

# Building Condition Assessment Report

<b>Asset</b>	C7 Henry Esson Young Building
<b>Address</b>	Riverview Lands, 2601 Lougheed Highway, Coquitlam, BC. V5C 4J2
<b>Construction Year</b>	1959.
<b>Size (Gross Floor Area)</b>	80,505 Sq.Ft.
<b>Asset Type</b>	Hospital, 4-8 Story with Face Brick with Concrete Block Back-up / R/Conc.
<b>Floors Above Ground</b>	5
<b>Report Date</b>	May 2013



**Executive Summary**

The Henry Esson Young Building contains 7,479 m2 of space with a five-storey mid-rise tower and attached two-storey annex. Constructed in 1959, the main structure is concrete with both painted and brick-clad exterior treatments. The building is in good condition. It was not rated in the previous heritage evaluations. On Central Steam.

This report assumes a continuation of the current use (or previous use if building is vacant) and does not include costs associated with a change of use of the building.

**Summary Results of Assessment:** C7 Henry Esson Young Building

Replacement Costs	Renewal Costs	FCI
\$21,735,682.00	\$6,189,819.00	28%

**Definitions:**

- **Replacement Cost:** The combined costs (construction only - soft costs are not included) to replace all the components in the building without demolition and rebuilding. This number is arrived at from RS Means and other sources then verified (validated) by the persons doing the building assessments.



- **Renewal Cost:** The combined costs (construction only - soft costs are not included) of all the identified renewal needs.

- **Facility Condition Index (FCI):** a ratio of renewal costs divided by replacement costs


- **FCI Level Definitions:**

- o Good: 0%-5%
- o Fair: 6%-10%
- o Poor: 11%-30%
- o Critical: greater than 30%



**A10 Foundations**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$413,798		
<u>What &amp; Where</u>	Footings and foundation's are reinforced concrete cast in place. North wall constructed into slope,back filled.		
<u>Commentary (Condition ...)</u>	Various locations indicate issues with perimeter drainage.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$60,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Various areas indicate water ingress damage.		
<u>Commentary</u>	Investigate extent of perimeter drainage and repair as required.		



**A20 Basement Construction**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$336,512		
<u>What &amp; Where</u>	Reinforced concrete slab on grade.		
<u>Commentary (Condition ...)</u>	Footings and foundations reinforced, cast in place. There are visual signs of water ingress.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$50,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Investigate source & extent of leakage into basement. Repair as required.		
<u>Commentary</u>	Possible perimeter drainage failure.		


**B10 Superstructure**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$2,492,446		
<u>What &amp; Where</u>	Reinforced concrete cast in place.		
<u>Commentary (Condition ...)</u>	Mix of: - reinforced, cast in place walls, columns and floor slabs. - brick veneer walls. - glass block wall feature.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$100,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Various areas require repairs. Repair, seal brick veneer. Repair, seal and paint concrete exterior.		
<u>Commentary</u>			



**B2010 Exterior Walls**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$1,705,909		
<u>What &amp; Where</u>	Painted Concrete with brick veneer clad exterior.		
<u>Commentary (Condition ...)</u>	Mix of: - reinforced, cast in place walls. - brick veneer walls. - glass block wall feature		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$200,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Repairs to exterior walls.		
<u>Commentary</u>	Note: No weep holes in brick veneer were observed at time of inspection. upgrade requirements.		



**B2020 Exterior Windows**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Fair 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$556,292		
<u>What &amp; Where</u>	Original Aluminum frame single glazed. Ground floor storefront windows and glassed stairwell		
<u>Commentary (Condition ...)</u>	Windows are a mix of original slider, awning and fixed with some newer, however, all are single glazed.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$556,292		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace windows		
<u>Commentary</u>	Windows are a mix of original with some newer, however, all are single glazed. Windows are in poor condition.		



**B2030 Exterior Doors**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Fair 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$82,115		
<u>What &amp; Where</u>	Front entry is storefront glass and metal. All other entry doors are metal.		
<u>Commentary (Condition ...)</u>	Doors are beyond life cycle. Condition is fair to poor. Glass doors with side lites are single glazed.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$15,000		
<u>Action Year</u>	2015.		
<u>Brief Description</u>	Replace exterior doors and frames.		
<u>Commentary</u>	Doors are beyond life cycle. Condition is fair to poor. Glass doors with side lites are single glazed.		



**B30 Roofing**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Poor</b> 
<u>Last Major Action Year</u>	2005.		
<u>Replacement Cost</u>	\$1,289,696		
<u>What &amp; Where</u>	Hi-rise roof has torch on modified bitumen roof. Lo-rise roofs are tar & gravel. Pavers over membrane at mezzanine/patio level.		
<u>Commentary (Condition ...)</u>	The roofs are in poor condition. Membrane is wrinkled and soft throughout.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$400,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace hi-rise SBS roofs. Assess lo-rise tar & gravel roofs. Re & re mezzanine roof with pavers.		
<u>Commentary</u>	The hi-rise roof is in poor condition. Membrane is wrinkled and soft throughout. Install additional roof drains, and/or overflow scuppers. Age of lo-rise tar & gravel roofs to be confirmed		



**C1010 Partitions**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$917,761		
<u>What &amp; Where</u>	Painted gypsum walls on steel and/or wood studs.		
<u>Commentary (Condition ...)</u>	Holes in walls at random locations to allow plumbing repairs to be undertaken. Ensure any/all compromised drywall are reinstated to ensure fire separations remain intact.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$140,000		
<u>Action Year</u>	2015.		
<u>Brief Description</u>	Repair and paint damaged walls.		
<u>Commentary</u>	Holes in walls at random locations to allow plumbing repairs to be undertaken. Ensure any/all compromised drywall are reinstated to ensure fire separations remain intact. Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.		



**C1020 Interior Doors**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$700,000		
<u>What &amp; Where</u>	Interior doors are a mixture of wood and metal. Fire doors solid core wood.		
<u>Commentary (Condition ...)</u>	Repair as required. Frames do not have a rating tag. Doors have magnetic locks appear to be tied in to the fire alarm system.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$110,000		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Replace interior doors.		
<u>Commentary</u>	Fire doors solid core wood. Frames do not have a rating tag. Doors have magnetic locks appear to be tied in to the fire alarm system. Doors should be equipped with panic hardware and ensure all closers are operational and in good order. Vestibule glazing by elevators at each floor, west end to be removed due to contravention of fire code for means of egress.		



**C1030 Fittings**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Poor</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$107,877		
<u>What &amp; Where</u>	Blinds on all ground windows, cabinets and shelving.		
<u>Commentary (Condition ...)</u>	Era of millwork varies. Repair and/or replace as required.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$60,000		
<u>Action Year</u>	2025.		
<u>Brief Description</u>	Replace fittings.		
<u>Commentary</u>	Fittings would require upgrades based on occupancy needs.		

**C20 Stairs**



<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$146,520		
<u>What &amp; Where</u>	Annex has a centre stairwell and midrise has one main stairwell.		
<u>Commentary (Condition ...)</u>	Overall good condition.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$15,000		
<u>Action Year</u>	2018.		
<u>Brief Description</u>	Repairs to stairs including railings and treads.		
<u>Commentary</u>	Exterior metal stairs require inspection, repairs, prime and paint. Metal stairs require review assessment under recommended BECA.		

**C3010 Wall Finishes**



<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$801,028		
<u>What &amp; Where</u>	Painted walls. Theatres have some sound treatment (acoustic wall panels). Washrooms have ceramic tile.		
<u>Commentary (Condition ...)</u>	Holes in walls at random locations to allow plumbing repairs to be undertaken.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$120,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Repair and repaint walls		
<u>Commentary</u>	Holes in walls at random locations to allow plumbing repairs to be undertaken. Ensure any/all compromised drywall are reinstated to ensure fire separations remain intact. Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.		





**C3020 Floor Finishes**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1970.		
<u>Replacement Cost</u>	\$768,826		
<u>What &amp; Where</u>	Terrazzo and linoleum. Carpet in the theatres and ceramic tiles in areas such as washrooms.		
<u>Commentary (Condition ...)</u>	Flooring conditions range good, fair, poor.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$150,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace flooring		
<u>Commentary</u>	Resilient floors range good, fair, poor. Re & re as required. Carpet condition range good, fair, poor. Re & re as required. Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.		



**C3030 Ceiling Finishes**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Fair 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$734,209		
<u>What &amp; Where</u>	Texture on concrete. Texture on drops.		
<u>Commentary (Condition ...)</u>	Ceiling conditions range fair to poor.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$100,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Repair and repaint ceilings. Re & re t-bar (code compliance) with acoustic panels as required.		
<u>Commentary</u>	Asbestos identified in various areas, guidelines must be followed. Ensure Asbestos inventory is updated.		


**D1010 Elevators & Lifts**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$761,581		
<u>What &amp; Where</u>	Elevator in the tower building. Original Otis elevator.		
<u>Commentary (Condition ...)</u>	Inspections completed routinely. Overall assessment required.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$76,480		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Repairs to elevator cab finishes and motors		
 <u>Commentary</u>	 Recommend Consultants assessment to determine compliance with Safety Branch.		



**D2010 Plumbing Fixtures**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$1,498,205		
<u>What &amp; Where</u>	Common area bathrooms, janitorial sinks, emergency stations and drinking fountains.		
<u>Commentary (Condition ...)</u>	Mostly original units. Era, finishes and types vary.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$100,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace common area bathroom fixtures, janitorial sinks and emergency stations (eyewash)		
 <u>Commentary</u>	 Update fixtures with water efficient type units. Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		



**D2020 Domestic Water Distribution**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$675,440		
<u>What &amp; Where</u>	domestic water supply to each service area with flexible connections to each fixture. (Glass piping for biomedical system, NOT confirmed).		
<u>Commentary (Condition ...)</u>	6 inch main supply with 3 inch supply for hot water with copper risers to each floor. 1/2 inch copper supply to each fixture with flexible and non-flexible connections to each fixture.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$60,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Domestic water distribution. Repair areas as required.		
<u>Commentary</u>	Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		



**D2030 Sanitary Waste**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$499,133		
<u>What &amp; Where</u>	Gravity based risers leading to 8 inch sewer pipe in the basement.		
<u>Commentary (Condition ...)</u>	Assessment required.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Maintenance		
<u>Action Cost</u>	\$1,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Assessment required.		
<u>Commentary</u>	Assess at time of Consultant Domestic Water Distribution assessment.		


**D2040 Rain Water Drainage**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$57,964		
<u>What &amp; Where</u>	Internal rain water drainage cast iron.		
<u>Commentary (Condition ...)</u>	Gravity based storm system terminating in main collector on site.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Maintenance		
<u>Action Cost</u>	\$10,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Repair at various location as required.		
<u>Commentary</u>			

**D2095 Domestic Water Heaters**



<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	2011.		
<u>Replacement Cost</u>	\$0		
<u>What &amp; Where</u>	Hi-rise: One - 2011, electric Bradford White 80 gallon HWTanks that feed the following: Two - 2009, John Wood 100 gallon holding tanks.		
<u>Commentary (Condition ...)</u>	Good condition.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$10,000		
<u>Action Year</u>	2021.		
<u>Brief Description</u>	Replace DHW tank and holding tanks.		
<u>Commentary</u>	Replace as required.		

**D3012 Gas Supply System**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$0		
<u>What &amp; Where</u>	No gas supply.		
<u>Commentary (Condition ...)</u>			



<b><u>Action</u></b>	<b>1.</b>
<u>Action type</u>	Replacement
<u>Action Cost</u>	\$20,126
<u>Action Year</u>	2029.
<u>Brief Description</u>	
<u>Commentary</u>	

**D3043 Hydronic Distribution Systems**



<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$250,000		
<u>What &amp; Where</u>	Intermediate pressure steam distribution to fin tube registers throughout.		
<u>Commentary (Condition ...)</u>	'A' Zone feeds West Building, Hi-rise. 'B' Zone feeds East Building, Low-rise.		

<b><u>Action</u></b>	<b>1.</b>
<u>Action type</u>	Replacement
<u>Action Cost</u>	\$250,000
<u>Action Year</u>	2014.
<u>Brief Description</u>	Upgrades to be determined based on future of existing steam plant.
<u>Commentary</u>	



### D3045 Exhaust Ventilation Systems

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$9,661		
<u>What &amp; Where</u>	Located throughout facility.		
<u>Commentary (Condition ...)</u>	Various equipment shutdown.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Study		
<u>Action Cost</u>	\$10,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Various exhaust system throughout facility.		
<u>Commentary</u>	An assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		



### D3055 Fin Tube Radiation

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Fair</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$119,953		
<u>What &amp; Where</u>	Steam fed fin tubed radiators.		
<u>Commentary (Condition ...)</u>	Appear to be in fair condition.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$20,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace fin tube radiators.		
<u>Commentary</u>	Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		



**D3058-D Make-Up AHU**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Poor 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$805,000		
<u>What &amp; Where</u>	Roof top units.		
<u>Commentary (Condition ...)</u>	Currently not working and in poor condition.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$805,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace the make-up AHU system.		
<u>Commentary</u>	Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		


**D3060 Controls And Instrumentation**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Poor 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$714,888		
<u>What &amp; Where</u>	Thermostats and control systems.		
<u>Commentary (Condition ...)</u>	Poor condition		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$100,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Replace thermostats and control systems		
<u>Commentary</u>	Original equipment with some upgrades. Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale.		

**D3090 Other HVAC Systems And Equipment**



<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$50,000		
<u>What &amp; Where</u>	Portable air cleaner systems.		
<u>Commentary (Condition ...)</u>	Determine if they meet current code compliance.		

**D4010 Sprinklers**



<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Poor</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$1,200,000		
<u>What &amp; Where</u>	Building is not sprinklered.		
<u>Commentary (Condition ...)</u>	Siamese connection for fire fighting is located at front of building.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Study		
<u>Action Cost</u>	\$10,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Install new sprinkler system.		
 <u>Commentary</u>	 Recommend Mechanical Consultant assessment to define scope of work and order of magnitude for multiple buildings on site to achieve economies of scale. A study to determine future sprinkler needs for this site.		





**D4020 Standpipes**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$108,682		
<u>What &amp; Where</u>	Siamese connection located at front of building.		
<u>Commentary (Condition ...)</u>	Siamese connection located near front entry. 2.5 inch standpipe in fire hose cabinets with 1.5 inch valve. System maintained by fire protection contractor?		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$108,682		
<u>Action Year</u>	2053.		
<u>Brief Description</u>			
<u>Commentary</u>			



**D5010 Electrical Service And Distribution**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$401,722		
<u>What &amp; Where</u>	Electrical service from transformer to building. Large original switchgear.		
<u>Commentary (Condition ...)</u>	15,000 volt transformer.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Maintenance		
<u>Action Cost</u>	\$60,000		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Electrical distribution & panels.		
 <u>Commentary</u>	Perform infra-red scans of electrical distribution and panels. All feeder conductors should be checked for condition and ground continuity.		


**D5021 Branch Wiring**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$1,191,479		
<u>What &amp; Where</u>	Insulated copper wiring.		
<u>Commentary (Condition ...)</u>	Typically not visible. Replace plugs in bathrooms, kitchens and exterior with GFI plugs as required.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Repair		
<u>Action Cost</u>	\$120,000		
<u>Action Year</u>	2014.		
<u>Brief Description</u>	Interior/exterior wiring & devices.		
<u>Commentary</u>	All wiring devices (interior and exterior) should be tested for correct wiring, polarity and retentive force. Any defective devices should be replaced.		



**D5022 Lighting Equipment**

<b><u>Component</u></b>	<b>1</b>	<u>Overall Condition</u>	Fair 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$297,870		
<u>What &amp; Where</u>	Majority of lighting fluorescent. Some T8's. Some metal halide at exterior.		
<u>Commentary (Condition ...)</u>	Fixtures typically original to construction of building.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$297,870		
<u>Action Year</u>	2020.		
<u>Brief Description</u>	Replace light fixtures		
 <u>Commentary</u>	 Conduct lighting study/ energy audit. Determine possible energy savings. Replace interior/exterior light fixtures.		



**D5031 Public Address And Music System**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$46,693		
<u>What &amp; Where</u>	PA system throughout the tower and annex		
<u>Commentary (Condition ...)</u>	Replace PA System.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$46,693		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Replace PA system		
<u>Commentary</u>			



**D5032 Intercommunications And Paging**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$60,379		
<u>What &amp; Where</u>	Communications room. Nurse call system throughout. (Intercom & paging).		
<u>Commentary (Condition ...)</u>	Nurse call system not operating. Network equipment has been removed.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$60,379		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Nurse call, intercom & paging.		
<u>Commentary</u>	Existing system has been removed. A consultant would be required to determine compliance of existing CAT 5 wiring and requirements for new system.		



### D5033 Telephone Systems

<u>Component</u>	<b>1</b>	<u>Overall Condition</u>	Poor 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$107,072		
<u>What &amp; Where</u>	Phone system provided and maintained by service provider (Telus typically).		
<u>Commentary (Condition ...)</u>	Telephone equipment, handsets, etc. have been removed.		
<u>Action</u>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$107,072		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Install new system where and when required.		
<u>Commentary</u>			



### D5035 Television System

<u>Component</u>	<b>1</b>	<u>Overall Condition</u>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$0		
<u>What &amp; Where</u>	Cable system provided and maintained by service provider ( typically Shaw or Rogers).		
<u>Commentary (Condition ...)</u>	The main television equipment is located in the basement electrical room.		



**D5037 Fire Alarm System**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Fair</b> 
<u>Last Major Action Year</u>	2000.		
<u>Replacement Cost</u>	\$63,599		
<u>What &amp; Where</u>	Fire alarm system panel - Simplex Smoke detectors are located appropriately throughout the facility. Smoke detectors tend to get replaced, as they fail, by the service contractor.		
<u>Commentary (Condition ...)</u>	Annual inspection complete. Fire Alarm system is regularly tested as required by code. Altogether, the fire alarm system is in fair condition and may require periodic maintenance.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$63,599		
<u>Action Year</u>	2025.		
<u>Brief Description</u>	Replace fire alarm panel and accessories		
<u>Commentary</u>	The facility is equipped with a fire alarm system. The fire alarm panel is located near the main entrance of the building. The panel is aging but should operate well for another 10 to 15 years. It will still be operational after 15 years; however; experience dictates that it becomes increasingly difficult to find replacement parts and technical support for older fire alarm control panels. Therefore, it becomes a discretionary call that at some point in time replacing the panel is less costly than trying to maintain it.		


**D5038 Security Systems**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$170,671		
<u>What &amp; Where</u>	Door and motion sensor activated intrusion alarm.		
<u>Commentary (Condition ...)</u>	Security staff deactivate and reactivate as required.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$170,671		
<u>Action Year</u>	2025.		
<u>Brief Description</u>	Replace security system		
<u>Commentary</u>	The condition of systems is good, however may require periodic maintenance. As with most electronic equipment, it's lifespan can be estimated to be approx. 15 years, as advances in technology will make the system obsolete, thus will become difficult to source replacement parts.		

**D5091 Exit & Emergency Light Systems**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	Good 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$20,000		
<u>What &amp; Where</u>	No emergency backup system in place.		
<u>Commentary (Condition ...)</u>	Emergency lights and exit lights have battery backup. To be confirmed.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$20,000		
<u>Action Year</u>	2013.		
<u>Brief Description</u>	Exit and Emergency lighting.		
<u>Commentary</u>	Recommend systems upgrades to ensure code compliance.		



### D5092 Emergency Power & Generation Systems

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1991.		
<u>Replacement Cost</u>	\$300,000		
<u>What &amp; Where</u>	No emergency backup system.		
<u>Commentary (Condition ...)</u>	A backup generator should be considered for future occupancy.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$263,253		
<u>Action Year</u>	2021.		
<u>Brief Description</u>			
<u>Commentary</u>			



### E1010 Commercial Equipment

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$0		
<u>What &amp; Where</u>			
<u>Commentary (Condition ...)</u>			

### E1020 Institutional Equipment

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$1,356,515		
<u>What &amp; Where</u>	Teaching hospital includes 3 theatre in annex, laboratories, audiovisual equipment and library equipment		
<u>Commentary (Condition ...)</u>	Equipment has been removed.		
 <b><u>Action</u></b>	 <b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$1,356,515		
<u>Action Year</u>	2019.		
<u>Brief Description</u>	Replace specialized equipment		
<u>Commentary</u>			

**E2010 Fixed Furnishings**

<b><u>Component</u></b>	<b>1</b>	<b><u>Overall Condition</u></b>	<b>Good</b> 
<u>Last Major Action Year</u>	1959.		
<u>Replacement Cost</u>	\$74,870		
<u>What &amp; Where</u>	3 theatre in annex (Auditorium style seating)		
<u>Commentary (Condition ...)</u>	See Institutional equipment.		
<b><u>Action</u></b>	<b>1.</b>		
<u>Action type</u>	Replacement		
<u>Action Cost</u>	\$74,870		
<u>Action Year</u>	2019.		
<u>Brief Description</u>	Replace seating and other fixed furnishings		
<u>Commentary</u>			





