

Asset Overview Report

By Asset Name



Hay River CCG Base

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DRAFT

Region: Central and Arctic

Site: Hay River CCG Base

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Region: Central and Arctic Asset: Access Road

Site: Hay River CCG Base Asset Number: C L 00002 17660

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	170,815	FCI:	0.74	
RI Cost:	170,815	RI:	0.74	
Total Requirement Cost:	170,814	Size:	1 SM	
Current Replacement Value:	230,465			

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation Access Road

Asset Description

ACCESS ROAD, ASSET CODE: C L 00002 17660

ARCHITECTURAL

Genera

The Hay River Canadian Coast Guard Base can be found at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The site infrastructure includes a paved, asphalt Access Road, Asset Code: C L 00002 17660, which leads onto the site from the Mackenzie Highway. The Access Road is approximately 8.5 meters wide by 250 lineal meters long.

System Description





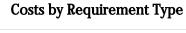
System Name	Description
G2011 - Bases and Sub-Bases-Roadway Flexible Pavement - Base Course	Roadway flexible pavement (bituminous) includes a 300mm thick gravel base course (also known as pit-run) for freeways, major arterials, minor arterials, collectors and local roads; spread and compaction included.
G2011 - Bases and Sub-Bases-Roadway Flexible Pavement - Intermediate Course	Roadway flexible pavement includes a 75mm thick bituminous intermediate binder course for freeways, major arterials, minor arterials, collectors and local roads.
G2012 - Paving and Surfacing-Roadway Flexible Pavement - Surface Course	Roadway flexible pavement includes a 50mm thick bituminous wearing surface course for freeways, major arterials, minor arterials, collectors and local roads. Observed years remaining increased due to system condition. Assume 8.5m wide, by 250m long.
G2015 - Painted Lines-Roadway - Traffic Control - Painted Pavement Markings	Roadway includes painted pavement markings used to provide guidance and information to drivers and pedestrians. Includes centerline striping, directional arrows, crosswalk and other roadway graphics.

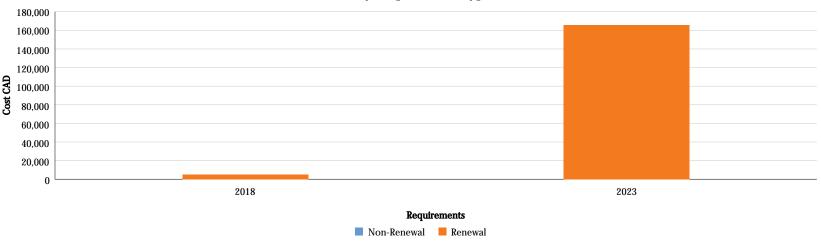
Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2011 - Bases and Sub-Bases	Roadway Flexible Pavement - Intermediate Course	25	62	1986	2023	69,380	111,904
G2011 - Bases and Sub-Bases	Roadway Flexible Pavement - Base Course	65	12	1986	2051	4,367	36,393
G2012 - Paving and Surfacing	Roadway Flexible Pavement - Surface Course	25	125	1986	2023	96,330	77,064
G2015 - Painted Lines	Roadway - Traffic Control - Painted Pavement Markings	10	100	1986	2018	5,104	5,104
			Subtotal		230,465		
					Overhead:		0
					Subtotal		0
		Total Replacement Value Based on System Costs with Overheads			230,465		



Requirements including Renewals





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Roadway - Traffic Control - Painted Pavement Markings Renewal	Yes	G2015 - Painted Lines	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	5,104
Roadway Flexible Pavement - Intermediate Course Renewal	Yes	G2011 - Bases and Sub-Bases	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	69,380
Roadway Flexible Pavement - Surface Course Renewal	Yes	G2012 - Paving and Surfacing	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	96,330
Total						170,814





Region: Central and Arctic Asset: Administration Building

Site: Hay River CCG Base Asset Number: C L 00002 16580

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	1,706,953	FCI:	0.68	
RI Cost:	1,822,117	RI:	0.73	
Total Requirement Cost:	1,706,953	Size:	462 SM	
Current Replacement Value:	2,500,684			

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT



Photo



Signature - Front Elevation Administration Building

Asset Description

ADMINISTRATION BUILDING: ASSET CODE C L 00002 16580

ARCHITECTURAL

General

The Administration building, Asset Code C L 00002 16580, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, XOE 0R9. The facility is a single level building with crawlspace foundation built in 1984. The Administration building contains 462 square meters of floor space.

Construction

The substructure construction found beneath the Administration building facility consists of an elevated wood floor, supported on wood floor trusses and sitting on an exterior perimeter cast concrete foundation walls founded on strip concrete footings. The entire foundation substructure is supported by steel piles driven into the highly compressible discontinuous permafrost soils to prevent subsidence and settlement issues. Exterior walls are clad with prefinished metal panel siding on an insulated wood framed backup wall, finished with vapour retarder and painted gypsum wallboard. Roof framing consists of pre-engineered wood roof trusses and is waterproofed with a protected membrane roof assembly. Fenestration consists of insulated aluminum window





assemblies and entry doors are finished, insulated wood panel doors and frames, some with insulated glazing.

Classification

The Administration Building can be classified as a Group D, Personal and Business Services Occupancy per Table 3.1.2.1. of the 2010 National Building Code of Canada.

MECHANICAL

The building has an indoor air handler, with a humidifier and a dx cooling unit set on the roof. There is a hot water heating system supplied by two high efficiency, propane fired boilers installed in 2018, and a pneumatic temperature control system.

The building is supplied with water from a municipal system, and the sanitary waste is piped to a holding tank.

ELECTRICAL

The electrical system includes a service entrance with a metering cabinet, panel boards and power distribution. There is also a transfer switch and an exterior connection for use with a portable emergency generator

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - Crawlspace	Basic perimeter foundation for building with crawlspace. System cost includes strip footing, 1.8 meter high foundation wall, damp proofing and underdrain and is based on average height of crawlspace at 600mm.
A - Substructure-Grade Beams	The substructure includes grade beams with a span of 9.14 meters and 1,016-mm deep.
A - Substructure-Pile Foundation	The building substructure includes pile caps and piles 15-LM in length in clusters of 10 at each pile cap.
B10 - Superstructure-Single-Story - Wood - Crawl Space	Single-story wood framed building over crawl space. Includes wood floor framing and roof structure. Exterior walls are covered under a separate System. System components include wood floor joists, subfloor, wood roof framing and sheathing.
B2010 - Exterior Walls-Wood Stud Framing With Metal Panel Siding	The exterior walls are of $38 \times 140 \text{mm}$ studs, 400mm OC, insulated, with aluminum panel siding.
B2020 - Exterior Windows-Aluminum Windows	The building includes aluminum framed exterior units with insulating glass. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Door Assembly - 900 x 2,100 HM	Exterior doors include $900 \times 2,100$ steel door and steel frame with hinges, lockset (lever), exit hardware and closer. Includes painted door and painted frame. Observed years remaining increased due to system condition.
B30 - Roofing-Modified Bitumen	The roof covering is a modified bitumen waterproofing system. Observed years remaining increased due to system condition.
C1010 - Partitions-GWB Walls - Standard (Non-Painted)	The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation.
C1020 - Interior Doors-Swinging Doors - 900 x 2100 HM & Wood	Interior doors include 900×2100 steel or wood doors and steel or wood frame with hinges, lockset (lever) and closer. Includes painted door and painted frame.





System Name	Description
C1030 - Fittings-Restroom Accessories	The restroom accessories include mirror, grab bars, paper towel dispenser and disposal, diaper changing station, toilet paper holder and soap dispenser.
C1030 - Fittings-Toilet Partitions	Restrooms are equipped with standard quality, ceiling-hung partitions.
${\it C1035-Identifying\ Devices-Fittings-Signage\ (Room\ Numbering\ and\ Identification)}$	Room, door and graphic symbol signs. Adhesive backs and Braille. Observed years remaining increased due to system condition.
C3010 - Wall Finishes-Ceramic Wall Tile	$Building \ wall \ coverings \ include \ 100 \ x \ 100 - mm \ thin \ set \ ceramic \ decorator \ tiles \ at \ medium \ price. \ Tile \ job \ includes \ wainscot \ with \ bullnose \ trim.$
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	Interior wall finishes include standard paint finish.
C3020 - Floor Finishes-Carpeting - Tile	Floor finishes include a standard range carpet tiles (460 x 460 or 600 x 600 modules) and vinyl or rubber base, for medium traffic areas.
C3020 - Floor Finishes-Carpeting Broadloom	Floor finishes include medium priced carpeting and base.
C3020 - Floor Finishes-Ceramic Floor Tile	Floor finishes include ceramic tile and base. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted concrete with an abrasive textured additive to prevent slipping. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Vinyl Sheet Goods	Floor finishes include areas of vinyl sheet goods flooring and related base. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-Acoustic Ceiling Tile System	Standard suspended ACT ceiling system with $600 \times 600 \times 1,200$ mm regular tiles in 24 or 14-mm grids. Use add-ons as applicable. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-GWB Taped and Finished	GWB ceiling system over 2,400-mm floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to metal or wood furring.
D2010 - Plumbing Fixtures-Custodial/Utility Sinks	The plumbing fixtures include a custodial/utility sink in the janitor's closet.
D2010 - Plumbing Fixtures-Restroom Fixtures - Std Density	The restroom fixtures include vitreous china urinals and water closets, vitreous china or molded lavatories.
$\ensuremath{D2010}$ - Plumbing Fixtures-Sinks - Breakroom and Conference Room	The plumbing fixtures include stainless steel counterset sink located in the break rooms and conference room
D2020 - Domestic Water Distribution-Domestic Water Distribution System	The building water distribution system includes a new city water service with branch piping, backflow preventer, water meter, valves, insulation and fittings.
D2020 - Domestic Water Distribution-Water Heater - Gas - 40 Gal	The domestic hot water is provided by a propane fired, 151 L water heater with a 40,000 btuh burner and circulating pump. The water heater was installed in 2015.
D2030 - Sanitary Waste-Sanitary Sewage Holding Tank	The sanitary sewage drains to a holding tank located behind the building. The tank is periodically sucked out by connection to a discharge standpipe. There have been some issues with the discharge piping.
D2030 - Sanitary Waste-Sanitary Waste - Gravity Discharge	The building includes an sanitary waste system, hung from the slab in the crawl space and discharging to a holding tank.
D2040 - Rain Water Drainage-Roof Drainage - Gravity	Rain water drainage includes roof drains and piping, and discharges on grade.





System Name	Description
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building includes a propane gas supply and distribution system.
$\ensuremath{D3020}$ - Heat Generating Systems-Boiler Heating Water - Propane Fired	Heat is provided by two high efficiency, 96% AFUE, hot water boilers with circulating pumps and accessories. the boilers are propane fired.
D3020 - Heat Generating Systems-Humidifier - Steam Generating - Whole Building	There is n electric, steam generating humidifier installed in the central air handling unit. Note: The unit is functioning normally and the observed years remaining has been extended.
D3030 - Cooling Generating Systems-Air Cooled Condensing Unit	Cooling is provided by a 20 ton air cooled condensing unit located on the roof.
${\bf D3040 - Distribution \ Systems-Central \ Station \ Air \ Handler - AHU-1}$	The HVAC system consists of one air handler located in the boiler room. The system is in good condition and the observed useful life has been extended.
$D3040-Distribution\ Systems-Ductwork\ Distribution\ System$	The HVAC system includes ductwork, dampers, diffusers, installed throughout the building.
$\ensuremath{D3040}$ - Distribution Systems-Exhaust System - Restroom w/Roof Fan	HVAC ventilation system includes roof-mounted restroom exhaust system with a fan and ductwork. Note: This system is in good condition and the observed year remaining has been increased.
D3040 - Distribution Systems-Heating Hot Water - Building Heating Water Distribution System	The Hot water Heating System consists of distribution piping, valves, insulation and fittings. The system is in good condition and has been maintained so the observed years remaining has been extended.
$\ensuremath{D3040}$ - Distribution Systems-Perimeter Heat System - Hydronic Fin Tube	The HVAC distribution includes a two-pipe system of heating hot water, with perimeter units. Note: This system is in good condition and the observed years remaining has been extended.
D3060 - Controls and Instrumentation-Compressor - Temperature Control System	The building has a duplex compressor unit for the pneumatic control system. Note: The system is functioning normally, and the observed years remaining has been extended.
D3060 - Controls and Instrumentation-Pneumatic Controls	The building includes a pneumatic HVAC control system with air supply, actuators, thermostats and control panel. Note: The system is in good condition and the new boilers have an OEM control package, therefore, the observed useful life has been extended.
D5012 - Low Tension Service and DistDistribution Equipment, Panelboards, and Feeders - $600Y/347V \& 208Y/120V$	The electrical distribution system includes panelboards, feeders and associated equipment. Note: The system is in good condition and functioning normally, and the observed years remaining has been extended.
D5012 - Low Tension Service and DistMain Electrical Service	The building includes an electrical service, which includes incoming feeders and meter. Note: The equipment is in good condition, and the observed years remaining has been extended.
D5012 - Low Tension Service and DistTransformer - 112.5 KVA	The facility has a transformer located in the boiler room. Note: The equipment is functioning normally, and the observed years remaining has been extended.
$\rm D5020$ - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	The exterior lighting consists of LED wall pack fixtures.
D5021 - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and utilization equipment. Note: This system is in good condition and functioning normally, and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Interior - Fluorescent	The building has fluorescent light fixtures throughout. Note: The lighting is operating normally and in good condition, and the observed years remaining has been extended.





System Name	Description
D5031 - Public Address and Music Systems-Public Address System	The building includes a public address system with speakers, amplifier and wiring. Note: The system functioning normally, and the observed years remaining has been expended.
D5033 - Telephone Systems-Telephone System with VOIP	Telephone service with VOIP is provided throughout the building with distribution wiring extended to telephone outlets.
D5037 - Fire Alarm Systems-Fire Alarm System	The building has a fire alarm system panel, sensors, horns and smoke detectors. The system does not meet current codes for fire alarm systems.
D5039 - Local Area Networks-LAN System	The facility includes a LAN system and data cabling system with a UPS. Note: The system is functioning normally, and the observed years remaining has been extended.
D5092 - Emergency Light and Power Systems-Emergency Backup Power System	There is an exterior connection and a transfer swith in the electrical room for connection with a portable emergency generator. Note: The system is in good condition and the observed years remaining has been extended.
D5092 - Emergency Light and Power Systems-Emergency Battery Pack Lights	The emergency lighting system includes self-contained battery packs and lights in the egress passages.
D5092 - Emergency Light and Power Systems-Exit Signs	The building has illuminated exit signs. (Picture not available)
E - Equipment and Furnishings-Fixed Casework Cabinetry	Building includes average plastic laminate casework including wall and under counter cabinets and countertops, without appliances. Observed years remaining increased due to system condition.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Pile Foundation	75	6	1984	2059	12,423	207,045
A - Substructure	Grade Beams	75	6	1984	2059	9,501	158,353
A - Substructure	Foundation Wall and Footings - Crawlspace	75	6	1984	2059	7,700	123,194
B10 - Superstructure	Single-Story - Wood - Crawl Space	75	6	1984	2059	7,414	123,559
B2010 - Exterior Walls	Wood Stud Framing With Metal Panel Siding	50	12	1984	2034	8,856	73,801
B2020 - Exterior Windows	Aluminum Windows	30	125	1984	2023	85,633	68,506
B2030 - Exterior Doors	Door Assembly - 900 x 2,100 HM	30	125	1984	2023	33,283	26,627
B30 - Roofing	Modified Bitumen	20	125	1984	2023	126,484	101,187





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C1010 - Partitions	GWB Walls - Standard (Non-Painted)	50	62	1984	2034	17,887	28,849
C1020 - Interior Doors	Swinging Doors - 900 x 2100 HM & Wood	50	125	1984	2034	116,071	92,857
C1030 - Fittings	Restroom Accessories	25	125	2009	2034	12,730	10,184
C1030 - Fittings	Toilet Partitions	40	125	1984	2024	16,051	12,841
C1035 - Identifying Devices	Fittings - Signage (Room Numbering and Identification)	10	125	1984	2021	4,351	3,481
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2014	2024	7,585	6,068
C3010 - Wall Finishes	Ceramic Wall Tile	25	125	2009	2034	12,568	10,055
C3020 - Floor Finishes	Vinyl Sheet Goods	12	125	1996	2020	7,792	6,234
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	1999	2020	657	525
C3020 - Floor Finishes	Ceramic Floor Tile	25	125	1984	2021	23,682	18,946
C3020 - Floor Finishes	Carpeting - Tile	10	125	2016	2026	34,216	27,373
C3020 - Floor Finishes	Carpeting Broadloom	10	125	1984	2018	34,354	27,483
C3030 - Ceiling Finishes	Acoustic Ceiling Tile System	20	125	1984	2026	86,932	69,546
C3030 - Ceiling Finishes	GWB Taped and Finished	30	125	1984	2026	12,298	9,838
D2010 - Plumbing Fixtures	Custodial/Utility Sinks	30	125	1984	2021	7,781	6,225
D2010 - Plumbing Fixtures	Restroom Fixtures - Std Density	30	125	1984	2021	32,555	26,044
D2010 - Plumbing Fixtures	Sinks - Breakroom and Conference Room	30	125	1984	2020	6,879	5,503
D2020 - Domestic Water Distribution	Water Heater - Gas - 40 Gal	10	112	2015	2025	9,898	8,837
D2020 - Domestic Water Distribution	Domestic Water Distribution System	30	112	1984	2023	32,210	28,632
D2030 - Sanitary Waste	Sanitary Sewage Holding Tank	40	100	1984	2024	40,960	40,960
D2030 - Sanitary Waste	Sanitary Waste - Gravity Discharge	50	125	1984	2034	109,267	87,414
D2040 - Rain Water Drainage	Roof Drainage - Gravity	50	125	1984	2034	21,929	17,543





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1984	2024	17,396	13,917
D3020 - Heat Generating Systems	Humidifier - Steam Generating - Whole Building	30	125	1984	2021	34,537	27,630
D3020 - Heat Generating Systems	Boiler Heating Water - Propane Fired	30	125	2018	2048	49,777	39,822
D3030 - Cooling Generating Systems	Air Cooled Condensing Unit	15	125	1986	2021	31,855	25,484
D3040 - Distribution Systems	Ductwork Distribution System	40	125	1984	2024	78,119	62,495
D3040 - Distribution Systems	Heating Hot Water - Building Heating Water Distribution System	25	125	1984	2024	154,400	123,520
D3040 - Distribution Systems	Perimeter Heat System - Hydronic Fin Tube	18	112	1984	2024	171,252	152,224
D3040 - Distribution Systems	Central Station Air Handler - AHU-1	25	125	1984	2023	119,195	95,356
D3040 - Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	1984	2023	5,033	4,027
D3060 - Controls and Instrumentation	Compressor - Temperature Control System	20	125	1984	2021	43,378	34,702
D3060 - Controls and Instrumentation	Pneumatic Controls	20	112	1984	2023	108,214	96,620
D5012 - Low Tension Service and Dist.	Main Electrical Service	30	125	1984	2024	22,325	17,860
D5012 - Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders - 600Y/347V & 208Y/120V	30	125	1984	2023	70,098	56,079
D5012 - Low Tension Service and Dist.	Transformer - 112.5 KVA	20	125	1984	2024	22,642	18,114
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2037	14,707	11,766
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1984	2023	29,418	23,534
D5022 - Lighting Equipment	Lighting Fixtures - Interior - Fluorescent	20	125	1984	2022	53,616	42,893
D5031 - Public Address and Music Systems	Public Address System	15	125	1984	2023	21,649	17,319
D5033 - Telephone Systems	Telephone System with VOIP	10	125	2010	2020	3,421	2,737
D5037 - Fire Alarm Systems	Fire Alarm System	10	125	1984	2018	37,952	30,361
D5039 - Local Area Networks	LAN System	15	125	2005	2023	44,355	35,484

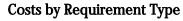


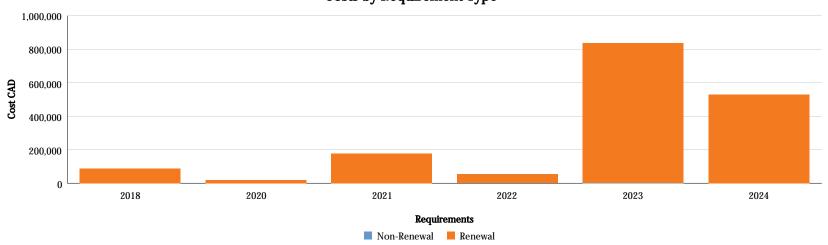


Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5092 - Emergency Light and Power Systems	Exit Signs	10	125	1984	2018	8,573	6,859
D5092 - Emergency Light and Power Systems	Emergency Backup Power System	20	125	1984	2023	125,735	100,588
D5092 - Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1984	2018	7,756	6,205
E - Equipment and Furnishings	Fixed Casework Cabinetry	25	125	1984	2023	34,228	27,382
				Subtotal			2,500,684
			Overhead: Subtotal			0 0	
		Total Replacement Value Based on System Costs with Overheads					2,500,684



Requirements including Renewals





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Air Cooled Condensing Unit Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	31,855
Aluminum Windows Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	85,633
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	29,418
Carpeting Broadloom Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2018	34,354





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Central Station Air Handler - AHU-1 Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	119,195
Ceramic Floor Tile Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	23,682
Compressor - Temperature Control System Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	43,378
Concrete - Painted or Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	657
Custodial/Utility Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	7,781
Distribution Equipment, Panelboards, and Feeders - $600 \mbox{Y}/347 \mbox{V} \ \& \ 208 \mbox{Y}/120 \mbox{V}$ Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	70,098
Domestic Water Distribution System Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	32,210
Door Assembly - 900 x 2,100 HM Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	33,283
Ductwork Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	78,119
Emergency Backup Power System Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	125,735
Emergency Battery Pack Lights Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	7,756
Exhaust System - Restroom w/Roof Fan Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	5,033
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	8,573
Exterior Walls - Deteriorating Weatherstripping	No	B2010 - Exterior Walls	Maintenance	2- Due within 2 Years of Inspection	Aug 14, 2020	0
Fire Alarm System Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	37,952





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Fittings - Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	4,351
Fixed Casework Cabinetry Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	34,228
Floor Finishes - Aged Vinyl Composite Tile Janitor Room	No	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	1,548
Heating Hot Water - Building Heating Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	154,400
Humidifier - Steam Generating - Whole Building Renewal	Yes	D3020 - Heat Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	34,537
LAN System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	44,355
Lighting Fixtures - Interior - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	53,616
Main Electrical Service Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	22,325
Modified Bitumen Renewal	Yes	B30 - Roofing	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	126,484
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	7,585
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	171,252
Pneumatic Controls Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	108,214
Propane Gas Supply for Bldg Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	17,396
Public Address System Renewal	Yes	D5031 - Public Address and Music Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	21,649
Restroom Fixtures - Std Density Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	32,555





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Sanitary Sewage Holding Tank Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	40,960
Sinks - Breakroom and Conference Room Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	6,879
Telephone System with VOIP Renewal	Yes	D5033 - Telephone Systems	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	3,421
Toilet Partitions Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	16,051
Transformer - 112.5 KVA Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	22,643
Vinyl Sheet Goods Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	7,792
Total						1,706,953





Region: Central and Arctic

Asset: Carpenter Shop

Site: Hay River CCG Base

Asset Number: C L 00002 17465

Assets are ordered by Asset Name

ne Currency: CAD

Statistics

FCI Cost:	581,227	FCI:	0.42
RI Cost:	587,933	RI:	0.43
Total Requirement Cost:	581,229	Size:	318 SM
Current Replacement Value:	1,375,444		

Address 1 City 42037 Mackenzie Highway

Hay River

Address 2

State/Province/Region

NT





Photo



Signature - Exterior Elevation Carpenter Shop

Asset Description

CARPENTER SHOP: ASSET CODE C L 00002 17465

ARCHITECTURAL

Genera

The Carpenter Shop building, Asset Code C L 00002 17465, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a single level building with a slab on grade foundation built in 1968. The Carpenter Shop building contains 318 square meters of floor space.

Construction

The substructure construction found beneath the Carpenter Shop building facility consists of a concrete floor slab on grade with exterior perimeter cast concrete foundation walls founded on strip concrete footings. Exterior walls are clad with prefinished metal panel siding on an insulated steel framed backup wall, finished with vapour retarder and either painted gypsum wallboard or prefinished metal wall panels. Roof framing consists of a metal roof deck supported on structural steel members and waterproofed with a standing seam metal roof panel assembly. Fenestration consists of wood framed window assemblies and entry doors are finished, wood panel doors and frames, some with glazing.





Classification

The Carpenter Shop building can be classified as a Group F, Division 3 Industrial Low Hazard Occupancy as a workshop per Table 3.1.2.1. of the 2010 National Building Code of Canada.

Mechanical

The building heat is provided by a high efficiency hot water boiler with pumps, piping and accessories. There is a heating air handler and baseboard radiation. The painting are has a ventilation system. The pluming system consists of a water holding tank, fixtures and piping. There is a shop compressed air system.

Electrical

The electrical system consists of the incoming service, panelboards and power distribution. The building has fluorescent lighting with explosion proof fixtures in the paint room.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - No Basement	Basic foundation for building without basement - to include strip footing, 1200mm foundation wall and damp proofing. Also included are underdrains.
A - Substructure-Structural Slab on Grade - Light Industrial	The building substructure includes a light industrial type structural slab on grade.
B10 - Superstructure-Low Slope Roof Assembly - Metal Deck Steel Framing	Roof superstructure consists of steel columns and steel joist roof structure.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2020 - Exterior Windows-Windows - Aluminum	The building includes aluminum framed exterior units with insulating glass.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Metal Roofing - High End	The roof covering is of formed metal roofing, such as standing seam metal.
C1010 - Partitions-GWB on Wood Stud	The building interior includes standard GWB on wood stud partitions, taped and finished, but not painted, no insulation. Observed years remaining increased due to system condition.
C1020 - Interior Doors-Swinging Doors Wood and Metal	Interior doors include wood and metal doors and frames with standard hardware. System cost includes both single and double doors. Observed years remaining increased due to system condition.
C1030 - Fittings-Washroom Accessories	The washroom accessories typically include mirror, grab bars, paper towel dispenser and disposal, toilet paper holder and soap dispenser. Observed years remaining increased due to system condition.
C1035 - Identifying Devices-Signage (Room Numbering and Identification)	The building has way finding signage which typically includes door numbers, names and graphics. Observed years remaining increased due to system condition.
C20 - Stairs-Stairs Typical	The interior stairs include two, 12-riser flights per story with hand and guard rails.





System Name	Description
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	Interior wall finishes include standard paint finish.
C3010 - Wall Finishes-Prefinished Metal Wall Panels	Interior wall finishes include prefinished metal wall panels. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted concrete with an abrasive textured additive to prevent slipping.
C3020 - Floor Finishes-Linoleum Sheet Goods	Floor finishes include areas of seamless linoleum and or marmoleum sheet goods flooring and related base.
C3030 - Ceiling Finishes-GWB Taped and Finished	System includes GWB ceiling at 2400mm or more above the floor level; typically taped, finished and painted with primer and 2 finish coats. Ceiling supported by a suspension system or fastened to metal or wood furring.
C3030 - Ceiling Finishes-Painted Roof Superstructure	Roof superstructure is painted. Observed years remaining increased due to system condition.
D2010 - Plumbing Fixtures-Emergency Eyewash	Plumbing fixtures include an emergency eyewash unit.
D2010 - Plumbing Fixtures-Restroom Fixtures	The restroom fixtures include water closet and lavatory.
D2010 - Plumbing Fixtures-Utility Sink	The plumbing fixtures include laundry tub type utility sink.
D2020 - Domestic Water Distribution-Water Distribution Piping	The building domestic water distribution system includes a distribution piping. Note: The system is in good condition with some recent modifications. The observed years remaining has been extended.
D2020 - Domestic Water Distribution-Water Heater - Elecric - 10 Gal	The domestic hot water is provided by a 10-gallon residential-grade electric water heater.
D2023 - Domestic Water Supply Equipment-Potable Water Tank - Fiberglass - 2270 L	The system includes a single-wall, aboveground 2270 L fiberglass storage tank for potable water usage and pump. The system is located in the attic
D2030 - Sanitary Waste-Sanitary Sewage Holding Tank	The sanitary sewage drains to a holding tank located behind the building. The tank is periodically sucked out by connection to a discharge standpipe. There have been some issues with the discharge piping.
D2030 - Sanitary Waste-Sanitary Waste - Gravity Disch - Average	The building includes an sanitary waste system piped to a holding tank. Note: The system is functioning normal and appears to be in good condition. The overserved useful life has been extended.
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building includes a propane gas supply and distribution system.
D2090 - Other Plumbing Systems-Shop Compreessed Air System	The building has a shop compressed air system with a compressor and piping.
D3020 - Heat Generating Systems-Boiler Heating Water - Propane Fired	Heat is provided by a high efficiency, 96% AFUE, hot water boiler and accessories. The boilers are propane fired.
D3040 - Distribution Systems-Air Handler with Ductwork	The HVAC system includes air handling units (fan coil), ceiling hung with distribution ductwork. Note: The system is in good condition and observed years remaining has been extended.
D3040 - Distribution Systems-Exhaust System Paint Room	The building has a dedicated paint room exhaust system. Note: The system is in good condition and the observed years remaining has been increased.
D3040 - Distribution Systems-Heating Hot Water - Building	The Hot water Heating System consists of pumps, distribution piping, valves, insulation and fittings. The system is in good condition and has been





System Name	Description
Heating Water Distribution System	maintained with some modifications so the observed years remaining has been extended.
D3040 - Distribution Systems-Perimeter Heat System - Hydronic Fin Tube	HVAC distribution includes a two-pipe system of heating hot water with perimeter baseboard radiation. The system is in good condition with some recent modifications, and the observed years remaining has been extended.
D3040 - Distribution Systems-Sawdust Collection System Removal	The building has a sawdust collection system that is no longer used and should be removed.
D3050 - Terminal and Package Units-Unit Heaters - Electric	Heating in some rooms is provided by suspended, electric unit heaters. Note: The unit is good condition and the observed useful life has been extended.
D5012 - Low Tension Service and DistElectrical Distribution Equipment, Panelboards and Feeders	The electrical distribution system for this building includes panelboards, feeders, and associated equipment. The system is go condition and the observed years remaining has been extended.
D5012 - Low Tension Service and DistTransformer	The facility has a transformer located in an outside in a boxed enclosure, and a picture could not be taken. Note: The equipment is functioning normally, and the observed years remaining has been extended.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	Exterior lighting consists of HID wall pack units.
D5021 - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and power to the shop equipment. Note: The system is in good condition and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Explosion Proof in Paint Room	The paint room has explosion proof fluorescent light fixtures. Note: The system is operating normally and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Fluorescent	The building lighting system includes fixtures, conduit and wire. Note: The fixtures are operating normally, and the observed years remaining has been expending.
D5039 - Local Area Networks-LAN & Telephone System	$Building\ includes\ a\ combination\ LAN\ and\ Telephone\ System.\ The\ system\ is\ functioning\ normally\ and\ the\ observed\ years\ remaining\ has\ been\ extended.$
D5092 - Emergency Light and Power Systems-Emergency Battery Pack Lights	The emergency lighting system includes self-contained battery packs and lights.
D5092 - Emergency Light and Power Systems-Exit Signs	The emergency system includes the installation of Exit signs.
E - Equipment and Furnishings-Casework Fixed	The building includes typical fixed casework for a work shop.
G2023 - Curbs, Rails and Barriers-Pipe Bollards	The site contains metal parking bumpers, pipe bollards, concrete filled, painted, 2400 mm L \times 1200 mm D hole, 200 mm diameter.





Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade - Light Industrial	75	6	1968	2043	4,415	73,585
A - Substructure	Foundation Wall and Footings - No Basement	75	6	1968	2043	4,895	78,312
B10 - Superstructure	Low Slope Roof Assembly - Metal Deck Steel Framing	75	6	1968	2043	4,413	70,609
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1968	2043	53,160	85,056
B2020 - Exterior Windows	Windows - Aluminum	30	125	1993	2023	65,301	52,241
B2030 - Exterior Doors	Door Assembly - Single	30	125	1993	2023	32,442	25,953
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1998	2028	4,790	3,832
B30 - Roofing	Metal Roofing - High End	65	125	1968	2033	378,896	303,117
C1010 - Partitions	GWB on Wood Stud	50	62	1963	2028	9,959	15,935
C1020 - Interior Doors	Swinging Doors Wood and Metal	50	125	1968	2026	58,173	46,538
C1030 - Fittings	Washroom Accessories	25	125	1993	2023	7,986	6,389
C1035 - Identifying Devices	Signage (Room Numbering and Identification)	10	125	2008	2021	2,995	2,396
C20 - Stairs	Stairs Typical	75	38	1968	2043	16,908	45,087
C3010 - Wall Finishes	Prefinished Metal Wall Panels	25	81	1993	2028	15,679	19,357
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2013	2023	5,476	4,381
C3020 - Floor Finishes	Linoleum Sheet Goods	25	125	2012	2037	11,932	9,546
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	2008	2023	7,253	5,803
C3030 - Ceiling Finishes	Painted Roof Superstructure	30	125	1993	2028	3,983	3,186
C3030 - Ceiling Finishes	GWB Taped and Finished	30	125	1998	2028	8,555	6,844





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D2010 - Plumbing Fixtures	Restroom Fixtures	30	125	1968	2019	1,891	1,513
D2010 - Plumbing Fixtures	Emergency Eyewash	30	125	1968	2018	4,381	3,505
D2010 - Plumbing Fixtures	Utility Sink	30	125	1968	2019	6,817	5,453
D2020 - Domestic Water Distribution	Water Distribution Piping	30	112	1968	2023	9,892	8,833
D2020 - Domestic Water Distribution	Water Heater - Elecric - 10 Gal	10	112	2015	2023	4,367	3,899
D2023 - Domestic Water Supply Equipment	Potable Water Tank - Fiberglass - 2270 L	35	125	2008	2023	21,047	16,837
D2030 - Sanitary Waste	Sanitary Waste - Gravity Disch - Average	50	125	1968	2023	7,166	5,733
D2030 - Sanitary Waste	Sanitary Sewage Holding Tank	40	100	1968	2024	40,960	40,960
D2090 - Other Plumbing Systems	Shop Compreessed Air System	20	105	2017	2037	29,764	28,347
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1968	2024	11,974	9,579
D3020 - Heat Generating Systems	Boiler Heating Water - Propane Fired	30	125	1968	2048	25,222	20,178
D3040 - Distribution Systems	Air Handler with Ductwork	25	125	1968	2023	24,065	19,252
D3040 - Distribution Systems	Perimeter Heat System - Hydronic Fin Tube	18	112	1968	2023	33,641	30,036
D3040 - Distribution Systems	Exhaust System Paint Room	15	125	1968	2021	11,305	9,044
D3040 - Distribution Systems	Sawdust Collection System Removal	15	125	1968	2019	4,690	3,752
D3040 - Distribution Systems	Heating Hot Water - Building Heating Water Distribution System	25	125	1968	2024	9,820	7,856
D3050 - Terminal and Package Units	Unit Heaters - Electric	15	112	1968	2023	13,190	11,777
D5012 - Low Tension Service and Dist.	Transformer	20	125	1968	2023	38,935	31,148
D5012 - Low Tension Service and Dist.	Electrical Distribution Equipment, Panelboards and Feeders	30	125	1968	2023	34,302	27,441
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2023	1,237	989
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1968	2023	20,249	16,199
D5022 - Lighting Equipment	Lighting Fixtures - Fluorescent	20	125	1968	2023	34,457	27,565

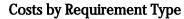


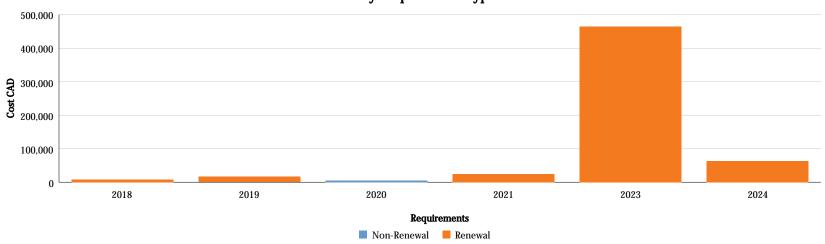


Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5022 - Lighting Equipment	Lighting Fixtures - Explosion Proof in Paint Room	20	125	1968	2023	104,292	83,433
D5039 - Local Area Networks	LAN & Telephone System	15	106	1968	2021	10,069	9,499
D5092 - Emergency Light and Power Systems	Exit Signs	10	125	1968	2019	2,840	2,272
D5092 - Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	2005	2018	3,549	2,840
E - Equipment and Furnishings	Casework Fixed	30	125	1968	2028	83,796	67,037
G2023 - Curbs, Rails and Barriers	Pipe Bollards	30	125	1968	2030	27,876	22,301
					Subtotal		1,375,444
					Overhead: Subtotal		0 0
		Total Replacement Value Based on System Costs with Overheads					1,375,444



Requirements including Renewals





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Air Handler with Ductwork Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	24,065
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	20,249
Concrete - Painted or Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	7,253
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	32,442
Electrical Distribution Equipment, Panelboards and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	34,302
Emergency Battery Pack Lights Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	3,549
Emergency Eyewash Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	4,381
Exhaust System Paint Room Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	11,305





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	2,840
Exterior Windows - Deteriorating Paint Finish Window Frames	No	B2020 - Exterior Windows	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	4,640
Heating Hot Water - Building Heating Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	9,820
LAN & Telephone System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	10,069
Lighting - Exterior - LED Wall Packs Renewal	Yes	D5020 - Lighting and Branch Wiring	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	1,237
Lighting Fixtures - Explosion Proof in Paint Room Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	104,292
Lighting Fixtures - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	34,457
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	5,476
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	33,641
Potable Water Tank - Fiberglass - 2270 L Renewal	Yes	D2023 - Domestic Water Supply Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	21,047
Propane Gas Supply for Bldg Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	11,974
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	1,891
Sanitary Sewage Holding Tank Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	40,960
Sanitary Waste - Gravity Disch - Average Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	7,166
Sawdust Collection System Removal Renewal	Yes	D3040 - Distribution Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	4,690
Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	2,995
Transformer Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	38,935
Unit Heaters - Electric Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	13,190
Utility Sink Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	6,817
Washroom Accessories Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	7,986
Water Distribution Piping Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	9,892
Water Heater - Elecric - 10 Gal Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	4,367
Windows - Aluminum Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	65,301
Total						581,229





Region: Central and Arctic **Asset:** DFO Wharf

Site: Hay River CCG Base Asset Number: C L 00002 58873

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	0	FCI:	0.00
RI Cost:	0	RI:	0.00
Total Requirement Cost:		Size:	250 SM
Current Replacement Value:	851,004		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation DFO Wharf

Asset Description

DFO WHARF, ASSET CODE: C L 00002 58873

ARCHITECTURAL

General

The Hay River Canadian Coast Guard Base can be found at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The site infrastructure includes the DFO Wharf, Asset Code: C L 00002

58873, which sits on the western most part of the site on the Hay River. Two other wharfs can be found just east of the DFO Wharf, but are not part of this condition assessment. The DFO Wharf was built in 2001, is 52 lineal meters in length and includes a boat launch ramp. The wharf consists of sheet steel piling shore protection tied back to the shore and backfilled with granular material behind the piling. The wearing surface adjacent to the wharf is compacted gravel.

System Description





System Name	Description
A - Substructure-Pile Anchors	The DFO Wharf sheet piling is tied back into the ground on shore using two Z-piles at each anchor. Twenty-five anchors in total.
G2011 - Bases and Sub-Bases-Boat Launch - Rigid Pavement Base Course	Rigid pavement (concrete) includes a 300-mm thick gravel base course; spread and compaction included.
G2021 - Bases and Sub-Bases-DFO Wharf Base Course Backfill	Parking lot flexible pavement (bituminous) includes a 457-mm thick gravel base course for large paved areas.
G2021 - Bases and Sub-Bases-DFO Wharf Intermediate Course	Parking lot flexible pavement includes a 75-mm thick bituminous intermediate binder course for large paved areas.
G2031 - Paving and Surfacing-Boat Launch - Rigid Pavement Wearing Surface	Structural concrete, in place, slab on grade, 150mm thick.
G2049 - Miscellaneous Structures-Sheet Steel Seawall	Site development includes steel sheet piling seawall, steel sheeting, 3,600 meters high, driven from shore, for protecting shoreline. The sheet piling is anchored to the shore via ties.
G2049 - Miscellaneous Structures-Site Development - Mooring Accessories	Site development includes dock cleats and service utilities for water vessels to tie up to and tender into docks.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Pile Anchors	75	6	2001	2076	31,297	521,615
G2011 - Bases and Sub-Bases	Boat Launch - Rigid Pavement Base Course	65	12	2001	2066	58	480
G2021 - Bases and Sub-Bases	DFO Wharf Base Course Backfill	65	12	2001	2066	678	5,652
G2021 - Bases and Sub-Bases	DFO Wharf Intermediate Course	25	62	2001	2026	3,262	5,262
G2031 - Paving and Surfacing	Boat Launch - Rigid Pavement Wearing Surface	25	125	2001	2026	1,986	1,589
G2049 - Miscellaneous Structures	Sheet Steel Seawall	60	125	2001	2061	393,425	314,740
G2049 - Miscellaneous Structures	Site Development - Mooring Accessories	30	125	2001	2031	2,083	1,666
		Subtotal					851,004





Overhead: 0

Subtotal 0

Total Replacement Value Based on System Costs with Overheads 851,004

Requirements including Renewals

No data available.





Region: Central and Arctic **Asset:** Fences and Gates

Site: Hay River CCG Base Asset Number: C L 00002 18254

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	262,698	FCI:	1.10	
RI Cost:	262,698	RI:	1.10	
Total Requirement Cost:	262,698	Size:	1 SM	
Current Replacement Value:	239,137			

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT



DRAFT

Asset Overview Report By Asset Name

Photo



Signature - Exterior Elevation Fences and Gates

Asset Description

FENCES AND GATES: ASSET CODE C L 00002 18254

ARCHITECTURAL

General

The Fences and Gates infrastructure, Asset Code C L 00002 18254, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. Several types of Fences and Gates can be found on the compound and includes: Perimeter Chain Link Fencing, Automatic Sliding Chain Link Security Gate, Manual Vehicle Entrance Gate, Post and Chain Fencing and Metal Pipe Rail Fencing. The Fencing and Gates infrastructure dates from 1970.

System Description





System Name	Description
G2041 - Fences and Gates-Fencing - Vehicle Gates Chain Link Powered	Site development includes chain link fence gates and posts, motor operators for gates, up to 13.7-m sliding, excludes electric wiring and excavation. Observed years remaining increased due to system condition.
G2041 - Fences and Gates-Fencing - Vehicle Gates Manual	Site development includes swing metal fence gates and posts for vehicular traffic. Observed years remaining increased due to system condition.
G2041 - Fences and Gates-Site Development - Fencing - Chain Link	Site development includes 3-m high chain link fencing with 50-mm post.
G2041 - Fences and Gates-Site Development - Fencing Metal Rail	Site development includes 1.066-mm high metal posts with 2 metal pipe rails. Observed years remaining increased due to system condition.
G2041 - Fences and Gates-Site Development - Fencing Post and Chain	Site development includes 1,200-mm high fence posts, 1,200-mm o.c. with steel chain strung between them. Observed years remaining increased due to system condition.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2041 - Fences and Gates	Fencing - Vehicle Gates Manual	20	125	1990	2023	7,437	5,950
G2041 - Fences and Gates	Fencing - Vehicle Gates Chain Link Powered	20	125	1990	2023	17,410	13,928
G2041 - Fences and Gates	Site Development - Fencing - Chain Link	20	125	1990	2023	237,851	190,281
G2041 - Fences and Gates	Site Development - Fencing Post and Chain	20	125	1990	2025	33,426	26,741
G2041 - Fences and Gates	Site Development - Fencing Metal Rail	25	125	1995	2028	2,797	2,237
			Subtotal				

Overhead: 0

Total Replacement Value Based on System Costs with Overheads

239,137





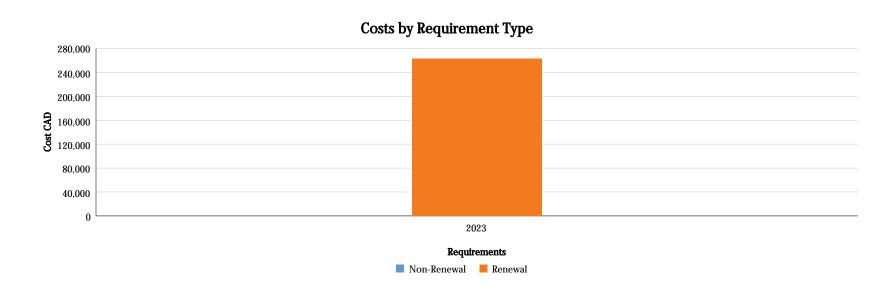
Subtotal 0

Total Replacement Value Based on System Costs with Overheads 239,137

Requirements including Renewals







Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Fencing - Vehicle Gates Chain Link Powered Renewal	Yes	G2041 - Fences and Gates	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	17,410
Fencing - Vehicle Gates Manual Renewal	Yes	G2041 - Fences and Gates	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	7,437
Site Development - Fencing - Chain Link Renewal	Yes	G2041 - Fences and Gates	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	237,851
Total						262,698





Region: Central and ArcticAsset: Fish Management ComplexSite: Hay River CCG BaseAsset Number: C L 00002 15914

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	2,892,649	FCI:	0.60
RI Cost:	3,261,425	RI:	0.67
Total Requirement Cost:	3,143,944	Size:	1,164 SM
Current Replacement Value:	4,844,387		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation Fish Management Complex

Asset Description

FISH MANAGEMENT COMPLEX: ASSET CODE C L 00002 15914

ARCHITECTURAL

General

The Fish Management Complex building. Asset Code C L 00002 15914, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a two level building with crawlspace foundation built in 1974. The Fish Management Complex contains 1,164 square meters of floor space.

Construction

The substructure construction found beneath the Fish Management Complex facility consists of an elevated concrete floor, supported on concrete grade beams and sitting on an exterior perimeter cast concrete foundation walls founded on strip concrete footings. The entire foundation substructure is supported by steel piles driven into the highly compressible discontinuous permafrost soils to prevent subsidence and settlement issues. Exterior walls are clad with prefinished metal panel siding on an insulated steel framed backup wall, finished with vapour retarder and either painted gypsum wallboard or prefinished metal wall panels. Roof framing consists of a metal roof deck supported by structural steel support members and is waterproofed with asphalt shingles.





Fenestration consists of insulated aluminum window assemblies and entry doors are finished, metal panel doors and frames, some with insulated glazing.

Classification

The Fish Management Complex can be classified as a Group F, Division 2, Industrial Medium Hazard Occupancy as a laboratory per Table 3.1.2.1. of the 2010 National Building Code of Canada.

Mechanical

The building is heated by a hydronic heating system with boilers, pumps and distribution piping. There is an HVAC system serving the second floor with air conditioning. Domestic water from a municipal system was recently added to the building and there is a domestic water heater. Sewage drains by gravity to a holding tank. There are fire protection stand pipes and hose cabinets throughout the building and those are now connected to the water system.

Electrical

The building has a main electrical and an electrical distribution system. There is fluorescent lighting throughout. The building has a connection and transfer switch to connect to a portable electric generator.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - Crawlspace	Basic perimeter foundation for building with crawlspace. System cost includes strip footing, 1.8 meter high foundation wall, damp proofing and underdrain and is based on average height of crawlspace at 600mm.
A - Substructure-Grade Beams	The substructure includes grade beams with a span of 9.14 meters and 1,016-mm deep.
A - Substructure-Pile Foundation	The building substructure includes pile caps and piles 15-LM in length in clusters of 10 at each pile cap.
B10 - Superstructure-Flat Roof Assembly - Metal Deck Steel Framing	Roof superstructure consists of steel columns and steel joist roof structure.
B10 - Superstructure-Floor Assembly - Cast in Place Concrete	Floor superstructure consists of reinforced cast in place concrete construction.
B1015 - Exterior Stairs and Fire Escapes-Exterior Stairs - Steel	The facility has exterior steel stairs, (one flight), with railings. Measure each flight.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2020 - Exterior Windows-Windows - Aluminum	The building includes aluminum framed exterior units with insulating glass. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Asphalt Shingles	The building roof is finished with asphalt shingles. Observed years remaining increased due to system condition.
C1010 - Partitions-CMU Block Walls	Interior partitions include concrete masonry unit (CMU) assemblies with no finish.





System Name	Description
C1010 - Partitions-GWB on Wood Stud	The building interior includes standard GWB on wood stud partitions, taped and finished, but not painted, no insulation.
$\ensuremath{\text{C}1020}$ - Interior Doors-Swinging Doors Wood and Metal	Interior doors include wood and metal doors and frames with standard hardware. System cost includes both single and double doors.
C1030 - Fittings-Metal Partitions Washrooms	Washrooms and change rooms are equipped with standard quality ceiling, and or floor mounted toilet partitions. Observed years remaining increased due to system condition.
C1030 - Fittings-Washroom Accessories	The washroom accessories typically include mirror, grab bars, paper towel dispenser and disposal, toilet paper holder and soap dispenser.
C1035 - Identifying Devices-Signage (Room Numbering and Identification)	The building has way finding signage which typically includes door numbers, names and graphics.
C20 - Stairs-Stairs Typical	The interior stairs include two, 12-riser flights per story with hand and guard rails.
C3010 - Wall Finishes-Paint Masonry/Epoxy Finish	Wall finishes include paint on CMU and minimum hi-build epoxy finish. Observed years remaining increased due to system condition.
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	Interior wall finishes include standard paint finish.
C3020 - Floor Finishes-Carpeting - Sheet or Tiles	Floor finishes include medium priced carpeting and or carpet tiles and base.
C3020 - Floor Finishes-Concrete - Painted or Sealed	The building includes a typical painted or sealed concrete floor finish.
C3020 - Floor Finishes-Linoleum Sheet Goods	Floor finishes include areas of seamless linoleum and or marmoleum sheet goods flooring and related base.
C3020 - Floor Finishes-Vinyl Composite Tile Standard	Floor finishes include areas of standard VCT flooring and related base. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-GWB Taped and Finished	System includes GWB ceiling at 2400mm or more above the floor level; typically taped, finished and painted with primer and 2 finish coats. Ceiling supported by a suspension system or fastened to metal or wood furring.
C3030 - Ceiling Finishes-Suspended ACT	600 x 600mm or 600 x 1200mm x 19mm standard acoustic ceiling tiles (ACT) in 14mm tee grid suspension system. Observed years remaining increased due to system condition.
D1090 - Other Conveying Systems-Dumbwaiter	The building has a dumbwaiter between the first and second floor. The unit is seldom used.
D2010 - Plumbing Fixtures-Laboratory Sinks	The building plumbing fixtures include a stainless steel laboratory sinks. Note: The unit is in good condition and the observed years remaining has been extended.
D2010 - Plumbing Fixtures-Restroom Fixtures	The restroom fixtures include vitreous china water closets and urinals. Note: The systems are functioning normally and the observed years remaining has been extended.
D2010 - Plumbing Fixtures-Restroom Fixtures - Lavatories	The restroom fixtures include vitreous china lavatories. Note: The system is functioning normally and the observed years remaining has been extended.
$\ensuremath{D2010}$ - Plumbing Fixtures-Sinks - Breakroom and Conference Room	The plumbing fixtures include stainless steel counterset sinks located in the break rooms. Note: The system is working normally and the observed years remaining has been extended.





System Name	Description
D2020 - Domestic Water Distribution-Domestic Water Distribution System	The building water distribution system includes a new city water service with branch piping, backflow preventer, water meter, valves, insulation and fittings. Note: The system is good condition and the observed years remaining has been extended.
D2020 - Domestic Water Distribution-Water Heater - Propane	The domestic hot water is provided by a propane fired water heater with acirculating pump. The water heater was installed in 2015.
D2030 - Sanitary Waste-Sanitary Sewage Holding Tank	The sanitary sewage drains to a holding tank located behind the building. The tank is periodically sucked out by connection to a discharge standpipe. There have been some issues with the discharge piping. Note: The system is functioning normally and the observed years remaining has been extended.
D2030 - Sanitary Waste-Sanitary Waste - Gravity Discharge	The building includes an sanitary waste system, hung from the slab in the crawl space and discharging to a holding tank.
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building includes a propane gas supply and distribution system. Note: The system is in good condition with some recent modifications and the observed years remaining has been increased.
D2090 - Other Plumbing Systems-Shop Compreessed Air System	The building has a shop compressed air system with a compressor and piping.
D3020 - Heat Generating Systems-Boiler Heating Water - Propane Fired	Heat is provided by two high efficiency, 96% AFUE, hot water boilers with circulating pumps and accessories. the boilers are propane fired.
D3030 - Cooling Generating Systems-Air Cooled Condensing Unit	Cooling is provided by an air cooled condensing unit located on the roof. Note: The unit is in good condition and the observed years remaining have been extended.
D3040 - Distribution Systems-Central Station Air Handler - 2nd Floor	The HVAC system consists of one air handler located in the boiler room.
D3040 - Distribution Systems-Ductwork Distribution System	The HVAC system includes ductwork, dampers, diffusers, installed throughout the building. Note: The system is in good condition with some modifications and the observed years remaining has been extended.
D3040 - Distribution Systems-Exhaust System - Restroom w/Roof Fan	HVAC ventilation system includes roof-mounted restroom exhaust system with a fan and ductwork. Note: This system is in good condition and the observed year remaining has been increased.
D3040 - Distribution Systems-Heating Hot Water - Building Heating Water Distribution System	The Hot water Heating System consists of distribution piping, valves, insulation and fittings. Note: The system is in good condition and has been maintained so the observed years remaining has been extended.
D3040 - Distribution Systems-Perimeter Heat System - Hydronic Fin Tube	The HVAC distribution includes a two-pipe system of heating hot water, with perimeter units in various parts of the building. Note: This system is in good condition and the observed years remaining has been extended.
D3041 - Air Distribution Systems-Air to Air Heat Exchange Ventilation Units	There are 4 air to air exchange ventilating units on the first floor.
D3050 - Terminal and Package Units-Data Room Cooling - HP w/Air Cooled Remote Condenser	The data room is conditioned by a mini-split heat pump
D3050 - Terminal and Package Units-Unit Heaters - Hot Water	There are hot water unit heaters in the building. Note: The units are in good condition and the observed years remaining has been extended.





System Name	Description
D3060 - Controls and Instrumentation-DDC/ Pneumatic System - Hybrid -	HVAC controls include a pneumatic system for the majority of the building and a DDC system for the second floor HVAC system.
D3060 - Controls and Instrumentation- Maintenance Garage CO Monitor System	The vehicle maintenance area has a C0 monitoring system.
D40 - Fire Protection-Fire Protection Standpipe System	The building has a fire protection standpipe system with water supplied by the municipal water system (new) and stand pipes and fire hose station in the building. Note: This system is in normal with some recent modifications.condition and the observed years remaining been extended.
D5012 - Low Tension Service and DistDistribution Equipment, Panelboards, and Feeders	The electrical distribution system includes panelboards, feeders and associated equipment. Note: The system is in good condition and functioning normally, and the observed years remaining has been extended.
D5012 - Low Tension Service and DistMain Electrical Service	The building includes an electrical service, which includes incoming feeders and meter. Note: The equipment is in good condition, and the observed years remaining has been extended.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	The exterior lighting consists of LED wall pack fixtures.
D5021 - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and utilization equipment. Note: This system is in good condition and functioning normally, and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Interior - Fluorescent	The building has fluorescent light fixtures throughout. Note: The lighting is operating normally and in good condition, and the observed years remaining has been extended.
D5031 - Public Address and Music Systems-Public Address System	The building includes a public address system with speakers, amplifier and wiring. Note: The system functioning normally, and the observed years remaining has been expended.
$\ensuremath{D5033}$ - Telephone Systems-Telephone System with VOIP	Telephone service with VOIP is provided throughout the building with distribution wiring extended to telephone outlets.
D5037 - Fire Alarm Systems-Fire Alarm System	The building has a fire alarm system panel, sensors, horns and smoke detectors. The system does not meet current codes for fire alarm systems.
D5039 - Local Area Networks-LAN System	The facility includes a LAN system and data cabling system with a UPS.
D5092 - Emergency Light and Power Systems- Emergency Backup Power System	There is an exterior connection and a transfer swith in the electrical room for connection with a portable emergency generator. Note: The system is in good condition and the observed years remaining has been extended.
D5092 - Emergency Light and Power Systems- Emergency Battery Pack Lights	The emergency lighting system includes self-contained battery packs and lights in the egress passages.
E - Equipment and Furnishings-Casework Fixed	The building includes typical administrative and laboratory space casework. Estimate based on asset size.
E1027 - Laboratory Equipment-Fume Hood	The building has a laboratory fume hood. Note: The unit is in good condition and the observed years remaining has been increased.
E1091 - Maintenance Equipment-Chain Hoist Systems	There are two chain hoists in the maintenance area. Note: These are functioning normally and the observed years remaining has been extended.
E2012 - Fixed Casework-Fixed Lockers - Single Tier	Staff lockers, steel, baked enamel, single tier box, 450 x 375 x 1800mm.





System Name	Description
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G2023 - Curbs, Rails and Barriers-Pipe Bollards

The site contains metal parking bumpers, pipe bollards, concrete filled, painted, 2400 mm L x 1200 mm D hole, 200 mm diameter.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Grade Beams	75	6	1974	2049	11,969	199,483
A - Substructure	Foundation Wall and Footings - Crawlspace	75	6	1974	2049	8,642	138,271
A - Substructure	Pile Foundation	75	6	1974	2049	15,649	260,823
B10 - Superstructure	Flat Roof Assembly - Metal Deck Steel Framing	75	6	1974	2049	8,077	129,227
B10 - Superstructure	Floor Assembly - Cast in Place Concrete	75	6	1974	2049	52,146	834,344
B1015 - Exterior Stairs and Fire Escapes	Exterior Stairs - Steel	50	125	2012	2062	43,661	34,929
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1974	2049	143,835	230,135
B2020 - Exterior Windows	Windows - Aluminum	30	125	1974	2023	176,685	141,348
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1974	2021	33,527	26,821
B2030 - Exterior Doors	Door Assembly - Single	30	125	1974	2021	25,953	20,763
B30 - Roofing	Asphalt Shingles	20	125	1994	2023	124,736	99,789
C1010 - Partitions	CMU Block Walls	50	62	1974	2024	56,979	91,166
C1010 - Partitions	GWB on Wood Stud	50	62	1974	2024	22,783	36,452
C1020 - Interior Doors	Swinging Doors Wood and Metal	50	125	1974	2024	334,495	267,596
C1030 - Fittings	Metal Partitions Washrooms	40	125	1974	2026	22,795	18,236
C1030 - Fittings	Washroom Accessories	25	125	1999	2024	29,231	23,385
C1035 - Identifying Devices	Signage (Room Numbering and Identification)	10	125	2014	2024	10,962	8,770





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C20 - Stairs	Stairs Typical	75	38	1974	2049	50,723	135,261
C3010 - Wall Finishes	Paint Masonry/Epoxy Finish	15	125	2004	2023	52,274	41,819
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2014	2024	19,167	15,334
C3020 - Floor Finishes	Linoleum Sheet Goods	25	125	1999	2024	43,441	34,753
C3020 - Floor Finishes	Vinyl Composite Tile Standard	10	125	2004	2023	21,021	16,817
C3020 - Floor Finishes	Carpeting - Sheet or Tiles	10	125	2014	2024	43,180	34,544
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	2006	2021	16,620	13,296
C3030 - Ceiling Finishes	Suspended ACT	20	125	1994	2026	137,485	109,988
C3030 - Ceiling Finishes	GWB Taped and Finished	30	125	2004	2034	15,506	12,405
D1090 - Other Conveying Systems	Dumbwaiter	35	125	1974	2020	51,632	41,305
D2010 - Plumbing Fixtures	Restroom Fixtures - Lavatories	30	125	1974	2020	15,883	12,706
D2010 - Plumbing Fixtures	Restroom Fixtures	30	125	1984	2021	17,410	13,928
D2010 - Plumbing Fixtures	Laboratory Sinks	30	125	1974	2021	10,467	8,373
D2010 - Plumbing Fixtures	Sinks - Breakroom and Conference Room	30	125	1974	2020	6,879	5,503
D2020 - Domestic Water Distribution	Domestic Water Distribution System	30	112	1974	2023	81,154	72,137
D2020 - Domestic Water Distribution	Water Heater - Propane	10	112	2015	2025	9,898	8,837
D2030 - Sanitary Waste	Sanitary Sewage Holding Tank	40	100	1974	2023	40,960	40,960
D2030 - Sanitary Waste	Sanitary Waste - Gravity Discharge	50	125	1974	2024	268,013	214,410
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1974	2023	43,828	35,063
D2090 - Other Plumbing Systems	Shop Compreessed Air System	20	105	1974	2018	25,421	24,211
D3020 - Heat Generating Systems	Boiler Heating Water - Propane Fired	30	125	2018	2048	49,777	39,822
D3030 - Cooling Generating Systems	Air Cooled Condensing Unit	15	125	2003	2023	31,855	25,484





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D3040 - Distribution Systems	Ductwork Distribution System	40	125	1974	2024	62,374	49,899
D3040 - Distribution Systems	Heating Hot Water - Building Heating Water Distribution System	25	125	1974	2024	61,328	49,063
D3040 - Distribution Systems	Perimeter Heat System - Hydronic Fin Tube	18	112	1974	2024	91,334	81,186
D3040 - Distribution Systems	Central Station Air Handler - 2nd Floor	25	125	2003	2028	119,195	95,356
D3040 - Distribution Systems	Exhaust System - Restroom w/Roof Fan	20	125	1974	2023	12,681	10,145
D3041 - Air Distribution Systems	Air to Air Heat Exchange Ventilation Units	30	100	2003	2033	108,549	108,549
D3050 - Terminal and Package Units	Data Room Cooling - HP w/Air Cooled Remote Condenser	20	125	2012	2032	9,217	7,374
D3050 - Terminal and Package Units	Unit Heaters - Hot Water	25	112	1974	2023	93,331	83,331
D3060 - Controls and Instrumentation	DDC/Pneumatic System - Hybrid -	25	125	1998	2023	45,752	36,602
D3060 - Controls and Instrumentation	Maintenance Garage CO Monitor System	10	125	2010	2020	8,396	6,717
D40 - Fire Protection	Fire Protection Standpipe System	35	125	1974	2021	49,902	39,921
D5012 - Low Tension Service and Dist.	Main Electrical Service	30	125	1974	2023	22,325	17,860
D5012 - Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders	30	125	1984	2023	176,611	141,289
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2037	16,545	13,236
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1974	2023	74,118	59,295
D5022 - Lighting Equipment	Lighting Fixtures - Interior - Fluorescent	20	125	1974	2021	135,084	108,067
D5031 - Public Address and Music Systems	Public Address System	15	125	1974	2021	19,167	15,333
D5033 - Telephone Systems	Telephone System with VOIP	10	125	2010	2020	8,620	6,896
D5037 - Fire Alarm Systems	Fire Alarm System	10	125	1974	2018	101,808	81,446
D5039 - Local Area Networks	LAN System	15	125	2005	2020	111,753	89,402

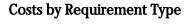


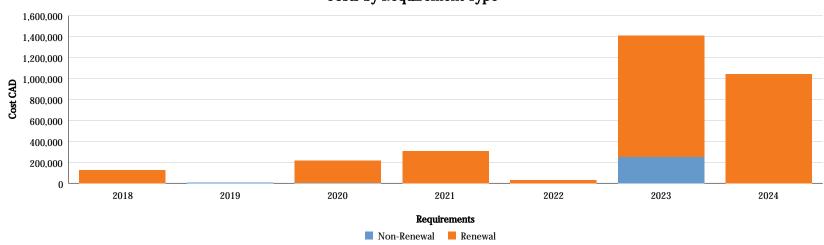


Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5092 - Emergency Light and Power Systems	Emergency Backup Power System	20	125	1974	2023	62,868	50,294
D5092 - Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1974	2020	11,634	9,307
E - Equipment and Furnishings	Casework Fixed	30	125	1974	2023	84,141	67,313
E1027 - Laboratory Equipment	Fume Hood	20	100	1995	2023	13,571	13,571
E1091 - Maintenance Equipment	Chain Hoist Systems	25	100	1985	2022	32,242	32,242
E2012 - Fixed Casework	Fixed Lockers - Single Tier	40	125	2000	2040	2,527	2,022
G2023 - Curbs, Rails and Barriers	Pipe Bollards	30	125	2004	2034	62,722	50,177
					Subtotal		4,844,387
					Overhead:		0
					Subtotal		0
	Total Replacement Value Based on System Costs with Overheads					4,844,387	



Requirements including Renewals





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Air Cooled Condensing Unit Renewal	Yes	D3030 - Cooling Generating Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	31,855
Asphalt Shingles Renewal	Yes	B30 - Roofing	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	124,736
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	74,118
CMU Block Walls Renewal	Yes	C1010 - Partitions	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	56,979





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Carpeting - Sheet or Tiles Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	43,180
Casework Fixed Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	84,141
Ceiling Finishes - Stained Acoustic Ceiling Tile 2nd	No	C3030 - Ceiling Finishes	Maintenance	2- Due within 2 Years of Inspection	Aug 14, 2020	2,134
Chain Hoist Systems Renewal	Yes	E1091 - Maintenance Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	32,242
Concrete - Painted or Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	16,620
DDC/Pneumatic System - Hybrid - Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	45,752
Distribution Equipment, Panelboards, and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	176,611
Domestic Water Distribution System Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	81,154
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	25,953
Ductwork Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	62,374
Dumbwaiter Renewal	Yes	D1090 - Other Conveying Systems	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	51,632
Emergency Backup Power System Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	62,868
Emergency Battery Pack Lights Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	11,634
Exhaust System - Restroom w/Roof Fan Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	12,681
Exterior Windows - Deteriorating Window Assemblies 2nd	No	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	3,141





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Fire Alarm System Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	101,808
Fire Protection Standpipe System Renewal	Yes	D40 - Fire Protection	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	49,902
Fume Hood Renewal	Yes	E1027 - Laboratory Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	13,571
GWB on Wood Stud Renewal	Yes	C1010 - Partitions	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	22,783
Heating Hot Water - Building Heating Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	61,328
LAN System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	111,753
Laboratory Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	10,467
Lighting Fixtures - Interior - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	135,084
Linoleum Sheet Goods Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	43,441
Main Electrical Service Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	22,325
Maintenance Garage CO Monitor System Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	8,396
Overhead Rolling Doors - Manual Operation Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	33,527
Paint Masonry/Epoxy Finish Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	52,274
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	19,167
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	91,334





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Propane Gas Supply for Bldg Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	43,828
Public Address System Renewal	Yes	D5031 - Public Address and Music Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	19,167
Restroom Fixtures - Lavatories Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	15,883
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	17,410
Sanitary Sewage Holding Tank Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	40,960
Sanitary Waste - Gravity Discharge Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	268,013
Shop Compreessed Air System Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	25,421
Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	10,962
Sinks - Breakroom and Conference Room Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	6,879
Substructure - Settlement Perimeter Ground Surface	No	A - Substructure	Maintenance	3- Due within 5 Years of Inspection	Aug 14, 2023	249,160
Superstructure - Mezzanine Lacks Protective Guard 1st	No	B10 - Superstructure	Building Code	1- Due within 1 Year of Inspection	Aug 14, 2019	5,913
Swinging Doors Wood and Metal Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	334,495
Telephone System with VOIP Renewal	Yes	D5033 - Telephone Systems	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	8,620
Unit Heaters - Hot Water Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	93,331
Vinyl Composite Tile Standard Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	21,021





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Washroom Accessories Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	29,231
Windows - Aluminum Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	176,685
Total						3,143,944





Region: Central and Arctic **Asset:** Flammable Storage

Site: Hay River CCG Base Asset Number: C L 00002 18152

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	321,747	FCI:	0.45	
RI Cost:	321,747	RI:	0.45	
Total Requirement Cost:	321,748	Size:	138 SM	
Current Replacement Value:	717,158			

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT



Photo



Signature - Exterior Elevation Flammable Storage

Asset Description

FLAMMABLE STORAGE: ASSET CODE C L 00002 18152

ARCHITECTURAL

Genera

The Flammable Storage, Asset Code C L 00002 18152, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a single level building with crawlspace foundation built in 1989. The Flammable Storage facility contains 138 square meters of floor space and is used to store flammable and hazardous materials.

Construction

The substructure construction found beneath the Flammable Storage building facility consists of an elevated wood floor, supported on wood floor trusses and sitting on an exterior perimeter cast concrete foundation walls founded on strip concrete footings. The entire foundation substructure is supported by steel piles driven into the highly compressible discontinuous permafrost soils to prevent subsidence and settlement issues. Exterior walls are clad with prefinished metal panel siding on an insulated wood framed backup wall, finished with vapour retarder and painted gypsum wallboard or prefinished metal wall panels. Roof framing consists of pre-engineered wood roof trusses and is waterproofed with a standing seam metal panel roof assembly. Fenestration consists of





insulated aluminum window assemblies and entry doors are finished, insulated metal panel doors and frames. There is an overhead, metal panel garage door.

Classification

The Flammable Storage facility can be classified as a Group F, Division 1 Industrial Hazardous Occupancy as a flammable materials storage facility per Table 3.1.2.1. of the 2010 National Building Code of Canada.

Mechanical

The building heat is provided by a high efficiency hot water boiler with pumps, piping and accessories. Heat is distributed unit heaters and an in-floor heating system. The facility had a fire suppression system system, but that system is no longer in service. The building does not have domestic water supply.

Electrical

The electrical system consists of the incoming service, panelboards and power distribution. The building has fluorescent lighting with explosion proof fixtures in the area that was used as flammable storage.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - No Basement	Basic foundation for building without basement - to include strip footing, 1,200-mm foundation wall and damp proofing. Also included are underdrains.
A - Substructure-Structural Slab on Grade - Light Industrial	The building substructure includes a light industrial type structural slab on grade.
B10 - Superstructure-Flat Roof Assembly - Metal Deck Steel Framing	Roof superstructure consists of steel columns and steel joist roof structure.
B1014 - Ramps-Accessible Ramp - Exterior Steel	Concrete in place, handicapped ramp w/cheek walls & rails both sides. Assume 1.5m wide.
B1015 - Exterior Stairs and Fire Escapes-Exterior Stairs - Steel	The facility has exterior steel stairs, (one flight), with railings. Measure each flight.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2030 - Exterior Doors-Door Assembly - Double	Exterior doors include double-leaf doors and frames with standard hardware.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Metal Roofing	The roof covering is of formed metal roofing, such as standing seam metal.
C1010 - Partitions-GWB on Wood Stud	The building interior includes standard GWB on wood stud partitions, taped and finished, but not painted, no insulation.
C1020 - Interior Doors-Swinging Doors Wood and	Interior doors include wood and metal doors and frames with standard hardware. System cost includes both single and double doors.





System Name	Description
Metal	
C1035 - Identifying Devices-Signage (Room Numbering and Identification)	The building has way finding signage which typically includes door numbers, names and graphics.
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	Interior wall finishes include standard paint finish. Observed years remaining increased due to system condition.
C3010 - Wall Finishes-Prefinished Metal Wall Panels	Interior wall finishes include prefinished metal wall panels. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted & Sealed	Typical painted concrete with an abrasive textured additive to prevent slipping.
C3030 - Ceiling Finishes-Prefinished Metal Ceiling Panels	Ceiling system consists of prefinished metal ceiling panels. Observed years remaining increased due to system condition.
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building includes a propane gas supply and distribution system.
D3020 - Heat Generating Systems-Boiler Heating Water - Propane Fired	Heat is provided by a high efficiency, 96% AFUE, hot water boiler and accessories. The boilers are propane fired.
D3040 - Distribution Systems-Exhaust System Flammable Storage	The building has an exhaust system installed as part of the flammable storage suppression and control system. Note: The system is in good condition the suppression system is no longer in service. The observed years remaining has been increased.
D3040 - Distribution Systems-Heating Hot Water - Building Heating Water Distribution System	The Hot water Heating System consists of pumps, distribution piping, valves, insulation and fittings. The system is in good condition and has been maintained with recentmodifications so the observed years remaining has been extended.
D3047 - Glycol Distribution Systems-Infloor Heating System	The building has a four zone in-floor heating system. One of the zones has a pipe leak and has been shut off. The remaining zones are currently functioning normally. Note: Based on functionality and that modifications were made with the new boilers, the observed useful life has been extended.
D3050 - Terminal and Package Units-Unit Heaters - Hot Water	There are hot water unit heaters in the building. Note: The units are in good condition and the observed years remaining has been extended.
D40 - Fire Protection-Fire Suppression System FM200 System	The area of the building previously used for flammable storage has a FM 200 type fire protection system. The system is not being maintained at this time because the building is no longer used for flammable storage. The system includes an alarm panel.
D5012 - Low Tension Service and DistElectrical Distribution Equipment, Panelboards and Feeders	The electrical distribution system for this building includes panelboards, feeders, and associated equipment. The system is go condition and the observed years remaining has been extended.
$\ensuremath{D5012}$ - Low Tension Service and DistTransformer - 30 KVA	There is a 30 KJVA transformer in the building.Note: The equipment is functioning normally, and the observed years remaining has been extended.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	Exterior lighting consists of HID wall pack units.
D5021 - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and power to the shop equipment. Note: The system is in good condition and the observed years remaining has been extended.





System Name	Description
D5022 - Lighting Equipment-Lighting Fixtures - Explosion Proof in Flammable Storage Area	The flammable storage area has explosion proof fluorescent light fixtures. The area currently is not used for flammable storage. Note: The system is operating normally and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Fluorescent	The building area not designated as flammable storage has fluorescent light fixtures. The system includes fixtures, conduit and wire. Note: The fixtures are operating normally, and the observed years remaining has been expending.
D5092 - Emergency Light and Power Systems-Exit Signs	The emergency system includes the installation of Exit signs.
G2041 - Fences and Gates-Site Development - Fencing Chain Link	Site development includes 3-m high chain link fencing with 50-mm post.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade - Light Industrial	75	6	1989	2064	1,916	31,933
A - Substructure	Foundation Wall and Footings - No Basement	75	6	1989	2064	3,096	51,592
B10 - Superstructure	Flat Roof Assembly - Metal Deck Steel Framing	75	6	1989	2064	1,915	30,642
B1014 - Ramps	Accessible Ramp - Exterior Steel	50	12	1989	2039	830	6,643
B1015 - Exterior Stairs and Fire Escapes	Exterior Stairs - Steel	50	125	1989	2039	29,108	23,286
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1989	2064	35,019	56,031
B2030 - Exterior Doors	Door Assembly - Double	30	125	1989	2019	12,514	10,011
B2030 - Exterior Doors	Door Assembly - Single	30	125	1989	2019	25,953	20,763
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1989	2023	10,108	8,087
B30 - Roofing	Metal Roofing	65	125	1989	2054	164,427	131,541
C1010 - Partitions	GWB on Wood Stud	50	62	1989	2039	5,403	8,644





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C1020 - Interior Doors	Swinging Doors Wood and Metal	50	125	1989	2039	14,543	11,635
C1035 - Identifying Devices	Signage (Room Numbering and Identification)	10	125	2009	2019	1,300	1,040
C3010 - Wall Finishes	Prefinished Metal Wall Panels	25	81	1989	2026	24,759	30,567
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2009	2023	2,273	1,818
C3020 - Floor Finishes	Concrete - Painted & Sealed	15	125	2004	2019	3,941	3,153
C3030 - Ceiling Finishes	Prefinished Metal Ceiling Panels	30	125	1989	2028	42,871	34,296
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1989	2029	5,196	4,157
D3020 - Heat Generating Systems	Boiler Heating Water - Propane Fired	30	125	2018	2048	25,222	20,178
D3040 - Distribution Systems	Heating Hot Water - Building Heating Water Distribution System	25	125	1989	2024	4,261	3,409
D3040 - Distribution Systems	Exhaust System Flammable Storage	15	125	1989	2024	12,812	10,249
D3047 - Glycol Distribution Systems	Infloor Heating System	30	100	1989	2023	55,629	55,629
D3050 - Terminal and Package Units	Unit Heaters - Hot Water	25	112	1989	2023	53,332	47,618
D40 - Fire Protection	Fire Suppression System FM200 System	15	125	1989	2018	29,652	23,722
D5012 - Low Tension Service and Dist.	Electrical Distribution Equipment, Panelboards and Feeders	30	125	1989	2023	14,886	11,909
D5012 - Low Tension Service and Dist.	Transformer - 30 KVA	20	125	1989	2023	17,114	13,691
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2023	3,711	2,968
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1968	2023	11,839	9,471
D5022 - Lighting Equipment	Lighting Fixtures - Explosion Proof in Flammable Storage Area	20	125	1989	2023	42,975	34,380
D5022 - Lighting Equipment	Lighting Fixtures - Fluorescent	20	125	1989	2023	14,953	11,962





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5092 - Emergency Light and Power Systems	Exit Signs	10	125	1989	2019	4,495	3,596
G2041 - Fences and Gates	Site Development - Fencing Chain Link	20	125	2009	2029	3,171	2,537
					Subtotal		717,158
					Overhead:		0
					Subtotal		0
		Total Replace	Replacement Value Based on System Costs with Overheads				717,158

Requirements including Renewals



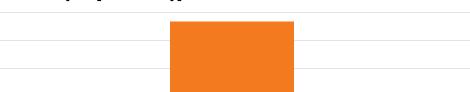
240,000

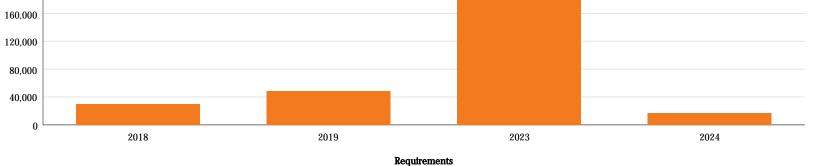
200,000

Cost CAD



Asset Overview Report By Asset Name





■ Non-Renewal ■ Renewal

Costs by Requirement Type

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	11,839
Concrete - Painted & Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	3,941
Door Assembly - Double Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	12,514
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	25,953
Electrical Distribution Equipment, Panelboards and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	14,886
Exhaust System Flammable Storage Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	12,812
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	4,495
Fire Suppression System FM200 System Renewal	Yes	D40 - Fire Protection	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	29,652
Heating Hot Water - Building Heating Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	4,261
Infloor Heating System Renewal	Yes	D3047 - Glycol Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	55,629





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Lighting - Exterior - LED Wall Packs Renewal	Yes	D5020 - Lighting and Branch Wiring	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	3,711
Lighting Fixtures - Explosion Proof in Flammable Storage Area Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	42,975
Lighting Fixtures - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	14,953
Overhead Rolling Doors - Manual Operation Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	10,108
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	2,273
Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	1,300
Transformer - 30 KVA Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	17,114
Unit Heaters - Hot Water Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	53,332
Total						321,748





Region: Central and Arctic **Asset:** Groundskeeper Shed

Site: Hay River CCG Base Asset Number: C L 00002 15579

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	6,488	FCI:	0.05
RI Cost:	6,488	RI:	0.05
Total Requirement Cost:	6,488	Size:	30 SM
Current Replacement Value:	119,493		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation Groundskeeper Shed

Asset Description

GROUNDSKEEPER SHED: ASSET CODE C L 00002 15579

ARCHITECTURAL

General

The Groundskeeper Shed, Asset Code C L 00002 15579, can be found on the site of the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a single level building with concrete slab on grade foundation built in 1992. The Groundskeeper Shed contains 30 square meters of unheated floor space.

Construction

The substructure construction found beneath the Groundskeeper Shed facility consists of a concrete slab on grade substructure with perimeter cast concrete foundation walls founded on strip concrete footings. Exterior walls are clad with prefinished metal panel siding on a wood framed backup wall. The sloped roof framing consists of pre-engineered wood roof trusses and is waterproofed with a metal roofing panel assembly. Fenestration consists of insulated aluminum window assemblies and the entry door is a finished, insulated wood panel door and frame, set with insulated glazing.





Classification

The Groundskeeper Shed can be classified as a Group F, Division 3, Low Hazard Industrial Occupancy for use as a grounds storage facility per Table 3.1.2.1. of the 2010 National Building Code of Canada.

Mechanical

The building does not have any mechanical services.

Electrical

The building does not have electrical power.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - No Basement	Basic foundation for building without basement - to include strip footing, 1,200-mm foundation wall and damp proofing. Also included are underdrains.
A - Substructure-Structural Slab on Grade - Non-Industrial	The building substructure includes a non-industrial type structural slab on grade.
B10 - Superstructure-Single-Story - Wood Framed Roof Truss	The building superstructure includes wood truss roof framing, sheathing and batt insulation.
B1014 - Ramps-Access Ramp - Exterior Steel	Portable access ramp, aluminum. Observed years remaining increased due to system condition.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2020 - Exterior Windows-Windows - Aluminum	The building includes aluminum framed exterior units with insulating glass. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Metal Roofing - High End	The roof covering is of formed metal roofing, such as standing seam metal.
C3010 - Wall Finishes-Unfinished Plywood Panels	[Interior wall finishes include panels of unfinished plywood. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted or sealed concrete with an abrasive textured additive to prevent slipping. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-Wood Ceiling - Painted or Stained	Ceiling system of painted or stained wood. Observed years remaining increased due to system condition.





Asset Replacement Value Based on System Costs with Overheads

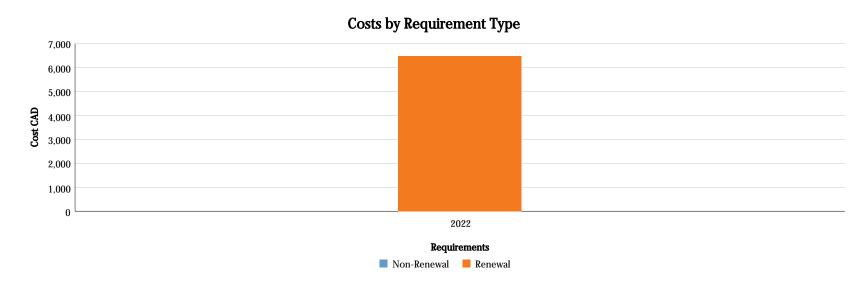
Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade - Non-Industrial	75	6	1992	2067	312	5,198
A - Substructure	Foundation Wall and Footings - No Basement	75	6	1992	2067	1,443	24,055
B10 - Superstructure	Single-Story - Wood Framed Roof Truss	75	6	1992	2067	324	5,395
B1014 - Ramps	Access Ramp - Exterior Steel	30	112	1992	2028	4,350	3,884
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1992	2067	16,329	26,126
B2020 - Exterior Windows	Windows - Aluminum	30	125	1992	2026	7,710	6,168
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1992	2026	4,329	3,463
B2030 - Exterior Doors	Door Assembly - Single	30	125	1992	2022	6,488	5,191
B30 - Roofing	Metal Roofing - High End	65	125	1974	2039	35,745	28,596
C3010 - Wall Finishes	Unfinished Plywood Panels	25	81	1992	2026	2,655	3,277
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	2007	2026	857	685
C3030 - Ceiling Finishes	Wood Ceiling - Painted or Stained	30	125	1992	2026	9,320	7,456
					Subtotal		119,493
					Overhead:		0
					Subtotal		0

Total Replacement Value Based on System Costs with Overheads

119,493



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	6,488
Total						6,488





Region: Central and Arctic

Asset: Helicopter Operations / General

Storage

Site: Hay River CCG Base

Asset Number: C L 00002 16709

Assets are ordered by Asset Name

Currency: CAD

Statistics

FCI Cost:	338,471	FCI:	0.47
RI Cost:	340,246	RI:	0.47
Total Requirement Cost:	338,472	Size:	174 SM
Current Replacement Value:	718,542		

Address 1 42037 Mackenzie Highway City

Hay River

Address 2

State/Province/Region

NT





Photo



Signature - Exterior Elevation Helicopter Operations / General Storage

Asset Description

HELICOPTER OPERATIONS / GENERAL STORAGE: ASSET CODE C L 00002 16709

ARCHITECTURAL

General

The Helicopter Operations / General Storage building. Asset Code C L 00002 16709, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a single level building with a concrete slab foundation built in 1974. The Helicopter Operations / General Storage building contains 174 square meters of floor space.

Construction

The substructure construction found beneath the Helicopter Operations / General Storage facility consists of a concrete floor slab at grade, sitting on exterior perimeter cast concrete foundation walls founded on strip concrete footings. Exterior walls are clad with prefinished metal panel siding on an insulated steel framed backup wall, finished with vapour retarder and either painted gypsum wallboard or prefinished metal wall panels. Roof framing consists of a metal roof deck supported by structural steel framing and is waterproofed with a standing seam metal panel roof





assembly. Fenestration consists of insulated aluminum window assemblies and entry doors are finished, insulated wood panel doors and frames.

Classification

The Helicopter Operations / General Storage building can be classified as a Group F, Division 3 Low Hazard Industrial Occupancy for use as a general storage facility per Table 3.1.2.1. of the 2010 National Building Code of Canada.

Mechanical

The building heat is provided by electric unit heaters. There is a domestic water holding tank, water heater, water distribution and plumbing fixtures. The sanitary sewer is piped to a holding tank.

Electrical

There is an electrical service to the building with lighting and general power. The building also has a battery charging room.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - No Basement	Basic foundation for building without basement - to include strip footing, 1200mm foundation wall and damp proofing. Also included are underdrains.
A - Substructure-Structural Slab on Grade	The building substructure includes a light industrial type structural slab on grade.
B10 - Superstructure-Floor Assembly - Wood Joists and Subfloor	Floor assembly includes wood floor framing components include wood floor joists, subfloor.
B10 - Superstructure-Sloped Roof Assembly - Metal Deck Steel Framing	Roof superstructure consists wood frame roof and ceiling rafters sheathed with plywood.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2020 - Exterior Windows-Windows - Aluminum	The building includes aluminum framed exterior units with insulating glass.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Metal Roofing - High End	The roof covering is of formed metal roofing, such as standing seam metal.
C1010 - Partitions-GWB on Wood Stud	The building interior includes standard GWB on wood stud partitions, taped and finished, but not painted, no insulation.
C1020 - Interior Doors-Swinging Doors Wood and Metal	Interior doors include wood and metal doors and frames with standard hardware. System cost includes both single and double doors.
C1030 - Fittings-Washroom Accessories	The washroom accessories typically include mirror, grab bars, paper towel dispenser and disposal, toilet paper holder and soap dispenser.
C1035 - Identifying Devices-Signage (Room Numbering and Identification)	The building has way finding signage which typically includes door numbers, names and graphics.
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 $$	Interior wall finishes include standard paint finish.





System Name	Description
Coats Finish)	
C3010 - Wall Finishes-Plywood Wall Sheathing	Interior wall finishes include economy grade plywood sheathing.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted or sealed concrete with an abrasive textured additive to prevent slipping. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Linoleum Sheet Goods	Floor finishes include areas of seamless linoleum and or marmoleum sheet goods flooring and related base.
C3020 - Floor Finishes-Wood Flooring - Plywood	Floor finishes, direct glue-down, include plywood floors and base, for large open areas.
C3030 - Ceiling Finishes-Suspended ACT	$600 \ x \ 600 mm$ or $600 \ x \ 1200 mm$ x $19 mm$ standard acoustic ceiling tiles (ACT) in $14 mm$ tee grid suspension system.
C3030 - Ceiling Finishes-Wood Ceiling - Painted or Stained	Ceiling system of painted or stained wood.
D2010 - Plumbing Fixtures-Emergency Eyewash	Plumbing fixtures include an emergency eyewash unit.
D2010 - Plumbing Fixtures-Restroom Fixtures	The restroom fixtures include water closet and lavatory.
D2020 - Domestic Water Distribution-Water Distribution Piping	The building domestic water distribution system includes a distribution piping. Note: The system is in good condition with some recent modifications. The observed years remaining has been extended.
D2020 - Domestic Water Distribution-Water Heater - Elecric - 10 Gal	The domestic hot water is provided by a 10-gallon residential-grade electric water heater.
D2023 - Domestic Water Supply Equipment-Potable Water Tank - Fiberglass - 2270 L	The system includes a single-wall, aboveground 2270 L fiberglass storage tank for potable water usage and pump. The system is located in the attic
D2030 - Sanitary Waste-Sanitary Sewage Holding Tank	The sanitary sewage drains to a holding tank located behind the building. The tank is periodically sucked out by connection to a discharge standpipe. There have been some issues with the discharge piping.
D2030 - Sanitary Waste-Sanitary Waste - Gravity Disch - Average	The building includes an sanitary waste system piped to a holding tank.
D3040 - Distribution Systems-Exhaust System - Generator Room	There is an exhaust system for the generator room
D3050 - Terminal and Package Units-Unit Heaters - Electric	Heating is provided by suspended, electric unit heaters. Note: The unit is good condition and the observed useful life has been extended.
D5012 - Low Tension Service and DistElectrical Distribution Equipment, Panelboards and Feeders	The electrical distribution system for this building includes panelboards, feeders, and associated equipment. The system is go condition and the observed years remaining has been extended.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	Exterior lighting consists of LED wall pack units.
$\ensuremath{D5021}$ - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and power to the shop equipment. Note: The system is in good condition and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Fluorescent	The building area not designated as flammable storage has fluorescent light fixtures. The system includes fixtures, conduit and wire. Note: The fixtures are operating normally, and the observed years remaining has been expending.





System Name	Description
D5094 - Other Special Systems and Devices-Battery Charging Equipment	The building has a battery charging station.
E - Equipment and Furnishings-Casework Fixed	The building includes typical fixed casework for a work shop.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade	75	6	1974	2049	2,416	40,263
A - Substructure	Foundation Wall and Footings - No Basement	75	6	1974	2049	3,620	57,926
B10 - Superstructure	Floor Assembly - Wood Joists and Subfloor	75	6	1974	2049	231	3,855
B10 - Superstructure	Sloped Roof Assembly - Metal Deck Steel Framing	75	6	1974	2049	4,147	66,355
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1974	2049	39,323	62,916
B2020 - Exterior Windows	Windows - Aluminum	30	125	1974	2023	24,152	19,321
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1974	2023	9,579	7,663
B2030 - Exterior Doors	Door Assembly - Single	30	125	1974	2023	12,977	10,381
B30 - Roofing	Metal Roofing - High End	65	125	1974	2039	207,321	165,856
C1010 - Partitions	GWB on Wood Stud	50	62	1974	2024	4,557	7,290
C1020 - Interior Doors	Swinging Doors Wood and Metal	50	125	1974	2024	79,988	63,990
C1030 - Fittings	Washroom Accessories	25	125	1999	2024	4,370	3,496
C1035 - Identifying Devices	Signage (Room Numbering and Identification)	10	125	2014	2024	1,639	1,311
C3010 - Wall Finishes	Plywood Wall Sheathing	25	81	1999	2024	4,791	5,915





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2012	2022	3,833	3,067
C3020 - Floor Finishes	Wood Flooring - Plywood	25	125	1999	2024	3,833	3,067
C3020 - Floor Finishes	Linoleum Sheet Goods	25	125	1999	2024	3,729	2,983
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	2004	2021	4,969	3,975
C3030 - Ceiling Finishes	Wood Ceiling - Painted or Stained	30	125	2004	2034	40,385	32,308
C3030 - Ceiling Finishes	Suspended ACT	20	125	1994	2023	10,394	8,315
D2010 - Plumbing Fixtures	Emergency Eyewash	30	125	1974	2018	4,381	3,505
D2010 - Plumbing Fixtures	Restroom Fixtures	30	125	1974	2019	1,891	1,513
D2020 - Domestic Water Distribution	Water Heater - Elecric - 10 Gal	10	112	2015	2023	4,367	3,899
D2020 - Domestic Water Distribution	Water Distribution Piping	30	112	1974	2023	5,413	4,833
D2023 - Domestic Water Supply Equipment	Potable Water Tank - Fiberglass - 2270 L	35	125	2008	2023	21,047	16,837
D2030 - Sanitary Waste	Sanitary Waste - Gravity Disch - Average	50	125	1974	2023	3,921	3,137
D2030 - Sanitary Waste	Sanitary Sewage Holding Tank	40	100	1974	2023	40,960	40,960
D3040 - Distribution Systems	Exhaust System - Generator Room	25	125	2000	2025	3,217	2,573
D3050 - Terminal and Package Units	Unit Heaters - Electric	15	112	1974	2023	10,798	9,642
D5012 - Low Tension Service and Dist.	Electrical Distribution Equipment, Panelboards and Feeders	30	125	1974	2023	18,769	15,015
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	1974	2023	1,237	989
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1974	2023	11,080	8,864
D5022 - Lighting Equipment	Lighting Fixtures - Fluorescent	20	125	1974	2023	18,854	15,083
D5094 - Other Special Systems and Devices	Battery Charging Equipment	20	100	2000	2020	13,056	13,056
E - Equipment and Furnishings	Casework Fixed	30	125	1974	2021	10,474	8,380
					Subtotal		718,542





Overhead: 0

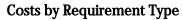
Subtotal 0

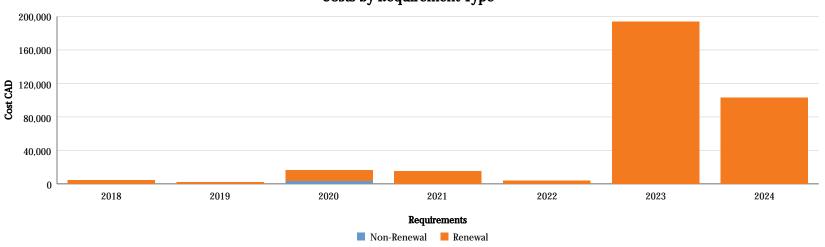
Total Replacement Value Based on System Costs with Overheads 718,542

Requirements including Renewals









Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Battery Charging Equipment Renewal	Yes	D5094 - Other Special Systems and Devices	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	13,056
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	11,080
Casework Fixed Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	10,474
Concrete - Painted or Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	4,969
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	12,977
Electrical Distribution Equipment, Panelboards and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	18,769
Emergency Eyewash Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	4,381
Equipment and Furnishings - Aged Vanity Cabinet Washroom	No	E - Equipment and Furnishings	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	3,413
GWB on Wood Stud Renewal	Yes	C1010 - Partitions	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	4,557
Lighting - Exterior - LED Wall Packs Renewal	Yes	D5020 - Lighting and Branch Wiring	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	1,237





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Lighting Fixtures - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	18,854
Linoleum Sheet Goods Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	3,729
Overhead Rolling Doors - Manual Operation Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	9,579
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	3,833
Plywood Wall Sheathing Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	4,791
Potable Water Tank - Fiberglass - 2270 L Renewal	Yes	D2023 - Domestic Water Supply Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	21,047
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	1,891
Sanitary Sewage Holding Tank Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	40,960
Sanitary Waste - Gravity Disch - Average Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	3,921
Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	1,639
Suspended ACT Renewal	Yes	C3030 - Ceiling Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	10,394
Swinging Doors Wood and Metal Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	79,988
Unit Heaters - Electric Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	10,798
Washroom Accessories Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	4,370
Water Distribution Piping Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	5,413
Water Heater - Elecric - 10 Gal Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	4,367
Windows - Aluminum Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	24,152
Wood Flooring - Plywood Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	3,833
Total						338,472





Region: Central and Arctic

Asset: Helicopter Pad

Site: Hay River CCG Base

Asset Number: C L 00002 15823

Assets are ordered by Asset Name

Currency: CAD

Statistics

FCI Cost:	16,441	FCI:	0.21
RI Cost:	16,441	RI:	0.21
Total Requirement Cost:	16,441	Size:	1 SM
Current Replacement Value:	76,775		

Address 1 City 42037 Mackenzie Highway

Hay River

Address 2

State/Province/Region

NT





Photo



Signature - Exterior Helicopter Pad

Asset Description

HELICOPTER PAD. ASSET CODE: C L 00002 15823

ARCHITECTURAL

Genera

The Hay River Canadian Coast Guard Base is located at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. Site infrastructure includes a Helicopter Pad, Asset Code C L 00002 15823 located at the far eastern edge of the site. The landing pad is composed of reinforced concrete, it is circular in area and has painted, pavement markings on it.

Mechanical

The Helicopter Pad does not have any mechanical services.

Electrical

The helicopter Pad does not have any electrical services.





System Description

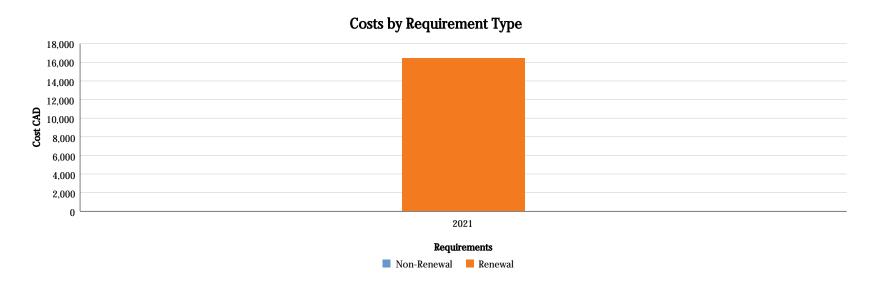
System Name	Description			
A - Substructure-Structural Slab on Grade - Light Industrial	The helicopter landing pad substructure includes a light industrial type structural slab on grade.			
G2021 - Bases and Sub-Bases-Pavement - Base Course	Pavement includes a 300mm thick gravel base course for large paved areas.			
G2049 - Miscellaneous Structures-Site Development - Painted Pavement Markings	Site development includes painted pavement markings.			

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade - Light Industrial	75	6	1969	2044	3,554	59,238
G2021 - Bases and Sub-Bases	Pavement - Base Course	65	12	1969	2034	526	4,384
G2049 - Miscellaneous Structures	Site Development - Painted Pavement Markings	35	125	1986	2021	16,441	13,153
					Subtotal		76,775
					Overhead:		0
					Subtotal		0
		Total Replaceme	nt Value Based o	on System Costs wit	th Overheads		76,775



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Site Development - Painted Pavement Markings Renewal	Yes	G2049 - Miscellaneous Structures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	16,441
Total						16,441





Region: Central and Arctic **Asset:** Open Storage

Site: Hay River CCG Base Asset Number: C L 00002 15146

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	20,243	FCI:	0.47
RI Cost:	20,243	RI:	0.47
Total Requirement Cost:	20,243	Size:	620 SM
Current Replacement Value:	43,439		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation Open Storage

Asset Description

OPEN STORAGE; ASSET CODE C L 00002 15146

ARCHITECTURAL

Genera

The Open Storage infrastructure, Asset Code C L 00002 15146, can be found on the Hay River Canadian Coast Guard Base located at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a gravel surfaced open storage compound originally developed in 1970 and located on the north side of the RSER/DFO Storage Warehouse.

Mechanical

The Open Storage does not have any mechanical services.

Electrical

The Open Storage does not have any electrical services





System Description

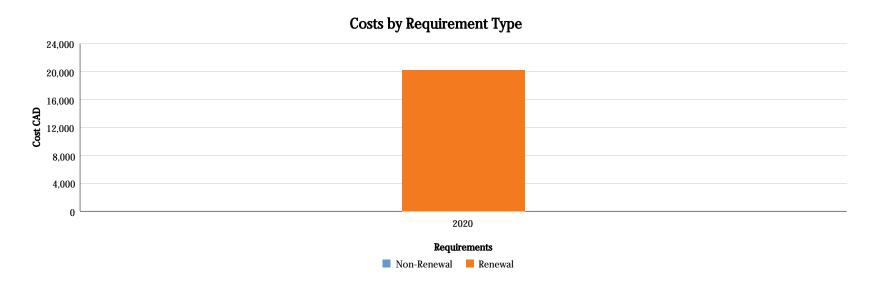
System Name	Description
G2011 - Bases and Sub-Bases-Open Storage - Base Course	The open storage space includes a 300mm thick gravel base course (also known as pit-run) typically used for freeways, major arterials, minor arterials, collectors and local roads; spread and compaction included.
G2011 - Bases and Sub-Bases-Open Storage - Intermediate Course	The Open Storage pavement includes a 75mm thick bituminous intermediate binder course typically used for freeways, major arterials, minor arterials, collectors and local roads.

Asset Replacement Value Based on System Costs with Overheads

-	J						
Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2011 - Bases and Sub-Bases	Open Storage - Base Course	65	12	1970	2035	1,295	10,789
G2011 - Bases and Sub-Bases	Open Storage - Intermediate Course	25	62	1995	2020	20,243	32,650
					Subtotal		43,439
					Overhead:		0
					Subtotal		0
		m . 1p . 1					40.400
		Total Replacen	nent Value Based (on System Costs wi	ith Overheads		43,439



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Open Storage - Intermediate Course Renewal	Yes	G2011 - Bases and Sub-Bases	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	20,243
Total						20,243





Region: Central and Arctic **Asset:** Parking Lot

Site: Hay River CCG Base Asset Number: C L 00002 15840

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	451,922	FCI:	0.79
RI Cost:	451,922	RI:	0.79
Total Requirement Cost:	451,921	Size:	2,380 SM
Current Replacement Value:	573,646		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior View Parking Lot Administration Building

Asset Description

PARKING LOT. ASSET CODE: C L 00002 15840

ARCHITECTURAL

General

The Hay River Canadian Coast Guard Base can be found at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The site infrastructure includes a paved, asphalt Parking Lot, Asset Code: C L 00002 15840, which can be found on the site in front of the Administration building. The Administration Parking Lot is approximately 2,380 square meters in size and dates from 1984. There is an additional Parking Lot found to the north of the Stores / Maintenance Shop facility. Its size is approximately 956 square meters and dates from 1968.

Electrical

There are parking lot light poles and vehicle power kiosks in the parking lot.





System Description

System Name	Description
D5022 - Lighting Equipment-Parking Lot Light Poles & Power Pedestals	There are light poles with LED fixtures and power pedestals tor vehicles in the parking lot. Note: The system is in good condition and the observed years remaining has been extended.
$\label{lem:G2021-Bases} \textbf{G2021-Bases and Sub-Bases-Parking Lot Administration-Base} \\ \textbf{Course}$	Parking lot flexible pavement (bituminous) includes a 300mm thick gravel base course for large paved areas.
G2021 - Bases and Sub-Bases-Parking Lot Administration - Intermediate Course	Parking lot flexible pavement includes a 75mm thick bituminous intermediate binder course for large paved areas.
G2021 - Bases and Sub-Bases-Parking Lot Stores - Base Course	Parking lot flexible pavement (bituminous) includes a 300mm thick gravel base course for large paved areas.
G2021 - Bases and Sub-Bases-Parking Lot Stores - Intermediate Course	Parking lot flexible pavement includes a 75mm thick bituminous intermediate binder course for large paved areas. Observed years remaining increased due to system condition.
$\ensuremath{G2022}$ - Paving and Surfacing-Parking Lot Administration - Surface Course	Parking lot flexible pavement includes a 75mm thick bituminous wearing surface course for large paved areas.
G2022 - Paving and Surfacing-Parking Lot Stores - Surface Course	Parking lot flexible pavement includes a 75mm thick bituminous wearing surface course for large paved areas. Observed years remaining increased due to system condition.
G2025 - Markings and Signage-Parking Lot Administration - Traffic Control - Painted Pavement Markings	Parking lot includes painted pavement markings used to provide guidance and information to drivers and pedestrians. Includes parking space, directional arrows, crosswalk, accessibility and other parking lot graphics.
G2025 - Markings and Signage-Parking Lot Stores - Traffic Control - Painted Pavement Markings	Parking lot includes painted pavement markings used to provide guidance and information to drivers and pedestrians. Includes parking space, directional arrows, crosswalk, accessibility and other parking lot graphics.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5022 - Lighting Equipment	Parking Lot Light Poles & Power Pedestals	20	100	1995	2023	113,422	113,422
G2021 - Bases and Sub-Bases	Parking Lot Stores - Base Course	65	12	1968	2033	3,929	32,745
G2021 - Bases and Sub-Bases	Parking Lot Administration - Intermediate Course	25	62	1984	2023	70,588	113,852

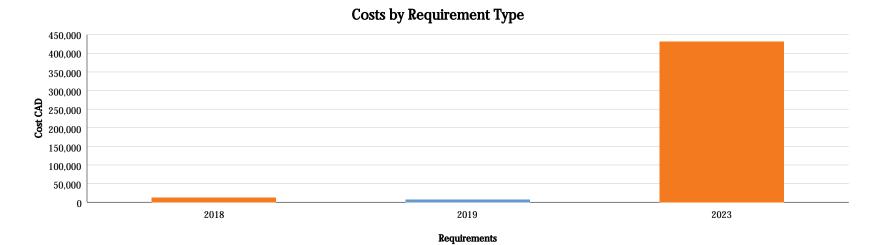




Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2021 - Bases and Sub-Bases	Parking Lot Administration - Base Course	65	12	1984	2049	9,782	81,519
G2021 - Bases and Sub-Bases	Parking Lot Stores - Intermediate Course	25	62	1993	2023	28,354	45,732
G2022 - Paving and Surfacing	Parking Lot Administration - Surface Course	25	125	1984	2023	156,667	125,334
G2022 - Paving and Surfacing	Parking Lot Stores - Surface Course	25	125	1993	2023	62,930	50,344
G2025 - Markings and Signage	Parking Lot Administration - Traffic Control - Painted Pavement Markings	10	115	1984	2018	8,838	7,686
G2025 - Markings and Signage	Parking Lot Stores - Traffic Control - Painted Pavement Markings	10	115	1993	2018	3,464	3,012
					Subtotal		573,646
					Overhead:		0
					Subtotal		0
		Total Replacen	nent Value Based o	on System Costs wi	th Overheads		573,646



Requirements including Renewals



■ Non-Renewal ■ Renewal

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Parking Lot Administration - Deteriorating Asphalt Surface	No	G2022 - Paving and Surfacing	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	7,658
Parking Lot Administration - Intermediate Course Renewal	Yes	G2021 - Bases and Sub-Bases	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	70,588
Parking Lot Administration - Surface Course Renewal	Yes	G2022 - Paving and Surfacing	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	156,667
Parking Lot Administration - Traffic Control - Painted Pavement Markings Renewal	Yes	G2025 - Markings and Signage	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	8,838
Parking Lot Light Poles & Power Pedestals Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	113,422
Parking Lot Stores - Intermediate Course Renewal	Yes	G2021 - Bases and Sub-Bases	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	28,354
Parking Lot Stores - Surface Course Renewal	Yes	G2022 - Paving and Surfacing	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	62,930
Parking Lot Stores - Traffic Control - Painted Pavement Markings Renewal	Yes	G2025 - Markings and Signage	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	3,464





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Total		·				A51 Q21





Region: Central and Arctic Asset: Propane Tank and Lines

Site: Hay River CCG Base Asset Number: C L 00002 15656

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	72,894	FCI:	0.46
RI Cost:	72,894	RI:	0.46
Total Requirement Cost:	72,894	Size:	1 SM
Current Replacement Value:	158,714		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT





Photo



D3012 - Propane Tank

Asset Description

A single propane tank with a propane vaporizer system provides propane gas to all the buildings on the Base. There vaporizing system is in an adjacent shed, and the propane is distributed around the base in underground piping.

System Description

System Name	Description
D3012 - Gas Supply System-Propane Gas Service to Buildings - Underground	The propane is delivered to the buildings in underground pipe.
D3012 - Gas Supply System-Propane Tank - 45.4 Cubic Meters	There is a 1606 cubic foot (45.4 cubic meter) propane tank on the base.
D3012 - Gas Supply System-Propane Vaporizer System	The propane distribution has am Algas-SD1 propane vaporizer with a capacity of 52.3 USGal/hr.



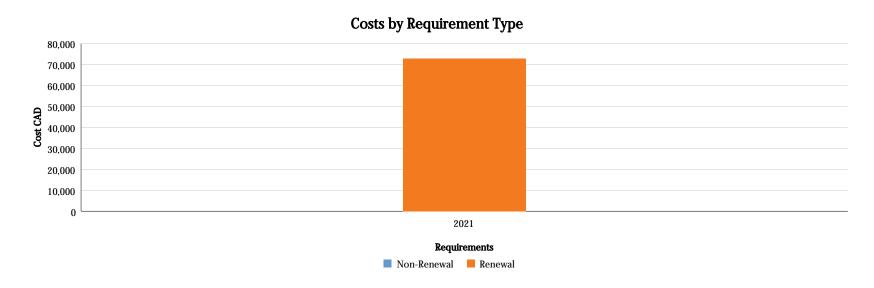


Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D3012 - Gas Supply System	Propane Vaporizer System	30	100	1991	2021	39,631	39,631
D3012 - Gas Supply System	Propane Tank - 45.4 Cubic Meters	30	100	1991	2021	33,263	33,263
D3012 - Gas Supply System	Propane Gas Service to Buildings - Underground	40	125	1991	2032	107,274	85,820
					Subtotal		158,714
					Overhead:		0
					Subtotal		0
		Total Replaceme	nt Value Based o	on System Costs wi	th Overheads		158,714



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Propane Tank - 45.4 Cubic Meters Renewal	Yes	D3012 - Gas Supply System	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	33,263
Propane Vaporizer System Renewal	Yes	D3012 - Gas Supply System	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	39,631
Total						72,894





Region: Central and Arctic Asset: RSER / DFO Storage Warehouse

Site: Hay River CCG Base Asset Number: C L 00002 17105

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	98,682	FCI:	0.09
RI Cost:	105,150	RI:	0.10
Total Requirement Cost:	105,150	Size:	372 SM
Current Replacement Value:	1,100,876		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior Elevation RSER / DFO Storage Warehouse

Asset Description

RSER / DFO STORAGE WAREHOUSE: ASSET CODE C L 00002 17105

ARCHITECTURAL

General

The RSER / DFO Storage Warehouse facility, Asset Code C L 00002 17105, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a single level building with a slab foundation built in 1996. The RSER / DFO Storage Warehouse building contains 372 square meters of floor space.

Construction

The substructure construction found beneath the RSER / DFO Storage Warehouse building consists of concrete slab on grade, sitting on an exterior perimeter cast concrete foundation walls founded on strip concrete footings. Exterior walls are clad with prefinished metal panel siding on an insulated wood framed backup wall, finished on the interior with prefinished metal panels. The floors are typically painted or sealed concrete finishes. Roof framing consists of pre-engineered wood roof trusses and is waterproofed with a standing seam metal panel roof assembly. Fenestration consists of insulated aluminum window assemblies and entry doors are finished, insulated metal panel doors and frames.





Classification

The RSER / DFO Storage Warehouse can be classified as a Group F Division 3 Low Hazard Industrial Occupancy per Table 3.1.2.1. of the 2010 National Building Code of Canada for storage uses.

Mechanical

The building is heated by propane fired unit heaters, and does not have any plumbing services. There is a shop compressed air system.

Electrical

The building has a main electrical and an electrical distribution system. There is HID lighting throughout.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - No Basement	Basic foundation for building without basement - to include strip footing, 1200mm foundation wall and damp proofing. Also included are underdrains.
A - Substructure-Structural Slab on Grade	The building substructure includes a light industrial type structural slab on grade.
B10 - Superstructure-Single-Story - Wood Framed Roof Truss	The building superstructure includes wood truss roof framing, sheathing and batt insulation.
B2010 - Exterior Walls-Metal Siding on Framing	The exterior wall has prefinished metal panel siding on framing with GWB finish on the interior.
B2020 - Exterior Windows-Windows - Aluminum	The building includes aluminum framed exterior units with insulating glass.
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware.
B2030 - Exterior Doors-Overhead Rolling Doors - Electric Operation	Exterior openings include overhead rolling doors with electric operators.
B30 - Roofing-Metal Roofing - High End	The roof covering is of formed metal roofing, such as standing seam metal.
C1010 - Partitions-GWB on Wood Stud	The building interior includes standard GWB on wood stud partitions, taped and finished, but not painted, no insulation.
C1020 - Interior Doors-Swinging Doors Wood and Metal	Interior doors include wood and metal doors and frames with standard hardware. System cost includes both single and double doors.
C1035 - Identifying Devices-Signage (Room Numbering and Identification)	The building has way finding signage which typically includes door numbers, names and graphics.
C3010 - Wall Finishes-Prefinished Metal Wall Panels	Interior wall finishes include prefinished metal wall panels. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted concrete with an abrasive textured additive to prevent slipping.
C3030 - Ceiling Finishes-Prefinished Metal Ceiling Panels	Ceiling system consists of prefinished metal ceiling panels. Observed years remaining increased due to system condition.
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building has a propane gas distribution system, including meter and distribution piping, valves and fittings.
D2090 - Other Plumbing Systems-Shop Compreessed Air System	The building has a shop compressed air system with a compressor and piping.





System Name	Description
D3050 - Terminal and Package Units-Unit Heaters - Gas Fired	There are gas fired unit heaters in the building. Note: The units are in good condition and the observed years remaining has been extended.
$D5012\mbox{ -} Low$ Tension Service and DistDistribution Equipment, Panelboards, and Feeders	The electrical distribution system includes panelboards, feeders and associated equipment.
D5012 - Low Tension Service and DistMain Electrical Service	The building includes an electrical service, which includes incoming feeders and meter.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	The exterior lighting consists of LED wall pack fixtures.
D5022 - Lighting Equipment-Lighting Fixtures - Interior - HID	The building has fluorescent light fixtures throughout. Note: The lighting is operating normally and in good condition, and the observed years remaining has been extended.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Structural Slab on Grade	75	6	1996	2071	5,165	86,081
A - Substructure	Foundation Wall and Footings - No Basement	75	6	1996	2071	5,294	84,698
B10 - Superstructure	Single-Story - Wood Framed Roof Truss	75	6	1996	2071	4,014	66,894
B2010 - Exterior Walls	Metal Siding on Framing	75	62	1996	2071	57,497	91,995
B2020 - Exterior Windows	Windows - Aluminum	30	125	1996	2026	35,314	28,251
B2030 - Exterior Doors	Door Assembly - Single	30	125	1996	2026	12,977	10,381
B2030 - Exterior Doors	Overhead Rolling Doors - Electric Operation	30	125	1996	2026	48,555	38,844
B30 - Roofing	Metal Roofing - High End	65	125	1996	2061	443,237	354,590
C1010 - Partitions	GWB on Wood Stud	50	62	1996	2046	7,095	11,352
C1020 - Interior Doors	Swinging Doors Wood and Metal	50	125	1996	2046	14,543	11,635
C1035 - Identifying Devices	Signage (Room Numbering and Identification)	10	125	2016	2026	3,503	2,803





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C3010 - Wall Finishes	Prefinished Metal Wall Panels	25	81	1996	2026	40,676	50,218
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	2011	2026	10,623	8,498
C3030 - Ceiling Finishes	Prefinished Metal Ceiling Panels	30	125	1996	2026	115,564	92,451
D2090 - Other Plumbing Systems	Shop Compreessed Air System	20	105	2018	2018	27,805	26,481
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1996	2036	14,007	11,206
D3050 - Terminal and Package Units	Unit Heaters - Gas Fired	15	112	1996	2023	31,745	28,344
D5012 - Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders	30	125	1996	2026	56,443	45,154
D5012 - Low Tension Service and Dist.	Main Electrical Service	30	125	1996	2026	22,325	17,860
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2037	3,677	2,941
D5022 - Lighting Equipment	Lighting Fixtures - Interior - HID	20	125	1996	2023	37,749	30,199
					Subtotal		1,100,876
					Overhead:		0
					Subtotal		0
		Total Replaceme	nt Value Based o	on System Costs wi	th Overheads		1,100,876

Cost CAD

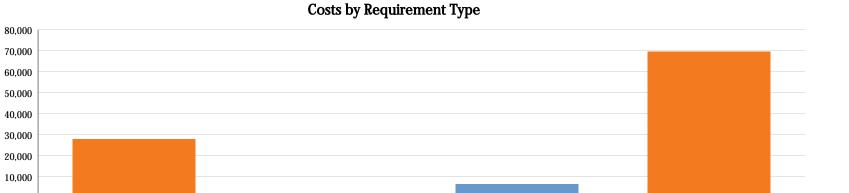


Asset Overview Report By Asset Name

2023

Requirements including Renewals

2018



Requirements

■ Non-Renewal ■ Renewal

Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Exterior Doors - Damaged Overhead Garage Door	No	B2030 - Exterior Doors	Maintenance	2- Due within 2 Years of Inspection	Aug 14, 2020	4,816
Exterior Walls - Damaged Exterior Metal Siding	No	B2010 - Exterior Walls	Reliability	2- Due within 2 Years of Inspection	Aug 14, 2020	1,383
Lighting Fixtures - Interior - HID Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	37,749
Shop Compreessed Air System Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	27,805
Superstructure - Unwanted Bee Hives	No	B10 - Superstructure	Maintenance	1- Due within 1 Year of Inspection	Aug 14, 2019	1,652
Unit Heaters - Gas Fired Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	31,745
Total						105,150

2019

2020





Region: Central and Arctic Asset: Sewage Septic Tank (NOT USED)

Site: Hay River CCG Base Asset Number: C L 00002 16944

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	0	FCI:	0.00
RI Cost:	0	RI:	0.00
Total Requirement Cost:		Size:	1 SM
Current Replacement Value:	0		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT

No photo available.

Asset Description

The Base does not have a central septic system. Each building has a sewage holding tank that is pumped out as needed. These sewage holding tanks are listed with each building to better reflect the age and condition of the tanks.

System Description

System Name Description





Overhead: 0
Subtotal 0

Total Replacement Value Based on System Costs with Overheads

Requirements including Renewals

No data available.





Region: Central and Arctic Asset: Shore Protection

Site: Hay River CCG Base Asset Number: C L 00002 15162

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	0	FCI:	0.00
RI Cost:	0	RI:	0.00
Total Requirement Cost:		Size:	1 SM
Current Replacement Value:	529,792		

Address 142037 Mackenzie HighwayAddress 2-CityHay RiverState/Province/RegionNT

No photo available.

Asset Description

SHORE PROTECTION, ASSET CODE: C L 00002 15162

ARCHITECTURAL

General

The Hay River Canadian Coast Guard Base can be found at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The site infrastructure includes shore protection along the Hay River bank edge on the southeastern edge of the site. Shore protection consists of broken stone rip-rap and steel piling walls to prevent river bank erosion.

Mechanical

The Shore Protection does not have any mechanical services.





Electrical

The Shore Protectiondoes not have any electrical services

System Description

System Name	Description
G2049 - Miscellaneous Structures-Shore Protection Rip Rap SE Site	Site development includes river bank broken stone rip-rap for protecting shoreline. Assume 170LM long by 2M high.
G2049 - Miscellaneous Structures-Steel Piling Seawall SE Site	Site development includes steel sheet piling seawalls, steel sheeting, 3.6 M high, shore driven for protecting shoreline.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2049 - Miscellaneous Structures	Shore Protection Rip Rap SE Site	60	125	1982	2042	124,223	99,378
G2049 - Miscellaneous Structures	Steel Piling Seawall SE Site	60	125	1982	2042	538,017	430,414
					Subtotal		529,792
					Overhead:		0
					Subtotal		0
		Total Replace	ment Value Based o	on System Costs wi	ith Overheads		529,792





Requirements including Renewals

No data available.





Region: Central and Arctic Asset: Stores / Maintenance Shop

Site: Hay River CCG Base Asset Number: C L 00002 17009

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	1,715,902	FCI:	0.37	
RI Cost:	1,748,082	RI:	0.37	
Total Requirement Cost:	1,746,311	Size:	804 SM	
Current Replacement Value:	4,663,288			

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Front Elevation Stores / Maintenance Shop

Asset Description

STORES / MAINTENANCE SHOP: ASSET CODE C L 00002 17009

ARCHITECTURAL

Genera

The Stores / Maintenance Shop, Asset Code C L 00002 17009, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, XOE 0R9. The facility is a single level building with crawlspace foundation built in 1968 and renovated in 1991. The Stores / Maintenance Shop contains 804 square meters of floor space.

Construction

The substructure construction found beneath the Stores / Maintenance Shop facility consists of an elevated concrete floor, supported on concrete grade beams and resting on an exterior perimeter cast concrete foundation walls founded on strip concrete footings. The entire foundation substructure is supported by steel piles driven into the highly compressible discontinuous permafrost soils to prevent subsidence and settlement issues. Exterior walls are clad with prefinished metal panel siding on an insulated wood framed backup wall, finished with vapour retarder and either painted gypsum or prefinished metal wall panels. Roof framing consists of pre-engineered structural steel support members and is waterproofed with a standing seam metal roofing assembly. Fenestration





consists of insulated aluminum window assemblies and entry doors are finished, insulated wood panel doors and frames, some with insulated glazing.

Classification

The Stores / Maintenance Shop can be classified as a Group F, Division 3 Low Hazard Industrial Occupancy per Table 3.1.2.1. of the 2010 National Building Code of Canada for use as general storage facility and a Group F, Division 2 Medium Hazard Industrial Occupancy as a maintenance shop.

Mechanical

The building is heated by a hydronic heating system with boilers, pumps and distribution piping. There is an HVAC system serving the first and second floor office areas. There is also a waste oil boiler with piping connecting to the heating water system. Domestic water from a municipal system was recently added to the building and there is a domestic water heater. Sewage drains by gravity to a holding tank. The maintenance area contains an auto hoist. There are fire protection stand pipes and hose cabinets throughout the building and those are now connected to the water system.

Electrical

The building has a main electrical and an electrical distribution system. There is fluorescent lighting throughout. The building has a connection and transfer switch to connect to a portable electric generator.

System Description

System Name	Description
A - Substructure-Foundation Wall and Footings - Crawlspace	Basic perimeter foundation for building with crawlspace. System cost includes strip footing, 1.8 meter high foundation wall, damp proofing and underdrain and is based on average height of crawlspace at 600mm.
A - Substructure-Grade Beams	The substructure includes grade beams with a span of 9.14LM and 1.02LM deep.
A - Substructure-Pile Foundation	The building substructure includes pile caps and piles 15-LM in length in clusters of 10 at each pile cap.
B10 - Superstructure-Floor Assembly - Cast in Place Concrete	Floor superstructure consists of reinforced cast in place concrete construction.
B10 - Superstructure-Single-Story - Steel Framed Roof on Columns	Single-story steel framed building with steel columns and steel joist roof structure. Exterior walls are covered under a separate System.
B1014 - Ramps-Access Ramp - Exterior Steel	Portable access ramp, aluminum. RS means line items provided for estimation purposes.
B1015 - Exterior Stairs and Fire Escapes-Exterior Stairs - Steel	Exterior steel stairs (one flight) with railing.
B2010 - Exterior Walls-Wood Stud Framing With Metal Panel Siding	The exterior walls are of $38 \times 140 \text{mm}$ studs, 400mm OC, insulated, with aluminum panel siding. Observed years remaining increased due to system condition.
B2020 - Exterior Windows-Aluminum Windows	The building includes aluminum framed exterior units with insulating glass. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Door Assembly - 6 x 7 Wood	Exterior doors include pr. 900 x 2,100 wood doors and wood frame with hinges, locksets (lever), exit hardware and closers. Includes painted doors and painted frame. Observed years remaining increased due to system condition.





System Name	Description
B2030 - Exterior Doors-Door Assembly - Single	Exterior doors include single-leaf door and frames with standard hardware. Observed years remaining increased due to system condition.
B2030 - Exterior Doors-Overhead Rolling Doors - Manual Operation	Exterior openings include overhead rolling doors with manual operation. Observed years remaining increased due to system condition.
B30 - Roofing-Metal Roofing - High End	The roof covering is of formed metal roofing, such as standing seam metal.
C1010 - Partitions-CMU Block Walls - Plain	Interior walls are of 200-mm hollow concrete block, light and regular weight, with no finish. Observed years remaining increased due to system condition.
C1010 - Partitions-GWB Walls - Standard (Non-Painted)	The building interior includes standard GWB partitions, taped and finished, but not painted, with no insulation. Observed years remaining increased due to system condition.
C1020 - Interior Doors-Swinging Doors - 900 x 2100 HM & Wood	Interior doors include 900 x 2100 steel or wood doors and steel or wood frame with hinges, lockset (lever) and closer. Includes painted door and painted frame. Observed years remaining increased due to system condition.
C1030 - Fittings-Restroom Accessories	The restroom accessories include mirror, grab bars, paper towel dispenser and disposal, diaper changing station, toilet paper holder and soap dispenser. Observed years remaining increased due to system condition.
C1030 - Fittings-Toilet Partitions	Restrooms are equipped with standard quality, ceiling-hung partitions.
C1035 - Identifying Devices-Fittings - Signage (Room Numbering and Identification)	Room, door and graphic symbol signs. Adhesive backs and Braille.
C20 - Stairs-Stairs Typical	The interior stairs include one, 12-riser flight per story with hand and guard rails.
C3010 - Wall Finishes-Paint Masonry/Epoxy Finish - Economy	Wall finishes include paint on CMU and minimum hi-build epoxy finish.
C3010 - Wall Finishes-Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	Interior wall finishes include standard paint finish.
C3010 - Wall Finishes-Prefinished Metal Wall Panels	Interior wall finishes include prefinished metal wall panels. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Concrete - Painted or Sealed	Typical painted or sealed concrete with an abrasive textured additive to prevent slipping. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Linoleum Sheet Goods	Floor finishes include areas of seamless linoleum and or marmoleum sheet goods flooring and related base. Observed years remaining increased due to system condition.
C3020 - Floor Finishes-Vinyl Composite Tile	Floor finishes include areas of standard vinyl composite tile, VCT flooring and related base. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-Acoustic Ceiling Tile System	Standard suspended ACT ceiling system with 600×600 or $600 \times 1,200$ mm regular tiles in 24 or 14-mm grids. Use add-ons as applicable. Observed years remaining increased due to system condition.
C3030 - Ceiling Finishes-GWB Taped and Finished	GWB ceiling system over 2,400-mm floor taped, finished and painted with primer and 2 finish coats. Ceiling on suspension system or fastened to metal or wood furring.





System Name	Description
C3030 - Ceiling Finishes-Prefinished Metal Ceiling Panels	Ceiling system consists of prefinished metal ceiling panels. Observed years remaining increased due to system condition.
D2010 - Plumbing Fixtures-Custodial/Utility Sinks	The plumbing fixtures include a custodial/utility sink.
D2010 - Plumbing Fixtures-Restroom Fixtures	The restroom fixtures include vitreous china water closets and urinals.
D2010 - Plumbing Fixtures-Restroom Fixtures - Individual Shower	The restroom fixtures include fiberglass individual shower stall.
D2010 - Plumbing Fixtures-Restroom Fixtures - Lavatories	The restroom fixtures include vitreous china lavatories.
D2010 - Plumbing Fixtures-Sink - Breakroom	The plumbing fixtures include stainless steel counterset sinks located in the break room.
D2020 - Domestic Water Distribution-Domestic Water Distribution System	The building water distribution system includes a new city water service ,branch piping, backflow preventer, water meter, valves, insulation and fittings.
D2020 - Domestic Water Distribution-Water Heater - Propane	The domestic hot water is provided by a propane fired water heater with acirculating pump. The water heater was installed in 2015.
D2030 - Sanitary Waste-Sanitary Sewage Holding Tank	The sanitary sewage drains to a holding tank located behind the building. The tank is periodically sucked out by connection to a discharge standpipe. There have been some issues with the discharge piping. Note: The system is functioning normally and the observed years remaining has been extended.
D2030 - Sanitary Waste-Sanitary Waste - Gravity Discharge	The building includes an sanitary waste system, hung from the slab in the crawl space and discharging to a holding tank. The system has had some deterioration and repairs. Note: The observed years remaining has been reduced to reflect the deteriorating system
D2090 - Other Plumbing Systems-Propane Gas Supply for Bldg	The building includes a propane gas supply and distribution system. Note: The system is in good condition with some recent modifications and the observed years remaining has been increased.
D2090 - Other Plumbing Systems-Shop Compreessed Air System	The building has a shop compressed air system with a compressor and piping.
D3020 - Heat Generating Systems-Boiler Heating Water - Propane Fired	Heat is provided by two high efficiency, 96% AFUE, hot water boilers with circulating pumps and accessories. the boilers are propane fired.
D3020 - Heat Generating Systems-Waste Oil Boiler	There is a waste oil fueled boiler with pump and piping to tie into the heating water system.
D3040 - Distribution Systems-Central Station Air Handler	The HVAC system consists of one air handler located on the mezzanine.
D3040 - Distribution Systems-Ductwork Distribution System	The HVAC system includes ductwork, dampers, diffusers, installed throughout the building. Note: The system is in good condition with some modifications and the observed years remaining has been extended.
D3040 - Distribution Systems-Exhaust System - Maintenance Garage	The building includes a garage exhaust system including a fan and ductwork. Note: The system is functioning normally and the observed years remaining has been increased.
D3040 - Distribution Systems-Heating Hot Water -	The Hot water Heating System consists of distribution piping, valves, insulation and fittings. Note: The system is in good condition and has been maintained so the





System Name	Description
Building Heating Water Distribution System	observed years remaining has been extended.
D3040 - Distribution Systems-Perimeter Heat System - Hydronic Fin Tube	The HVAC distribution includes a two-pipe system of heating hot water, with perimeter units in various parts of the building. Note: This system is in good condition and the observed years remaining has been extended.
D3041 - Air Distribution Systems-Air Heating and Filtration Units	The building has air filtration and heating units
D3042 - Exhaust Ventilation Systems-Welding Exhaust	The building has a welding exhaust system in the shop area.
D3050 - Terminal and Package Units-Unit Heaters - Hot Water	There are hot water unit heaters in the building. Note: The units are in good condition and the observed years remaining has been extended.
${\rm D3060}$ - Controls and Instrumentation-Pneumatic Controls	The building includes average pneumatic HVAC control system with compressed air supply, controls, sensors and miscellaneous devices. Note: The system is functioning normally and has had some modifications, and the observed years remaining has been increased.
D40 - Fire Protection-Fire Protection Standpipe System	The building has a fire protection standpipe system with water supplied by the municipal water system (new) and stand pipes and fire hose station in the building. Current building codes for new construction requires fire sprinklers throughout.
D5012 - Low Tension Service and Dist Distribution Equipment, Panelboards, and Feeders	The electrical distribution system includes panelboards, feeders and associated equipment. The wharf power stations and the parking lot receptacles are fed from this building.
D5012 - Low Tension Service and DistMain Electrical Service	The building includes an electrical service, which includes incoming feeders and meter.
D5012 - Low Tension Service and Dist Transformer	The building has an electrical transformer.
D5020 - Lighting and Branch Wiring-Lighting - Exterior - LED Wall Packs	The exterior lighting consists of LED wall pack fixtures.
D5021 - Branch Wiring Devices-Branch Wiring - Equipment & Devices	Branch wiring for this building includes interior and exterior branch wiring, devices, and utilization equipment. Note: This system is in good condition and functioning normally, and the observed years remaining has been extended.
D5022 - Lighting Equipment-Lighting Fixtures - Interior - Fluorescent	The building has fluorescent light fixtures throughout. Note: The lighting is operating normally and in good condition, and the observed years remaining has been extended.
D5031 - Public Address and Music Systems-Public Address System	The building includes a public address system with speakers, amplifier and wiring.
D5033 - Telephone Systems-Telephone System with VOIP	Telephone service with VOIP is provided throughout the building with distribution wiring extended to telephone outlets. The system is functioning normally and the observed years remaining has been extended.
D5037 - Fire Alarm Systems-Fire Alarm System	The building has a fire alarm system panel, sensors, horns and smoke detectors. The system does not meet current codes for fire alarm systems.
D5039 - Local Area Networks-LAN System	The facility includes a LAN system and data cabling system.





System Name	Description
D5092 - Emergency Light and Power Systems- Emergency Backup Power System	There is an exterior connection and a transfer switch in the electrical room for connection with a portable emergency generator. Note: The system is in good condition and the observed years remaining has been extended.
D5092 - Emergency Light and Power Systems- Emergency Battery Pack Lights	The emergency lighting system includes self-contained battery packs and lights in the egress passages.
D5092 - Emergency Light and Power Systems-Exit Signs	The building does not have illuminated exit signs
D5094 - Other Special Systems and Devices-Cable Tray - Data Systems Wiring	A cable tray for data and communications wire has been installed in the building. However, the cables were tied to the underside of the tray rather than being run in the tray.
E - Equipment and Furnishings-Fixed Casework Cabinetry	Building includes average plastic laminate casework including wall and under counter cabinets and countertops, without appliances. Observed years remaining increased due to system condition.
E1031 - Vehicular Service Equipment-Vehicle Hoist & Service Equipment	The building has a vehicle hoist and related vehicle service equipment. Note: The system is in good condition with current inspection tags, and the observed years remaining has been increased.
E1091 - Maintenance Equipment-Chain Hoist Systems	There are chain hoists in the maintenance area. Note: These are functioning normally and the observed years remaining has been extended.
G2023 - Curbs, Rails and Barriers-Pipe Bollards	The site contains metal parking bumpers, pipe bollards, concrete filled, painted, $2400 \text{ mm L} \times 1200 \text{ mm}$ D hole, 200 mm diameter. Observed years remaining increased due to system condition.
G2031 - Paving and Surfacing-Pedestrian Pavement - Perimeter Steel Grate	Pedestrian pavement includes perimeter walkway composed of steel grating. Assume 1,200-mm width.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Pile Foundation	75	6	1968	2043	21,619	360,312
A - Substructure	Grade Beams	75	6	1968	2043	16,534	275,575
A - Substructure	Foundation Wall and Footings - Crawlspace	75	6	1968	2043	10,157	162,519
B10 - Superstructure	Single-Story - Steel Framed Roof on Columns	75	6	1968	2043	10,711	178,520





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
B10 - Superstructure	Floor Assembly - Cast in Place Concrete	75	6	1968	2043	36,019	576,299
B1014 - Ramps	Access Ramp - Exterior Steel	30	112	1992	2022	52,202	46,609
B1015 - Exterior Stairs and Fire Escapes	Exterior Stairs - Steel	50	125	1991	2041	29,108	23,286
B2010 - Exterior Walls	Wood Stud Framing With Metal Panel Siding	50	12	1968	2028	11,683	97,357
B2020 - Exterior Windows	Aluminum Windows	30	125	1968	2023	75,311	60,248
B2030 - Exterior Doors	Overhead Rolling Doors - Manual Operation	30	125	1968	2021	19,158	15,326
B2030 - Exterior Doors	Door Assembly - Single	30	125	1968	2021	51,907	41,525
B2030 - Exterior Doors	Door Assembly - 6 x 7 Wood	30	125	1968	2021	10,728	8,582
B30 - Roofing	Metal Roofing - High End	65	125	1968	2033	957,964	766,371
C1010 - Partitions	GWB Walls - Standard (Non-Painted)	50	62	1968	2028	6,264	10,103
C1010 - Partitions	CMU Block Walls - Plain	50	62	1968	2028	18,288	29,496
C1020 - Interior Doors	Swinging Doors - 900 x 2100 HM & Wood	50	125	1968	2023	126,623	101,298
C1030 - Fittings	Restroom Accessories	25	125	1991	2023	22,154	17,723
C1030 - Fittings	Toilet Partitions	40	125	1991	2031	27,933	22,347
C1035 - Identifying Devices	Fittings - Signage (Room Numbering and Identification)	10	125	2011	2021	7,572	6,057
C20 - Stairs	Stairs Typical	75	38	1968	2043	8,454	22,543
C3010 - Wall Finishes	Prefinished Metal Wall Panels	25	81	1991	2028	29,879	36,887
C3010 - Wall Finishes	Paint Masonry/Epoxy Finish - Economy	15	125	2006	2021	14,487	11,590
C3010 - Wall Finishes	Painted Finish - Average (1 Coat Prime - 2 Coats Finish)	10	125	2011	2021	5,312	4,250
C3020 - Floor Finishes	Linoleum Sheet Goods	25	125	1991	2020	37,475	29,980
C3020 - Floor Finishes	Concrete - Painted or Sealed	15	125	1991	2023	16,077	12,862
C3020 - Floor Finishes	Vinyl Composite Tile	10	125	1991	2021	4,550	3,640





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
C3030 - Ceiling Finishes	Acoustic Ceiling Tile System	20	125	1991	2026	7,087	5,669
C3030 - Ceiling Finishes	Prefinished Metal Ceiling Panels	30	125	1991	2028	62,131	49,705
C3030 - Ceiling Finishes	GWB Taped and Finished	30	125	1968	2026	12,298	9,838
D2010 - Plumbing Fixtures	Sink - Breakroom	30	125	1991	2021	3,439	2,751
D2010 - Plumbing Fixtures	Restroom Fixtures	30	125	1991	2021	17,410	13,928
D2010 - Plumbing Fixtures	Restroom Fixtures - Individual Shower	30	125	1991	2021	3,788	3,030
D2010 - Plumbing Fixtures	Custodial/Utility Sinks	30	125	1991	2021	15,561	12,449
D2010 - Plumbing Fixtures	Restroom Fixtures - Lavatories	30	125	1991	2023	7,942	6,353
D2020 - Domestic Water Distribution	Water Heater - Propane	10	112	1991	2025	9,898	8,837
D2020 - Domestic Water Distribution	Domestic Water Distribution System	30	112	1991	2021	56,055	49,826
D2030 - Sanitary Waste	Sanitary Sewage Holding Tank	40	100	1991	2023	40,960	40,960
D2030 - Sanitary Waste	Sanitary Waste - Gravity Discharge	50	125	1991	2028	185,122	148,098
D2090 - Other Plumbing Systems	Propane Gas Supply for Bldg	40	125	1991	2023	30,273	24,219
D2090 - Other Plumbing Systems	Shop Compreessed Air System	20	105	2017	2035	25,421	24,211
D3020 - Heat Generating Systems	Boiler Heating Water - Propane Fired	30	125	2018	2048	49,777	39,822
D3020 - Heat Generating Systems	Waste Oil Boiler	30	125	2002	2032	92,748	74,198
D3040 - Distribution Systems	Perimeter Heat System - Hydronic Fin Tube	18	112	1991	2024	35,645	31,684
D3040 - Distribution Systems	Exhaust System - Maintenance Garage	25	125	1991	2023	6,000	4,800
D3040 - Distribution Systems	Central Station Air Handler	25	125	1991	2028	119,195	95,356
D3040 - Distribution Systems	Heating Hot Water - Building Heating Water Distribution System	25	125	1991	2024	42,361	33,889
D3040 - Distribution Systems	Ductwork Distribution System	40	125	1991	2024	20,045	16,036
D3041 - Air Distribution Systems	Air Heating and Filtration Units	30	100	1991	2033	108,549	108,549





Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D3042 - Exhaust Ventilation Systems	Welding Exhaust	25	100	1991	2018	25,685	25,685
D3050 - Terminal and Package Units	Unit Heaters - Hot Water	25	112	1991	2023	106,664	95,235
D3060 - Controls and Instrumentation	Pneumatic Controls	20	112	1991	2021	106,405	95,004
D40 - Fire Protection	Fire Protection Standpipe System	35	125	1991	2026	49,902	39,921
D5012 - Low Tension Service and Dist.	Transformer	30	100	1991	2021	13,605	13,605
D5012 - Low Tension Service and Dist.	Distribution Equipment, Panelboards, and Feeders	30	125	1991	2021	121,989	97,591
D5012 - Low Tension Service and Dist.	Main Electrical Service	30	125	1991	2021	22,325	17,860
D5020 - Lighting and Branch Wiring	Lighting - Exterior - LED Wall Packs	20	125	2017	2037	16,545	13,236
D5021 - Branch Wiring Devices	Branch Wiring - Equipment & Devices	30	125	1991	2023	51,195	40,956
D5022 - Lighting Equipment	Lighting Fixtures - Interior - Fluorescent	20	125	1991	2021	93,305	74,644
D5031 - Public Address and Music Systems	Public Address System	15	125	1991	2018	13,239	10,591
D5033 - Telephone Systems	Telephone System with VOIP	10	125	1991	2020	5,954	4,763
D5037 - Fire Alarm Systems	Fire Alarm System	10	125	1991	2018	101,808	81,446
D5039 - Local Area Networks	LAN System	15	125	2005	2020	77,190	61,752
D5092 - Emergency Light and Power Systems	Emergency Backup Power System	20	125	1991	2023	62,868	50,294
D5092 - Emergency Light and Power Systems	Emergency Battery Pack Lights	10	125	1991	2018	24,238	15,512
D5092 - Emergency Light and Power Systems	Exit Signs	10	125	1991	2018	17,615	8,573
D5094 - Other Special Systems and Devices	Cable Tray - Data Systems Wiring	20	100	2012	2042	10,575	10,575
E - Equipment and Furnishings	Fixed Casework Cabinetry	25	125	1991	2023	34,228	27,382
E1031 - Vehicular Service Equipment	Vehicle Hoist & Service Equipment	25	100	1991	2023	64,107	64,107



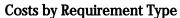


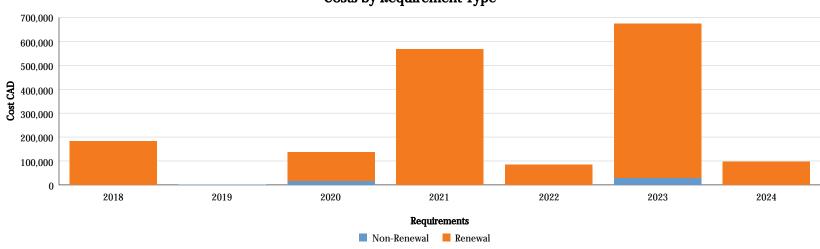
Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
E1091 - Maintenance Equipment	Chain Hoist Systems	25	100	1991	2022	32,242	32,242
G2023 - Curbs, Rails and Barriers	Pipe Bollards	30	125	1991	2026	31,361	25,089
G2031 - Paving and Surfacing	Pedestrian Pavement - Perimeter Steel Grate	25	125	1991	2035	39,634	31,707
					Subtotal		4,663,288
					Overhead:		0
					Subtotal		0
		Total Replacement Value Based on System Costs with Overheads					4.663,288

Requirements including Renewals









Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Access Ramp - Exterior Steel Renewal	Yes	B1014 - Ramps	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	52,202
Aluminum Windows Renewal	Yes	B2020 - Exterior Windows	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	75,311
Branch Wiring - Equipment & Devices Renewal	Yes	D5021 - Branch Wiring Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	51,195
Chain Hoist Systems Renewal	Yes	E1091 - Maintenance Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2022	32,242
Concrete - Painted or Sealed Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	16,077
Custodial/Utility Sinks Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of	Aug 14,	15,561





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
	·		·	Inspection	2021	
Distribution Equipment, Panelboards, and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	121,989
Domestic Water Distribution System Renewal	Yes	D2020 - Domestic Water Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	56,055
Door Assembly - 6 x 7 Wood Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	10,728
Door Assembly - Single Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	51,907
Ductwork Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	20,045
Emergency Backup Power System Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	62,868
Emergency Battery Pack Lights Renewal	Yes	D5092 - Emergency Light and Power Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	24,238
Equipment and Furnishings - Aged Vanity Cabinets Washrooms	No	E - Equipment and Furnishings	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	6,826
Exhaust System - Maintenance Garage Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	6,000
Exit Signs Renewal	Yes	D5092 - Emergency Light and Power Systems	Life Safety	1- Due within 1 Year of Inspection	Aug 14, 2018	17,615
Fire Alarm System Renewal	Yes	D5037 - Fire Alarm Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	101,808
Fittings - Signage (Room Numbering and Identification) Renewal	Yes	C1035 - Identifying Devices	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	7,572
Fixed Casework Cabinetry Renewal	Yes	E - Equipment and Furnishings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	34,228
Floor Finishes - Aged Vinyl Flooring Cafe Upper	No	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	5,090





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Floor Finishes - Aged Vinyl Flooring Office Garage	No	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	5,090
Heating Hot Water - Building Heating Water Distribution System Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	42,361
LAN System Renewal	Yes	D5039 - Local Area Networks	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	77,190
Lighting Fixtures - Interior - Fluorescent Renewal	Yes	D5022 - Lighting Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	93,305
Linoleum Sheet Goods Renewal	Yes	C3020 - Floor Finishes	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	37,475
Main Electrical Service Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	22,325
Overhead Rolling Doors - Manual Operation Renewal	Yes	B2030 - Exterior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	19,158
Paint Masonry/Epoxy Finish - Economy Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	14,487
Painted Finish - Average (1 Coat Prime - 2 Coats Finish) Renewal	Yes	C3010 - Wall Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	5,312
Perimeter Heat System - Hydronic Fin Tube Renewal	Yes	D3040 - Distribution Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2024	35,645
Pneumatic Controls Renewal	Yes	D3060 - Controls and Instrumentation	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	106,405
Propane Gas Supply for Bldg Renewal	Yes	D2090 - Other Plumbing Systems	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	30,273
Public Address System Renewal	Yes	D5031 - Public Address and Music Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	13,239
Restroom Accessories Renewal	Yes	C1030 - Fittings	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	22,154
Restroom Fixtures - Individual Shower Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	3,788





Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Restroom Fixtures - Lavatories Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	7,942
Restroom Fixtures Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	17,410
Sanitary Sewage Holding Tank Renewal	Yes	D2030 - Sanitary Waste	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	40,960
Sink - Breakroom Renewal	Yes	D2010 - Plumbing Fixtures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	3,439
Superstructure - Pitted Cast In Place Concrete Floor Garage	No	B10 - Superstructure	Maintenance	3- Due within 5 Years of Inspection	Aug 14, 2023	30,406
Swinging Doors - 900 x 2100 HM & Wood Renewal	Yes	C1020 - Interior Doors	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	126,623
Telephone System with VOIP Renewal	Yes	D5033 - Telephone Systems	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	5,954
Transformer Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	13,605
Unit Heaters - Hot Water Renewal	Yes	D3050 - Terminal and Package Units	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	106,664
Vehicle Hoist & Service Equipment Renewal	Yes	E1031 - Vehicular Service Equipment	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	64,107
Vinyl Composite Tile Renewal	Yes	C3020 - Floor Finishes	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	4,550
Wall Finishes - Aged Gypsum Wall Paint Office	No	C3010 - Wall Finishes	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2019	1,202
Welding Exhaust Renewal	Yes	D3042 - Exhaust Ventilation Systems	Lifecycle	1- Due within 1 Year of Inspection	Aug 14, 2018	25,685
Total						1,746,311



DRAFT

Asset Overview Report By Asset Name

Region: Central and Arctic

Asset: Underground Power & Fiber Optic

Lines

Site: Hay River CCG Base

Asset Number: C L 00002 15182

Assets are ordered by Asset Name

Currency: CAD

Statistics

City

FCI Cost:	551,649	FCI:	0.85
RI Cost:	551,649	RI:	0.85
Total Requirement Cost:	551,649	Size:	1 SM
Current Replacement Value:	648,185		

Address 1 42037 Mackenzie Hwy.

Hay River

Address 2

State/Province/Region

NT



Photo



G4013 - Underground Electrical System - Service Transformer

Asset Description

The Base has an underground power distribution system with distribution and transformers. There is an underground fiber optics system connecting to each building for phone and data systems.

System Description

System Name	Description
D5039 - Local Area Networks-Fiber Optics System	Underground fiber optics lines have been installed to the buildings on the Base.
G4013 - Underground Power Distribution-Underground Electrical System	The Base electrical power is distributed by and underground electrical distribution system. Note: The system is functioning normally and the observed years remaining has been increased.





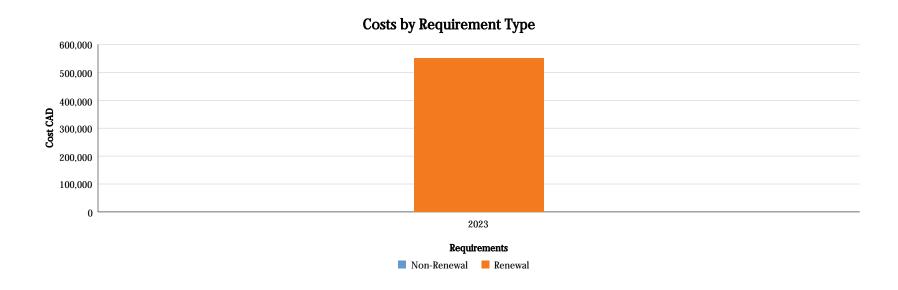
Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
D5039 - Local Area Networks	Fiber Optics System	15	100	2010	2025	96,536	96,536
G4013 - Underground Power Distribution	Underground Electrical System	30	100	1982	2023	551,649	551,649
				Subtotal			648,185
				Overhead:			0
					Subtotal		0
		Total Replacement Value Based on System Costs with Overheads					648,185

Requirements including Renewals







Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Underground Electrical System Renewal	Yes	G4013 - Underground Power Distribution	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	551,649
Total						551,649





Region: Central and Arctic Asset: Underground Water Service

Site: Hay River CCG Base Asset Number: C L 00002 14562

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	621,497	FCI:	1.00
RI Cost:	621,497	RI:	1.00
Total Requirement Cost:	621,497	Size:	1 SM
Current Replacement Value:	621,497		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT





Photo



G3011 - Underground Water System - Hydrant

Asset Description

The Coast Guard Base is supplied water from a municipal water system. The system connects to the Administration Building, The Fisheries Management Building and the Stores/Maintenance Building. All other buildings have potable water tanks. There are fire hydrants on the water system.

System Description

System Name	Description
G3011 - Potable Water Distribution and Storage-Underground	There is an underground water distribution system with connects to fire hydrants, the Administration Building, the Fisheries Management Buildings, and
Water System	the Stores/Maintenance Building





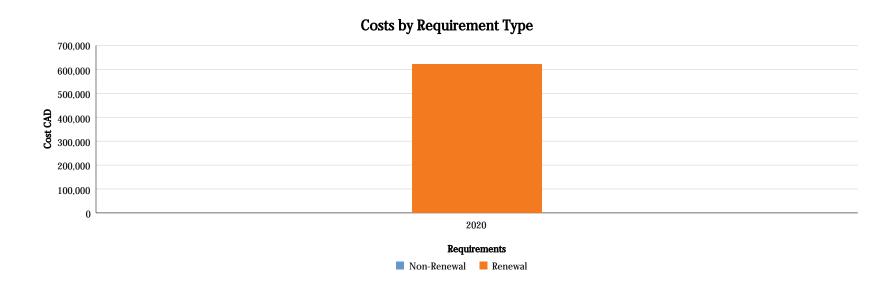
Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G3011 - Potable Water Distribution and Storage	Underground Water System	25	100	1995	2020	621,497	621,497
					Subtotal		621,497
				Overhead:			0
		Total Replace	Subtotal Total Replacement Value Based on System Costs with Overheads				0 621,497

Requirements including Renewals







Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Underground Water System Renewal	Yes	G3011 - Potable Water Distribution and Storage	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	621,497
Total						621,497





Region: Central and Arctic **Asset:** Wharf

Site: Hay River CCG Base Asset Number: C L 00002 16145

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	361,205	FCI:	0.21
RI Cost:	361,205	RI:	0.21
Total Requirement Cost:	361,205	Size:	1 SM
Current Replacement Value:	1,724,263		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT





Photo



Signature - Exterior View Wharf

Asset Description

WHARF. ASSET CODE: C L 00002 16145

ARCHITECTURAL

Genera

The Hay River Canadian Coast Guard Base can be found at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The site infrastructure includes two wharfs along the Hay River bank edge on the northeastern edge of the site. The two wharfs consist of sheet steel piling, supported by wales tied back to the shore and anchored below grade. New fill placed behind the piling.

Mechanical

There are two fuel dispensary systems on the wharf.

Electrical

There are four power stations and one light pole on the wharf.





System Description

System Name	Description
A - Substructure-Wharf One Pile Anchors	The Wharf One sheet piling is assumed to be tied back into the ground on shore using two piles at each anchor. Thirteen anchors in total. Observed years remaining reduced due to system condition.
A - Substructure-Wharf Two Pile Anchors	The Wharf Two sheet piling is assumed to be tied back into the ground on shore using two piles at each anchor. Twenty-seven anchors in total.
D2099 - Other Piping Systems-Fuel Tank and Pump	There are two fuel tanks and pumps on the wharf. The tank holds 2500 liters.
D5012 - Low Tension Service and DistDistribution, Panelboards and Feeders	There are 3 power connection stations on the wharf used for shore power to ships moored at the wharf. Note: The equipment is in good condition and functioning normally and the observed years remaining has been increased.
D5022 - Lighting Equipment-Wharf Light Pole and LED	The wharf lighting is a pole with four LED lights.
G2021 - Bases and Sub-Bases-Wharf One Base Course Backfill	Parking lot flexible pavement (bituminous) includes a 457-mm thick gravel base course for large paved areas.
G2021 - Bases and Sub-Bases-Wharf One Intermediate Course	Parking lot flexible pavement includes a 75-mm thick bituminous intermediate binder course for large paved areas.
G2021 - Bases and Sub-Bases-Wharf Two Base Course Backfill	Parking lot flexible pavement (bituminous) includes a 457-mm thick gravel base course for large paved areas.
G2021 - Bases and Sub-Bases-Wharf Two Intermediate Course	Parking lot flexible pavement includes a 75-mm thick bituminous intermediate binder course for large paved areas.
G2049 - Miscellaneous Structures-Mooring Accessories One	Site development includes dock cleats and service utilities for water vessels to tie up to and tender into docks. Quantities are outlined in the means line items. Observed years remaining reduced due to system condition.
G2049 - Miscellaneous Structures-Mooring Accessories Two	Site development includes dock fenders, ladders, cleats and service utilities for water vessels to tie up to and tender into docks. Quantities are outlined in the means line items.
G2049 - Miscellaneous Structures-Sheet Steel Seawall One	Site development includes steel sheet piling seawall, steel sheeting, 3,600 meters high, driven from shore, for protecting shoreline. Observed years remaining reduced due to system condition.
G2049 - Miscellaneous Structures-Sheet Steel Seawall Two	Site development includes steel sheet piling seawall, steel sheeting, 3,600 meters high, driven from shore, for protecting shoreline.
G4013 - Underground Power Distribution-Underground Electrical Power Distribution	Power is supplied to the Wharf power kiosks, the fuel depot, and the parking lot power kiosks via an underground distribution system.





Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Wharf Two Pile Anchors	75	6	1970	2045	33,801	563,344
A - Substructure	Wharf One Pile Anchors	75	6	1970	2023	16,274	271,240
D2099 - Other Piping Systems	Fuel Tank and Pump	25	100	1991	2025	24,498	24,498
D5012 - Low Tension Service and Dist.	Distribution, Panelboards and Feeders	30	125	1970	2023	91,947	73,558
D5022 - Lighting Equipment	Wharf Light Pole and LED	20	125	2015	2035	44,381	35,505
G2021 - Bases and Sub-Bases	Wharf One Intermediate Course	25	62	1995	2020	7,118	11,481
G2021 - Bases and Sub-Bases	Wharf One Base Course Backfill	65	12	1970	2035	1,480	12,331
G2021 - Bases and Sub-Bases	Wharf Two Intermediate Course	25	62	1995	2020	41,523	66,972
G2021 - Bases and Sub-Bases	Wharf Two Base Course Backfill	65	12	1970	2035	8,631	71,929
G2049 - Miscellaneous Structures	Sheet Steel Seawall One	60	125	1970	2021	201,757	161,405
G2049 - Miscellaneous Structures	Sheet Steel Seawall Two	60	125	1970	2030	420,326	336,261
G2049 - Miscellaneous Structures	Mooring Accessories Two	30	125	2000	2030	2,586	2,068
G2049 - Miscellaneous Structures	Mooring Accessories One	30	125	2000	2021	2,586	2,068
G4013 - Underground Power Distribution	Underground Electrical Power Distribution	30	100	2000 2030 91,603		91,603	
			Subtotal				1,724,263

Overhead: 0

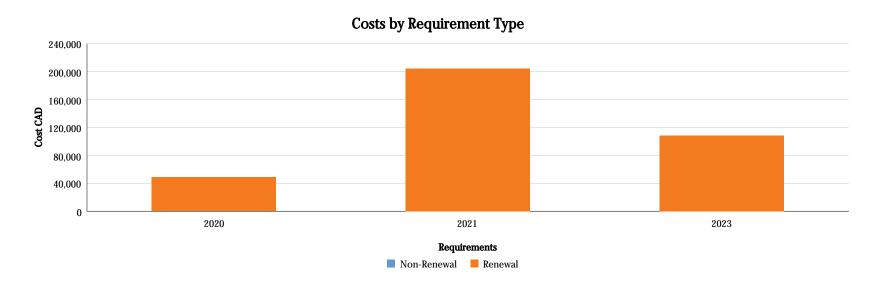
Total Replacement Value Based on System Costs with Overheads 1,724,263

Subtotal

0



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Distribution, Panelboards and Feeders Renewal	Yes	D5012 - Low Tension Service and Dist.	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	91,947
Mooring Accessories One Renewal	Yes	G2049 - Miscellaneous Structures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	2,586
Sheet Steel Seawall One Renewal	Yes	G2049 - Miscellaneous Structures	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	201,757
Wharf One Intermediate Course Renewal	Yes	G2021 - Bases and Sub-Bases	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	7,118
Wharf One Pile Anchors Renewal	Yes	A - Substructure	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2023	16,274
Wharf Two Intermediate Course Renewal	Yes	G2021 - Bases and Sub-Bases	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	41,523
Total						361,205





Region: Central and Arctic **Asset:** Yard(s)

Site: Hay River CCG Base Asset Number: C L 00002 15709

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	241,192	FCI:	0.17
RI Cost:	241,192	RI:	0.17
Total Requirement Cost:	241,191	Size:	1 SM
Current Replacement Value:	1,402,712		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT



Photo



Signature - Flags at Entrance Hay River CCG Base Yard(s)

Asset Description

YARD(S); ASSET CODE C L 00002 15709

ARCHITECTURAL

General

The Yard(s), Asset Code C L 00002 15709, can be found on the Hay River Canadian Coast Guard Base at 42037 Mackenzie Highway, Hay River, Northwest Territories, X0E 0R9. The facility is a gravel surfaced, asphalt surfaced and landscaped surfaced compound originally developed in 1970. Site infrastructure located in the Yard includes:

- 1. A Fuel Distribution Equipment Slab,
- 2. A Equipment Slab Wharf 2,
- 3. Exterior Stairs Steel,
- 4. Conex Steel Storage Containers,
- 5. Roadway Wharf 2,





- 6. Roadway DFO Wharf,
- 7. Yard Base Course,
- 8. Site Development Entrance Sign,
- 9. Site Development Retaining Wall Wood Tie Wharf 1,
- 10. Site Development Retaining Wall Wood Tie Wharf 2,
- 11. Site Development Retaining Wall Concrete Parking,
- 12. Site Development Flagpoles Steel,
- 13. Miscellaneous Structures Concrete Equipment Slab DFO,
- 14. Miscellaneous Structures Concrete Equipment Slab,
- 15. Miscellaneous Structures Concrete Slab Flammable Storage,
- 16. Miscellaneous Structures Fish Cleaning Shed,
- 17. Miscellaneous Structures Storage Shed,
- 18. Special Construction Millard Tower.

Mechanical

There is a fuel depot with two tanks and two pumps in the Yard. A water distribution from the municipal water system has been installed on the Baes. Water is supplied to the Administration Building, the Fisheries Management Building, and the Stores - Maintenance Shops Building. There are fire hydrants on the system.

Electrical

There is a solar photovoltaic system on the Base. There are panels on and equipment in the Heli Operations Building, the Carpenter Shop and the Stores & Maintenance Building. The base has an underground fiber optics network.

System Description

System Name	Description
A - Substructure-Equipment Slab Wharf 2	An equipment slab supports one flag pole on metal tower at Wharf 2. Assume 1.5 SM by 600mm thick.
A - Substructure-Fuel Distribution Equipment Slab on Grade 1	The fuel distribution equipment sits on a concrete equipment slab on grade. Assume 14SM, 300-mm thick.
B1015 - Exterior Stairs and Fire Escapes-Exterior Stairs - Steel	Exterior steel stairs (one flight) with railing.
D5090 - Other Electrical Systems-Solar Photovoltaic System	There is solar photovoltaic system on the with panels on the Heli Operations Building, The Carpenter Shop and Stores-Maintenance Building. The inverters and other electrical equipment are located in the buildings.
E1039 - Other Vehicular Equipment-Fuel Dispensing Station - Diesel Fuel	There is a fuel dispensing station in the yard with a tank and pump system pump system for diesel fuel.
E1039 - Other Vehicular Equipment-Fuel Dispensing Station - Gasoline	There is a fuel dispensing station in the yard with a tank and pump system pump system for Gasoline.
F10 - Special Construction-Millard Tower	The site infrastructure includes a self supported, Millard Training Tower, 9 LM in height; three legs and three concrete foundations.





System Name	Description
F1010 - Special Structures-Conex Steel Storage Container	Conex steel storage containers, 6M x 2.4M
G2011 - Bases and Sub-Bases-Roadway - Base Course DFO Wharf	Roadway flexible pavement (bituminous) includes a 300-mm thick gravel base course (also known as pit-run) for freeways, major arterials, minor arterials, collectors and local roads; spread and compaction included.
G2011 - Bases and Sub-Bases-Roadway - Base Course Wharf 2	Roadway flexible pavement (bituminous) includes a 300-mm thick gravel base course (also known as pit-run) for freeways, major arterials, minor arterials, collectors and local roads; spread and compaction included.
G2011 - Bases and Sub-Bases-Roadway - Intermediate Course DFO Wharf	Roadway flexible pavement includes a 75-mm thick bituminous intermediate binder course for freeways, major arterials, minor arterials, collectors and local roads.
G2011 - Bases and Sub-Bases-Roadway - Intermediate Course Wharf 2 $$	Roadway flexible pavement includes a 75-mm thick bituminous intermediate binder course for freeways, major arterials, minor arterials, collectors and local roads. Observed years remaining increased due to system condition.
G2011 - Bases and Sub-Bases-Yard - Base Course	The base course for the compound yard includes a 300-mm thick gravel base course (also known as pit-run) for roads; spread and compaction included.
G2012 - Paving and Surfacing-Roadway - Surface Course DFO Wharf	Roadway flexible pavement includes a 50-mm thick bituminous wearing surface course for freeways, major arterials, minor arterials, collectors and local roads.
$\mbox{G2012}$ - Paving and Surfacing-Roadway - Surface Course Wharf 2	Roadway flexible pavement includes a 50-mm thick bituminous wearing surface course for freeways, major arterials, minor arterials, collectors and local roads.
G2013 - Curbs Gutters and Drains-Roadway - Curbs and Gutters - Cast-In-Place Concrete	Roadway includes cast-in-place concrete curbs and gutters at each side of roadway, 150-mm curbs and 400-mm gutters.
G2041 - Fences and Gates-Site Development - Entrance Signage	Site development includes identification signage. Main entrance.
G2042 - Retaining Walls-Site Development - Retaining Wall Concrete Parking	Site development includes retaining wall 600-mm high consisting of cast-in-place on concrete footing. Observed years remaining increased due to system condition.
G2042 - Retaining Walls-Site Development - Retaining Wall Wood Tie Wharf 1	Site development includes retaining wall 600-mm. high consisting of pressure-treated 200 x 200-mm wood ties.
G2042 - Retaining Walls-Site Development - Retaining Wall Wood Tie Wharf 2	Site development includes retaining wall 600 -mm. high consisting of pressure-treated 200×200 -mm wood ties. Observed years remaining increased due to system condition.
G2048 - Flagpoles-Site Development - Flagpoles - Steel	Site development includes steel flagpoles.
G2049 - Miscellaneous Structures-Miscellaneous Structures - Concrete Equipment Slab	Concrete equipment slab on grade in front of the DFO Fish Management Complex. Assume 2.4 m by 3.6 m by 100mm thick. Observed years remaining increased due to system condition.
G2049 - Miscellaneous Structures-Miscellaneous Structures - Concrete Equipment Slab DFO	Concrete equipment slab on grade adjacent to the DFO boat launch ramp. Assume 2.4 m by 3.6 m by 150mm thick.
G2049 - Miscellaneous Structures-Miscellaneous Structures - Concrete Slab Flammable Storage	Concrete equipment slab on grade adjacent to the Flammable Storage facility. Assume 3.6 m by 7.3m by 150mm thick.





System Name	Description
G2049 - Miscellaneous Structures-Miscellaneous Structures - Fish Cleaning Shed	Fish cleaning shed, portable building, economy, on skids. Assume 2.4m by 3.6m.
G2049 - Miscellaneous Structures-Miscellaneous Structures - Storage Shed	Flammable liquids storage shed next to DFO Fish Management Complex, portable building, economy, on skids. Assume 2.4m by 2.4m.

Asset Replacement Value Based on System Costs with Overheads

Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
A - Substructure	Fuel Distribution Equipment Slab on Grade	75	6	2014	2089	191	3,178
A - Substructure	Equipment Slab Wharf 2	75	6	2010	2085	41	682
B1015 - Exterior Stairs and Fire Escapes	Exterior Stairs - Steel	50	125	2010	2060	58,215	46,572
D5090 - Other Electrical Systems	Solar Photovoltaic System	20	100	2018	2038	476,375	476,375
E1039 - Other Vehicular Equipment	Fuel Dispensing Station - Diesel Fuel	30	100	1990	2020	50,333	50,333
E1039 - Other Vehicular Equipment	Fuel Dispensing Station - Gasoline	30	100	1997	2027	50,333	50,333
F10 - Special Construction	Millard Tower	50	125	2014	2064	44,623	35,699
F1010 - Special Structures	Conex Steel Storage Container	30	125	1998	2028	219,601	175,680
G2011 - Bases and Sub-Bases	Roadway - Base Course Wharf 2	65	12	1970	2035	3,393	28,275
G2011 - Bases and Sub-Bases	Roadway - Intermediate Course DFO Wharf	25	62	2001	2026	27,295	44,024
G2011 - Bases and Sub-Bases	Roadway - Base Course DFO Wharf	65	12	2001	2066	1,718	14,317
G2011 - Bases and Sub-Bases	Roadway - Intermediate Course Wharf 2	25	62	1995	2026	53,904	86,943
G2011 - Bases and Sub-Bases	Yard - Base Course	65	12	1970	2035	6,165	51,378
G2012 - Paving and Surfacing	Roadway - Surface Course DFO Wharf	25	125	2001	2026	37,897	30,318
G2012 - Paving and Surfacing	Roadway - Surface Course Wharf 2	25	125	1995	2020	74,843	59,874

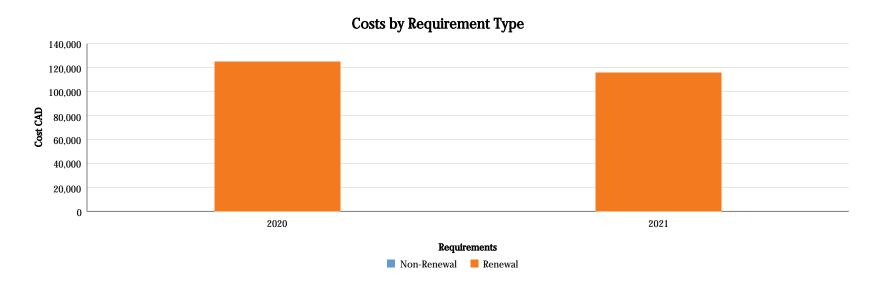




Uniformat	System Name	Lifetime (Years)	% Renew	Year Installed	Next Renewal Year	Renewal Cost	Replacement Cost
G2013 - Curbs Gutters and Drains	Roadway - Curbs and Gutters - Cast-In-Place Concrete	25	125	2014	2039	8,669	6,935
G2041 - Fences and Gates	Site Development - Entrance Signage	20	125	2010	2030	16,923	13,538
G2042 - Retaining Walls	Site Development - Retaining Wall Concrete Parking	40	125	1970	2028	109,390	87,512
G2042 - Retaining Walls	Site Development - Retaining Wall Wood Tie Wharf 1	40	125	1970	2021	34,122	27,298
G2042 - Retaining Walls	Site Development - Retaining Wall Wood Tie Wharf 2	40	125	1970	2021	81,893	65,515
G2048 - Flagpoles	Site Development - Flagpoles - Steel	25	125	2010	2035	36,153	28,922
G2049 - Miscellaneous Structures	Miscellaneous Structures - Concrete Equipment Slab DFO	40	125	2001	2041	1,457	1,166
G2049 - Miscellaneous Structures	Miscellaneous Structures - Concrete Slab Flammable Storage	40	125	1989	2029	4,372	3,497
G2049 - Miscellaneous Structures	Miscellaneous Structures - Storage Shed	40	125	2002	2042	6,007	4,806
G2049 - Miscellaneous Structures	Miscellaneous Structures - Concrete Equipment Slab	40	125	1974	2028	2,915	2,332
G2049 - Miscellaneous Structures	Miscellaneous Structures - Fish Cleaning Shed	40	125	2009	2049	9,011	7,209
					Subtotal		1,402,712
					Overhead:		0
					Subtotal		0
		Total Danie	nt Volue Bos J	on Contone Costs			
		Total Keplaceme	ut value Based o	on System Costs wi	in Overheads		1,402,712



Requirements including Renewals



Requirement Name	Renewal	Prime System	Category	Priority	Action Date	Estimated Cost
Fuel Dispensing Station - Diesel Fuel Renewal	Yes	E1039 - Other Vehicular Equipment	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	50,333
Roadway - Surface Course Wharf 2 Renewal	Yes	G2012 - Paving and Surfacing	Lifecycle	2- Due within 2 Years of Inspection	Aug 14, 2020	74,843
Site Development - Retaining Wall Wood Tie Wharf 1 Renewal	Yes	G2042 - Retaining Walls	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	34,122
Site Development - Retaining Wall Wood Tie Wharf 2 Renewal	Yes	G2042 - Retaining Walls	Lifecycle	3- Due within 5 Years of Inspection	Aug 14, 2021	81,893
Total						241,191





Region: Central and Arctic Asset: ~Boat Equipment Storage (REMOVED)

Site: Hay River CCG Base Asset Number: C L 00002 17971

Assets are ordered by Asset Name Currency: CAD

Statistics

FCI Cost:	0	FCI:	0.00
RI Cost:	0	RI:	0.00
Total Requirement Cost:		Size:	9 SM
Current Replacement Value:	0		

Address 142037 Mackenzie Hwy.Address 2-CityHay RiverState/Province/RegionNT

No photo available.

Asset Description

System Description

System Name Description





Overhead: 0
Subtotal 0

Total Replacement Value Based on System Costs with Overheads

Requirements including Renewals

No data available.