

EAST CAROLINA UNIVERSITY

Facility Condition Assessment

MRI of Eastern Carolina

Asset MRI

Inspected March 3, 2014



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FACILITY CONDITION ASSESSMENT

SECTION 1

ASSET OVERVIEW

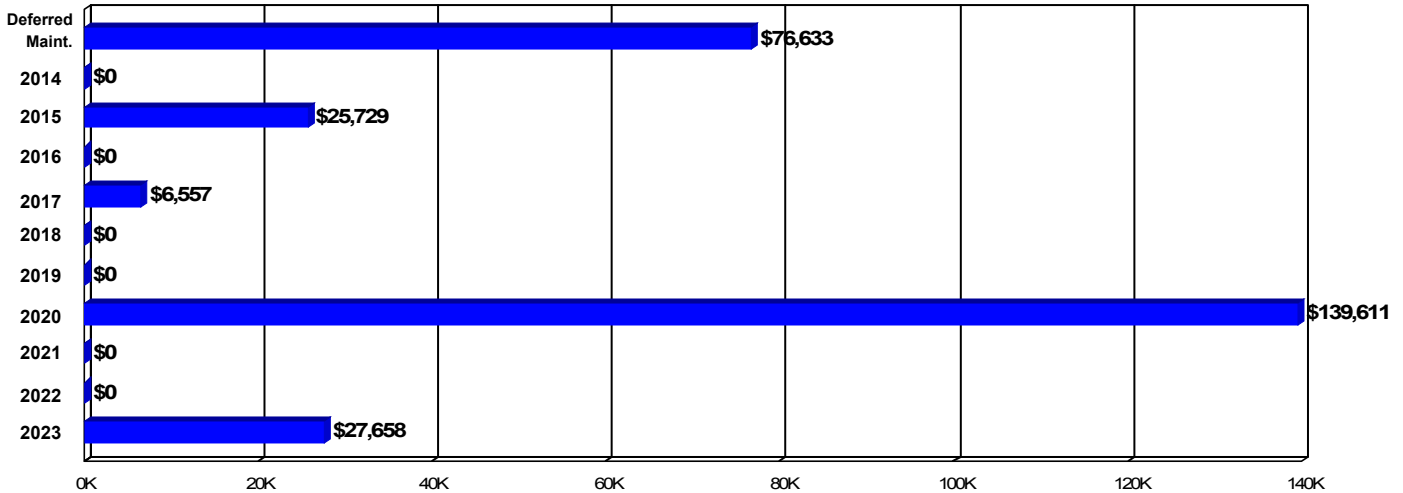
EXECUTIVE SUMMARY - MRI OF EASTERN CAROLINA

Building Code: MRI
 Building Name: MRI OF EASTERN CAROLINA
 Year Built: 1990
 Building Use: Medical / Clinic
 Square Feet: 3,484

Non-Recurring Project Costs by Priority
 Immediate: \$0
 Critical: \$16,401
 Non-Critical: \$0

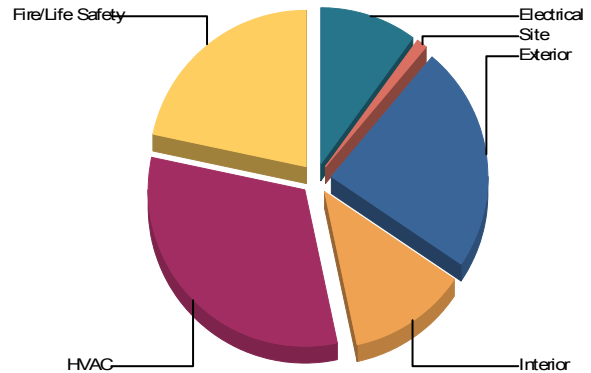
Current Replacement Value: \$1,438,000 Total Non-Recurring Project Costs: \$16,401

Recurring Component Replacement Cost By Year



Recurring Facilities Renewal Cost By System

Exterior	\$64,316
Interior	\$33,886
Plumbing	\$0
HVAC	\$87,426
Fire/Life Safety	\$60,216
Electrical	\$27,655
Site	\$2,688
Conveying	\$0
Equipment	\$0
Total	\$276,187



Non-Recurring Project Cost	\$16,401
Deferred Maintenance Cost	\$76,633
Projected Facility Renewal Cost	\$199,554
Total 10-Year Facility Cost	\$292,589

FCNI	FCI	10-Yr \$/SqFt
0.20	0.053	\$83.98

ASSET SUMMARY

The MRI of Eastern Carolina building is a relatively square, 3,484 gross square foot, one-story, wood-framed structure built in 1990. The medical clinic facility contains office space, examination rooms, the large MRI examining room, and typical support areas, such as the computer/IT room, public and private restrooms, a mechanical/electrical room, and a break area. The building is located in an office park just south of the Pitt County Hospital and the University Medical School and west of downtown Greenville, North Carolina. The building has brick masonry and wood siding facades with a main flat membrane roof. A covered entry has a small standing seam pitched metal gable roof, and windows and doors are dual pane glazing and aluminum frame construction. The building foundation appears to be a floating slab on grade. There is no basement or subterranean level associated with this facility. The building is fully accessible to those in wheelchairs or those with other disabilities.

The building has two entrances—a public entrance with more durable ceramic tile floor finishes in the southwest corner of the building and an employee entrance on the north side. Both are wheelchair accessible. The entire facility is surrounded by an asphalt parking lot with ample parking and sufficient accessible spaces.

The information for this report was collected during a site visit that concluded on March 3, 2014.

Site

Overall, the site is well maintained and visually appealing. The landscaping is adequate and appropriate for existing building conditions. Generally, the site hardscape, which includes concrete sidewalks, asphalt parking lots, and concrete curbs and gutters, is in good condition. However, the entire asphalt parking lot is expected to need a slurry sealcoat and restriping within the next five years in order to fill minor surface cracks and prolong the life of the pavement.

Exterior Structure

The existing flat mechanically adhered membrane roof system is original and in good to fair condition. The roof application is being properly maintained and repaired as necessary. It is anticipated that replacement will be needed within the next ten years as it reaches the end of its expected service life. The brick masonry exterior and the horizontal plank siding are in good condition and require no improvements or upgrades at this time.

The windows on this facility are either large, inoperable, dual pane systems similar in style to storefront units or smaller, inoperable, dual pane windows. They are typically in good condition and are not expected to need any upgrades or replacements. The exterior entrance doors are glass and metal door applications. They appear to be original to the building construction and are approaching the end of their lifecycle.

Interior Finishes/Systems

The interior finishes within this facility are well maintained and generally in good condition. There are a few small areas of carpeting in the office and dressing room that are recommended for replacement towards the end of the ten-year timeframe of this report. The majority of the flooring applications are vinyl tile and generally in good condition. However, they are expected to need replacement within the ten-year window of this report. The restrooms are finished with ceramic tile floors and ceramic tile walls that are all in good condition. The interior painted and papered walls and the suspended grid acoustical tile ceiling finishes are also in good condition and require no upgrades, with the exception of a few stained ceiling tiles that can be replaced through routine maintenance. The interior doors are all properly rated and in good condition. There is lever hardware on all doors and accessible signage where required.

Accessibility

The facility was constructed in 1990, several years before ADA legislation took effect. However, since this facility serves health care patients, accessibility requirements have been retrofitted into the original design of this facility in recent years. Lever hardware is on all doors, and accessible signage is present. Public and staff restrooms are also fully accessible. No additional accessibility improvements are proposed.

Health

No information was provided by the University pertaining to the presence of asbestos containing material (ACM). However, due to the age of this facility, it is highly unlikely that ACM or any other hazardous materials exist within. Therefore, no Health-related project is proposed.

Fire/Life Safety

Structural fire separations are maintained according to code requirements for new construction in all areas of this facility. The paths of egress in this building are adequate in regard to fire rating. There are no compromises involving doors or partitions. No fire or life safety issues related to architectural features were observed during the inspection of this facility.

The building is served by an automatic fire alarm system manufactured by Notifier. The system incorporates smoke detectors and pull boxes for activation, and bells and old-style strobes are present for notification. The fire alarm system is believed to be original and has reached the end of intended lifecycle.

Fire suppression is provided by an original automatic sprinkler system. The system appears to be in adequate condition. Additional fire suppression is provided by a wet chemical fire system serving the computer room. The system utilizes Halon and appears to be in adequate condition. However, because Halon is being phased out, it is recommended that the system be replaced with an environmentally safe system.

The path of egress is marked by exit signs that are believed to contain fluorescent bulbs. The equipment appears to provide adequate coverage. However, the equipment has reached the end of its intended lifecycle. Emergency lighting is believed to be contained in select overhead light fixtures with battery backup ballasts. Upgrades to this system can take place during an interior lighting upgrade.

HVAC

The facility utilizes two rooftop package units for heating and cooling purposes. The equipment is charged with R-22 DX refrigerant for cooling and utilizes natural gas for heating. The units were installed within the last five years and appear to be in good condition. Additionally, a small split system installed in 2007 serves the electrical room and also appears to be in good condition.

A large Liebert computer room air conditioning system serves room 118. The unit was installed in 2005 and has a cooling capacity of 17.5 tons. The equipment appears to be in good condition and was operating properly on the day of the inspection. However, based on the estimated lifecycle for the unit, the system may need to be considered for replacement within the next ten years. A separate condenser located on the roof is believed not to be in service. This may have been the original computer room air conditioning unit. The unit was not inventoried and is mentioned in this report for information purposes only.

Facility exhaust is provided by two rooftop, mushroom style centrifugal fans. These units are original and are beginning to show signs of wear. The exhaust fans have served beyond their intended lifecycle.

Electrical

Power is fed to the facility at 120/208 volts from underground utilities. A main panelboard receives the power for distribution. The unit was manufactured by Square D in 1990 and has a capacity rating of 800 amps. Power is then fed to panelboards that in turn energize circuits for mechanical, lighting, and general purpose loads. Additionally, a small 30 kVA, dry-type transformer is present to step voltage up from 208 to 480 volts. The unit is believed to be utilized for specific research equipment. Overall, the electrical distribution system appears to be in good condition, with no obvious issues to report. The system should continue to serve the facility over the next ten years.

The interior lighting consists of lay-in type fixtures that contain either plastic or parabolic lenses. The fixtures are lamped with T12 fluorescent bulbs. The interior lighting appears to be in good condition. However, it is believed to be original and has reached the end of its intended lifecycle.

The exterior lighting consists of wall-mounted HID fixtures and a can-type fixture. All entryways display some form of lighting. Additionally, pole-mounted fixtures are present onsite to illuminate the parking lot. The exterior lighting scheme appears to be in good condition, and some newer units are present. However, some older units are beginning to show signs of age. The older fixtures have reached the end of their intended lifecycle and should be replaced.

Plumbing

Domestic water enters the facility in the janitor's closet through a 1-1/2 inch pipe. Copper piping is then utilized to distribute water throughout the building. The drain piping that could be observed consists of plastic piping. The supply and drain piping networks are original, with the exception of the break room that was added after the facility was constructed. Overall, the systems appeared to be in adequate condition and should continue to serve the facility over the next ten years.

Domestic hot water is provided by one electric, residential style water heater manufactured by Ruud. The unit was installed in 2007 and has a tank capacity of 40 gallons. The water heater appears to be in good condition.

Plumbing fixtures are constructed of ceramic and stainless steel material, and hand-operated devices are utilized on flush valves and faucets. The equipment appears to be in good condition and should continue to serve the facility over the scope of this report.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to "like-new" condition. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, security, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information. However, existing fixed building components and systems were thoroughly inspected. The developed costs (shown in Sections 3 and 4) represent correcting existing deficiencies and anticipated lifecycle failures (within a ten-year period) to bring the facility to modern standards without any anticipation of change to facility space layout or function.

INSPECTION TEAM DATA

Report Development

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Date of Inspection

March 3, 2014

Inspection Team Personnel

NAME	POSITION	SPECIALTY
John Holder	Senior Project Engineer	Mechanical, Electrical, Plumbing, Energy, Fire/Life Safety, Health
Carl Mason, PE, BSCP, M.ASCE	Senior Project Engineer	Interior Finishes, Exterior Structure, ADA Compliance, Site, Fire/Life Safety, Health

Client Contact

NAME	POSITION
Griffin L. Avin	Director of Facilities Services, Health Sciences Campus

DEFINITIONS

The following information is a clarification of the Facility Condition Assessment report using example definitions.

Overview

Recurring and Non-Recurring Facility Renewal Costs

Facility renewal costs are divided into two main categories – recurring and non-recurring. Recurring costs are cyclical and consist primarily of major repairs to or replacement/rebuilding of facility systems and components (e.g., roof or HVAC system replacement at or past the end of its normal useful life). The tool for projecting the recurring renewal costs is the Lifecycle Component Inventory, which is explained in detail below. Non-recurring costs typically consist of modifications or repairs necessary to comply with fire/life safety or accessibility code requirements or to address isolated, non-recurring deficiencies that could negatively affect the structure of the facility or the systems and components within. For these non-recurring costs, projects have been developed and include estimated material and labor costs.

Facility Condition Needs Index (FCNI)

The FCNI provides a lifecycle cost comparison. It is a ratio of the sum of the recurring and non-recurring facilities renewal costs over ten years to the current replacement value of the asset. The current replacement value is based on replacement with current construction standards for the facility use type, and not original design parameters. This index gives the university a comparison within all buildings for identifying worst case/best case building conditions.

$$\text{FCNI} = \frac{\text{Non-Recurring Projects} + \text{10-Year Recurring Component Renewal}}{\text{Current Replacement Value}}$$

Facility Condition Index (FCI)

The FCI is a ratio of the Deferred Maintenance facilities renewal costs to the current replacement value.

$$\text{FCI} = \frac{\text{Deferred Maintenance}}{\text{Current Replacement Value}}$$

Material and Labor Cost Factors and Additional Markups

The project costs are adjusted from the national averages to reflect conditions in Greenville using the R. S. Means City Cost Index for material and labor cost factors. The percentage adjustment of the national average is shown in the table below. Typical general contractor fees (which could include profit, overhead, bonds, and insurance) and professional fees (architect or engineer design fees and in-house design costs) are also included in the project costs.

GLOBAL MARKUP	%
Local Labor Index	51.3
Local Materials Index	100.7
General Contractor Markup	20.0
Professional Fees	16.0

Recurring Costs

Asset Component Inventory and Cost Projections

The Asset Component Inventory (starting on page 4.1.1) is based on industry standard lifecycle expectancies applied to an inventory of major building systems and major components within a facility. This is a list of all major systems and components within the facility. Each indicated component has the following associated information:

CATEGORY	DEFINITION
Uniformat Code	The standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Identifier	Unique identifying information entered for a component as necessary
Quantity	The quantity of the listed component
Units	The unit of measure associated with the quantity
Unit Cost	The cost to replace each individual component unit (this cost is in today's dollars)
Complexity Adjustment	A factor utilize to adjust component replacement costs accordingly when it is anticipated that the actual cost will deviate from the average for that component
Total Cost	Unit cost multiplied by quantity, in today's dollars. Note that this is a one-time renewal/replacement cost
Install Date	Year that the component was or is estimated to have been installed. When this data is not available, it defaults to the year the asset was constructed
Life Expectancy	Average life expectancy for each individual component
Life Expectancy Adjustment	Utilized to adjust the first lifecycle of the component and to express when the next replacement should occur

The component listing forms the basis of the Recurring Component Renewal Schedule, which provides a year-by-year list of projected recurring renewal costs over the next ten years. Each individual component is assigned a replacement year based on lifecycles, and the costs for each item are in future year dollars. For items that are already past the end of their lifecycle, the replacement year is shown as Deferred Maintenance.

For a longer term perspective, the Recurring Component Expenditure Projections Graph presents recurring renewal cost projections over a 50-year period (starting from the date the report is run) based on each individual item's renewal cost and life span. Some components might require renewal several times within the 50-year model, while others might not occur at all. The vertical bars on the graph represent the accumulated total costs for each individual year. The average annual cost per gross square foot (\$/GSF) is shown at the bottom of the graph. In this calculation, costs are not escalated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

Recurring Cost Classifications

- **Deferred Maintenance**
Recurring repairs, generated by the Lifecycle Component Inventory, that are past due for completion but have not yet been accomplished as part of normal maintenance or capital repair efforts. Further deferral of such renewal could impair the proper functioning of the facility. Costs estimated for Deferred Maintenance projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to effect the needed repairs.
- **Recurring Component Replacement**
Recurring renewal efforts, generated by the Lifecycle Component Inventory, that will be due within the scope of the assessment. These projects represent regular or normal facility maintenance, repair, or renovation that should be planned in the near future.

Non-Recurring Costs

As previously mentioned, modifications or repairs necessary to comply with fire/life safety or accessibility code requirements and those that address isolated, non-recurring deficiencies that could negatively affect the structure of the facility or the systems and components within are not included in the Lifecycle Component Inventory. For each such deficiency identified during the facility inspection, a project with an estimated cost to rectify said deficiency is recommended. These projects each have a unique identifier and are categorized by system type, priority, and classification, which are defined below. The costs in these projects are also indexed to local conditions and markups applied as the situation dictates.

Project Number

Each project has a unique number consisting of three elements, the asset identification number, system code, and a sequential number assigned by the FCA software. For example, the third fire/life safety project identified for asset 0001 would have a project number of 0001FS03 (0001 for the asset number, FS for fire/life safety, and 03 being the next sequential number for a fire/life safety project).

Project Classifications

- **Plant/Program Adaption**
Non-recurring expenditures, stored in the Projects module, required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g., accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).
- **Corrective Action**
Non-recurring expenditures, stored in the Projects module, for repairs needed to correct random and unpredictable deficiencies. Such projects are not related to aligning a building with codes or standards. Deficiencies classified as Corrective Action could have an effect on building aesthetics, safety, or usability.

Priority Classes

Recurring renewal needs do not receive individual prioritization, as the entire data set of needs in this category is year-based. Each separate component has a distinct need year, rendering further prioritization unnecessary. Each non-recurring renewal project, however, has a priority assigned to indicate the criticality of the recommended work. The prioritization utilized for this subset of the data is as follows.

- **Priority 1 – Immediate**
Projects in this category require immediate action to:
 - a. correct a cited safety hazard
 - b. stop accelerated deterioration
 - c. and/or return a facility to normal operation

- **Priority 2 – Critical**

Projects in this category include actions that must be addressed in the short-term:

- a. repairs to prevent further deterioration
- b. improvements to facilities associated with critical accessibility needs
- c. potential safety hazards

- **Priority 3 – Non-Critical**

Projects in this category include:

- a. improvements to facilities associated with non-critical accessibility needs
- b. actions to bring a facility into compliance with current building codes as grandfather clauses expire
- c. actions to improve the usability of a facility following an occupancy or use change

Category Codes

CATEGORY CODE*	SYSTEM DESCRIPTION
AC1A – AC4B	ACCESSIBILITY
EL1A – EL8A	ELECTRICAL
ES1A – ES6E	EXTERIOR STRUCTURE
FS1A – FS6A	FIRE/LIFE SAFETY
HE1A – HE7A	HEALTH
HV1A – HV8B	HVAC
IS1A – IS6D	INTERIOR FINISHES/SYSTEMS
PL1A – PL5A	PLUMBING
SI1A – SI4A	SITE
SS1A – SS7A	SECURITY SYSTEMS
VT1A – VT7A	VERTICAL TRANSPORTATION

<i>Example:</i> Category Code = EL5A	
EL	System Description
5	Component Description
A	Element Description

**Refer to the Category Code Report starting on page 1.6.1.*

Priority Sequence

A Priority Sequence number is automatically assigned to each project to rank the projects in order of relative criticality and show the recommended execution order. This number is calculated based on the Priority Class and identified system of each project.

Example:

Priority Class	Category Code	Project Number	Priority Sequence
1	HV2C	0001HV04	01
1	PL1D	0001PL02	02
2	IS1E	0001IS06	03
2	EL4C	0001EL03	04

Project Subclass Type

- **Energy Conservation**
Projects with energy conservation opportunities, based on simple payback analysis.

Drawings/Project Locations

The drawings for this facility are marked with icons (see legend on plans) denoting the specific location(s) for each project. Within each icon are the last four characters of the respective project number (e.g., 0001IS01 is marked on the plan as IS01).

Photographs

A code shown on the Photo Log identifies the asset number, photo sequence, and a letter designation for architect (a) or engineer (e).

<i>Example:</i> Photo Number: 0001006e	
0001	Asset Number
006	Photo Sequence
e	Engineering Photo

CATEGORY CODE REPORT

ACCESSIBILITY			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
AC1A	Site	Stair and Railings	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	Site	Ramps and Walks	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	Site	Parking	Designated parking spaces, including striping, signage, access aisles and ramps, etc.
AC1D	Site	Tactile Warnings	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	Building Entry	General	Covers all aspects of entry into the building itself, including ramps, lifts, doors and hardware, power operators, etc.
AC3A	Interior Path of Travel	Lifts/Ramps/Elevators	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	Interior Path of Travel	Stairs and Railings	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	Interior Path of Travel	Doors and Hardware	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	Interior Path of Travel	Signage	Interior building signage upgrades for compliance with THE ADA.
AC3E	Interior Path of Travel	Restrooms/Bathrooms	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms that are an integral part of residential suites are catalogued under HC4A.
AC3F	Interior Path of Travel	Drinking Fountains	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	Interior Path of Travel	Phones	Replacement/modification of public access telephones.
AC4A	General	Functional Space Modifications	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms that are integral to efficiency suites are catalogued here.
AC4B	General	Other	All accessibility issues not catalogued elsewhere.

ELECTRICAL			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
EL1A	Incoming Service	Transformer	Main building service transformer.
EL1B	Incoming Service	Disconnects	Main building disconnect and switchgear.
EL1C	Incoming Service	Feeders	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	Incoming Service	Metering	Installation of meters to record consumption and/or demand.
EL2A	Main Distribution Panels	Condition Upgrade	Main distribution upgrade due to deficiencies in condition.
EL2B	Main Distribution Panels	Capacity Upgrade	Main distribution upgrades due to inadequate capacity.
EL3A	Secondary Distribution	Step-Down Transformers	Secondary distribution step-down and isolation transformers.
EL3B	Secondary Distribution	Distribution Network	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.

EL3C	Secondary Distribution	Motor Controllers	Mechanical equipment motor starters and control centers.
EL4A	Devices and Fixtures	Exterior Lighting	Exterior building lighting fixtures, including supply conductors and conduit.
EL4B	Devices and Fixtures	Interior Lighting	Interior lighting fixtures (also system wide emergency lighting), including supply conductors and conduits.
EL4C	Devices and Fixtures	Lighting Controllers	Motion sensors, photocell controllers, lighting contactors, etc.
EL4D	Devices and Fixtures	GFCI Protection	Ground fault protection, including GFCI receptacles and breakers.
EL4E	Devices and Fixtures	Lightning Protection	Lightning arrestation systems including air terminals and grounding conductors.
EL5A	Emergency Power System	Generation/ Distribution	Includes generators, central battery banks, transfer switches, emergency power grid, etc.
EL6A	Systems	UPS/DC Power Supply	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.
EL7A	Infrastructure	Above Ground Transmission	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.
EL7B	Infrastructure	Underground Transmission	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.
EL7C	Infrastructure	Substations	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.
EL7D	Infrastructure	Distribution Switchgear	Stand-alone sectionalizing switches, distribution switchboards, etc.
EL7F	Infrastructure	Area and Street Lighting	Area and street lighting systems, including stanchions, fixtures, feeders, etc.
EL8A	General	Other	Electrical system components not catalogued elsewhere.

EXTERIOR STRUCTURE

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
ES1A	Foundation/ Footing	Structure	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, and piles, including crack repairs, shoring, and pointing
ES1B	Foundation/ Footing	Dampproofing/ Dewatering	Foundation/footing waterproofing work, including, damp-proofing, dewatering, insulation, etc.
ES2A	Columns/Beams/ Walls	Structure	Structural work to primary load-bearing structural components aside from floors, including columns, beams, bearing walls, lintels, arches, etc.
ES2B	Columns/Beams/ Walls	Finish	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components, including masonry/pointing, expansion joints, efflorescence and stain removal, grouting, surfacing, chimney repairs, etc.
ES3A	Floor	Structure	Work concerning the structural integrity of the load supporting floors, both exposed and unexposed, including deformation, delamination, spalling, shoring, crack repair, etc.
ES4A	Roof	Repair	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total), including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.
ES4B	Roof	Replacement	Work involving total refurbishment of roofing system, including related component rehab.
ES5A	Fenestrations	Doors	Work on exterior exit/access door, including storefronts, airlocks, air curtains, vinyl slot doors, all power/manual operating hardware (except handicapped), etc.
ES5B	Fenestrations	Windows	Work on exterior fenestration closure and related components, including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.

ES6A	General	Attached Structure	Work on attached exterior structure components not normally considered in above categories, including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.
ES6B	General	Areaways	Work on attached grade level or below structural features, including subterranean lightwells, areaways, basement access stairs, etc.
ES6C	General	Trim	Work on ornamental exterior (generally non-structural) elements, including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	General	Superstructure	Finish and structural work on non-standard structures with exposed load-bearing elements, such as stadiums, bag houses, bleachers, freestanding towers, etc.
ES6E	General	Other	Any exterior work not specifically categorized elsewhere, including finish and structural work on freestanding boiler stacks.

FIRE/LIFE SAFETY			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
FS1A	Lighting	Egress Lighting/Exit Signage	R&R work on exit signage and packaged AC/DC emergency lighting.
FS2A	Detection/Alarm	General	Repair or replacement of fire alarm/detection system/components, including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	Suppression	Sprinklers	Repair or installation of water sprinkler type automatic fire suppressions, including wet-pipe and dry-pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	Suppression	Standpipe/Hose	Repair or installation of standpipe system or components, including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	Suppression	Extinguishers	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	Suppression	Other	Other fire suppression items not specifically categorized elsewhere, including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	Hazardous Materials	Storage Environment	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies, including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	Hazardous Materials	User Safety	Improvements, repairs, installation, or testing of user safety equipment, including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	Egress Path	Designation	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	Egress Path	Distance/Geometry	Work involving remediation of egress routing problems, including elimination of dead end corridors, excessive egress distance modifications, and egress routing inadequacies.
FS5C	Egress Path	Separation Rating	Restoration of required fire protective barriers, including wall rating compromises, fire-rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	Egress Path	Obstruction	Clearance of items restricting the required egress routes.
FS5E	Egress Path	Stairs Railing	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	Egress Path	Fire Doors/Hardware	Installation/replacement/repair of fire doors and hardware, including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	Egress Path	Finish/Furniture Ratings	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	General	Other	Life/fire safety items not specifically categorized elsewhere.

HEALTH			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HE1A	Environmental Control	Equipment and Enclosures	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	Environmental Control	Other	General environmental control problems not catalogued elsewhere.
HE2A	Pest Control	General	Includes all measures necessary to control and destroy insects, rodents, and other pests.
HE3A	Refuse	General	Issues related to the collection, handling, and disposal of refuse.
HE4A	Sanitation Equipment	Laboratory and Process	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	Food Service	Kitchen Equipment	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	Food Service	Cold Storage	Includes the cold storage room and all associated refrigeration equipment.
HE6A	Hazardous Material	Structural Asbestos	Testing, abatement, and disposal of structural and building finish materials containing asbestos.
HE6B	Hazardous Material	Mechanical Asbestos	Testing, abatement, and disposal of mechanical insulation materials containing asbestos.
HE6C	Hazardous Material	PCBs	Includes testing, demolition, disposal, and cleanup of PCB contaminated substances.
HE6D	Hazardous Material	Fuel Storage	Includes monitoring, removal, and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	Hazardous Material	Lead Paint	Testing, removal, and disposal of lead-based paint systems.
HE6F	Hazardous Material	Other	Handling, storage, and disposal of other hazardous materials.
HE7A	General	Other	Health related issues not catalogued elsewhere.

HVAC			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
HV1A	Heating	Boilers/Stacks/Controls	Boilers for heating purposes, including their related stacks, flues, and controls.
HV1B	Heating	Radiators/Convectors	Including cast-iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	Heating	Furnace	Furnaces and their related controls, flues, etc.
HV1D	Heating	Fuel Supply/Storage	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	Cooling	Chillers/Controls	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	Cooling	Heat Rejection	Repair/replacement of cooling towers, dry coolers, air-cooling, and heat rejection. Includes connection of once-through system to cooling tower.
HV3A	Heating/Cooling	System Retrofit/Replace	Replacement or major retrofit of HVAC systems.
HV3B	Heating/Cooling	Water Treatment	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	Heating/Cooling	Package/Self-Contained Units	Repair/replacement of self-contained/package type units, including stand-up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	Heating/Cooling	Conventional Split Systems	Repair, installation, or replacement of conventional split systems, both air conditioners and heat pumps, including independent component replacements of compressors and condensers.

HV4A	Air Moving/ Ventilation	Air Handlers/ Fan Units	Includes air handlers and coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems, or other specifically categorized systems.
HV4B	Air Moving/ Ventilation	Exhaust Fans	Exhaust fan systems, including fans, range and fume hoods, controls, and related ductwork.
HV4C	Air Moving/ Ventilation	Other Fans	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	Air Moving/ Ventilation	Air Distribution Network	Repair, replacement, or cleaning of air distribution network, including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	Steam/Hydronic Distribution	Piping Network	Repair/replacement of piping networks for heating and cooling systems, including pipe, fittings, insulation, related components, etc.
HV5B	Steam/Hydronic Distribution	Pumps	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	Steam/Hydronic Distribution	Heat Exchangers	Including shell-and-tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	Controls	Complete System Upgrade	Replacement of HVAC control systems.
HV6B	Controls	Modifications/ Repairs	Repair or modification of HVAC control system.
HV6C	Controls	Air Compressors/ Dryers	Repair or modification of control air compressors and dryers.
HV7A	Infrastructure	Steam/Hot Water Generation	Generation of central steam and/or hot water, including boilers and related components.
HV7B	Infrastructure	Steam/Hot Water Distribution	Distribution system for central hot water and/or steam.
HV7C	Infrastructure	Chilled Water Generation	Generation of central chilled water, including chillers and related components.
HV7D	Infrastructure	Chilled Water Distribution	Distribution system for central chilled water.
HV7E	Infrastructure	Tunnels/ Manholes/ Trenches	Repairs, installation, or replacement of utility system access chambers.
HV7F	Infrastructure	Other	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	General	CFC Compliance	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	General	Other	HVAC issues not catalogued elsewhere.

INTERIOR FINISHES/SYSTEMS			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
IS1A	Floor	Finishes-Dry	R&R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum and tile, marble, terrazzo, rubber flooring, and underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	Floor	Finishes-Wet	Flooring finish/underlayment work in predominantly "wet" areas, including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	Partitions	Structure	Structural work on full height permanent interior partitions, including wood/metal stud and drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	Partitions	Finishes	Work on full height permanent interior partitions, including R&R, to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	Ceilings	Repair	Repair of interior ceilings (<40% of total), including tiles, gypsum board, plaster, paint, etc.
IS3B	Ceilings	Replacement	Major refurbishments (>40% of total) to interior ceiling systems, including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.

IS4A	Doors	General	Any work on interior non-fire-rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	Stairs	Finish	Any finish restorative work to stair tower walking surfaces, including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	General	Molding	R&R to interior trim/molding systems, including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	General	Cabinetry	R&R work to interior casework systems, including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	General	Screening	Work on temporary or partial height partitioning systems, including toilet partitions, urinal/vanity screens, etc.
IS6D	General	Other	Any work on interior elements not logically or specifically categorized elsewhere, including light coves, phone booths, interior lightwells, etc.

PLUMBING			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
PL1A	Domestic Water	Piping Network	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	Domestic Water	Pumps	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	Domestic Water	Storage/ Treatment	Equipment or vessels for storage or treatment of domestic water.
PL1D	Domestic Water	Metering	Installation, repair, or replacement of water meters.
PL1E	Domestic Water	Heating	Domestic water heaters, including gas, oil, and electric water heaters, shell-and-tube heat exchangers, tank type, and instantaneous.
PL1F	Domestic Water	Cooling	Central systems for cooling and distributing drinking water.
PL1G	Domestic Water	Fixtures	Plumbing fixtures, including sinks, drinking fountains, water closets, urinals, etc.
PL1H	Domestic Water	Conservation	Alternations made to the water distribution system to conserve water.
PL1I	Domestic Water	Backflow Protection	Backflow protection devices, including backflow preventers, vacuum breakers, etc.
PL2A	Wastewater	Piping Network	Repair or replacement of building wastewater piping network.
PL2B	Wastewater	Pumps	Pump systems used to lift wastewater, including sewage ejectors and other sump systems.
PL3A	Special Systems	Process Gas/Fluids	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	Infrastructure	Potable Water Storage/ Treatment	Storage and treatment of potable water for distribution.
PL4B	Infrastructure	Industrial Water Distribution/ Treatment	Storage and treatment of industrial water for distribution.
PL4C	Infrastructure	Sanitary Water Collection	Sanitary water collection systems and sanitary sewer systems, including combined systems.
PL4D	Infrastructure	Stormwater Collection	Stormwater collection systems and storm sewer systems; storm water only.
PL4E	Infrastructure	Potable Water Distribution	Potable water distribution network.
PL4F	Infrastructure	Wastewater Treatment	Wastewater treatment plants, associated equipment, etc.
PL5A	General	Other	Plumbing issues not categorized elsewhere.

SITE			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SI1A	Access	Pedestrian	Paved pedestrian surfaces, including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	Access	Vehicular	Paved vehicular surfaces, including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	Landscape	Grade/Flora	Landscape related work, including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	Hardscape	Structure	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	General	Other	Other site work not specifically categorized elsewhere.

SECURITY SYSTEMS			
CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
SS1A	Lighting	Exterior	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.
SS2A	Site	Fencing	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	Site	General	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	Communications	Emergency Phones	Access, locations, visibility, function, reliability, etc.
SS4A	Access Control	Doors	Access, locks, keys, two-way speakers, reliability, redundancy, etc.
SS4B	Access Control	Windows	Locks, screens, access, reliability, etc.
SS4C	Access Control	Systems	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	Monitoring	Systems	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	Circulation	Pedestrian	On campus as well as to and from off-campus housing and class locations, etc.
SS6B	Circulation	Vehicular	Guard gates, access, systems, data control and use, identification, etc.
SS7A	General	Other	General information/projects pertaining to security issues.

VERTICAL TRANSPORTATION			
CODE	Component Description	Element Description	DEFINITION
VT1A	Machine Room	General	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, and floor.
VT2A	Car	General	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, and ventilation.
VT3A	Hoistway	General	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, and compensation.
VT4A	Hall Fixtures	General	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, and card/key access.
VT5A	Pit	General	Buffer(s), guards, sheaves, hydro packing, floor, lighting, and safety controls.
VT6A	Operating Conditions	General	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, and nudging.
VT7A	General	Other	General information/projects relating to vertical transportation system components.

FACILITY CONDITION ASSESSMENT

SECTION 2

DETAILED COST SUMMARIES
AND TOTALS

Detailed Facility Cost Summary
Facilities Renewal Budget Pro-Forma
MRI : MRI OF EASTERN CAROLINA

	Non-Recurring Project Costs			Recurring Component Replacement Cost											Total
	Immediate	Critical	Non-Critical	Deferred Maint.	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Accessibility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
Exterior	0	0	0	0	0	8,892	0	0	0	0	55,424	0	0	0	\$64,316
Interior	0	0	0	0	0	0	0	3,869	0	0	2,359	0	0	27,658	\$33,886
Plumbing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
HVAC	0	0	0	5,598	0	0	0	0	0	0	81,827	0	0	0	\$87,426
Fire/Life Safety	0	16,401	0	43,379	0	16,837	0	0	0	0	0	0	0	0	\$76,618
Electrical	0	0	0	27,655	0	0	0	0	0	0	0	0	0	0	\$27,655
Site	0	0	0	0	0	0	0	2,688	0	0	0	0	0	0	\$2,688
Conveying	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
Equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
	0	16,401	0	76,633	0	25,729	0	6,557	0	0	139,611	0	0	27,658	\$292,589

Non-Recurring Project Cost	\$16,401
Recurring Component Replacement Cost	\$276,187
Total 10-Year Facility Cost	\$292,589

CRV	\$1,438,000
FCNI	0.20
FCI	0.05

Building SqFt.	3,484
10-Yr \$ / SqFt	\$83.98

All costs shown as Present Value

**Detailed Facility Cost Summary
Facilities Renewal Needs by System
MRI : MRI OF EASTERN CAROLINA**

	Non-Recurring Project Costs	Recurring Component Replacement Cost	Total 10-Yr. Facility Renewal Costs
Accessibility	\$0	\$0	\$0
Exterior	\$0	\$64,316	\$64,316
Interior	\$0	\$33,886	\$33,886
Plumbing	\$0	\$0	\$0
HVAC	\$0	\$87,426	\$87,426
Fire/Life Safety	\$16,401	\$60,216	\$76,618
Electrical	\$0	\$27,655	\$27,655
Site	\$0	\$2,688	\$2,688
Conveying	\$0	\$0	\$0
Equipment/Other	\$0	\$0	\$0
	\$16,401	\$276,187	\$292,589

**Detailed Facility Cost Summary
Facilities Renewal Plan
MRI : MRI OF EASTERN CAROLINA**

Non-Recurring Project Costs

Project Number	Title	Uniformat	Priority Class	Project Classification	Project Cost (Present Val.)
MRIFS01	REPLACE HALON FIRE SUPPRESSION SYSTEM	D4090	Year 1	Plant Adaption	16,401
					16,401

Recurring Component Replacement Cost

Component		Uniformat	Repl. Year	Repl. Cost (Present Val.)	
FN18	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)		D3040	Deferred Maint. \$5,598	
EL02	EXIT SIGN - WITH BATTERY BACK-UP		D4030	Deferred Maint. \$2,008	
FA01	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER		D4030	Deferred Maint. \$28,510	
FA02	FIRE ALARM SYSTEM - DEVICES		D4030	Deferred Maint. \$12,861	
LE06	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT		D5020	Deferred Maint. \$8,944	
LE07	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)		D5020	Deferred Maint. \$1,483	
LI11	LIGHTING SYSTEM, INTERIOR - MEDICAL CLINIC		D5020	Deferred Maint. \$17,228	
DR05	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	MAIN ENTRY	B2030	2015 \$8,892	
FS02	FM200 OR INERGEN FIRE SUPPRESSION		D4090	2015 \$16,837	
IW09	WALL FINISH - WALL COVERING, ROLL		C3010	2017 \$3,869	
SI06	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE		G2020	2017 \$2,688	
RR03	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	FLAT	B3010	2020 \$55,424	
DR24	DOOR LOCK, COMMERCIAL-GRADE	MAIN ENTRY	C1020	2020 \$2,359	
AH37	COMPUTER ROOM AC UNIT - REFRIGERANT, EXCL. HEAT REJECTION (10-20 TON)	COMPUTER RM	D3050	2020 \$81,827	
DR24	DOOR LOCK, COMMERCIAL-GRADE	EXT METAL	C1020	2023 \$1,180	
DR24	DOOR LOCK, COMMERCIAL-GRADE	NON-RATED DOOR:	C1020	2023 \$11,797	
DR24	DOOR LOCK, COMMERCIAL-GRADE	RATED DOORS	C1020	2023 \$1,180	
IF01	FLOORING - CARPET, TILE OR ROLL, STANDARD		C3020	2023 \$4,988	
IF03	FLOORING - VINYL COMPOSITION TILE, STANDARD		C3020	2023 \$8,514	
					\$276,187

**Detailed Facility Cost Summary
Facilities Renewal Plan
MRI : MRI OF EASTERN CAROLINA**

All costs shown as Present Value

Detailed Project Summary
Facility Condition Assessment
Project Classification
 MRI : MRI OF EASTERN CAROLINA

Cat. Code	Project Number	Pri Seq	Project Classification	Pri Cls	Project Title	Construction Cost	Prof Fees	Actual Cost to Date	Remaining Cost
FS3D	MRIFS01	1	Plant Adaption	2	REPLACE HALON FIRE SUPPRESSION SYSTEM	14,139	2,262	0	16,401
			Totals for Plant Adaption			14,139	2,262	0	16,401
					Grand Total:	14,139	2,262	0	16,401

Detailed Project Summary
Facility Condition Assessment
Category/System Code Report
 MRI : MRI OF EASTERN CAROLINA

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fees	Actual Cost to Date	Remaining Cost
FS3D	MRIFS01	2	1	REPLACE HALON FIRE SUPPRESSION SYSTEM	14,139	2,262	0	16,401
Totals for System Code: FIRE/LIFE SAFETY					14,139	2,262	0	16,401
Grand Total:					14,139	2,262	0	16,401

FACILITY CONDITION ASSESSMENT

SECTION 3

SPECIFIC PROJECT DETAILS

Specific Project Details
Facility Condition Assessment
Section Three

Project Description

Project Number:	MRIFS01	Title:	REPLACE HALON FIRE SUPPRESSION SYSTEM
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS3D	System:	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	OTHER
Building Code:	MRI		
Building Name:	MRI OF EASTERN CAROLINA		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA	2001	
Project Class:	Plant Adaption		
Project Date:	03/03/2014		
Project Location:	Room Only: Floor(s) 1		

Project Description

Halon is no longer being produced in the United States due to environmental concerns. In the event of a discharge, the system would likely have to be retrofitted or replaced with an approved extinguishing agent. This project provides a budget for replacement with such a system.

Specific Project Details
Facility Condition Assessment
Section Three

Project Cost

Project Number: MRIFS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
FM200 or Inergen fire suppression system upgrade	CF	3,600	\$2.43	\$8,748	\$1.61	\$5,796	\$14,544
Project Totals:				\$8,748		\$5,796	\$14,544

Material/Labor Cost		\$14,544
Material Index		100.70
Labor Index		51.30
Material/Labor Indexed Cost		<u>\$11,783</u>
General Contractor Mark Up at 20.0%	+	\$2,357
Inflation	+	<u>\$0</u>
Construction Cost		<u>\$14,139</u>
Professional Fees at 16.0%	+	<u>\$2,262</u>
Total Project Cost		<u><u>\$16,401</u></u>

FACILITY CONDITION ASSESSMENT

SECTION 4

LIFECYCLE COMPONENT INVENTORY

Asset Component Inventory
MRI : MRI OF EASTERN CAROLINA

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
B2010	WALL, EXTERIOR, MASONRY POINTING		1,210	SF	\$4.89		\$5,912	1990	30	10
B2010	WALL, EXTERIOR, SIDING, WOOD BOARD, STANDARD		1,810	SF	\$7.70		\$13,940	1990	30	5
B2010	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD		340	SF	\$117.21		\$39,851	1990	40	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	MAIN ENTRY	4	LEAF	\$2,222.99		\$8,892	1990	25	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL		2	LEAF	\$1,636.47		\$3,273	1990	40	
B3010	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	FLAT	3,600	SF	\$5.13	3.00	\$55,424	1990	20	10
B3010	ROOF - PANEL, ALUMINUM OR GALVANIZED, STANDING SEAM	PITCHED ENTRY CANOPY	800	SF	\$15.07		\$12,054	1990	40	
C1020	DOOR AND FRAME, INTERIOR, NON-RATED		20	LEAF	\$1,701.07		\$34,021	1990	40	
C1020	DOOR AND FRAME, INTERIOR, FIRE-RATED		2	LEAF	\$3,027.66		\$6,055	1990	40	
C1020	DOOR LOCK, COMMERCIAL-GRADE	NON-RATED DOORS	20	EA	\$589.83		\$11,797	2000	20	3
C1020	DOOR LOCK, COMMERCIAL-GRADE	RATED DOORS	2	EA	\$589.83		\$1,180	2000	20	3
C1020	DOOR LOCK, COMMERCIAL-GRADE	MAIN ENTRY	4	EA	\$589.83		\$2,359	2000	20	
C1020	DOOR LOCK, COMMERCIAL-GRADE	EXT METAL	2	EA	\$589.83		\$1,180	2000	20	3
C1030	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	BREAK ROOM	12	LF	\$417.87		\$5,014	1990	20	15
C3010	WALL FINISH - PAINT, STANDARD		14,110	SF	\$1.46		\$20,587	2007	12	11
C3010	WALL FINISH - TILE, CERAMIC / STONE, STANDARD		250	SF	\$29.39		\$7,347	1990	30	8
C3010	WALL FINISH - WALL COVERING, ROLL		1,000	SF	\$3.87		\$3,869	1990	20	7
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD		500	SF	\$9.98		\$4,988	2000	12	11
C3020	FLOORING - VINYL COMPOSITION TILE, STANDARD		1,760	SF	\$4.84		\$8,514	2000	20	3
C3020	FLOORING - TILE, CERAMIC / STONE / QUARRY PREMIUM		500	SF	\$50.04		\$25,021	1990	40	
C3030	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD		2,790	SF	\$7.44		\$20,767	1990	30	5
D2010	PLUMBING FIXTURE - LAVATORY, COUNTER		2	EA	\$1,034.94		\$2,070	1990	35	
D2010	PLUMBING FIXTURE - SINK, KITCHEN		1	EA	\$1,733.33		\$1,733	2005	35	
D2010	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY		4	EA	\$1,430.14		\$5,721	1990	35	

Asset Component Inventory
MRI : MRI OF EASTERN CAROLINA

Uni-format	Component Description	Identifier	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp	Lf Adj
D2010	PLUMBING FIXTURE - WATER CLOSET, TANK-TYPE		2	EA	\$922.64		\$1,845	1990	35	
D2020	SUPPLY PIPING SYSTEM - MEDICAL CLINIC		3,484	SF	\$5.34	1.18	\$21,944	1990	35	
D2020	WATER HEATER - RESIDENTIAL, GAS (35-45 GAL)		40	GAL	\$42.83		\$1,713	2007	20	
D2030	DRAIN PIPING SYSTEM - MEDICAL CLINIC		3,484	SF	\$8.12	1.18	\$33,362	1990	40	
D3030	CONDENSER - REFRIGERANT, AIR-COOLED (<=10 TON)	ELECTRICAL RM	1	TON	\$1,626.65		\$1,627	2007	23	
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)		2	EA	\$2,799.24		\$5,598	1990	20	3
D3050	COMPUTER ROOM AC UNIT - REFRIGERANT, EXCL. HEAT REJECTION (10-20 TON)	COMPUTER RM	17	TON	\$4,813.37		\$81,827	2005	15	
D3050	PACKAGE HVAC UNIT, DX, GAS OR ELECTRIC HEAT, SINGLE-ZONE (<= 5 TON)		4	TON	\$3,465.90		\$13,864	2007	23	
D3050	PACKAGE HVAC UNIT, DX, GAS OR ELECTRIC HEAT, MULTI-ZONE (9-35 TON)		18	TON	\$6,012.19		\$108,219	2005	23	
D4010	FIRE SPRINKLER SYSTEM		3,484	SF	\$9.22	1.18	\$37,908	1990	80	
D4030	EXIT SIGN - WITH BATTERY BACK-UP		4	EA	\$502.11		\$2,008	1990	20	3
D4030	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER		1	EA	\$28,509.86		\$28,510	1990	15	8
D4030	FIRE ALARM SYSTEM - DEVICES		3,484	SF	\$3.13	1.18	\$12,861	1990	18	5
D4090	FM200 OR INERGEN FIRE SUPPRESSION		3,600	CF	\$4.68		\$16,837	1990	25	
D5010	ELECTRICAL DISTRIBUTION NETWORK - MEDICAL CLINIC		3,484	SF	\$14.55	1.18	\$59,804	1990	40	
D5020	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)		1	EA	\$176.99		\$177	2009	15	
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT		2	EA	\$4,472.08		\$8,944	1990	15	8
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)		5	EA	\$741.47		\$3,707	2009	15	
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)		2	EA	\$741.47		\$1,483	1990	15	8
D5020	LIGHTING SYSTEM, INTERIOR - MEDICAL CLINIC		3,484	SF	\$4.19	1.18	\$17,228	1990	20	3
G2020	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE		1,000	SY	\$2.69		\$2,688	2010	7	

\$763,724

Recurring Component Renewal Schedule

MRI : MRI OF EASTERN CAROLINA

Uniformat Code	Component Description	Qty	Units	DM Replacement Cost	Year
D3040	FAN - CENTRIFUGAL ROOF EXHAUST, 1/4" SP (10"-18" DIAMETER)	2	EA	\$5,598	DM
D4030	EXIT SIGN - WITH BATTERY BACK-UP	4	EA	\$2,008	DM
D4030	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	1	EA	\$28,510	DM
D4030	FIRE ALARM SYSTEM - DEVICES	3,484	SF	\$12,861	DM
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	2	EA	\$1,483	DM
D5020	LIGHTING SYSTEM, INTERIOR - MEDICAL CLINIC	3,484	SF	\$17,228	DM
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 30-FOOT	2	EA	\$8,944	DM
Deferred Maintenance Cost for Asset No. MRI				\$76,633	

No Projected Component Replacement Cost for Asset No. MRI for 2014

Uniformat Code	Component Description	Qty	Units	2015 Replacement Cost	Year
D4090	FM200 OR INERGEN FIRE SUPPRESSION	3,600	CF	\$17,342	2015
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS				
	MAIN ENTRY	4	LEAF	\$9,159	2015
Projected Component Replacement Cost for Asset No. MRI for 2015				\$26,501	

Recurring Component Renewal Schedule

No Projected Component Replacement Cost for Asset No. MRI for 2016

Uniformat Code	Component Description	Qty	Units	2017 Replacement Cost	Year
G2020	ASPHALT VEHICULAR PAVING - SEALCOAT AND STRIPE	1,000	SY	\$2,937	2017
C3010	WALL FINISH - WALL COVERING, ROLL	1,000	SF	\$4,228	2017
Projected Component Replacement Cost for Asset No. MRI for 2017				\$7,165	

No Projected Component Replacement Cost for Asset No. MRI for 2018

No Projected Component Replacement Cost for Asset No. MRI for 2019

Uniformat Code	Component Description	Qty	Units	2020 Replacement Cost	Year
D3050	COMPUTER ROOM AC UNIT - REFRIGERANT, EXCL. HEAT REJECTION (10-20 TON)	17	TON	\$97,706	2020
B3010	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	3,600	SF	\$66,179	2020
C1020	DOOR LOCK, COMMERCIAL-GRADE	4	EA	\$2,817	2020
Projected Component Replacement Cost for Asset No. MRI for 2020				\$166,703	

No Projected Component Replacement Cost for Asset No. MRI for 2021

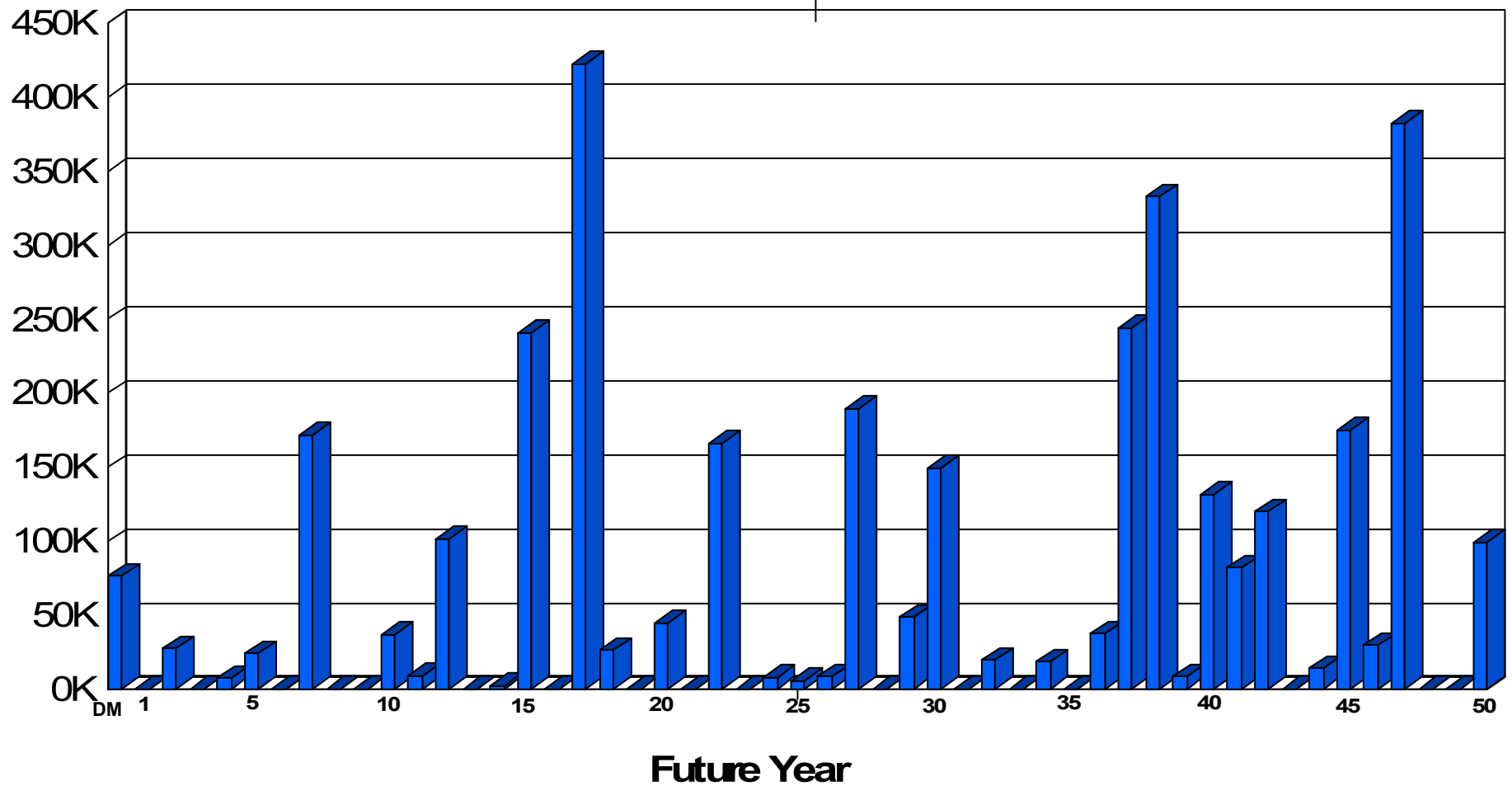
Recurring Component Renewal Schedule

No Projected Component Replacement Cost for Asset No. MRI for 2022

Uniformat Code	Component Description	Qty	Units	2023 Replacement Cost	Year
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD	500	SF	\$6,509	2023
C3020	FLOORING - VINYL COMPOSITION TILE, STANDARD	1,760	SF	\$11,108	2023
C1020	DOOR LOCK, COMMERCIAL-GRADE NON-RATED DOORS	20	EA	\$15,392	2023
C1020	DOOR LOCK, COMMERCIAL-GRADE RATED DOORS	2	EA	\$1,539	2023
C1020	DOOR LOCK, COMMERCIAL-GRADE EXT METAL	2	EA	\$1,539	2023
Projected Component Replacement Cost for Asset No. MRI for 2023				\$36,087	

Recurring Component Expenditure Projections

MRI : MRI OF EASTERN CAROLINA

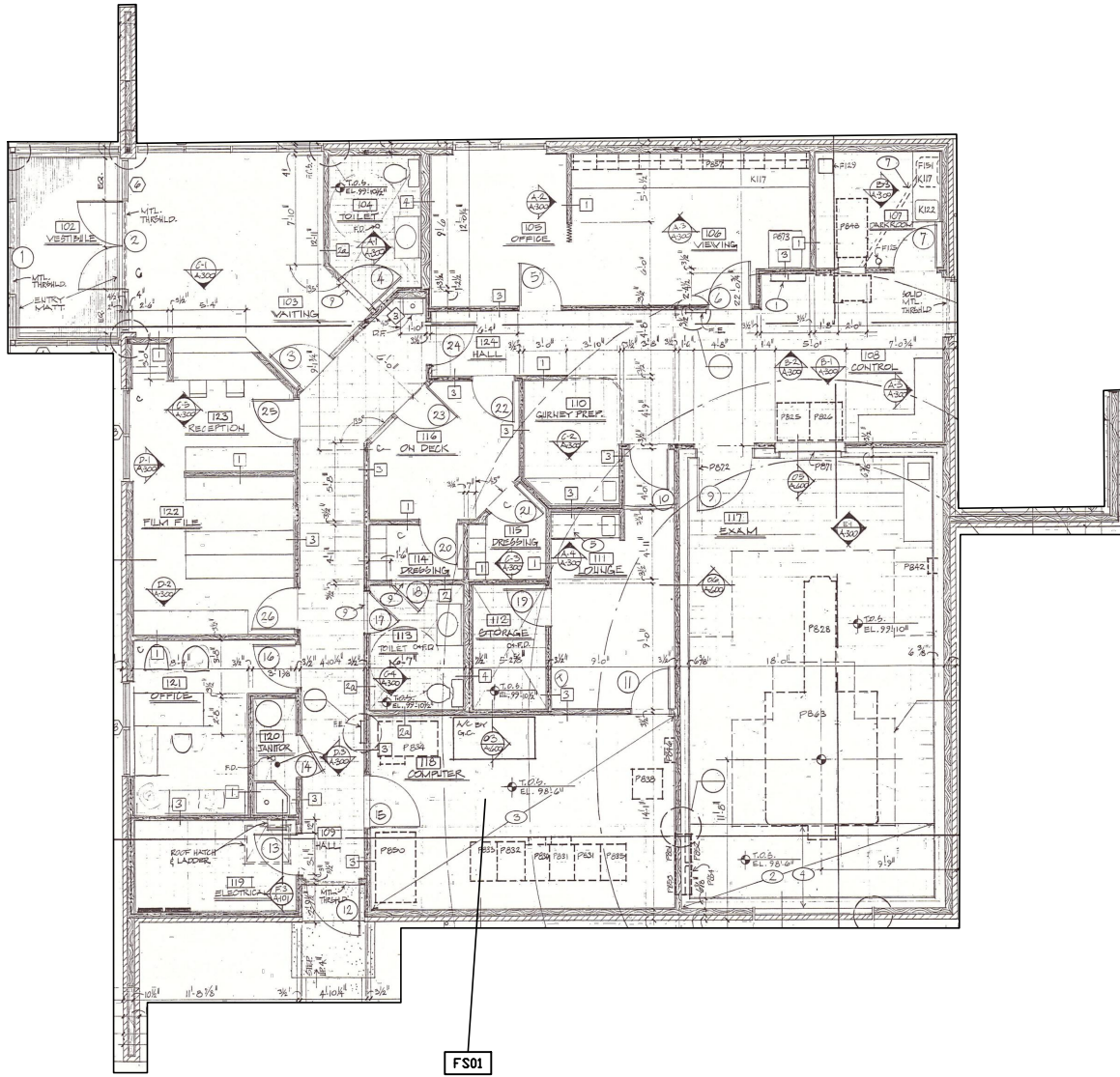


Average Annual Renewal Cost per SqFt \$8.67

FACILITY CONDITION ASSESSMENT







SECTION 5

DRAWINGS
AND PROJECT LOCATIONS



FACILITY CONDITION ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

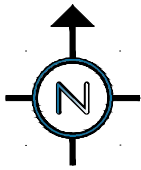
-  PROJECT NUMBER APPLIES TO ONE ROOM ONLY
-  PROJECT NUMBER APPLIES TO ONE ITEM ONLY
-  PROJECT NUMBER APPLIES TO ENTIRE BUILDING
-  PROJECT NUMBER APPLIES TO ENTIRE FLOOR
-  PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS
-  PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 04/10/2014

Drawn by: T.C.

Project No. 14-009

FIRST FLOOR PLAN



FACILITY CONDITION ASSESSMENT

SECTION 6

PHOTOGRAPHS

Photo Log - Facility Condition Assessment
MRI : MRI OF EASTERN CAROLINA

Photo ID No.	Description	Location	Date
MRI001a	Accessible restroom with ceramic tile floor and walls	Waiting room restroom	03/03/2014
MRI001e	Exit sign and interior lighting	Waiting room	03/03/2014
MRI002a	Ceramic tile entry and waiting area with glass enclosed vestibule	Main entrance	03/03/2014
MRI002e	Fire alarm device and interior lighting	Restroom	03/03/2014
MRI003a	Pitched metal roof	Covered entry and vestibule	03/03/2014
MRI003e	Lavatory	Restroom	03/03/2014
MRI004a	White membrane roof application	Main roof	03/03/2014
MRI004e	Water closet	Restroom	03/03/2014
MRI005a	Accessible restroom with ceramic tile floor and walls	Staff restroom	03/03/2014
MRI005e	HVAC blower unit	Electrical room	03/03/2014
MRI006a	Interior water staining	Electrical room	03/03/2014
MRI006e	Main panelboard	Electrical room	03/03/2014
MRI007a	12 inch vinyl floor tile and wooden cabinetry	Break room	03/03/2014
MRI007e	Panelboard	Electrical room	03/03/2014
MRI008a	Sliding glass automatic doors	Main entrance	03/03/2014
MRI008e	Fire alarm panel	Electrical room	03/03/2014
MRI009a	Glass enclosed entry vestibule	Southern exterior	03/03/2014
MRI009e	Package HVAC unit	Roof	03/03/2014
MRI010a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI010e	Exhaust fan	Roof	03/03/2014
MRI011a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI011e	Condensing units and exhaust fan	Roof	03/03/2014
MRI012a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI012e	Package HVAC unit	Roof	03/03/2014
MRI013a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI013e	Computer room air conditioners	Computer room	03/03/2014
MRI014a	Asphalt parking surrounding the facility	Grounds	03/03/2014
MRI014e	Halon system	Computer room	03/03/2014
MRI015a	Composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI015e	Transformer	Computer room	03/03/2014

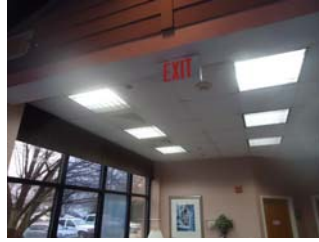
Photo Log - Facility Condition Assessment
MRI : MRI OF EASTERN CAROLINA

Photo ID No.	Description	Location	Date
MRI016a	Composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI016e	Fire alarm devices	Computer room	03/03/2014
MRI017a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI017e	Service sink	Janitor's closet	03/03/2014
MRI018a	Dual pane windows and composite horizontal siding above brick masonry lower wall	Exterior	03/03/2014
MRI018e	Water heater and standpipe	Janitor's closet	03/03/2014
MRI019a	Glass enclosed entry vestibule and composite horizontal siding above brick masonry lower wall	Southern exterior	03/03/2014
MRI019e	Lavatory and water closet	Restroom	03/03/2014
MRI020e	Sink	Prep room	03/03/2014
MRI021e	Fire alarm device and sprinkler head	Office area	03/03/2014
MRI022e	Interior lighting	Office area	03/03/2014
MRI023e	Fire alarm devices	Corridor	03/03/2014
MRI024e	Sink	Break room	03/03/2014
MRI025e	Drain and supply piping	Break room	03/03/2014
MRI026e	Interior lighting	Corridor	03/03/2014
MRI027e	Annunciator	Main entryway	03/03/2014
MRI028e	Exterior lighting	Building exterior	03/03/2014
MRI029e	Exterior lighting	Site	03/03/2014
MRI030e	Exterior lighting	Building exterior	03/03/2014
MRI031e	Condensing unit	Site	03/03/2014
MRI032e	Exterior lighting	Building exterior	03/03/2014
MRI033e	Exterior lighting	Building exterior	03/03/2014
MRI034e	Exterior lighting	Building exterior	03/03/2014
MRI035e	Gas regulator	Site	03/03/2014
MRI036e	Exterior lighting	Building exterior	03/03/2014
MRI037e	Exterior lighting	Building exterior	03/03/2014

Facility Condition Assessment - Photo Log



MRI001A.jpg



MRI001E.jpg



MRI002A.jpg



MRI002E.jpg



MRI003A.jpg



MRI003E.jpg



MRI004A.jpg



MRI004E.jpg



MRI005A.jpg



MRI005E.jpg



MRI006A.jpg



MRI006E.jpg



MRI007A.jpg



MRI007E.jpg



MRI008A.jpg



MRI008E.jpg



MRI009A.jpg



MRI009E.jpg



MRI010A.jpg



MRI010E.jpg

Facility Condition Assessment - Photo Log



MRI011A.jpg



MRI011E.jpg



MRI012A.jpg



MRI012E.jpg



MRI013A.jpg



MRI013E.jpg



MRI014A.jpg



MRI014E.jpg



MRI015A.jpg



MRI015E.jpg



MRI016A.jpg



MRI016E.jpg



MRI017A.jpg



MRI017E.jpg



MRI018A.jpg



MRI018E.jpg



MRI019A.jpg



MRI019E.jpg



MRI020E.jpg



MRI021E.jpg

Facility Condition Assessment - Photo Log



MRI022E.jpg



MRI023E.jpg



MRI024E.jpg



MRI025E.jpg



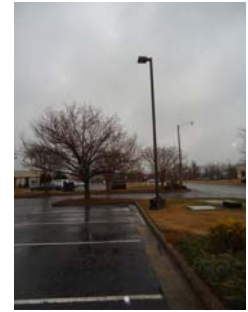
MRI026E.jpg



MRI027E.jpg



MRI028E.jpg



MRI029E.jpg



MRI030E.jpg



MRI031E.jpg



MRI032E.jpg



MRI033E.jpg



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