STADIUM IS A HODGEPODGE OF FANS, WINDOW UNITS AND ELECTRIC BASEBOARD HEATERS. THERE IS NO CHILLED WATER OR STEAM SERVICE TO THE STADIUM FOR HVAC PURPOSES.	REVIEW LONG RANGE PLANS FOR THE PRESS BOX. IDENTIFY OPTIONS FOR IMPROVING HVAC TO THE PRESS BOX.	\$100,000
TOTAL DOWDY-FICKLEN STADIUM			\$1,832,000
ECU-MED - PATIENT SERV			
07-E020	THE EXISTING FIRE ALARM IS ALSO WIRED IN WITH THE BURGLAR ALARM SYSTEM. THESE SYSTEMS SHOULD BE COMPLETELY SEPARATE.	RECOMMEND INSTALL A NEW FIRE ALARM SYSTEM THAT REPORTS TO A MANNED 24 HOUR STATION.	\$11,000
07-G042	SINGLE PLY ROOF IS NEARING END OF 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.	\$45,000
07-G043	TILE FLOORS IN TOILETS ARE AT END OF USEFUL LIFE. CARPET IN CORRIDORS HAS UNEVEN SURFACE.	REPLACE TILE FLOORS AND CARPET.	\$9,000

D_NO	Description	Recommended Correction	Cost
07-G044	ENTRANCE DOORS ARE EXPOSED TO WIND AND RAIN.	INSTALL CANOPIES OVER ENTRANCE DOORS.	\$9,000
07-G045	EXTERIOR EXIT DOORS HAVE NO PANIC HARDWARE. INTERIOR DOOR FRAMES ARE NEAR END OF USEFUL LIFE.	INSTALL PANIC HARDWARE ON EXIT DOORS. REPLACE INTERIOR DOOR FRAMES AS NEEDED.	\$9,000
TOTAL ECU-MED - PATIENT SERV			\$83,000
ENVIRONMENTAL HEALTH AND SAFETY			
07-E075	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$10,000
07-G174	ORIGINAL, WOOD, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR/AT END OF EXPECTED LIFE, ARE IN POOR OPERATING CONDITION, AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT. WOOD TRIM IS ALSO SHOWING SIGNS OF DETERIORATION.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REPAIR AND REPAINT DAMAGED AND DETERIORATED WOOD TRIM.	\$25,000
TOTAL ENVIRONMENTAL HEALTH			\$35,000
ERWIN			
07-G076	THIS BUILDING HAS MULTIPLE MAJOR DEFICIENCIES IN EXISTING SYSTEMS, AND THE ESTIMATED COST OF RENOVATION IS HIGH IN COMPARISON TO COST OF A NEW BUILDING. APPARENTLY BUILDING HAS NOT BEEN UPGRADED OR RENOVATED SINCE CONSTRUCTION IN 1952.	DEMOLITION FOR FUTURE REPLACEMENT OF THIS BUILDING IS RECOMMENDED. THE COST ESTIMATE IS FOR DEMOLITION ONLY, AS AN OPTION TO COSTLY RENOVATIONS.	\$100,000
07-G077	SINGLE PLY ROOF (21 YEARS OLD) IS IN FAIR TO POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. NOTE: ALTHOUGH BUILDING IS BEING RECOMMENDED FOR DEMOLITION, SPACE LIMITATIONS MAY REQUIRE BUILDING TO CONTINUE TO BE USED.	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.	\$60,000
TOTAL ERWIN			\$160,000
FINANCIAL SERVICES			
07-E069	THIS FACILITY DOES NOT HAVE A FIRE ALARM SYSTEM TO PROTECT LIFE AND STATE PROPERTY.	RECOMMEND INSTALLING AN ADDRESSABLE FIRE ALARM SYSTEM THAT REPORTS TO AN APPROVED 24-HR. MANNED STATION.	\$13,000
07-E070	THERE IS NO EMERGENCY POWER SOURCE TO RUN PUMPS, FANS, MOTORS, AND ANY OTHER REQUIRED EQUIPMENT UNDER ADVERSE SITUATIONS.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	\$40,000
07-G155	CONCRETE ENTRANCE STEPS ARE UNSAFE. RISERS ARE VARIOUS HEIGHTS AND ARE NOT SIZED AS REQUIRED BY THE STATE BUILDING CODE. ADJOINING CONCRETE SIDEWALK IS UNLEVEL.	DEMOLISH CONCRETE ENTRANCE STEPS AND REBUILD AS REQUIRED TO COMPLY WITH THE STATE BUILDING CODE.	\$20,000

D_NO	Description	Recommended Correction	Cost
07-G156	BUILT-UP ROOF IS IN FAIR CONDITION AND NEARING END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$67,000
		TOTAL FINANCIAL SERVICES	\$140,000
FLEMING RESIDENCE HALL			
07-E045	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED.	INSTALL NEW ENERGY SAVING LIGHTS.	\$50,000
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.	\$3,000
07-G216	BATHS ARE OLD, FIXTURES ARE WORN AND DIFFICULT TO OPERATE AND MAINTAIN.	RENOVATE ALL BATHROOMS.	\$245,000
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.	\$276,000
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.	\$80,000
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.	\$300,000
		TOTAL FLEMING RESIDENCE HALL	\$954,000
FLETCHER MUSIC			
07-E004	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$40,000

D_NO	Description	Recommended Correction	Cost
07-G032	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 41 YEAR OLD, MUSIC EDUCATION BUILDING (OLDER PORTION) ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES (STAIRWELL) OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. HVAC SYSTEM FAILS PROGRAM ACCREDITATION. SOME ENTRANCE DOORS ARE NEARING END OF USEFUL LIFE.	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. CLEAN EXTERIOR WALLS AND RE-CAULK AND REPAIR MORTAR JOINTS. REPLACE OR REPAIR EXTERIOR DOORS AND HARDWARE.	\$11,500,000
07-M005	AS NOTED PREVIOUSLY BY THE DEPARTMENT OF INSURANCE AND INDUSTRIAL RISK INSURERS, THE OLDER SECTION OF FLETCHER MUSIC BUILDING HAS NO SPRINKLER SYSTEM FOR FIRE PROTECTION. THE NEW SECTION IS SPRINKLERED.	PROVIDE A FIRE PROTECTION SPRINKLER SYSTEM.	\$675,000
		TOTAL FLETCHER MUSIC	\$12,215,000
FLETCHER RESIDENCE HALL			
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.	\$40,000
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.	\$3,000,000
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.	\$30,000
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.	\$800,000
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.	\$750,000
		TOTAL FLETCHER RESIDENCE HALL	\$4,620,000

GARRETT RESIDENCE HALL

D_NO	Description	Recommended Correction	Cost
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.	\$10,000,000
TOTAL GARRETT RESIDENCE HALL			\$10,000,000
GRAHAM			
07-G014	EXTERIOR WALL BELOW GRADE APPARENTLY HAS GOOD WATERPROOFING. NO DAMAGE FROM FUNGAL GROWTH TO INTERIOR SURFACES WAS NOTED. HOWEVER, SOME CAULK AND MORTAR JOINTS ARE DETERIORATED AT WINDOW HEADS AND OTHER LOCATIONS (MAIN AND SIDE ENTRIES). WOOD CORNICE AT WEST SIDE AND FASCIA AT PERIMETER OF BUILDING IS SHOWING EARLY SIGNS OF DETERIORATION.	REPAIR CAULK AND MORTAR JOINTS AS NEEDED (ESPECIALLY AT LOWER ROOF AREA). RENOVATE ENTRYWAYS TO PROVIDE COMPLETE ADA ACCESS. REPAIR AND REPAINT CORNICE AND FASCIA AT PERIMETER OF BUILDING. APPLY A WATERPROOF SEALER TO EXTERIOR MASONRY.	\$265,000
07-G015	FELT LAYER UNDER CLAY TILE ROOF IS LIKELY NEAR END OF USEFUL LIFE. GUTTERS ARE APPARENTLY IN POOR 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. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	\$125,000
07-G016	PREVIOUS AND MOST RECENT DOI REPORTS INDICATE THE FOLLOWING VIOLATIONS OF STATE BUILDING CODE. ATTIC HAS INADEQUATE DRAFT STOPPING. THREE STAIRS AND SEVERAL CLASSROOMS HAVE DOORS THAT ARE NOT FIRE RATED AS REQUIRED. SOME STAIR TREADS ARE IN POOR CONDITION.	RENOVATE ATTIC DRAFT STOPPING, STAIR AND CLASSROOM DOORS AND STAIR TREADS AS REQUIRED TO COMPLY WITH STATE BUILDING CODE.	\$150,000
07-G017	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 78 YEAR OLD, EDUCATIONAL ADMINISTRATION BUILDING ARE PAST THE END OF THEIR EXPECTED USEFUL LIFE. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. WINDOWS HAVE RECENTLY BEEN REPLACED.	REMOVE ALL EXISTING INTERIOR SYSTEMS, AND REVISE INTERIOR PLANS AS REQUIRED BY FUNCTIONS AND CODES. REMOVE HAZARDOUS MATERIALS ASSOCIATED WITH THE INSTALLATION OF NEW INTERIOR FINISHES AS NEEDED. CONSTRUCT NEW INTERIOR SPACES INCLUDING ALL ARCHITECTURAL SYSTEMS AND FINISHES. INSTALL NEW LIGHTING, FIRE ALARMS MECHANICAL AND ELECTRICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES. PATCH, REPAIR, REWORK AND INSTALL NEW INTERIOR FINISHES AS NEEDED. CORRECT ALL LIFE SAFETY AND ADA CODE DEFICIENCIES, INCLUDING INSTALLATION OF ELEVATOR.	\$4,200,000
TOTAL GRAHAM			\$4,740,000

GREENE RESIDENCE HALL

D_NO	Description	Recommended Correction	Cost
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.	\$40,000
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.	\$3,230,000
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.	\$175,000
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.	\$107,000
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.	\$750,000
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.	\$125,000
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.	\$300,000
TOTAL GREENE RESIDENCE HALL			\$4,727,000

GREENVILLE CENTRE

07-G182	SINGLE-PLY ROOF (LIKELY 17+ YEARS OLD) IS AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$145,000
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D_NO	Description	Recommended Correction	Cost
07-G183	EVIDENCE OF EXCESSIVE CAULKING AT PERIMETER OF WINDOWS (ESPECIALLY AT WINDOWS ALONG FRONT OF BUILDING) MAY INDICATE LEAKING WINDOW SURROUNDS.	INVESTIGATE AND CORRECT POSSIBLE LEAKING WINDOW SURROUNDS.	\$10,000
07-M064	THE GREENVILLE CENTER IS A GOOD CANDIDATE FOR HVAC RETRO COMMISSIONING. THE BUILDING'S HVAC ZONES HAVE CHANGED WITH THE RELOCATION OF WALLS SINCE INITIAL CONSTRUCTION.	PERFORM RETRO COMMISSIONING ON THE HVAC SYSTEM, INCLUDING COMPLETE TEST AND BALANCE. PROVIDE BETTER HVAC CONTROL FOR INDIVIDUAL ZONES. PROVIDE REHEAT FOR EACH ZONE.	\$400,000
		TOTAL GREENVILLE CENTRE	\$555,000
HARRIS			
07-G169	GUTTER SYSTEM IS IN A STATE OF DISREPAIR.	REPLACE DAMAGED, DETERIORATED AND END OF LIFE GUTTER AND DOWNSPOUT SYSTEM.	\$15,000
07-G170	HARDWARE AT INTERIOR DOORS IS NOT FULLY ADA COMPLIANT.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$15,000
		TOTAL HARRIS	\$30,000
HEALTH SCIENCE ALL BUILDINGS			
07-G054	SOME BUILDINGS DO NOT COMPLY FULLY WITH ADA GUIDELINES AND CURRENT CODES.	A STUDY TO DETERMINE EXTENT AND COST OF ADA DEFICIENCIES IS RECOMMENDED.	\$15,000
		TOTAL HEALTH SCIENCE ALL	\$15,000
HOWELL SCIENCE - EAST			
07-G021	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 38 YEAR OLD, SCIENCE CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, EXTERIOR CONCRETE PANELS AND BRICK ARE STAINED AND DISCOLORED. CAULK AND MORTAR JOINTS ARE ALSO DETERIORATED.	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.	\$5,000,000
07-G022	ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS.	UPGRADE ELEVATORS AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$200,000
07-G023	SINGLE PLY ROOF IS IN POOR CONDITION AND 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.	\$92,000
		TOTAL HOWELL SCIENCE - EAST	\$5,292,000

HOWELL SCIENCE - NORTH

D_NO	Description	Recommended Correction	Cost
07-G019	SINGLE PLY ROOF IS IN POOR CONDITION AND 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.	\$108,000
07-G020	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 38 YEAR OLD, SCIENCE CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, EXTERIOR CONCRETE PANELS AND BRICK ARE STAINED AND DISCOLORED. CAULK AND MORTAR JOINTS ARE ALSO DETERIORATED.	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.	\$1,900,000
07-G120	ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS.	UPGRADE ELEVATORS AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$300,000
07-G121	SINGLE PLY ROOF IS IN POOR CONDITION AND 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.	\$182,000
07-G122	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 38 YEAR OLD, SCIENCE CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, EXTERIOR CONCRETE PANELS AND BRICK ARE STAINED AND DISCOLORED. CAULK AND MORTAR JOINTS ARE ALSO DETERIORATED.	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.	\$6,400,000
TOTAL HOWELL SCIENCE - NORTH			\$8,890,000
HOWELL SCIENCE - SOUTH			
07-G024	SINGLE PLY ROOF IS IN POOR CONDITION AND 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.	\$96,000

D_NO	Description	Recommended Correction	Cost
07-G025	ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS.	UPGRADE ELEVATORS AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$300,000
07-G026	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 38 YEAR OLD, SCIENCE CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, EXTERIOR CONCRETE PANELS AND BRICK ARE STAINED AND DISCOLORED. CAULK AND MORTAR JOINTS ARE ALSO DETERIORATED. GLASS PANELS AT GREENHOUSE ARE AT END OF USEFUL LIFE. FLOORING AT GREEN-HOUSE BASEMENT IS NOT CONDUCTIVE TO FUNCTION OF LAB.	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.	\$8,200,000
TOTAL HOWELL SCIENCE - SOUTH			\$8,596,000
HSC EMERGENCY PHONES			
07-E022	SOME OF THE EXTERIOR EMERGENCY PHONES NEED REPLACING AND SEVERAL NEED TO BE ADDED FOR INCREASED SECURITY.	RECOMMEND ADDING NEW EMERGENCY PHONES AND REPLACING THE ONES THAT CANNOT BE REPAIRED.	\$31,000
TOTAL HSC EMERGENCY PHONES			\$31,000
HUMAN RESOURCES			
07-E074	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	RECOMMEND INSTALLING A FIRE ALARM SYSTEM IN ACCORDANCE WITH NC DEPARTMENT OF INSURANCE STANDARDS.	\$10,000
07-G171	SOME EXTERIOR DOORS (SECOND FLOOR BALCONY) AND HARDWARE ARE AT END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$15,000
07-G172	RESTROOMS ARE SMALL AND DO NOT APPEAR TO BE ADA ACCESSIBLE.	RENOVATE RESTROOMS TO COMPLY WITH ADA GUIDELINES.	\$30,000
07-G173	FINISHES AT INTERIOR AND EXTERIOR OF BUILDING ARE AT END OF LIFE. SOME DECORATIVE EXTERIOR WOOD TRIM IS IN POOR CONDITION.	PRESSURE WASH EXTERIOR OF BUILDING. REPAIR AND REPAINT DETERIORATED INTERIOR AND EXTERIOR FINISHES AS NEEDED.	\$35,000
TOTAL HUMAN RESOURCES			\$90,000
INFRASTRUCTURE			
07-E088	PARKING LOT LIGHTING OUTSIDE SPEECH AND HEARING CLINIC IS INADEQUATE. SOME AREAS ARE VERY DARK AT NIGHTS. IN ADDITION, THE EXISTING 175-WATT MERCURY VAPOR FIXTURES ARE OLD, AND OBSOLETE.	RECOMMEND INSTALLING ADDITIONAL 400 WATTS HIGH PRESSURE SODIUM (HPS) FIXTURES (TWO FIXTURES PER POLE), AND REPLACE EXISTING MERCURY VAPOR FIXTURES WITH HPS FIXTURES USING EXISTING POSTS.	\$100,000
TOTAL INFRASTRUCTURE			\$100,000

INFRASTRUCTURE - SANITARY - MAIN

D_NO	Description	Recommended Correction	Cost
07-M041	SOME SECTIONS OF SANITARY SEWER PIPING ARE KNOWN TO BE DAMAGED BEYOND REPAIR. OTHER LOCATIONS WITHIN THE SANITARY SEWER SYSTEM HAVE CRACKS OR BREAKS WHICH NEED TO BE INSPECTED AND REPAIRED.	REPLACE THE SECTIONS OF SEWER PIPE KNOWN TO BE DAMAGED BEYOND REPAIR.	\$900,000
		TOTAL INFRASTRUCTURE -	\$900,000
INFRASTRUCTURE - STEAM - MAIN			
07-M045	MOST OF THE UNDERGROUND STEAM AND CONDENSATE PIPING ON CAMPUS HAS SEVERELY DETERIORATED. NUMEROUS REPAIRS HAVE BEEN REQUIRED TO KEEP THE PIPING OPERATIONAL. SOME OF THE DAMAGED PIPE IS BEYOND REPAIR AND LEAKS CONTINUOUSLY. LOSS OF THIS STEAM AND CONDENSATE RESULTS IN TREMENDOUS WASTE OF ENERGY. A LIST OF SPECIFIC LOCATIONS OF PIPE TO BE REPLACED IS AVAILABLE FROM THE ECU UTILITIES MANAGER.	REPLACE DETERIORATED STEAM AND CONDENSATE PIPING AS NECESSARY THROUGHOUT THE CAMPUS.	\$29,000,000
07-M056	A BOILER BLOWDOWN HEAT EXCHANGER IS NEEDED AT THE ECU STEAM PLANT TO RECOVER HEAT ENERGY THAT IS CURRENTLY WASTED IN THE BLOWDOWN PROCESS. THIS HEAT EXCHANGER MAY QUALIFY AS AN ENERGY SAVINGS PROJECT.	PROVIDE A STEAM BLOWDOWN HEAT EXCHANGER.	\$300,000
		TOTAL INFRASTRUCTURE - STEAM	\$29,300,000
INFRASTRUCTURE - STORM - MAIN			
07-M043	THE STORM DRAIN SYSTEM IS INADEQUATE AT NUMEROUS LOCATIONS ON CAMPUS. TYPICAL PROBLEMS INCLUDE STANDING WATER AND EROSION, WITH POOR GRADING, INSUFFICIENT CATCH BASINS AND UNDERSIZED PIPING. SPECIFIC LOCATIONS OF PROBLEM AREAS ARE AVAILABLE FROM THE ECU GROUNDS DEPARTMENT.	UPGRADE THE STORM DRAIN SYSTEM TO CORRECT THE DEFICIENCIES. CORRECTIVE ACTION WILL DEPEND ON THE SPECIFIC SITE PROBLEM, BUT COULD INCLUDE PIPE REPLACEMENT, GRADING AND INSTALLATION OF NEW CATCH BASINS AND PIPING.	\$2,000,000
07-M044	THE MAIN STORM DRAIN CHANNEL KNOWN AS TOWN CREEK HAS BEEN DAMAGED BETWEEN FIRST STREET AND THIRD STREET, WHICH IS ON UNIVERSITY PROPERTY. THE SOIL AROUND THE EXISTING DRAIN PIPE HAS COMPLETELY WASHED AWAY, THE PIPE HAS BROKEN LOOSE, AND A TRENCH APPROXIMATELY 20 FEET DEEP HAS BEEN FORMED BY THE EROSION. THE SOIL AT THE EDGE OF THE TRENCH IS UNSTABLE, CAUSING AN UNSAFE CONDITION.	PROVIDE CONSTRUCTION TO STABILIZE THIS DRAINAGE CHANNEL. POSSIBLE SOLUTIONS INCLUDE AN ENCLOSED CONDUIT OR AN OPEN CHANNEL.	\$1,000,000
		TOTAL INFRASTRUCTURE -	\$3,000,000
INFRASTRUCTURE - WATER - MAIN			
07-M042	NUMEROUS BUILDINGS ON CAMPUS DO NOT HAVE BACKFLOW PREVENTERS WHICH MEET CURRENT REQUIREMENTS. THESE BACKFLOW PREVENTERS ARE NEEDED TO PROTECT AGAINST CONTAMINATION OF THE WATER SUPPLY.	PROVIDE BACKFLOW PREVENTERS TO MEET CURRENT STANDARDS. LOCATIONS FOR THIS EQUIPMENT ARE AVAILABLE FROM THE ECU UTILITIES MANAGER.	\$60,000
		TOTAL INFRASTRUCTURE -	\$60,000

D_NO	Description	Recommended Correction	Cost
INSTITUTIONAL ADVANCEMENT			
07-E005	THIS FACILITY DOES NOT HAVE A FIRE ALARM SYSTEM TO PROTECT LIFE AND STATE PROPERTY.	RECOMMEND INSTALLING AN ADDRESSABLE FIRE ALARM SYSTEM THAT REPORTS TO AN APPROVED 24-HR. MANNED STATION.	\$15,000
07-G152	THE MAJORITY OF SUSPENDED CEILING (2 X 2) THROUGH-OUT BUILDING IS STAINED, BRITTLE AND PAST END OF USEFUL LIFE.	REPLACE STAINED, BRITTLE AND END OF LIFE SUSPENDED CEILINGS THROUGH OUT BUILDING.	\$30,000
07-G153	SOME EXTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE. IN ADDITION, SOME HARDWARE AND DOORS AT INTERIOR ARE ALSO IN POOR CONDITION AND ARE NOT ADA COMPLIANT.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$45,000
07-G154	EXTERIOR WALLS APPARENTLY HAS FAIR TO GOOD WATERPROOFING. NO DAMAGE TO INTERIOR WALLS FROM FUNGAL GROWTH WAS NOTED. ALSO, WALLS BELOW GRADE APPARENTLY HAVE GOOD WATERPROOFING AND STORM DRAINAGE.	TO REDUCE MOISTURE MOVING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	\$12,000
07-M040	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.	\$80,000
TOTAL INSTITUTIONAL			\$182,000
INTERNATIONAL HOUSE			
07-E052	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.	\$8,000
07-G114	SINGLE-PLY ROOF IS IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT. METAL TILE ROOF WAS RECENTLY RECOATED AND APPEARS TO BE IN GOOD CONDITION. CHIMNEY APPEARS TO BE IN A STATE OF DISREPAIR.	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. IN ADDITION, SEAL MASONRY COPING AND REPAIR DAMAGED AND DETERIORATED CHIMNEY.	\$25,000
07-G115	PAINIT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.	\$20,000
07-G116	DOI REPORT INDICATES THAT BUILDING HAS AN OPEN STAIRWELL TO THE SECOND FLOOR. IN ADDITION, THERE IS NO DIRECT EXIT FROM THE SECOND FLOOR.	RENOVATE EXISTING STAIRS AND EGRESS ROUTES TO COMPLY WITH THE STATE BUILDING CODE. ADD AN EXTERIOR FIRE ESCAPE STAIR.	\$95,000
07-G117	SOME EXTERIOR AND INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$15,000
07-G118	ORIGINAL, WOOD FRAMED, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR END OF EXPECTED LIFE, ARE 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 RENOVATION.	\$52,000
07-G119	WATER IS PENETRATING WALL BELOW GRADE AND CONTRIBUTING TO DAMAGE OF INTERIOR SURFACES AND FUNGAL GROWTH. SOME CAULK AND MORTAR JOINTS ARE DETERIORATED.	EXCAVATE EARTH IN AFFECTED AREAS, INSTALL NEW WATERPROOFING SYSTEM AND DRAINS AND REPLACE ALL DAMAGED MATERIALS. REPAIR CAULK AND MORTAR JOINTS AS NEEDED.	\$50,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	INTERNATIONAL HOUSE	\$265,000
IRONS				
07-G125	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 37 YEAR OLD BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, CAULKING IS POOR CONDITION OR MISSING AT EXTERIOR DECORATIVE MASONRY AND SOFFITS ARE ALSO SHOWING SIGN OF DETERIORATION.	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 (INCLUDING, DOOR FRAMES, DOORS, HARDWARE AND SURROUNDS).		\$1,550,000
		TOTAL	IRONS	\$1,550,000
JENKINS CANCER CENTER				
07-E012	THE BRANCH CIRCUIT PANELS ARE EITHER FULL OR NEAR CAPACITY ON THE SECOND FLOOR. ADDITIONAL CIRCUITS ARE NEEDED TO SUPPORT THE WORK REQUIREMENTS.	RECOMMEND INSTALLING ONE ADDITIONAL PANEL ON THE SECOND FLOOR. THERE APPEARS TO BE SUFFICIENT POWER ON THE FIRST FLOOR TO SERVE THIS NEW PANEL.		\$5,000
07-E015	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.		\$75,000
07-G024	ROOFS ARE IN POOR CONDITION AND NEAR END OF LIFE. LEAKS AT PERMITER AND AT FAILING SEAMS.	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.		\$62,000
07-G025	SOME EXTERIOR DOORS AND HARDWARE WILL SOON BE NEAR END OF USEFUL LIFE. SOME INTERIOR DOOR HARDWARE SHOULD BE REPLACED. NOTE - FRONT ENTRANCE COVERED BY SEPARATE DEFICIENCY REPORT.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED. REPLACE INTERIOR DOOR HARDWARE WHERE NEEDED.		\$40,000
07-G026	SEVERAL WINDOWS HAVE LOST VACUUM SEALS. STEEL LINTELS ARE RUSTED. WINDOWS IN THE CHEMO UNIT ARE VERY LARGE, NOT ENERGY EFFICIENT AND ALLOW SIGNIFICANT HEAT GAIN IN WARD CAUSING PATIENT DISCOMFORT.	REPLACE WINDOW UNITS WITH NEW INSULATED GLASS UNITS WITH LOW E COATING. REPAINT STEEL LINTELS. IN ADDITION TO WINDOW UNITS IN THE CHEMO AREA - INSTALL HORIZONTAL SCREENS TO PROVIDE SHADE FROM SUMMER SUNLIGHT TO REDUCE HEAT GAIN AND PATIENT DISCOMFORT.		\$32,000
07-G027	BRICK PAVERS IN COURTYARD ARE SLICK WHEN WET. CONCRETE STEPS ARE IN POOR CONDITION.	INSTALL CONCRETE PAVERS AND CONSTRUCT NEW STEPS.		\$24,000

D_NO	Description	Recommended Correction	Cost
07-G028	CANOPY AT ENTRANCE IS TOO LOW FOR TRANSPORT VANS, RESCUE VEHICLES AND AMBULANCES. NON-AMBULATORY PATIENTS MUST BE TRANSPORTED FROM THE PARKING AREA AND EXPOSED TO RAIN, SLEET, SNOW. THE ENTRANCE / LOBBY IS TOO SMALL. AIRLOCK IS TOO SMALL AND DIFFICULT TO USE. THE ENTIRE AREA IS DIFFICULT TO NEGOTIATE BY PATIENTS IN WHEEL CHAIRS AND EXTREMELY DIFFICULT TO NAVIGATE WITH GURNEYS AND ROLLING BEDS.	DEMOLISH CANOPY. REVISE / REDESIGN THE ENTIRE ENTRANCE, AIRLOCK, LOBBY AND RECEPTION AREA TO FACILITATE PROPER USAGE. COST ESTIMATE ASSUMES ADEQUATE WORK TO PROVIDE A LONG TERM SOLUTION AND ASSUMES SIGNIFICANT RECONFIGURATION AND POSSIBLE ADDITIONAL CONSTRUCTION.	\$450,000
07-M030	THE SINGLE FLOW-RITE DOMESTIC HOT WATER HEATER IN LEO JENKINS MECHANICAL ROOM CC126 NEEDS A BACKUP UNIT OR REPLACEMENT WITH A DUAL UNIT.	PROVIDE A BACKUP DOMESTIC HOT WATER HEATER.	\$30,000
07-M031	A WATER BOOSTER PUMP IS NEEDED TO MAINTAIN ADEQUATE (50 - 60 PSI) WATER PRESSURE. CITY WATER PRESSURE IS 40 PSI.	PROVIDE A DOMESTIC WATER BOOSTER PUMP.	\$10,000
TOTAL JENKINS CANCER CENTER			\$728,000
JENKINS FINE ART			
07-G037	SECTIONS A, B, C AND F OF SINGLE-PLY ROOF IS NEARING END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$360,700
07-G038	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 30 YEAR OLD, ART SCHOOL BUILDING ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, ENTRANCE DOORS, ENTRYWAYS AND CONCRETE COURTYARDS (NORTH AND EAST SIDE OF BUILDING) ARE IN POOR CONDITION. ELEVATORS DO NOT COMPLY WITH CURRENT STANDARDS AND REQUIRE CONSTANT MAINTENANCE.	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 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. CLEAN EXTERIOR WALLS AND RE-CAULK AND REPAIR MORTAR JOINTS. REPLACE OR REPAIR EXTERIOR DOORS AND HARDWARE. RENOVATE COURTYARD AND EXTERIOR STEPS. UPGRADE ELEVATORS AS NEEDED.	\$22,000,000
TOTAL JENKINS FINE ART			\$22,360,700
JONES RESIDENCE HALL			
07-E029	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS.	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	\$60,000
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.	\$95,000
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.	\$40,000

D_NO	Description	Recommended Correction	Cost
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	\$270,000
07-G222	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	\$150,000
07-G223	CEILING TILE IN CORRIDORS IS NEAR END OF USEFUL LIFE.	INSTALL NEW CEILING TILE IN CORRIDORS.	\$50,000
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.	\$150,000
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 RENOVATION.	\$585,000
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.	\$330,000
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.	\$300,000
TOTAL JONES RESIDENCE HALL			\$2,030,000
JOYNER EAST			
07-E003	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.	\$7,500
07-G008	SOME EXTERIOR AND INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE, ARE OBSOLETE, AND IN POOR CONDITION.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$75,000
07-G009	SOME CAULK JOINTS (AT PERIMETER OF ROOF) 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, APPLY A SILICON COATING TO EXTERIOR.	\$25,000
07-G010	ORIGINAL, METAL, SINGLE GLAZED WINDOWS (AT OLD PORTION OF BUILDING) AND CAULKING ARE NEAR END OF EXPECTED LIFE, ARE IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC RENOVATION.	\$29,000
07-G011	INTERIOR PAINT AND FINISHES ARE NEAR/AT END OF EXPECTED LIFE.	REPAINT INTERIOR AS NEEDED.	\$15,000
07-G012	RESTROOM FINISHES AND FIXTURES ARE NEAR END OF USEFUL LIFE. RESTROOMS DO NOT COMPLY WITH STATE BUILDING CODE AND ADA GUIDELINES.	A COMPLETE RENOVATION OF RESTROOMS IS RECOMMENDED.	\$175,000
07-G013	STEP AND STAIR, TREADS AND SURFACES ARE NEAR/AT END OF USEFUL LIFE AND MAY POSE A TRIPPING HAZARD.	REPLACE AND REPAIR DAMAGED AND DETERIORATED STEP TREAD, STAIR STRUCTURE AND HANDRAILS.	\$35,000

D_NO	Description	Recommended Correction	Cost
07-M001	THE TWO SANITARY SEWER AND TWO STORM SEWER LIFT PUMPS HAVE DETERIORATED WITH AGE. THE PUMPS REQUIRE HIGH MAINTENANCE, ACCESS TO THE EQUIPMENT IS POOR, AND THE CONTROLS SYSTEM IS OBSOLETE, WITH REPLACEMENT PARTS VERY HARD TO OBTAIN.	REPLACE THE SEWER LIFT PUMPS AND ASSOCIATED CONTROLS. THE SEWER LINE NEEDS TO BE REPLACED AND AN ADDITIONAL MANHOLE IS NEEDED FOR IMPROVED ACCESSIBILITY. THIS WORK SHOULD BE DONE IN COORDINATION WITH THE MENDENHALL EXPANSION.	\$50,000
07-M051	THE CURRENT HVAC SYSTEM IN JOYNER LIBRARY IS AGING AND IN NEED OF REPLACEMENT. NINE AIR HANDLERS WERE INSTALLED IN 1963. THESE AIR HANDLERS LEAK AIR AND CONDENSATE. MOTORS ARE CONSTANT SPEED.	PROVIDE A COMPLETE HVAC RENOVATION AND UPGRADE. ADEQUATE MAKEUP AIR IS REQUIRED AS PART OF THIS UPGRADE. PROVIDE VARIABLE FREQUENCY DRIVES FOR THE AIR HANDLER MOTORS.	\$5,000,000
07-M052	STORM SEWER LINES NEAR JOYNER LIBRARY ARE OF INSUFFICIENT SIZE TO HANDLE FLOOD RAINS.	INSTALL LARGER STORM SEWER LINES NEAR JOYNER LIBRARY. PROVIDE SUFFICIENT MANHOLES FOR INSPECTION AND MAINTENANCE.	\$150,000
07-M055	FIXTURES AND PIPING ARE DETERIORATED IN THE BATHROOMS.	PROVIDE COMPLETE RENOVATIONS OF FIXTURES AND PIPING IN ALL JOYNER EAST BATHROOMS.	\$100,000
TOTAL JOYNER EAST			\$5,661,500
JOYNER LIBRARY			
07-E001	THERE ARE NO EXIT OR EGRESS LIGHTS IN THIS BUILDING.	INSTALL EXIT AND EGRESS LIGHTING IN THIS BUILDING. ENSURE THAT THE NEW EXIT LIGHTS ARE LED AND THAT ALL LIGHTING CODE REQUIREMENTS ARE MET.	\$3,000
07-E002	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	\$50,000
07-G001	SOME INTERIOR FINISHES, PAINT, SUSPENDED CEILINGS, FLOOR TILE AND STEP TREADS ARE NEAR/AT END OF MAINTAINABLE LIFE.	REPAINT INTERIOR FINISHES, REPLACE DETERIORATED FLOOR AND CEILING TILE. REPAIR/REPLACE DAMAGED AND DETERIORATED STAIR TREAD.	\$118,000
07-G002	PORTIONS OF SINGLE-PLY ROOF ARE IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$474,000
07-G003	ORIGINAL, METAL, SINGLE GLAZED WINDOWS (AT OLD PORTION OF BUILDING) 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, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC RENOVATION.	\$60,000
07-G004	ROLL-UP DOORS AT SOUTH SIDE OF BUILDING ARE NEAR/AT END OF USEFUL LIFE.	REPLACE OR REPAIR EXTERIOR ROLL-UP DOORS AND HARDWARE.	\$20,000
07-G005	ALUMINUM STOREFRONT, DOORS AND HARDWARE AT COURTYARD AREA (AT MAIN ENTRY, NEAR WATER FEATURE), DUE TO HEAVY USE, IS SHOWING EARLY SIGNS OF WEAR.	REPAIR OR REPLACE ALUMINUM STOREFRONT SYSTEM, DOORS AND HARDWARE AS NEEDED.	\$70,000
07-G006	SOME OF THE HARDWARE (ESPECIALLY AT OLD SECTION) DUE TO HEAVY USE AND AGE IS NEARING END OF USEFUL LIFE.	REPLACE AND REKEY DAMAGED, DETERIORATED AND OBSOLETE HARDWARE THROUGHOUT BUILDING.	\$75,000

D_NO	Description	Recommended Correction	Cost
07-G007	EXTERIOR WALL BELOW GRADE APPARENTLY HAS GOOD WATERPROOFING AND NO DAMAGE FROM FUNGAL GROWTH TO INTERIOR SURFACES WAS NOTED. HOWEVER, CONCRETE PANELS (DECORATIVE COPING) AND BRICK ARE STAINED AND DISCOLORED. SOME CAULK AND MORTAR JOINTS ARE DETERIORATED (ESPECIALLY AT PERIMETER OF ROOF).	CLEAN WALLS AND RECAULK AND REPAIR MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE COMING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	\$85,000
TOTAL JOYNER LIBRARY			\$955,000
LAKE LAUPUS			
07-G046	EROSION HAS PARTLY FILLED LAKE WITH SEDIMENT, THEREBY REDUCING CAPACITY FOR STORM WATER RETENTION AND SUPPLY FOR IRRIGATION OF GRASS AND PLANTS DURING DRY SEASON. WATER COMES FROM ROOFS AND PARKING. ALSO, IRRIGATION SYSTEM NEEDS TO BE UPGRADED SO THAT COSTLY CITY WATER IS NOT NEEDED. ONE AERATOR PUMP IS NOT WORKING. WALKWAY AROUND LAKE HAS UNEVEN SURFACE COMPOSED OF STONE SCREENINGS.	DREDGE LAKE TO INCREASE CAPACITY FOR STORM WATER AND IRRIGATION. REPLACE ONE AERATOR PUMP. REBUILD WALKWAY AROUND LAKE AS NEEDED TO PREVENT EROSION.	\$210,000
07-G053	EROSION HAS PARTLY FILLED LAKE WITH SEDIMENT, THEREBY REDUCING CAPACITY FOR STORM WATER RETENTION AND SUPPLY FOR IRRIGATION OF GRASS AND PLANTS DURING DRY SEASON. WATER COMES FROM ROOFS AND PARKING. ALSO, IRRIGATION SYSTEM NEEDS TO BE UPGRADED SO THAT COSTLY CITY WATER IS NOT NEEDED. ONE AERATOR PUMP IS NOT WORKING. WALKWAY AROUND LAKE HAS UNEVEN SURFACE COMPOSED OF STONE SCREENINGS.	DREDGE LAKE TO INCREASE CAPACITY FOR STORM WATER AND IRRIGATION. REPLACE ONE AERATOR PUMP. REBUILD WALKWAY AROUND LAKE AS NEEDED TO PREVENT EROSION.	\$210,000
TOTAL LAKE LAUPUS			\$420,000
LIFE SCIENCES BLDG			
07-E003	THE EMERGENCY GENERATOR IS NO LONGER LARGE ENOUGH TO HANDLE THE LIFE SAFETY LOAD.	INSTALL A LARGER DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	\$110,000
07-E004	THE EXISTING PANELS ARE OLD AND ARE REACHING THE END OF THEIR SERVICE LIFE. MANY OF THEM ARE FPE WHICH IS NO LONGER BEING MANUFACTURED.	REPLACE THE EXISTING PANELS WITH NEW, UP-TO-DATE PANELS.	\$30,000
07-G003	ON NEWER SECTION, BUILT-UP ROOF LEAKS AND FLASHING IS IN POOR CONDITION DUE TO BAD CONSTRUCTION. IF REPAIR IS NOT ADEQUATE, REPLACEMENT MAY BE NECESSARY.	REPAIR OR 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.	\$20,000
07-G004	DOI REPORT INDICATES THAT EXIT FROM MECHANICAL ROOM IS NOT ADEQUATE. SECURITY OF BUILDING IS A MAJOR CONCERN.	ADD EXIT FROM MECHANICAL ROOM.	\$4,000
07-G055	MAIN ENTRANCE / SECOND FLOOR CORRIDOR ARE NOT ADA COMPLIANT.	REPLACE DOORS WITH ADA COMPLIANT UNITS.	\$12,000
TOTAL LIFE SCIENCES BLDG			\$176,000

D_NO	Description	Recommended Correction	Cost
MAMIE JENKINS			
07-G075	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 97 YEAR OLD BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, WOOD, SINGLE GLAZED WINDOWS AND DOORS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. ASPHALT SHINGLE ROOF (WITH NOTICEABLE SAG) IS ALSO IN POOR CONDITION.	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.	\$785,000
TOTAL MAMIE JENKINS			\$785,000
MARITIME HISTORY (ELLER HOUSE)			
07-E025	THE EXISTING WIRE, PANELS, AND SWITCHES ARE REACHING THE END OF THEIR SERVICE LIVES.	COMPLETELY REWIRE AND REPLACE EXISTING PANELS AND SWITCHES.	\$20,000
07-E026	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	INSTALL A FIRE ALARM SYSTEM IN ACCORDANCE WITH THE NC FIRE CODE AND DOI REQUIREMENTS.	\$10,000
07-G088	ORIGINAL, WOOD, SINGLE GLAZED WINDOWS AND CAULKING ARE NEAR/AT END OF EXPECTED LIFE. LEAKAGE OF OUTDOOR AIR CONTRIBUTES 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 RENOVATION.	\$32,500
07-G089	SOME EXTERIOR AND INTERIOR DOORS AND HARDWARE ARE NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$20,000
07-G090	PAINT (INTERIOR), AND MASONITE FASCIA AND WOOD EXTERIOR TRIM IS IN FAIR CONDITION. RESTROOMS AT FIRST AND SECOND FLOORS ARE IN VERY POOR CONDITION AND DO NOT APPEAR TO BE ADA ACCESSIBLE.	REPAINT INTERIOR AND REPAIR AND/OR REPLACE EXTERIOR TRIM AND FINISHES AS NEEDED. RENOVATE RESTROOMS TO INCLUDE AN ACCESSIBLE RESTROOM.	\$75,000
07-G091	WATER IS PENETRATING WALL BELOW GRADE CONTRIBUTING TO DAMAGE OF INTERIOR SURFACES AND FUNGAL GROWTH. CRACKS ARE VISIBLE AT SOUTHSIDE WALL. PORCH EXTERIOR BRICK VENEER HAS SHIFTED (DROPPED) AT INTERSECTION TO MAIN HOUSE VENEER. SOME CAULK AND MORTAR JOINTS ARE DETERIORATED.	EXCAVATE EARTH IN AFFECTED AREAS, INSTALL NEW WATERPROOFING SYSTEM AND DRAINS AND REPLACE ALL DAMAGED MATERIALS. REPAIR CAULK AND MORTAR JOINTS AS NEEDED. PATCH/REPAIR WALL CRACKS.	\$45,000
TOTAL MARITIME HISTORY (ELLER)			\$202,500
MCGINNIS			
07-E008	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$40,000
07-E019	THE EXISTING LIGHTING IS INADEQUATE AND NEEDS TO BE REPLACED.	INSTALL NEW ENERGY SAVING LIGHTS.	\$50,000
07-E020	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.	\$50,000

D_NO	Description	Recommended Correction	Cost
07-G055	EXTERIOR WALL APPARENTLY DOES NOT HAVE GOOD WATERPROOFING AND SOME DAMAGE TO PLASTER AND FROM FUNGAL GROWTH ON INTERIOR WAS NOTED. SOME MORTAR AND CAULK JOINTS ARE DETERIORATED. STEEL LINTELS HAVE SOME RUST. WALLS BELOW GRADE ON SOUTHEAST AND WEST APPARENTLY, ALSO DO NOT HAVE GOOD WATERPROOFING AND STORM DRAINAGE.	CLEAN WALLS, RECAULK AND REPOINT MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE MOVING THROUGH EXTERIOR WALL, CONSIDER APPLICATION OF A SILICON COATING TO EXTERIOR AND A HIGH PERM RATED PAINT ON INTERIOR SURFACES. EXCAVATE EARTH IN AFFECTED AREAS, INSTALL NEW WATERPROOFING SYSTEM AND DRAINS AND REPLACE ALL DAMAGED MATERIALS AS NEEDED.	\$125,000
07-G056	PASSENGER ELEVATOR REQUIRES CONSTANT MAINTENANCE AND SPARE PARTS ARE NOT AVAILABLE.	UPGRADE ELEVATOR AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$325,000
07-G057	ON AUDITORIUM AND STAGE, SINGLE-PLY (ID-5A AND 6A) IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT IS DUE.	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.	\$62,000
07-G058	FINISHES AT CLASSROOMS AND STOREROOMS AT LOWER LEVEL ARE NEARING END OF MAINTAINABLE LIFE. SOME AREAS HAVE 9 X 9 FLOOR (ASSUMED ASBESTOS) AND 12 X 12 CEILING TILE. SOME SEATING AND CARPET AT AISLE WAYS AT AUDITORIUM ARE ALSO IN POOR CONDITION. IN ADDITION, FINISHES AT INTERIOR AND EXTERIOR (BUILDING-WIDE) ARE SHOWING SIGNS OF DETERIORATION. WOOD DOOR FRAMES, DOORS AND HARDWARE AT EXTERIOR OF BUILDING ARE ALSO IN POOR CONDITION.	RENOVATE PORTIONS OF LOWER LEVEL. REPLACE DAMAGED AND END OF LIFE FINISHES, SEATING AND CARPET AT AUDITORIUM. REPAINT AND REFURBISH INTERIOR AND EXTERIOR FINISHES AS REQUIRED. REPLACE AND/OR REPAIR EXTERIOR DOORS AND HARDWARE AS NEEDED.	\$525,000
07-G059	ORIGINAL, STEEL, 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, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. COORDINATE WITH ANY HVAC RENOVATION.	\$40,000
07-M009	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.	\$310,000
07-M010	THE EXISTING CHILLERS ARE NEAR THE END OF THEIR LIFE EXPECTANCY, AND THE CHILLERS ARE UNDERSIZED. THE AIR HANDLER COILS IN MCGINNIS AUDITORIUM ARE IMPACTED AND HAVE DIFFICULTY MAINTAINING TEMPERATURE SET POINTS. THE HVAC CONTROL SYSTEM IN MCGINNIS IS INADEQUATE. THE BREEZEWAY BETWEEN MCGINNIS AUDITORIUM AND THE MCGINNIS SCENE SHOP ALLOWS ENORMOUS HEATING/COOLING LOSS. THE MCGINNIS SCENE SHOP NEEDS SPRINKLERS AND A DUST CONTROL SYSTEM. THE PAINT SHOP BELOW THE SCENE SHOP NEEDS FUME HOODS, A DUST CONTROL SYSTEM AND SPRINKLERS.	SCRAP THE MCGINNIS CHILLERS AND PLACE MCGINNIS AUDITORIUM ON THE CENTRAL CAMPUS CHILLED WATER LOOP. REPLACE THE AIR HANDLERS WITH EFFICIENT, PROPERLY SIZED EQUIPMENT. INVESTIGATE COOLING COIL CONDENSATE RECOVERY FOR IRRIGATION PURPOSES. INVESTIGATE ARCHITECTURAL REDESIGN TO ADD A SCREEN WALL TO REDUCE HEATING/COOLING LOSS BETWEEN MCGINNIS AUDITORIUM AND THE SCENE SHOP. INSTALL SPRINKLERS AND A DUST COLLECTION SYSTEM AT SCENE SHOP. INSTALL FUME HOODS, SPRINKLERS AND DUST COLLECTION SYSTEM AT PAINT SHOP, (BELOW SCENE SHOP).	\$500,000
07-M054	FIXTURES AND PIPING ARE DETERIORATED IN THE BATHROOMS.	PROVIDE COMPLETE RENOVATIONS OF FIXTURES AND PIPING IN ALL MCGINNESS AUDITORIUM BATHROOMS.	\$100,000

TOTAL MCGINNIS

\$2,127,000

D_NO	Description	Recommended Correction	Cost
MCGINNIS SCENE SHOP			
07-E062	LIGHTING IN THE SCIENCE SHOP IS VERY LOW. IT IS PROVIDED BY 150-WATT, OLD INCANDESCENT FIXTURES. REPLACEMENT IS NEEDED TO BRING ILLUMINATION LEVEL TO AN ACCEPTABLE STANDARD.	RECOMMEND REPLACING EXISTING FIXTURES WITH NEW FLUORESCENT T-8 LAMP AND ELECTRONIC BALLAST TYPE FIXTURES. THIS TYPE OF LAMP-BALLAST SYSTEM IS VERY ENERGY EFFICIENT. THE SECOND FLOOR HAS A HIGH CEILING, RECOMMEND USING HIGH OUTPUT FLUORESCENT LIGHTING.	\$25,000
07-E063	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.	\$22,000
07-G140	SINGLE-PLY IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT IS DUE.	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.	\$74,000
07-M037	SPRAY PAINTING AND PAINT REMOVING OPERATIONS ARE BEING PERFORMED IN THE MCGINNIS SCENE SHOP WITHOUT A SPRAY BOOTH OR FUME REMOVAL SYSTEM. THIS CONDITION PRESENTS HAZARDS TO HUMANS IN THE FORM OF TOXIC FUMES AND THE BUILDUP OF FLAMMABLE OR EXPLOSIVE VAPORS. THIS IS A VIOLATION OF THE NORTH CAROLINA STATE BUILDING CODE.	PROVIDE VENTILATION AND A SPRAY BOOTH AS REQUIRED IN ACCORDANCE WITH THE NORTH CAROLINA STATE BUILDING CODE.	\$100,000
07-M038	THE WOOD WORKING MACHINES CREATE DUST, WHICH IS A FIRE HAZARD.	PROVIDE A DUST COLLECTION SYSTEM FOR THE WOODWORKING MACHINES.	\$50,000
TOTAL MCGINNIS SCENE SHOP			\$271,000
MEDICAL PAVILION #6			
07-E019	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.	\$50,000
07-E021	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.	\$5,000
07-G046	BUILDING IS CURRENTLY NOT OCCUPIED. INTERIOR FINISHES ARE WORN AND DETERIORATED. THERE IS VERY SIGNIFICANT CONCRETE FLOOR SLAB SETTLEMENT AND CRACKING. EXTENT OF SETTLEMENT WILL REQUIRE REMOVAL AND REPLACEMENT.	RENOVATE INTERIOR PARTITIONS, CEILINGS, DOORS, BATHROOMS, HARDWARE, LIGHTING, HVAC, FIXTURES. EXTENSIVE REPAIR OF THE CONCRETE SLAB IS REQUIRED. REMOVE AND REPLACEMENT IS POSSIBLY REQUIRED.	\$715,000
TOTAL MEDICAL PAVILION #6			\$770,000
MENDENHALL STUDENT CENTER			

D_NO	Description	Recommended Correction	Cost
07-G084	MOST ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 33 YEAR OLD, STUDENT CENTER ARE AT/NEAR THE END OF THEIR EXPECTED USEFUL LIFE. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. 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 LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES. UPGRADE ELEVATORS AS REQUIRED TO COMPLY WITH ADA GUIDELINES.	\$32,000,000
TOTAL MENDENHALL STUDENT			\$32,000,000
MESSICK			
07-G060	BUILT-UP ROOF (SECTION ID-2D, 3B, 3C) IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS. NUMBER OF DRAINS ARE INADEQUATE. COORDINATE WITH REPLACEMENT OF CLAY TILE FELTS.	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.	\$26,000
07-G061	EXTERIOR SOFFIT AND DECORATIVE RAFTER TAILS ARE IN FAIR TO GOOD CONDITION. CONTINUOUS EXPOSURE TO ELEMENTS LEADS TO PREMATURE DETERIORATION.	REPAIR AND REPLACE DAMAGED AND DETERIORATED WOOD TRIM, SOFFIT AND DECORATIVE RAFTER TAILS. PREPARE TRIM SURFACE, PRIME AND REPAINT EXTERIOR TRIM.	\$55,000
07-G062	FELT LAYER UNDER CLAY TILE ROOF IS PROBABLY NEAR END OF LIFE. GUTTER IS APPARENTLY IS IN GOOD 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 AND TILE. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	\$165,000
07-G063	ALTHOUGH SOME INTERIOR REFURBISHING HAS BEEN DONE, MOST ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 80 YEAR OLD, CLASSROOM BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. EXTERIOR WALLS AND WATERPROOFING IS IN QUESTIONABLE CONDITION. ORIGINAL, WOOD AND METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES (SPECIFICALLY STAIRWELL DOORS AS NOTED ON RECENT DOI ANNUAL REPORT) OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, EXTERIOR DOORS, WALKING SURFACES, STEPS AND RAILING AT ENTRY WAYS ARE ALSO IN A STATE OF DISREPAIR.	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. WATERPROOF EXTERIOR WALLS AS REQUIRED AND RENOVATE EXTERIOR BUILDING ENTRY WAYS, STEPS AND SURROUNDS.	\$6,200,000
07-G064	ON MAIN BUILDING, SINGLE-PLY ROOFS (SECTION ID-1A, 1D, 1E, 1F, 1G AND 2C) ARE IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT IS DUE.	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.	\$70,000

D_NO	Description	Recommended Correction	Cost
07-G065	ASPHALT SHINGLE ROOF (SECTION ID# 1B AND 1C) APPEARS TO BE IN POOR CONDITION.	REMOVE ALL ROOF MATERIALS (ASPHALT SHINGLES) TO EXPOSE STRUCTURAL DECK, AND REPAIR AS REQUIRED. INSTALL NEW ASPHALT SHINGLES.	\$12,000
		TOTAL MESSICK	\$6,528,000
MINGES			
07-G068	THE MAJORITY OF SINGLE PLY ROOFS ARE IN FAIR TO POOR CONDITION AND NEARING END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$762,000
07-G069	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 40 YEAR OLD, ATHLETIC BUILDING AND POOL ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, SOME EXTERIOR FINISHES (STUCCO) ARE CRACKED AND IN FAIR TO POOR CONDITION.	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. REPAIR EXTERIOR FINISHES. REPLACE OR REPAIR EXTERIOR DOORS AND HARDWARE.	\$21,000,000
		TOTAL MINGES	\$21,762,000
MRI BUILDING			
07-G031	SINGLE-PLY ROOF IS IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. REPAIR OF SEAMS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$56,000
07-M007	CHILLED WATER FOR THE HVAC SYSTEM AND FOR COOLING MEDICAL EQUIPMENT IN THIS BUILDING IS PROVIDED BY THE CAMPUS CHILLED WATER SYSTEM. DUE TO THE STRINGENT REQUIREMENTS AND CRITICAL NEEDS OF THIS AREA, A SEPARATE SYSTEM IS NEEDED TO PROVIDE RELIABLE SERVICE TO THE MRI BUILDING, AND TO ALLOW ENERGY CONSERVATION MEASURES IN THE CAMPUS CHILLED WATER SYSTEM.	PROVIDE A SEPARATE CHILLER TO PRODUCE PRIMARY CHILLED WATER FOR THIS BUILDING. PROVIDE CHILLED WATER BACKUP THROUGH THE EXISTING CAMPUS CHILLED WATER SYSTEM.	\$200,000

D_NO	Description	Recommended Correction	Cost
07-M008	THE INSTALLATION OF AN AUTOMATED ENERGY MANAGEMENT SYSTEM IN THE MRI BUILDING (ASSET NO. 11-0) ON THE WEST CAMPUS WILL PERMIT INDIVIDUAL ROOM HVAC CONTROL THROUGHOUT THE BUILDING. THIS SYSTEM WILL ENSURE THAT THE HVAC SYSTEM WILL CONTINUE TO PROVIDE THE MAXIMUM IN COST EFFECTIVE PERFORMANCE, AND ALSO INCREASE THE SYSTEM'S CAPABILITY FOR THE NEXT DECADE. THIS SYSTEM SHOULD BE REMOTELY CONTROLLED BY THE PRESENT HVAC CPU INTERFACE MANAGEMENT SYSTEM.	INSTALL AN AUTOMATED ENERGY MANAGEMENT SYSTEM TO REPLACE THE CURRENT PNEUMATIC CONTROL SYSTEM.	\$200,000
07-M029	HVAC INSULATION IS OLD AND DAMAGED IN MANY AREAS OF THE HSC CAMPUS, INCLUDING THE MRI BUILDING MECHANICAL ROOM.	REPAIR HVAC INSULATION THROUGHOUT THE HSC CAMPUS.	\$40,000
		TOTAL MRI BUILDING	\$496,000
PARKING LOTS			
07-G196	SELECTED LOTS (RS-12 AT FOURTH AND COTANCHE, AT WC-18 AT LAWRENCE STREET) NEED IMMEDIATE REPAIR, REPAVING OR REBUILDING. MOST AREAS ARE IN SUCH BAD CONDITION THAT THE ENTIRE BASE MUST BE RECONSTRUCTED. ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND EXTENSIVE CRACKS.	REPAIR, REPAVE, OR REBUILD SELECTED PARKING LOTS AS NEEDED BY THEIR CONDITION. PATCH CRACKS AND BROKEN AREAS OR COMPLETELY REMOVE ASPHALT TO RECONSTRUCT A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$85,000
07-G197	ASPHALT WEARING COURSE (PARKING LOTS CH-5, CH-17, EC-4, OP-4, RC-1, SM-9, WC-11, WC-12, WC-16) HAS WEATHERED SURFACE, EXPOSED AGGREGATE AND A MODERATE AMOUNT OF ALLIGATOR CRACKING.	REPAIR, REJUVENATE, OR REPAVE PARKING LOTS APPROPRIATELY FOR THEIR CONDITION AND AGE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO RECONSTRUCT A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED. REPAINT ALL MARKINGS AND STRIPES.	\$378,000
07-G198	ASPHALT WEARING COURSE AND IN SOME CASES, CONCRETE SURFACES, (PARKING LOTS CH-9, CH-12, EC-10, EC-12, RS-4, WC-14 AND WC-21) HAS WEATHERED SURFACE, EXPOSED AGGREGATE AND A MODERATE AMOUNT OF ALLIGATOR CRACKING.	REPAIR, REJUVENATE, OR REPAVE PARKING LOTS APPROPRIATELY FOR THEIR CONDITION AND AGE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO RECONSTRUCT A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED. REPAINT ALL MARKINGS AND STRIPES.	\$215,000
07-G199	ASPHALT WEARING COURSE (PARKING LOTS CH-8, CH-14, EC-5, EC-6, SM-18 AND WC-5) HAS WEATHERED SURFACE, EXPOSED AGGREGATE AND A MODERATE AMOUNT OF ALLIGATOR CRACKING.	REPAIR, REJUVENATE, OR REPAVE PARKING LOTS APPROPRIATELY FOR THEIR CONDITION AND AGE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO RECONSTRUCT A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED. REPAINT ALL MARKINGS AND STRIPES.	\$88,000

D_NO	Description	Recommended Correction	Cost
07-G200	ASPHALT WEARING COURSE AND IN SOME CASES, CONCRETE SURFACES, (PARKING LOTS EC-1, EC-13, OP-5 AND OP-7) HAS WEATHERED SURFACES, EXPOSED AGGREGATE AND A MODERATE AMOUNT OF ALLIGATOR CRACKING.	REPAIR, REJUVENATE, OR REPAVE PARKING LOTS APPROPRIATELY FOR THEIR CONDITION AND AGE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO RECONSTRUCT A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND ADDITION OF A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED. REPAINT ALL MARKINGS AND STRIPES.	\$98,000
		TOTAL PARKING LOTS	\$864,000
PHYSICIANS QUAD. BLDG. M			
07-E013	THE EXISTING FIRE ALARM IS ALSO WIRED IN WITH THE BURGLAR ALARM SYSTEM. THERE ARE ONLY SMOKE DETECTORS WITH NO PULL STATIONS. THESE SYSTEMS SHOULD BE COMPLETELY SEPARATE.	IT IS RECOMMENDED TO INSTALL A NEW FIRE ALARM SYSTEM THAT REPORTS TO A MANNED 24 HOUR STATION.	\$7,000
07-G029	DOOR HARDWARE IS NOT ADA COMPLIANT	INSTALL HEAVY DUTY LEVER ACTION ADA COMPLIANT HARDWARE	\$8,000
07-G030	TOILETS AND OTHER ITEMS DO NOT COMPLY WITH ADA GUIDELINES.	ADA STUDY IS RECOMMENDED TO DETERMINE SCOPE OF WORK AND REFINE COST ESTIMATE.	\$10,000
		TOTAL PHYSICIANS QUAD. BLDG.	\$25,000
PHYSICIANS QUAD. BLDG. N			
07-E007	THIS FACILITY DOES NOT HAVE A FIRE ALARM SYSTEM, NOR IS IT SPRINKLED.	RECOMMEND INSTALLING A BUILDING WIDE FIRE ALARM SYSTEM THAT REPORTS TO A 24 HOUR MANNED STATION.	\$7,300
07-G021	CARPET IN HALLWAYS REPLACED 2 YO. ALL OTHER CARPET IS VERY WORN, STAINED, DISCOLORED.	REPLACE CARPET OR CONSIDER TILE OR LINOLEUM. RECYCLE CARPET MATERIAL.	\$18,000
07-G022	TOILETS AND OTHER AREAS MAY NOT COMPLY WITH ADA STANDARD.	ADA STUDY IS RECOMMENDED TO DETERMINE SCOPE OF WORK AND REFINE COST ESTIMATE.	\$10,000
07-G023	FLAT ROOF AND SHINGLE ROOF ARE BOTH AT END OF 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. REMOVE AND REPLACE SHINGLES ON SLOPED ROOF. INSTALL NEW FELT AS NEEDED. REPAIR DECKING AS NEEDED.	\$37,000
		TOTAL PHYSICIANS QUAD. BLDG.	\$72,300
PIRATES CLUB			

D_NO	Description	Recommended Correction	Cost
07-G072	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 42 YEAR OLD, ATHLETICS BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS AND STOREFRONT SYSTEMS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. SINGLE PLY ROOF IS NEARING END OF EXPECTED LIFE.	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). 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 ESTIMATES ASSUMES HIGH QUALITY BUILT-UP, SINGLE PLY OR OTHER SYSTEM WITH A LIGHT, REFLECTIVE SURFACE.	\$1,000,000
		TOTAL PIRATES CLUB	\$1,000,000
RAGSDALE			
07-E055	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$25,000
07-G128	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 84 YEAR OLD BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES, AND DOES NOT HAVE AN ELEVATOR. 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) ALL 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 ELEVATOR WITH CONTROLS, DOOR OPERATING SYSTEMS TO COMPLY WITH ADA ACCESS TO UPPER FLOORS. INSTALL NEW LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES. RENOVATE EXTERIOR BUILDING ENTRY WAYS (INCLUDING, DOOR FRAMES, DOORS, HARDWARE AND SURROUNDS).	\$21,000,000
07-G129	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. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	\$242,000
07-G130	WATER IS PENETRATING WALL BELOW GRADE AND CONTRIBUTING TO DAMAGE OF INTERIOR SURFACES AND FUNGAL GROWTH. ODOR OF MOLD IS PRESENT IN BASEMENT. SOME CAULK AND MORTAR JOINTS ARE DETERIORATED. WATER PENETRATES SOLID BRICK AND PLASTER WALLS.	EXCAVATE EARTH IN AFFECTED AREAS, INSTALL NEW WATERPROOFING SYSTEM AND DRAINS AND REPLACE ALL DAMAGED MATERIALS. REPAIR CAULK AND RE-POINT MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE THROUGH EXTERIOR WALL, SEAL EXTERIOR WITH SILICON WATERPROOFING AND CONSIDER PAINTING INTERIOR WALLS WITH A HIGH PERM RATED PAINT.	\$135,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	RAGSDALE	\$21,402,000
RAWL				
07-G018	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 48 YEAR OLD, CLASSROOM BUILDING ARE NEAR/AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. IN ADDITION, STONE LANDING, DECORATIVE MASONRY, STEPS AND RAILING AT ENTRY WAYS ARE IN A STATE OF DISREPAIR.	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.		\$12,750,000
		TOTAL	RAWL	\$12,750,000
RIVERS				
07-G033	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 39 YEAR OLD, EDUCATIONAL BUILDING ARE AT THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. CAULK AT CONCRETE PANELS, AND SOME MORTAR JOINTS ARE DETERIORATED. BRICK AND CONCRETE WALLS ARE DISCOLORED IN SOME AREAS. SOME ENTRANCE DOORS AND HARDWARE ARE ALSO NEAR END OF USEFUL LIFE. EXTERIOR STEPS, HANDRAILS, WALKWAYS AND COURTYARD ARE ALSO SHOWING SIGNS OF HEAVY USE AND DETERIORATION.	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 CODES. CLEAN EXTERIOR WALLS AND RE-CAULK AND REPAIR MORTAR JOINTS. REPLACE OR REPAIR EXTERIOR DOORS AND HARDWARE. REPAIR OR REPLACE DAMAGED AND DETERIORATED EXTERIOR STEPS, RAMPS AND HANDRAILS. REPAIR DAMAGE TO COURTYARD AREA.		\$8,150,000
		TOTAL	RIVERS	\$8,150,000
ROADS				
07-G201	ASPHALT WEARING COURSE HAS WEATHERED SURFACE, EXPOSED AGGREGATE AND A MODERATE AMOUNT OF ALLIGATOR CRACKING.	REMOVE PART OF ASPHALT WEARING SURFACE WHERE AND AS REQUIRED TO ACHIEVE A SOLID BASE COURSE. PAVE NEW ASPHALT WEARING SURFACE COURSE SUITABLE FOR TRAFFIC CONDITIONS.		\$80,000
		TOTAL	ROADS	\$80,000
SCALES				

D_NO	Description	Recommended Correction	Cost
07-G070	SINGLE PLY ROOF WITH BALLAST IS IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$320,000
07-G071	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 41 YEAR OLD, ATHLETICS BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. 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).	\$2,900,000
TOTAL SCALES			\$3,220,000

SCIENCE & TECHNOLOGY

07-M057	THE SCIENCE & TECHNOLOGY BUILDING IS A GOOD CANDIDATE FOR AN ENERGY PERFORMANCE CONTRACT.	ENTER INTO AN ENERGY PERFORMANCE CONTRACT FOR THIS LARGE NEW FACILITY, WITH AN EXTENSIVE HVAC LOAD. THE INSTALLATION OF HIGH PERFORMANCE FUME HOODS WOULD BE ANTICIPATED UNDER THIS CONTRACT.	\$400,000
TOTAL SCIENCE & TECHNOLOGY			\$400,000

SCOTT RESIDENCE HALL

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.	\$2,500,000
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.	\$200,000
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.	\$400,000

D_NO	Description	Recommended Correction	Cost
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..	\$850,000
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.	\$100,000
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.	\$60,000
		TOTAL SCOTT RESIDENCE HALL	\$4,110,000
SLAY RESIDENCE HALL			
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.	\$65,000
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.	\$40,000
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.	\$150,000
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.	\$500,000
		TOTAL SLAY RESIDENCE HALL	\$755,000
SOM ADI (ALUMNI DEV & INFO)			
07-G038	WOOD, DOUBLE GLAZED WINDOWS ARE NEAR END OF EXPECTED LIFE, IN POOR CONDITION DUE TO LACK OF MAINTENANCE. SOME SILLS ARE ROTTED.	INSTALL NEW WINDOWS WITH SOME OPERABLE SECTIONS, THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. STOREFRONT STYLE IS RECOMMENDED FOR FRONT GLASS WALL.	\$46,000
07-G039	PLYWOOD FASCIA AND SOFFIT NEEDS PAINTING. BRICK PAVER PATIO IN REAR IS UNEVEN.	REPAINT EXTERIOR WOOD TRIM. REPAIR BRICK PAVER PATIO.	\$24,000

D_NO	Description	Recommended Correction	Cost
07-G040	DOOR HARDWARE IS NOT ADA COMPLIANT	INSTALL HEAVY DUTY LEVER ACTION ADA COMPLIANT HARDWARE	\$8,000
07-G041	SINGLE PLY ROOF ON 2 FLAT SECTIONS IS NEAR END OF 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.	\$27,000
TOTAL SOM ADI (ALUMNI DEV &			\$105,000

SOM EMERGENCY DRIVE

07-G051	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND LARGE CRACKS. CONDITION OF SURFACE VARIES DEPENDING ON INITIAL QUALITY, TRAFFIC LOAD, AND MAINTENANCE. GRADE IS TOO LOW IN SOME AREAS. SHOULDERS AND DITCHES ARE INADEQUATE.	REMOVE EXISTING SURFACE AND RECYCLE IN REBUILDING ROAD BASE. TO ACHIEVE A SOUND BASE, SHOULDERS AND DITCHES, ADD AGGREGATE BASE COURSE TO RAISE AND LEVEL GRADE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME AREAS MAY NEED REPAIR AND A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$188,000
TOTAL SOM EMERGENCY DRIVE			\$188,000

SOM PARKING LOTS AT SCHOOL OF MEDICINE

07-G047	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND CRACKS. CONDITION OF SURFACE IN EACH LOT VARIES DEPENDING ON INITIAL QUALITY, AGE, TRAFFIC LOAD, AND MAINTENANCE HISTORY. ONE LOT NEEDS IMMEDIATE REPAIR OF CRACKS AND REPAVING. SEE OTHER DEFICIENCIES FOR OTHER LOTS THAT NEED REPAIR WITHIN ONE TO FIVE YEARS.	REPAIR APPROPRIATELY FOR CONDITION OF ASPHALT SURFACE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO ACHIEVE A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED OR FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$24,000
07-G048	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND CRACKS. CONDITION OF SURFACE IN EACH LOT VARIES DEPENDING ON INITIAL QUALITY, AGE, TRAFFIC LOAD, AND MAINTENANCE HISTORY. LOTS WILL NEED REPAIR WITHIN ONE YEAR.	REPAIR APPROPRIATELY FOR CONDITION OF ASPHALT SURFACE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO ACHIEVE A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED OR FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$60,000
07-G049	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND CRACKS. CONDITION OF SURFACE IN EACH LOT VARIES DEPENDING ON INITIAL QUALITY, AGE, TRAFFIC LOAD, AND MAINTENANCE HISTORY. LOTS WILL NEED REPAIR WITHIN THREE YEARS.	REPAIR APPROPRIATELY FOR CONDITION OF ASPHALT SURFACE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO ACHIEVE A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED OR FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$60,000

D_NO	Description	Recommended Correction	Cost
07-G050	ASPHALT PAVING HAS A WEATHERED SURFACE, SOME EXPOSED AGGREGATE AND CRACKS. CONDITION OF SURFACE IN EACH LOT VARIES DEPENDING ON INITIAL QUALITY, AGE, TRAFFIC LOAD, AND MAINTENANCE HISTORY. LOTS WILL NEED REPAIR WITHIN SIX YEARS.	REPAIR APPROPRIATELY FOR CONDITION OF ASPHALT SURFACE. PATCH CRACKS AND BROKEN AREAS OR REMOVE PART OF SURFACE TO ACHIEVE A SOUND BASE. PAVE A NEW WEARING SURFACE SUITABLE FOR TYPE OF VEHICLE TRAFFIC. SOME LOTS NEED REPAIR AND A REJUVENATION COATING TO EXTEND LIFE UNTIL REPAVING IS NEEDED OR FUNDED. REPAINT ALL MARKINGS AND STRIPES.	\$60,000
		TOTAL SOM PARKING LOTS AT	\$204,000
SOM STEAM PLANT			
07-E001	THE EXISTING SWITCHGEAR IS REACHING THE END OF ITS USEFUL LIFE.	REPLACE THE EXISTING SWITCHGEAR	\$200,000
07-E002	THE EXISTING FIRE ALARMS ON CAMPUS DO NOT REPORT TO A CENTRAL LOCATION FOR MONITORING.	INSTALL A NEW FIRE ALARM PANEL AND ASSOCIATED WIRING TO ALLOW MONITORING OF ALL FIRE ALARM SYSTEMS ON THE MEDICAL CAMPUS.	\$125,000
07-G001	CONCRETE FLOOR IS DETERIORATED DUE TO HEAVY WEAR, ABRASION, AND SPILLS.	INSTALL A HEAVY DUTY, ABRASION AND CHEMICAL RESISTANT FLOORING SUCH AS STONEHARD OVER EXISTING CONCRETE FLOOR.	\$90,000
07-G002	SOME EXTERIOR DOOR HARDWARE IS WORN AND DIFFICULT TO OPERATE AND MAINTAIN	REPLACE DOOR HARDWARE AS NEEDED	\$4,000
07-M001	TWO OF THE EXISTING CHILLERS, CHILLER #1 AND CHILLER #2, ARE APPROXIMATELY 21 YEARS OLD AND USE R-11 REFRIGERANT. THE CHILLERS ARE INEFFICIENT COMPARED TO MODERN EQUIPMENT, AND THE CFC REFRIGERANT IS NO LONGER IN PRODUCTION AND WILL BE EXPENSIVE TO OBTAIN IN THE FUTURE.	REPLACE CHILLER #1 AND CHILLER #2 WITH NEW ENERGY EFFICIENT CHILLERS WHICH USE NON-CFC R-123 REFRIGERANT.	\$1,200,000
07-M002	CHILLER #4 IS APPROXIMATELY TEN YEARS OLD, IS IN GOOD CONDITION, BUT USES A CFC REFRIGERANT WHICH IS NO LONGER BEING PRODUCED.	IF POSSIBLE, CONVERT CHILLER #4 TO USE A NON-CFC REFRIGERANT.	\$75,000
07-M003	SOME OF THE EQUIPMENT IN THE BOILER ROOM HAS DETERIORATED AND NEEDS TO BE UPGRADED. FOR EXAMPLE, BOILER #2 HAS TUBES WHICH ARE LEAKING AND BEYOND REPAIR, AND THE BURNER ASSEMBLY IS INEFFICIENT AND UNRELIABLE. STEAM METERS ARE NEEDED TO MONITOR FLOW. SEVERAL OTHER MISCELLANEOUS PROBLEMS NEED REPAIR, AND A COMPLETE LISTING OF NEEDED UPGRADES IS AVAILABLE FROM THE ECU MEDICAL SCHOOL PHYSICAL PLANT OFFICE.	UPGRADE THE DEFICIENT EQUIPMENT IN THE HEATING PLANT. REPAIRS SHOULD INCLUDE RETUBING OF BOILER #2, REPLACEMENT OF BOILER #2 BURNER ASSEMBLY, AND INSTALLATION OF A STEAM FLOW METER. OTHER MISCELLANEOUS REPAIRS INCLUDE REPLACING THE FOLLOWING EQUIPMENT: STEAM HEADER VALVES, FUEL OIL PUMPS, AND CHEMICAL FEED SYSTEM. PROVIDE DUAL FUEL LINES TO THE BOILERS. A CONCRETE FLOOR IS NEEDED FOR THE FUEL OIL TANK CONTAINMENT AREA.	\$200,000
07-M009	THE CURRENT CHILLED WATER PUMPS DO NOT MOVE SUFFICIENT CHILLED WATER TO BRODY BUILDING. IMPELLERS MAY BE WORN.	UPGRADE BOTH CHILLED WATER PUMPS.	\$100,000
		TOTAL SOM STEAM PLANT	\$1,994,000
SPEIGHT			
07-E012	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$40,000

D_NO	Description	Recommended Correction	Cost
07-G034	EXTERIOR STEPS, RAMPS, HANDRAILS, SIDEWALKS AND RETAINING WALLS ARE SHOWING SIGNS OF HEAVY USE AND DETERIORATION.	REPAIR OR REPLACE DAMAGED OR DETERIORATED EXTERIOR STEPS, RAMPS, SIDEWALKS, RETAINING WALLS AND HANDRAILS.	\$55,000
07-G035	CAULK AT WINDOWS AND CONCRETE PANELS, AND SOME MORTAR JOINTS ARE DETERIORATED. BRICK AND CONCRETE WALLS ARE DISCOLORED IN SOME AREAS. SETTLEMENT HAS CREATED SOME MINOR CRACKS.	CLEAN WALLS AND RECAULK JOINTS AND WINDOWS, REPOINT MORTAR JOINTS AS NEEDED. REPAIR CRACKS DUE TO SETTLEMENT AND MONITOR FOR FURTHER SETTLEMENT. TO REDUCE MOISTURE THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR.	\$125,000
07-G036	ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 42 YEAR OLD, CLASSROOM BUILDING ARE NEAR THE END OF THEIR EXPECTED USEFUL LIFE. ORIGINAL, METAL, SINGLE GLAZED WINDOWS ARE IN POOR OPERATING CONDITION. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. HEATING AND VENTILATION SYSTEMS DO NOT COMPLY WITH CURRENT STANDARDS FOR COMFORT AND HEALTH. SINGLE PLY ROOF WAS RECENTLY REPLACED AND BUILDING HAS OLDER ELEVATOR.	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. UPGRADE ELEVATOR BY FUNCTIONS AND CODE.	\$8,850,000
TOTAL SPEIGHT			\$9,070,000
SPILMAN			
07-G039	ADA ACCESS TO SECOND FLOOR IS NOT POSSIBLE BECAUSE BUILDING HAS NO ELEVATOR.	CONSTRUCT NEW ELEVATOR IN NEW EXTERIOR SHAFT.	\$850,000
07-G040	EXTERIOR WALL APPARENTLY DOES NOT HAVE GOOD WATERPROOFING, ALTHOUGH NO DAMAGE FROM FUNGAL GROWTH ON INTERIOR WAS NOTED. SOME MORTAR AND CAULK JOINTS ARE DETERIORATED. STEEL LINTELS HAVE SOME RUST. WALLS BELOW GRADE APPARENTLY HAVE GOOD WATERPROOFING. IN ADDITION, CONCRETE STEPS AT FRONT ENTRY ARE ALSO SHOWING SIGNS OF DETERIORATION AND METAL RAILS ARE EXTREMELY RUSTY.	CLEAN WALLS, RECAULK AND REPOINT MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE MOVING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR. REPAIR AND/OR REPLACE CONCRETE STEPS AND HANDRAILS AT FRONT ENTRY.	\$55,000
07-G041	ON UPPER SECTION, PAINTED METAL ROOF IS AT/NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED TO STOP LEAKS. GUTTERS AND DOWNSPOUTS ARE IN QUESTIONABLE CONDITION.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW FLASHING, EXPANSION JOINTS AND DRAINS AS NEEDED. INSTALL NEW METAL ROOFING AND REPLACE GUTTER SYSTEM AS REQUIRED.	\$65,000
07-G042	FELT LAYER UNDER CLAY TILE ROOF IS LIKELY AT/NEAR END OF LIFE. GUTTERS ARE IN QUESTIONABLE CONDITION AND 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 AND TILE. REPAIR CORNICE AS NEEDED. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	\$50,000

D_NO	Description	Recommended Correction	Cost
07-G043	ALTHOUGH INTERIOR TRIM AND FINISHES ARE IN VERY GOOD CONDITION, MOST ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 77 YEAR OLD, ADMINISTRATION BUILDING ARE AT/NEAR THE END OF THEIR EXPECTED USEFUL LIFE. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. INTERIOR DOORS, STAIRWAYS AND MEANS OF EGRESS WERE NOTED IN ANNUAL DOI REPORTS. 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 LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES.	\$3,000,000
TOTAL SPILMAN			\$4,020,000
STEAM PLANT			
07-E027	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$40,000
07-E028	THIS BUILDING HAS NO FIRE ALARM SYSTEM. A FIRE ALARM SYSTEM IS NEEDED TO PROTECT PERSONNEL AND STATE-OWNED PROPERTY.	RECOMMEND INSTALLING FIRE ALARM SYSTEM IN ACCORDANCE WITH DEPARTMENT OF INSURANCE REQUIREMENTS.	\$30,000
07-G092	SPILL CONTAINMENT AREAS AT STORAGE TANKS AND FUELING STATION DOES NOT APPEAR TO BE ADEQUATE. COMPRESSOR SHED AT REAR OF BUILDING IS IN POOR CONDITION AND IS NOT ADEQUATE FOR APPLICATION.	PROVIDE ADEQUATE FUEL CONTAINMENT AT STORAGE TANKS AND FUELING STATION. DEMOLISH AND CONSTRUCT NEW COMPRESSOR SHELTER.	\$235,000
07-G093	CONCRETE FLOOR SLAB AND STEEL BEAMS AROUND THE DEALKALIZERS AND BASEMENT AREA HAS SERIOUS DETERIORATION THAT WILL CONTINUE TO FUTURE STRUCTURAL FAILURE. INFILTRATION OF CHEMICALS MAY BE RUSTING STEEL REINFORCING. SURFACE OF CONCRETE SLAB IS TOO SLIPPERY WHEN WET AND IS NOT SAFE. STRUCTURAL STUDY WAS DONE IN 1996. NOTE: IT APPEARS SOME WORK HAS BEEN DONE BUT ISSUES STILL EXIST ADJACENT TO RECENT REPAIRS.	REPAIRS AS RECOMMENDED IN CONSULTING ENGINEERS STUDY SHOULD BE COMPLETED IMMEDIATELY. FLOOR SURFACE SHOULD BE CLEANED AND COATED TO IMPROVE SAFETY.	\$55,000
07-G094	RESTROOMS ARE AT END OF USEFUL LIFE. FINISHES AND FIXTURES ARE IN POOR CONDITION DUE TO AGE AND HEAVY USE.	RENOVATE RESTROOMS AS REQUIRED.	\$45,000
07-G095	ON MAIN UPPER ROOF, SINGLE-PLY ROOF IS IN POOR CONDITION AND NEAR 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.	\$95,000
07-G096	EXTERIOR OVERHEAD AND PERSONNEL DOORS AND HARDWARE ARE NEARING END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.	\$35,000
07-M067	THE FUEL OIL TANKS AND ASSOCIATED TRANSFER PIPING AT THE STEAM PLANT ARE AGING AND NEED UPGRADE.	REPLACE CORRODED PIPING AND TANKS. VERIFY THAT ADEQUATE PROTECTION IS PROVIDED AGAINST GROUND SEEPAGE WITHIN THE CONTAINMENT WALL AREA. VERIFY THAT THE CONTAINMENT AREA HAS SUFFICIENT VOLUME IF ALL FUEL OIL TANKS RUPTURE.	\$400,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	STEAM PLANT	
\$935,000				
STUDENT HEALTH CENTER				
07-E053	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.		\$30,000
07-G123	FELT LAYER UNDER TERRA-COTTA ROOF IS LIKELY NEAR END OF LIFE. GUTTER IS APPARENTLY IN POOR CONDITION. QUALITY OF TERRA-COTTA IS NOT DETERMINED. LEAKS HAVE NOT DAMAGED INTERIOR FINISHES.	REMOVE TERRACOTTA 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.		\$99,000
07-G124 \$75,000	PAINT IS NEARING END OF EXPECTED LIFE. FINISHES AT WOOD	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.		
	RAFTER TAILS AND EXPOSED SOFFIT ARE ALSO SHOWING SIGNS OF DETERIORATION.	SEAL WATER/PROOF EXTERIOR MASONRY SURFACES.		
07-M068	THE STUDENT HEALTH CENTER IS IN GOOD CONDITION, BUT IS A CANDIDATE FOR RETRO COMMISSIONING DUE TO THE ADDITION OF NEW WALLS SINCE INITIAL CONSTRUCTION.	RETRO COMMISSION THE STUDENT HEALTH CENTER TO PROVIDE AIR FLOWS CONSISTENT WITH THE CURRENT LAYOUT.		\$150,000
			TOTAL STUDENT HEALTH CENTER	\$354,000
STUDENT RECREATION CENTER				
07-G157	SINGLE-PLY ROOF WAS NOT CONSTRUCTED TO GOOD QUALITY STANDARDS, AND SEAMS ARE IN POOR CONDITION. EXTENSIVE REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	REPAIR SEAMS AND FLASHING AS REQUIRED TO EXTEND LIFE.		\$30,000
07-G158	SOME CAULK JOINTS AT EXTERIOR MASONRY (BUILDING-WIDE) ARE DETERIORATED.	CLEAN AND RECAULK JOINTS AS NEEDED.		\$45,000
07-G159	SOME EXTERIOR DOORS AND HARDWARE (DUE TO HEAVY USE) IS NEAR/AT END OF USEFUL LIFE.	REPLACE OR REPAIR DOORS AND DOOR HARDWARE AS NEEDED.		\$15,000
07-M053	THE LOWER REHEAT COIL FOR AHU-5, SERVING THE MAIN COURT AREA, IS LEAKING AND NEEDS REPLACEMENT.	PROVIDE A NEW LOWER REHEAT COIL FOR AHU-5		\$40,000
			TOTAL STUDENT RECREATION	\$130,000
TAYLOR/SLAUGHTER ALUMNI CENTER				
07-E056	THIS BUILDING HAS NO FIRE ALARM SYSTEM.	RECOMMEND INSTALLING A FIRE ALARM SYSTEM IN ACCORDANCE WITH NC DEPARTMENT OF INSURANCE STANDARDS.		\$13,000
07-E058	PRESENTLY THERE ARE SEVERAL TWO-WIRE RECEPTACLES STILL IN USE IN THIS BUILDING. MUCH OF THE WIRING IS ORIGINAL AND WELL PAST ITS USEFUL LIFE.	RECOMMEND REPLACING ALL ORIGINAL WIRING AND DEVICES.		\$7,500
07-G131	PAINT IS NEARING END OF EXPECTED LIFE.	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.		\$35,000
07-G132	ASPHALT SHINGLE ROOF IS IN FAIR CONDITION AND BUT WILL SOON BE NEAR/AT END OF EXPECTED LIFE. METAL ROOF (WITH EPDM) OVER PORCH MAY ALSO BE NEAR END OF LIFE. DECORATIVE SECTIONS OF METAL FENCING AT PORCH ROOF ARE ALSO IN FAIR TO POOR CONDITION.	REMOVE ALL ROOF MATERIALS TO EXPOSE STRUCTURAL DECK AND REPAIR AS REQUIRED. INSTALL NEW ASPHALT SHINGLES. REPAIR OR REPLACE METAL ROOFING AND DECORATIVE METAL FENCING AT FRONT PORCH.		\$20,000

D_NO	Description	Recommended Correction	Cost
07-G133	ORIGINAL, WOOD FRAMED, SINGLE GLAZED WINDOWS ARE NEAR END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT OF OCCUPANTS.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING.	\$48,000
		TOTAL TAYLOR/SLAUGHTER	\$123,500
TODD DINING HALL			
07-G164	PAINT AND INTERIOR FINISHES ARE NEARING END OF EXPECTED LIFE.	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED.	\$65,000
07-G165	SINGLE-PLY ROOF IS NEARING END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.	\$275,000
07-G166	SOME EXTERIOR DOOR HARDWARE (DUE TO HEAVY USE) IS NEARING END OF USEFUL LIFE.	REPLACE OR REPAIR DOOR HARDWARE AS NEEDED.	\$10,000
07-G167	SOME CAULKED JOINTS (ABOVE AND AROUND WINDOWS) ARE SHOWING SIGNS OF DETERIORATION.	REPLACE DETERIORATED CAULKED JOINTS AS NEEDED.	\$75,000
07-G168	IN KITCHEN AND AT LOADING DOCK, SOME CEILING PANELS ARE NEAR/AT END OF USEFUL LIFE. IN ADDITION, GROUT AT TILED AREA (AT DISHWASHING AREA, KITCHEN) IS ALSO SHOWING SIGNS OF HEAVY USE.	REPLACE CEILING SYSTEM IN KITCHEN AND LOADING DOCK. REPLACE ANY BROKEN (6 X 6) FLOOR TILE AT DISHWASHING AREA. REPLACE GROUT AT TILED AREA.	\$50,000
07-M062	A DESERT AIRE UNIT HAS BEEN ADDED TO THE HVAC SYSTEM TO SUPPLEMENT CHILLER CAPACITY.	EVALUATE THE TODD DINING HALL HVAC SYSTEM TO DETERMINE UPGRADE REQUIREMENTS.	\$50,000
		TOTAL TODD DINING HALL	\$525,000
TYLER RESIDENCE HALL			
07-E021	THE EXISTING PANEL IS AT THE END OF ITS SERVICE LIFE.	INSTALL A NEW MAIN DISTRIBUTION PANEL PER THE NEC.	\$7,500
07-E022	THE EXISTING LIGHT LEVEL DOES NOT MEET IES STANDARDS	REPLACE THE EXISTING LIGHTING TO RAISE THE LIGHTING LEVEL TO AN ACCEPTABLE STANDARD.	\$45,000
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 RENOVATION.	\$350,000
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.	\$400,000
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.	\$345,000

D_NO	Description	Recommended Correction	Cost
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.	\$300,000
07-G214	PAINT WILL SOON BE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	\$140,000
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.	\$100,000
07-G219	SUSPENDED CEILING ARE SAGGING, DISCOLORED, DAMAGED AND AT END OF LIFE	REPLACE CEILING WITH 2X2 SYSTEM.	\$225,000
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.	\$125,000
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.	\$100,000
TOTAL TYLER RESIDENCE HALL			\$2,137,500
UMSTEAD RESIDENCE HALL			
07-G097	INTERIOR FINISHES ARE NEAR END OF EXPECTED LIFE.	REPAINT INTERIOR FINISHES AS NEEDED.	\$85,000
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.	\$65,000
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.	\$500,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	UMSTEAD RESIDENCE	\$650,000
WALKWAY AT MEDICAL PAVILLION				
07-G052	CONCRETE WALKWAY SURFACES ARE CRACKED, UNEVEN AND A TRIP HAZARD.	REMOVE ALL DAMAGED CONCRETE AND REPLACE WITH CONCRETE PAVERS.		\$35,000
		TOTAL	WALKWAY AT MEDICAL	\$35,000
WALKWAYS				
07-G202	SOME CONCRETE AND BRICK PAVER WALKS HAVE BROKEN AND UNEVEN AREAS. SOME WALKS NEED IMMEDIATE REPAIR. OTHER WALKS WILL NEED REPAIR WITHIN ONE TO SIX YEARS. SOME WALK AREAS DO NOT DRAIN ADEQUATELY.	REPAIR APPROPRIATELY FOR CONDITION OF WALK OR DEMOLISH EXISTING WALKWAY AND CONSTRUCT NEW.		\$137,000
		TOTAL	WALKWAYS	\$137,000
WARD SPORTS MEDICINE				
07-E067	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.		\$120,000
07-E068	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.		\$40,000
07-G148	SOME EXTERIOR DOORS AND HARDWARE ARE NEAR/AT END OF USEFUL LIFE. IN ADDITION, SOME INTERIOR DOORS AND HARDWARE ARE ALSO IN POOR CONDITION.	REPLACE OR REPAIR DOORS AND HARDWARE AS NEEDED.		\$125,000
07-G149	INTERIOR FINISHES, CARPET, FLOORING, SLIDING PARTITIONS, LOCKERS, RESTROOM PARTITIONS AND SURFACES ARE NEAR/AT END OF USEFUL LIFE.	REFURBISH, REPAINT AND REPLACE INTERIOR FINISHES, CARPET AND FLOORING. REPLACE DAMAGED, DETERIORATED AND END OF LIFE, SLIDING PARTITIONS LOCKERS AND RESTROOM FINISHES AND PARTITIONS.		\$500,000
07-G150	SOME CAULK JOINTS AT DECORATIVE MASONRY ARE DETERIORATED.	CLEAN JOINTS AND RECAULK JOINTS AS NEEDED. TO REDUCE MOISTURE COMING THROUGH EXTERIOR WALL, CONSIDER APPLICATION OF A SILICON COATING TO EXTERIOR AND PAINTING INTERIOR SURFACES WITH A HIGH PERM RATED PAINT.		\$55,000
07-G151	SINGLE-PLY ROOF IS IN FAIR TO POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED BEFORE REPLACEMENT.	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.		\$365,000
07-M059	ONLY ONE OF THE TWO RETURN FANS IN ROOM 334 IS ABLE TO OPERATE AT ANY GIVEN TIME. BOTH FANS MUST OPERATE FOR SUFFICIENT COOLING TO THE BUILDING. THE AIR HANDLER, COILS AND DDC SYSTEM HAVE AGED OUT. THE LARGE SHOWER HOT WATER TANK IS LEAKING AT THE TOP AND BOTTOM. THE STEAM TRAP IN THE BASEMENT MECHANICAL ROOM MUST BE CHECKED BECAUSE OF STEAM HAMMER IN THE CONDENSATE RETURN LINE.	DIAGNOSE AND CORRECT THE PROBLEM PREVENTING SIMULTANEOUS OPERATION OF BOTH RETURN AIR FANS. REPLACE THE AGING AIR HANDLER, COILS AND CONTROLS. REPLACE THE LEAKING HOT WATER TANK AND THE LEAKING STEAM TRAP.		\$200,000

D_NO	Description	Recommended Correction		Cost
		TOTAL	WARD SPORTS MEDICINE	\$1,405,000
WAREHOUSE				
07-E011	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.		\$50,000
07-G073	SINGLE-PLY ROOF IS NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.		\$186,000
07-G074	EXTERIOR BRICK VENEER HAS NUMEROUS STRESS FRACTURES, SETTLEMENT AND STAIR-STEP CRACKS (ESPECIALLY AT SOUTH-SIDE OF BUILDING).	COSMETICALLY REPAIR EXTERIOR BRICK VENEER AT SOUTH-SIDE OF BUILDING.		\$25,000
		TOTAL	WAREHOUSE	\$261,000
WEST RESEARCH CAMPUS ACADEMIC BLDG.				
07-E001	THE EXISTING PANELS ARE REACHING THE END OF USEFUL LIFE.	INSTALL NEW PANELS.		\$9,000
07-E002	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.		\$50,000
07-G001	ORIGINAL SINGLE PANE FLOOR TO CEILING WINDOWS ARE ENERGY INEFFICIENT AND CONTRIBUTE TO HIGH ENERGY COSTS AND OCCUPANT DISCOMFORT.	REPLACE WINDOWS WITH DOUBLE PANE LOW MAINTENANCE THERMAL BREAK UNITS.		\$95,000
07-G002	SINGLE PLY ROOF IS IN POOR CONDITION AND IS BEYOND 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.		\$180,000
07-G003	CARPET IS WORN AND UNRAVELLING.	REPLACE CARPET WITH HEAVY DUTY CARPET.		\$16,000
07-G004	BUILDING DOES NOT HAVE ADEQUATE EMERGENCY EXIT SINGNAGE.	INSTALL LIGHTED EXIT SIGNS AS NEEDED.		\$5,000
07-M001	THE CHILLERS ARE VERY OLD AND USE REFRIGERANT (R-22) THAT IS BECOMING OBSOLETE. THE EXISTING SYSTEM INCORPORATES TWO INDOOR CHILLER PACKAGES, EACH WITH THREE COMPRESSORS, LINKED BY DX LINES TO FOUR OUTDOOR AIR COOLED CONDENSING UNITS.	INSTALL TWO NEW CHILLERS.		\$150,000
07-M002	THE BUILDING DOES NOT HAVE A SPRINKLER SYSTEM, AS RECOMMENDED BY DOI.	INSTALL SPRINKLER SYSTEM.		\$150,000
07-M003	THE COPPER WATER LINES HAVE JOINTS SOLDERED WITH A SOLDER CONTAINING LEAD, WHICH IS NOT ALLOWED TODAY.	REPLACE ALL WATER PIPING WITH A SOLDER JOINT NOT CONTAINING LEAD.		\$50,000
		TOTAL	WEST RESEARCH CAMPUS	\$705,000

WEST RESEARCH CAMPUS COASTAL STUDIES

D_NO	Description	Recommended Correction	Cost
07-G005	GALVANIZED COATING ON WALLS HAS DETERIORATED AND METAL IS RUSTING. METAL WALL HAVE ALSO BEEN DAMAGED BY VEHICLE AND EQUIPMENT STRIKES.	REPAIR AND COAT METAL SIDING.	\$12,000
		TOTAL WEST RESEARCH CAMPUS	\$12,000
WEST RESEARCH CAMPUS ROADWAYS			
07-G007	ASPHALT PARKING AND ROADWAYS HAVE CRACKS AND POTHOLES. SEVERITY ISDEPENDENT UPON TRAFFIC AND USE.	REPAIR POTHOLES AND CRACKS. INSTALL SEALANT COAT.	\$35,000
		TOTAL WEST RESEARCH CAMPUS	\$35,000
WEST RESEARCH CAMPUS STORAGE BLDG			
07-G006	GALVANIZED COATING ON WALLS AND ROOF HAS DETERIORATED AND METAL IS RUSTING. METAL WALL HAVE ALSO BEEN DAMAGED BY VEHICLE AND EQUIPMENT STRIKES.	REPAIR AND COAT METAL SIDING AND ROOF.	\$18,000
		TOTAL WEST RESEARCH CAMPUS	\$18,000
WHICHARD			
07-E013	THE EXISTING TRANSFORMER IS REACHING THE END OF ITS USEFUL LIFE.	INSTALL A NEW TRANSFORMER.	\$30,000
07-G044	ON ANNEX, SINGLE-PLY ROOF IS IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS. IN ADDITION, MAIN BUILDING SIDE ROOFS MAY ALSO BE IN DETERIORATED CONDITION.	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.	\$140,000
07-G045	EXTERIOR WALLS APPARENTLY DO NOT HAVE GOOD WATERPROOFING. SOME MORTAR AND CAULK JOINTS ARE DETERIORATED AND STEEL LINTELS HAVE SOME RUST. IN ADDITION, WALLS BELOW GRADE (AT NORTHEAST SIDE OF ANNEX BUILDING, AT FILE ROOM) DO NOT APPEAR TO HAVE GOOD WATERPROOFING. CARPET AND WALL FINISHES APPARENTLY HAVE BEEN DAMAGED BY MOISTURE OR WATER INFILTRATION. IN ADDITION, EXTERIOR WOODWORK IS SHOWING SIGNS OF DETERIORATION.	CLEAN WALLS (ABOVE GRADE), RECAULK AND REPOINT MORTAR JOINTS AS NEEDED. TO REDUCE MOISTURE MOVING THROUGH EXTERIOR WALL, APPLY A SILICON COATING TO EXTERIOR. EXCAVATE AND RE-WATERPROOF NORTHEAST SIDE OF ANNEX (AT FILE ROOM). REPAIR AND REPAINT DAMAGED SURFACES ASSOCIATED WITH MOISTURE INFILTRATION. REPAIR AND/OR REPLACE AND REPAINT DAMAGED AND DETERIORATED EXTERIOR WOODWORK.	\$225,000
07-G046	FELT LAYER UNDER CLAY TILE ROOF IS LIKELY AT/NEAR END OF LIFE. QUALITY OF CLAY TILE IS NOT DETERMINED AND LEAKS MAY HAVE DAMAGED SOME INTERIOR FINISHES.	REMOVE CLAY TILE, REPAIR DECK AND STRUCTURE AS REQUIRED, AND REPLACE FELT AND TILE. COST ESTIMATE ASSUMES REUSING TILE AND MINOR REPAIR OF DECK.	\$70,000

D_NO	Description	Recommended Correction	Cost
07-G047	ALTHOUGH SOME INTERIOR TRIM AND FINISHES ARE IN VERY GOOD CONDITION, MOST ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL SYSTEMS IN THIS 84 YEAR OLD, ADMINISTRATION BUILDING ARE AT/NEAR THE END OF THEIR EXPECTED USEFUL LIFE. BUILDING DOES NOT FULLY COMPLY WITH CURRENT LIFE SAFETY CODES OR ADA GUIDELINES. THERE IS NO ELEVATOR ACCESS TO SECOND LEVEL AND SOME INTERIOR DOORS DO NOT HAVE ADA COMPLIANT HARDWARE. 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 ELEVATOR (TO COMPLY WITH ADA ACCESS) TO UPPER FLOOR. INSTALL NEW LIGHTING, FIRE ALARMS, ELECTRICAL AND MECHANICAL SERVICE SYSTEMS AS REQUIRED BY CURRENT STANDARDS AND BUILDING CODES.	\$4,350,000
		TOTAL WHICHARD	\$4,815,000
WHITE RESIDENCE HALL			
07-E014	THE EXISTING PANEL IS AT THE END OF ITS SERVICE LIFE.	INSTALL A NEW MAIN DISTRIBUTION PANEL PER THE NEC.	\$7,500
07-E023	THE EXISTING PANEL(S) IS FULL/LOADED AND A NEW PANEL IS NEEDED.	INSTALL A NEW ELECTRICAL PANEL.	\$4,500
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.	\$40,000
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.	\$3,250,000
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.	\$175,000
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.	\$106,000
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.	\$750,000

D_NO	Description	Recommended Correction	Cost
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.	\$125,000
TOTAL WHITE RESIDENCE HALL			\$4,458,000
WILLIS BLDG			
07-G085	ORIGINAL, ALUMINUM, SINGLE GLAZED WINDOWS ARE NEAR END OF EXPECTED LIFE, IN POOR OPERATING CONDITION AND DUE TO LEAKAGE OF OUTDOOR AIR, CONTRIBUTE TO HIGH ENERGY COST AND DISCOMFORT OF OCCUPANTS. IN ADDITION, ALUMINUM STOREFRONT SYSTEMS AND HOLLOW METAL (FRAMES, DOORS AND HARDWARE) ARE ALSO IN POOR CONDITION.	INSTALL NEW, OPERABLE WINDOWS WITH THERMAL BREAK FRAMES AND INSULATED GLASS WITH LOW E COATING. REPLACE DAMAGED AND DETERIORATED ALUMINUM STOREFRONT SYSTEMS, HOLLOW METAL (DOOR FRAMES, DOORS AND HARDWARE).	\$217,000
07-G086	INTERIOR AND EXTERIOR FINISHES ARE NEARING END OF EXPECTED LIFE. IN ADDITION, SUSPENDED CEILING THROUGHOUT BUILDING IS ALSO IN POOR CONDITION.	REPAINT INTERIOR AND EXTERIOR FINISHES AS NEEDED. REPLACE DAMAGED AND DETERIORATED SUSPENDED CEILING.	\$65,000
07-G087	SOME INTERIOR DOOR HARDWARE REQUIRES EXTENSIVE MAINTENANCE, IS NOT ADA COMPLIANT, AND IS NEAR END OF USEFUL LIFE.	REPLACE OR REPAIR DAMAGED, DETERIORATED AND NON-ADA COMPLIANT DOORS AND HARDWARE AS NEEDED.	\$85,000
07-M011	THE AIR HANDLING UNITS HAVE DETERIORATED WITH AGE. THE UNITS HAVE BECOME CORRODED, PARTICULARLY AT THE PIPE CONNECTIONS AND CONDENSATE DRAIN PANS. THE HVAC CONTROLS SYSTEM IS OLD AND OBSOLETE IN SOME AREAS. THE AIR DISTRIBUTION SYSTEM HAS DEFICIENCIES IN CAPACITY AND AIR BALANCE. THE CORRIDOR RETURN AIR FLOW DOES NOT MATCH THE LOADS OF THE SPACES, AS OFFICE PARTITIONS AND ZONING HAVE CHANGED. HIGH EFFICIENCY HEATING HOT WATER NATURAL GAS BOILERS WERE INSTALLED IN 2005.	HVAC RETROFIT AND RECOMMISSIONING IS REQUIRED. REPLACE THE SINGLE AIR HANDLING UNIT AND ADD VAV BOXES FOR REHEAT. UPGRADE THE HVAC CONTROLS SYSTEM TO PROVIDE A RELIABLE, ENERGY EFFICIENT SYSTEM. MODIFY THE AIR DISTRIBUTION SYSTEM TO MATCH THE SPACE LAYOUT, AND PROVIDE A COMPLETE AIR BALANCE FOR THE SYSTEM.	\$250,000
TOTAL WILLIS BLDG			\$617,000
WP & JP ENTERPRISES BUILDING			
07-G191	THIS BUILDING HAS MULTIPLE MAJOR DEFICIENCIES IN EXISTING SYSTEMS, AND RENOVATION IS NOT PRACTICAL IN COMPARISON TO COST OF A NEW BUILDING.	DEMOLITION FOR FUTURE REPLACEMENT OF THIS BUILDING IS RECOMMENDED. THE COST ESTIMATE IS FOR DEMOLITION ONLY, AS AN OPTION TO COSTLY RENOVATIONS.	\$185,000
TOTAL WP & JP ENTERPRISES			\$185,000

WRIGHT (ANNEX)

D_NO	Description	Recommended Correction	Cost
07-E015	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.	\$60,000
07-E016	THE EXISTING EMERGENCY POWER SOURCE NEEDS TO BE REPLACED.	INSTALL A DIESEL GENERATOR TO SUPPLY EMERGENCY POWER.	\$38,000
07-G048	FINISH (PAINT) IS NEAR END OF EXPECTED LIFE, ON OPEN STRUCTURE, OVER OUTDOOR TERRACE.	REPAINT STEEL STRUCTURE FINISHES AS NEEDED.	\$15,000
07-G049	BUILT UP ROOF (SECTIONS H AND I, BACK SECTIONS) APPEARS TO BE IN POOR CONDITION AND NEAR END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$60,000
07-G050	SOME INTERIOR FINISHES (FLOOR TILE AND CEILINGS), AND EXTERIOR FINISHES ARE SHOWING SIGNS OF DETERIORATION.	REPLACE DAMAGED AND DETERIORATED FLOOR AND CEILING TILE. REPAINT INTERIOR AND EXTERIOR FINISHES AS REQUIRED.	\$125,000
07-G051	ORIGINAL, METAL, 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 RENOVATION.	\$62,000
07-M006	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.	\$375,000
07-M007	THE THIRD FLOOR R.O.T.C. AREA HVAC SYSTEM IS IN POOR CONDITION. ALTHOUGH A NEW THIRD FLOOR AIR HANDLING UNIT HAS BEEN INSTALLED, DUCTWORK AND CONTROL ISSUES REMAIN. THE CONTROLS SYSTEM IS INCOMPLETE, AS EVIDENCED BY MAKESHIFT REPAIRS AND MISSING COMPONENTS. THE CONTROL SYSTEM IS NOT TIED INTO A CENTRAL BMS SYSTEM. THE CORRIDORS ARE USED AS RETURN AIR PLENUMS, CAUSING SMOKE CONTROL PROBLEMS AND UNEVEN AIR CIRCULATION. VAV BOXES USE ELECTRIC HEAT IN SOME AREAS, CAUSING VERY HIGH ENERGY USAGE.	PROVIDE A NEW HVAC SYSTEM FOR THE THIRD FLOOR, R.O.T.C. AREA TO REPLACE THE EXISTING DETERIORATED SYSTEM. PROVIDE DDC CONTROL AND HOT WATER OR STEAM HEAT TO REPLACE THE EXISTING ELECTRIC HEAT VAV BOXES.	\$300,000
TOTAL WRIGHT (ANNEX)			\$1,035,000

WRIGHT AUDITORIUM

07-E017	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.	\$5,000
07-E018	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.	\$80,000
07-G052	ELEVATOR REQUIRES MAJOR UPGRADE.	UPGRADE ELEVATOR AS NEEDED WITH NEW CONTROLS, DOOR OPERATING SYSTEM AND OTHER ITEMS TO COMPLY WITH ADA GUIDELINES.	\$200,000

D_NO	Description	Recommended Correction	Cost
07-G053	SINGLE PLY ROOF (REMAINING EPDM) APPEARS TO BE IN POOR CONDITION AND NEAR/AT END OF EXPECTED LIFE. SOME REPAIRS MAY BE NEEDED IMMEDIATELY TO STOP LEAKS.	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.	\$75,000
07-G054	FIXED SEATS IN AUDITORIUM ARE DAMAGED AND DUE TO AGE AND HEAVY USE ARE AT END OF LIFE. FRONT LOBBY AREA DOES NOT APPEAR TO BE FULLY ADA ACCESSIBLE. SOME INTERIOR AND EXTERIOR FINISHES ARE ALSO AGING OUT.	REPAIR/REPLACE SEAT PANS AND FIXED SEATING AS NEEDED. RECONFIGURE LOBBY AREA TO COMPLY WITH ADA GUIDELINES. REPAINT AND REFURBISH DETERIORATED FINISHES THROUGH-OUT BUILDING.	\$525,000
07-M008	THE HVAC SYSTEM IN WRIGHT AUDITORIUM IS BADLY IN NEED OF REDESIGN AND RENOVATION. THE AIR HANDLING UNITS HAVE DETERIORATED WITH AGE. AIR HANDLER PULLEYS ARE EXPOSED, AND MAINTENANCE ACCESS IS VERY DIFFICULT. THE UNITS HAVE BECOME CORRODED, PARTICULARLY AT THE PIPE CONNECTIONS AND CONDENSATE DRAIN PANS. COILS ARE IMPACTED WITH DUST BUILDUP, AND HEAT TRANSFER THROUGH THE COILS IS NO LONGER SUFFICIENT. SOME COILS HAVE BEEN DAMAGED, AND THE AIR HANDLERS HAVE VIBRATION PROBLEMS. CONTROL DAMPERS ARE BADLY DETERIORATED. THE HVAC CONTROLS SYSTEM IS OLD AND OBSOLETE AND REPLACEMENT PARTS ARE NOT AVAILABLE. THE CONTROLS SYSTEM IS INCOMPLETE, AS EVIDENCED BY MAKESHIFT REPAIRS AND MISSING COMPONENTS. THE DUCTWORK ABOVE THE AUDITORIUM HAS BEEN DAMAGED, WHICH RESTRICTS AIR FLOW. ELECTRICAL DUCT HEATING IS USED INSTEAD OF STEAM OR HOT WATER HEATING IN PARTS OF WRIGHT BUILDING.	PLACE WRIGHT AUDITORIUM ON THE CAMPUS CENTRAL CHILLED WATER LOOP. REPLACE THE AIR HANDLING UNITS AND UPGRADE THE HVAC CONTROLS SYSTEM. REPLACE DAMAGED DUCTWORK AND RESTORE ATTIC DUCTWORK OVER WRIGHT AUDITORIUM.	\$1,500,000
		TOTAL WRIGHT AUDITORIUM	\$2,385,000
		Total	\$475,584,600