BUILDING CONDITION ASSESSMENT FOR

THE TOWNSHIP OF NORTH DUMFRIES

# **PUBLIC WORKS BUILDINGS**

# **1168 GREENFIELD ROAD**

PROJECT NO: C SITE VISIT DATE: C REPORT DATE: C

GDR223-0353-00 June 15, 2023 October 11, 2023





# EXECUTIVE SUMMARY

Cion Corp. (Cion) was retained by THE TOWNSHIP OF NORTH DUMFRIES (the 'Client') to conduct a Building Condition Assessment (BCA) at the Public Works Buildings located at 1168 Greenfield Road, herein referred to as the 'site' or 'subject property'.

The North Dumfries Public Works Depot is located at 1168 Greenfield Road in Ayr and includes the main service shop, a sand storage dome, a Quonset hut for material and equipment storage, and a storage shed for vehicles. The main service shop is a pre-engineered steel structure with metal wall panels, aluminum windows and metal sectional overhead doors. The Quonset hut is a wood structure with metal siding and a metal sectional overhead door. The storage shed is a wood framed structure with metal siding and a sloped metal roof. The sand dome is a wood structure with asphalt shingles.

The objective of this BCA was to collect and document to the current condition of the base building systems to support the Municipality's asset management planning processes and to aid the proactive management of upcoming rehabilitation and replacement needs. This BCA was conducted in general conformance with ASTM E-2018-15 Standard Guide for Building Condition Assessments: Baseline Property Condition Assessment Process modified for use within a Canadian context.

Overall, the majority of the building elements can be considered to be in fair condition. The building components that are recommended as priority repairs/replacement are as follows:

- Localized repairs and refinishing of the metal siding on the main shop.
- Replacement of metal framed windows in the main shop.
- Replacement of the metal roof on the main shop.
- Replacement of the septic drainbed for the main shop.
- Refinishing the interior of the main shop, including a DSS of the ceiling tiles.
- Replacement the baseboard heaters in the main shop.
- Replacement of the siding, windows and doors on the Quonset hut.
- Replacement of all lighting with LED.



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# 1.0 | INTRODUCTION

Cion Corp. (Cion) was retained by The Township of North Dumfries (the 'Client') to conduct a Building Condition Assessment (BCA) at the property located at 1168 Greenfield Road, herein referred to as the 'site' or 'subject property'.

The objective of this BCA was to collect and document to the current condition of the base building systems to support the Municipality in their asset management planning processes and to aid the proactive management of upcoming rehabilitation and replacement needs. This BCA was conducted in general conformance with ASTM E-2018-15 Standard Guide for Building Condition Assessments: Baseline Property Condition Assessment Process modified for use within a Canadian context.

The Building Condition Assessment was to provide:

- An assessment of the need for repair and rehabilitation of building systems and components;
- A strategic assessment of the current and long-range physical condition and remaining useful life of each component; and,
- Provide a forecast of capital replacement and repair recommendations and probable cost estimates.

The following assessment criteria have formed the basis for this Building Condition Assessment Report and the recommendations provided, herein: a visual walk-through assessment to ascertain the visible condition of readily accessible elements of the property, building, and related structures (unless specified otherwise); documentation and information provided by the Client or volunteered by a site representative at the time of our review; our knowledge of the construction industry, probable costs and generally accepted industry and engineering practices; and, our previous experience with similar buildings of this age, type and complexity.



### 1.1 METHODOLOGY

The scope of work for this Building Condition Assessment included the following:

- A review of available drawings, specifications, maintenance records and historical repair/replacement records;
- Visual audits of the building components to provide detailed information on the current age, condition and remaining service life of the building, equipment and components.
- Building inspections of the following areas for the purposes of obtaining an overall sense of the current condition of the major components as a whole:
  - Structural (foundations, exposed columns, beams, etc.).
  - Interior finishes (floors, walls and ceiling finishes, bath enclosures, etc.).
  - Building Envelope (exterior walls, windows, doors, roofing, etc.).
  - Life safety systems (fire alarms, detection, suppression systems, etc.).
  - Mechanical systems (plumbing, heating/cooling systems, exhaust systems, etc.).
  - Electrical systems (distribution, lighting, security systems, etc.).
  - Sitework (landscaping, parking, driveways, walkways, etc.).

Components have been categorized according to the Uniformat II classification system in general conformance with ASTM E-1557 – Standard Classification for Building Elements and Related Sitework. The level to which building components have been categorized is in accordance with the RFP requirements set by the Municipality.

The Building Condition Assessment was prepared utilizing the following recognized standards/systems:

- Ontario Building Code, Building Code Act O. Reg. 332/12
- Occupational Health and Safety Act, amended 2011
- ANSI/ASHRAE/IES 90.1-2013
- ASTM E2018-08 Standard Guide for Property Condition audits: Baseline Property Condition Audit Process.

In keeping with current industry standards, the BCA is solely based on a general visual walk through and a review of provided documentation and records. The study does not include such things as video inspections of underground services, design review, instrument testing, and thermography of the building envelope, fire life-safety systems testing, or any further invasive testing /exploration. A detailed review for compliance with National, Provincial and Municipal codes is not part of the scope of this assessment. Environmental issues are not part of this study. Environmental issues are not part of this study.



## 1.2 DESCRIPTION OF TERMS

The following is a list of some of the subjective terms used in this report to describe the observed condition of the various elements:

Condition Rating:	Good Condition - The element has no visible reduction in anticipated performance and should remain serviceable during the term of this report, provided that proper service and maintenance are performed.
	Fair Condition - The element is in a condition which is typical of its age or, based on use or location has been exposed to duress which has reduced its typical service life expectancy. However, it may achieve its full-service life provided that proper service and maintenance are performed.
	Poor Condition - The element is nearing or at the end of its useful service life or, has been poorly maintained/serviced and should be replaced/repaired in the near future.
Age, In-Service Date:	The Age or In-Service Date is the date of the component installation or in some cases the last known repair. Where an in-date is not available the date is estimated based on the condition of the component at the time of the site review.
Estimated Useful Life (EUL):	The estimated useful life is an estimate as to the duration of time between when a component is new and when it will require replacement or a major repair investment. Estimated life expectancies are based on manufacturers' recommendations and on our past experiences with the performance of similar buildings and construction. Actual service lives may be found to be longer than estimated, however it is recommended that funds be available for repair or replacement at the earliest time that failures are likely to occur.
Current Replacement Value:	The current replacement value is an estimated probable cost for the full replacement of a component. These cost projections are based on our experience with similar building systems and judgment of typical industry conditions, assuming a reasonable amount of routine service and preventative maintenance is conducted. The inclusion of current replacement costs is generally limited to items with a replacement or major repair value generally greater than \$500. Below that amount the item would be considered remedied within the operating and maintenance budget. Code compliance or public safety issues are not limited by their potential repair cost and will be included where appropriate.



Replacement Cost Date:	The replacement cost date is the estimated date that the component will require replacement. These cost projections and remaining service life forecasts referenced herein are based on adequate regular service and maintenance being performed as recommended by the manufacturers. Deferred maintenance could result in premature capital costs or premature failure requiring capital type expenditures.
Intervention Year:	The Intervention Year is the estimated probable year that the next action is recommended for a component. Recommended interventions typically consist of either replacement, repairs, remediations, studies/further investigation or removals. The Invention Year is estimated based on the current condition and known repair history of a component and it is assumed that adequate regular maintenance is being performed.
Action Repeat Interval	The Action Repeat Interval is a number in years in which the recommended action is expected to occur as a regular cycle when it is different from the End of Life replacement cycle.
Cost:	The cost is a probable cost estimate for the recommended intervention associated with a component. The estimate of probable costs for future repair

construction inflation rate has been applied.

and replacement work has been provided uninflated in 2023 dollars. No



# 2.0 | GENERAL DESCRIPTION



The North Dumfries Public Works Depot is located at 1168 Greenfield Road in Ayr and includes the main service shop, a sand storage dome, a Quonset hut for material and equipment storage, and a storage shed for vehicles. The main service shop is a pre-engineered steel structure with metal wall panels, aluminum windows and metal sectional overhead doors. The Quonset hut is a wood structure with metal siding and a metal sectional overhead door. The storage shed is a wood framed structure with metal siding and a sloped metal roof. The sand dome is a wood structure with asphalt shingles.

The site has a gravel parking lot with a chain-link fence around the perimeter.



# 3.0 | MAIN SHOP BUILDING

## A.SUBSTRUCTURE

#### A1030 - Slab on Grade - Floor slab

The foundation is comprised of cast-in-place concrete. The majority of the foundation is concealed below grade. Minor deterioration was noted at the overhead doors, likely due to salt erosion. The concrete slab is in fair condition. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for periodic concrete repairs.

Overall Condition: Fair

### **B.SHELL**

#### **B1010 - Floor Construction - Mezzanine Floor**

The mezzanine floor is composed of a poured concrete floor. The mezzanine structure was concealed by interior finishes, however it is assumed to be conventional wood framing. The mezzanine floor appears to be in good condition. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for periodic repairs.

**Overall Condition: Good** 

#### B1020 - Roof Construction - Steel Framed Structure

There are pre-engineered steel ceiling joists and girders supporting the pitched, corrugated metal roof cladding atop the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for periodic localized repairs.

Overall Condition: Good

#### B2010 - Exterior Walls - Corrugated Metal Siding

The exterior walls of the Main Shop consists of corrugated metal siding. The siding has localized impact damage and corrosion apparent. The finish is faded in most locations. An allowance is included for re-coating the corrugated metal siding and replacement of damaged sections as needed.

Overall Condition: Fair

#### B2020 - Exterior Windows - Steel and Vinyl Framed Windows



Exterior windows consists of one (1) metal framed, single glazed window, one (1) metal framed, double glazed window and one (1) vinyl framed window with insulated glazing units. The windows are fixed and/or operable. The metal windows are very old and have exceeded their expected service life. The vinyl windows remain functional. An allowance is included for replacement of the original metal framed windows with new vinyl framed units in the short term.

**Overall Condition: Poor** 

#### B2030 - Exterior Doors - Hollow Metal Doors

Three (3) single hollow metal doors in hollow metal frames are positioned along the perimeter of the building. The doors appear to have been recently replaced. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Hollow Metal Doors at the end of their expected service life.

Overall Condition: Good

#### **B2030 - Exterior Doors - Overhead Doors**

There are four (4) insulated vinyl sectional overhead doors within the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Overhead Doors at the end of their expected service life.

Overall Condition: Good

#### B3010 - Roof Coverings - Metal Roofing

The roofing system installed is a pitched roof with standing seam metal roofing. The roof level was not accessible at the time of the site review. Localized leak stains were noted on the ceiling insulation. The metal roof has exceeded its expected service life. An allowance is included for an assessment and re-coating of the metal roof with a liquid applied waterproofing system.

**Overall Condition: Fair** 

### **C.INTERIORS**

#### C1010 - Partitions - Interior Windows

One (1) metal framed single glazed windows are installed on the interior in the office and one (1) double glazed vinyl window installed on the interior of wash bay. The wash bay window is not original to building construction and is operable. The office w No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Interior Windows at the end of their expected service life.



#### C1020 - Interior Doors - Wood/Metal Interior Doors

Hollow wood and metal interior doors. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Wood/Metal Interior Doors at the end of their expected service life.

Overall Condition: Fair

#### C1030 - Fittings - Kitchenette

The lunchroom has a kitchenette with one cabinet and a laminate countertop. The kitchenette is outdated. Counter has evidence of water damage. An allowance is included for replacement of the Kitchenette in the short term.

Overall Condition: Poor

#### C2010 - Stair Construction - Metal Staircase

Access to the mezzanine is provided by a painted metal staircase with a painted handrail. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for minor repairs and refinishing of the stairs.

**Overall Condition: Good** 

#### C3010 - Wall Finishes - Painted Drywall & Vinyl Covered Drywall

The walls of the lunchroom and sections of the Main Shop are painted drywall. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for minor repairs and repainting at regular intervals.

Overall Condition: Good

#### C3010 - Wall Finishes - Wood Panelling

The walls of the office consist of wood panelling. No significant deficiencies were observed or reported at the time of the site review. Wall finish is in fair condition. An allowance is included for minor repairs and refinishing at regular intervals.

Overall Condition: Good

#### C3010 - Wall Finishes - Exposed Steel Framing and Insulation

The wall finish throughout the Main Shop is typically exposed steel framing and insulation. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of damaged insulation as required.



Overall Condition: Good

#### C3010 - Wall Finishes - Painted Corrugated Metal Siding

The wall finish within the wash bay consists of painted corrugated metal siding. Minor corrosion and paint chipping is visible along the metal siding. No significant deficiencies were observed or reported at the time of the site review. An allowance is incldued for re-coating the corrugated metal siding and replacement of damaged sections as needed.

Overall Condition: Good

#### C3020 - Floor Finishes - Vinyl Composite Tile Flooring

The flooring finish in the lunchroom consists of vinyl composite tiling. Wear and deterioration is apparent on the flooring was visible at the time of the site visit. An allowance is included for replacement of the Vinyl Composite Tile Flooring at the end of its expected service life.

**Overall Condition: Poor** 

#### C3030 - Ceiling Finishes - Painted Gypsum Wallboard

Painted gypsum wallboard is the ceiling finish in the lunchroom. Minor paint chipping is visible on the ceiling finish. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for minor repairs and repainting at regular intervals.

**Overall Condition: Fair** 

#### C3030 - Ceiling Finishes - Ceiling Tile

The ceiling finish in the lunchroom, washroom and the office is 12x12 ceiling tiles. The ceiling appears to be original to construction. Based on the age of the finish and the material it appears to be comprised of, there is the potential for asbestos. It is recommended that a hazardous materials survey be conducted on the ceiling finish. An allowance is included for a DSS and replacement of the ceiling tiles as appropriate in the short term.

Overall Condition: Fair

### **D.SERVICES**

#### D2010 - Plumbing Fixtures - Kitchen & Washroom Fixtures

The plumbing fixtures within the Main Shop consists of with one (1) floor mounted, toilet and one (1) wall mounted lavatory in the washroom and one (1) steel kitchen sink in the lunchroom. All fixtures are in fair condition. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Kitchen & Washroom Fixtures at the end of its expected service life.



#### D2020 - Domestic Water Distribution - Domestic Water Piping

Domestic water is distributed to the washroom and kitchenette via copper piping. The piping is mostly concealed by the interior finishes. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for major as-needed repairs.

Overall Condition: Good

#### D2030 – Sanitary Waste – Septic Tank and Drainfield

The building utilizes a septic tank and drainfield for disposal of sanitary waste. The septic tank and drainfield are below grade and not visible for review. It was reported that the drainfield is not functioning properly and that the tank has to be pumped out regularly. An allowance is included for replacement of the drainfield in the short term.

**Overall Condition: Poor** 

#### D2095 - Domestic Water Heaters - Domestic Water Tank Heater

Domestic water heater is an electric water heater manufactured by John Wood which is located in the mezzanine. The water heater supplies hot water to the washroom and kitchenette below. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Domestic Water Tank Heater at the end of its expected service life.

Overall Condition: Good

#### D3023 - Furnaces - Furnace - 1

Furnace - 1 is an gas fired furnace, ceiling mounted within the garage bay which heats the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Furnace - 1 at the end of its expected service life.

Overall Condition: Good

#### D3023 - Furnaces - Furnace - 2

Furnace - 2 is an gas fired furnace, ceiling mounted within the garage bay which heats the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Furnace - 2 at the end of its expected service life.

Overall Condition: Good

#### D3045 - Exhaust Ventilation Systems - Exhaust 1

Exhaust is mounted on the rooftop and is not in use. N/A Allow to remove the unused exhaust during the roof replacement/re-coating



Overall Condition: N/A

#### D3045 - Exhaust Ventilation Systems - Exhaust 2

Exhaust is mounted on the rooftop and used for the wash bay pressure washer. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Exhaust 2 at the end of its expected service life.

Overall Condition: Good

#### D3045 - Exhaust Ventilation Systems - Ceiling Mounted Industrial Fans

Installed in the garage bay are two (2) ceiling mounted industrial fans. The fans have exceeded their expected service life. An allowance is included for replacement of the Ceiling Mounted Industrial Fans at the end of their expected service life.

**Overall Condition: Poor** 

#### D3053 - Unit Heaters - Electric Baseboard Heaters

Heating is provided in the lunchroom and the office by electric baseboard heaters. The heaters have corrosion and paint chipping apparent. Electric baseboard heaters are in fair condition. An allowance is included for replacement of the Electric Baseboard Heaters at the end of their expected service life.

**Overall Condition: Fair** 

#### D3060 - Controls & Instrumentation - Air Compressor

One (1) 80 gal air compressor manufactured by Devair is installed in the garage. The air compressor is complete with its own dedicated disconnect switch. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Air Compressor at the end of their expected service life.

**Overall Condition: Fair** 

#### D5010 - Electrical service & Distribution - Distribution Panels

There are two (2) distribution panels situated in the lunchroom. The panels are connected to the lighting and mechanical equipment in the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Distribution Panels at the end of their expected service life.



#### D5022 - Lighting Equipment - Fluorescent Fixtures

Throughout the building are ceiling mounted, T8 fluorescent fixtures with acrylic and caged coverings. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the fluorescent fixtures with LED for improved energy efficiency at the end of their expected service life.

Overall Condition: Fair

#### D5030 - Communications & Security - Communications Equipment

Installed in the mezzanine connected to the exterior communications transmission tower are a cavity duplexer and repeater for the a two-way radio system. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Communications Equipment at the end of their expected service life.

Overall Condition: Good

#### D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Light and Battery

Exit signs and emergency lights are installed throughout the building. No significant deficiencies were observed or reported at the time of the site review. Replace exit sign and emergency lighting unit on as needed basis with LED fixtures.

Overall Condition: Fair

### **G.BUILDING SITEWORK**

#### G2020 - Parking Lots - Asphalt and Gravel Parking Lot

The parking lot on site is comprised of a mixture of asphalt paved and gravel. The entrance driveway has asphalt driveway while the rest of the site is gravel. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the asphalt pavement at the end of its expected service life. A further allowance is included for regular regrading of the gravel lot.

Overall Condition: Good

#### G2041 - Fences And Gates - Chain-link Metal Fence

Spanning along the perimeter of the site is a barbed wire chain-link metal fence and entrance gate. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Chain-link Metal Fence at the end of its expected service life.



#### G4010 - Electrical Distribution - Emergency Generator

The exterior of the Main Shop is a Generac emergency backup generator system including a transfer switch and the generator. The generator is gas fired. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Emergency Generator at the end of its expected service life.

Overall Condition: Good

#### G4020 - Site Lighting - lighting & Flood Lights

The exterior lighting consists of wall packs and flood lights around the perimeter of the building. No significant deficiencies were observed or reported at the time of the site review. Replace wall packs with LED packs at the end of their expected service life.

**Overall Condition: Fair** 

#### G4030 - Site Communications & Security - Communications Transmissions Tower

One (1) communications transmission tower is installed on site for the two-way radio system. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Communications Transmissions Tower at the end of its expected service life.



# 4.0 | QUONSET HUT

## A.SUBSTRUCTURE

#### A1030 - Slab on Grade - Floor slab

The slab sitting atop strip footings consists of poured reinforced concrete. Cracking and some settlement is visible on the slab. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed concrete repairs.

Overall Condition: Good

### **B.SHELL**

#### B1020 - Roof Construction - Building Structure

The Quonset has a wood structure visible from the interior. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed repairs to the wood structure.

Overall Condition: Good

#### **B2010 - Exterior Walls - Corrugated Metal Siding**

Corrugated metal siding on all sides of the building. Impact damage, corroded fasteners and penetrations were observed. It was reported that the building leaks during rain events. An allowance is included for replacement of the Corrugated Metal Siding in the short term.

**Overall Condition: Poor** 

#### B2023 - Windows - Wood - Wood Framed Windows

Eleven (11) wooden framed, single glazed windows are situated along the perimeter of the building. The windows are operable and non-operable, The windows have exceeded their expected service life. An allowance is included for replacement of the Wood Framed Windows in the short term.

Overall Condition: Poor

#### B2030 - Exterior Doors - Hollow Wood Doors

Two (2) hollow wood doors in hollow wood frames are positioned along the perimeter of the building. The exterior doors have exceeded their expected service life. An allowance is included for replacement of the Hollow Wood Doors in the short term..



**Overall Condition: Poor** 

#### B2030 - Exterior Doors - Overhead Door

There is an insulation vinyl sectional overhead door with vision panels. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Overhead Door in the short term..

Overall Condition: Good

### **D.SERVICES**

#### D2010 - Plumbing Fixtures - Water Closet & Lavatory

The washroom in the building is equipped with one (1) floor mounted, toilet and one (1) wall mounted lavatory. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Water Closet & Lavatory at the end of their expected service life.

Overall Condition: Fair

#### D2020 - Domestic Water Distribution - Domestic Water Piping

Domestic water is distributed to the washroom via copper piping. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-need plumbing repairs.

Overall Condition: Good

#### D2030 – Sanitary Waste – Septic Tank and Drainfield

The building utilizes a septic tank and drainfield for disposal of sanitary waste. The septic tank and drainfield are below grade and not visible for review. No significant deficiencies were observed or reported at the time of the site review.

Overall Condition: Good

#### D2095 - Domestic Water Heaters - Domestic Water Heater

Domestic water heater is an electric water heater manufactured by Rheem which is located above the washroom. The water heater supplies hot water to the washroom below. Water heater details were not accessible during the site visit. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Domestic Water Heater at the end of its expected service life.



#### D3023 - Furnaces - Oil Fired Furnace

There is one (1) oil fired furnace, wall mounted within the garage bay which heats the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Oil Fired Furnace at the end of its expected service life.

Overall Condition: Good

#### D3045 - Exhaust Ventilation Systems - Exhaust ductwork

Ductwork is mounted on the rooftop which exhausts the air from the oil fired furnace. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Exhaust ductwork at the end of its expected service life.

Overall Condition: Good

#### D5010 - Electrical service & Distribution - Distribution Panels

There are two (2) distribution panels situated in the mechanical room building. The panels are connected to the lighting and mechanical equipment in the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Distribution Panels at the end of its expected service life.

**Overall Condition: Fair** 

#### D5020 - Lighting & Branch Wiring - Ceiling Mounted Industrial Fans

Installed in the garage bay are three (3) ceiling mounted industrial fans. The ceiling fans have exceeded their expected service life. An allowance is included for replacement of the Ceiling Mounted Industrial Fans at the end of its expected service life.

**Overall Condition: Poor** 

#### D5022 - Lighting Equipment - Fluorescent Light Fixtures

Throughout the building are ceiling mounted, T8 fluorescent fixtures with acrylic and caged coverings. No significant deficiencies were observed or reported at the time of the site review. Replace fluorescent fixtures with LED for improved energy efficiency.

**Overall Condition: Fair** 

#### D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Light and Battery

One (1) exit sign and emergency light is installed in the main entrance. No significant deficiencies were observed or reported at the time of the site review. Replace exit sign and emergency lighting unit with LED for improved energy efficiency



**Overall Condition: Fair** 

### **G.BUILDING SITEWORK**

#### G4020 - Site Lighting - Wall Packs

The exterior lighting consists of wall packs illuminating the exterior of the building. No significant deficiencies were observed or reported at the time of the site review. Replace wall packs with LED packs at the end of service life.

**Overall Condition: Fair** 

#### G3060 - Fuel Distribution - Furnace Oil Storage Tank

One (1) storage tank which stores the furnaces oil is installed on the exterior of the building. The tank has a capacity of 1360 L and feeds the furnace inside using a small pump. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Furnace Oil Storage Tank at the end of its expected service life.

**Overall Condition: Good** 

#### G3060 - Fuel Distribution - Underground Fuel Storage Tanks and Pump

Two (2) underground storage tanks which store unleaded gas and diesel fuel respectively are manufactured by Boehmers are dispensed by one (1) pump manufactured by Astro Universal. The fuel system is corroded and appears to be aged, nearing the end of its useful lifecycle. Due to the underground nature of the storage tanks, their condition could not be assessed. The fuel pump is aged but remains functional. An allowance is included for major repairs to the fuel tanks and for replacement of the fuel pump at the end of their expected service lives.



# 5.0 | SAND STORAGE BUILDING

## A.SUBSTRUCTURE

#### A1010 - Standard Foundations - Concrete Foundation Walls

Concrete foundation walls extend above grade to support the roofing structure and has no finishes. Cracking was observed. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed concrete repairs.

Overall Condition: Good

### **B.SHELL**

#### B1020 - Roof Construction - Domed Roofing Structure

A wood framed domed roofing structure is present for the Salt Dome. Wood roof trusses extend down to the concrete foundation walls. The wood trusses support the plywood sheathing supporting the asphalt shingled roofing. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed repairs to the wood structure.

Overall Condition: Good

#### B3010 - Roof Coverings - Asphalt Shingle Roofing

The roofing system installed is a domed roof with asphalt shingled. roofing. The ceiling finish throughout the Salt Dome is exposed wood framing. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Asphalt Shingle Roofing at the end of its expected service life.



# 6.0 | SERVICE SHED

## A.SUBSTRUCTURE

#### A1030 - Slab on Grade - Floor slab

The slab sitting atop strip footings consists of 4" poured reinforced concrete. Minor cracking and chipping is apparent on the slab. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed concrete repairs.

Overall Condition: Good

### **B.SHELL**

#### B1020 - Roof Construction - Pitched Roofing Structure

A wood framed pitched roofing structure is present for the site building. The wood roof trusses are supported by wood columns situated along the exterior walls. The wood trusses support the corrugated metal roofing assembly. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for as-needed repairs to the wood structure.

Overall Condition: Good

#### **B2010 - Exterior Walls - Corrugated Metal Siding**

The exterior walls of the Storage Building is cladded with corrugated metal siding with semi-opaque panels for natural lighting. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Corrugated Metal Siding at the end of its expected service life.

Overall Condition: Good

#### B2030 - Exterior Doors - Hollow Metal Door

One (1) hollow metal door in a hollow metal frame is used as the entrance into the Storage Building. The hinges on the exterior door has minor surface rust. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Hollow Metal Door at the end of its expected service life.

Overall Condition: Good

#### B2030 - Exterior Doors - Overhead Door

There is a vinyl sectional overhead door. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Overhead Door at the end of its expected service life.



Overall Condition: Good

#### B3010 - Roof Coverings - Corrugated Metal Roofing

The roofing system installed is a pitched roof with corrugated metal roofing. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Corrugated Metal Roofing at the end of its expected service life.

Overall Condition: Good

### **D.SERVICES**

#### D5010 - Electrical service & Distribution - Distribution Panels

There is one (1) distribution panel situated in the building manufactured by Federal Pioneer. The panel are connected to the lighting and receptacles in the building. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Distribution Panels at the end of its expected service life.

Overall Condition: Good

#### D5022 - Lighting Equipment - Fluorescent Fixtures

Throughout the building are four (4) ceiling mounted, T8 fluorescent fixtures. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Fluorescent Fixtures at the end of its expected service life.

**Overall Condition: Good** 

#### D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Light and Battery

One (1) Exit sign and emergency light is installed in the main entrance. No significant deficiencies were observed or reported at the time of the site review. An allowance is included for replacement of the Exit Sign, Emergency Light and Battery at the end of its expected service life.



# 7.0 | SUMMARY OF PROBABLE CAPITAL COSTS

Our opinion of probable costs for major repairs/replacements were estimated based on either a unit rate or lump sum basis and are intended only as an indication of the order of magnitude. The estimated probable costs for repair or replacement are also based on our judgment of typical expected service life and the estimated remaining service life of a component, assuming a reasonable amount of routine service and preventative maintenance is conducted. Establishing replacement, rehabilitation, or upgrade probable costs for various elements are based on several factors such as:

- Quantity of repair
- Accessibility and protection requirements
- Economies of scale
- Consultation with qualified contractors
- Availability of local qualified trade personnel
- Impact on local services, public access, and other disruptions.

A contingency amount should be added to all probable costs to allow for the following items:

- Variation in estimated unit prices due to competitive tender bidding;
- Additional work required to repair any hidden damage concealed by finishes; and,
- Consulting costs to prepare specifications or drawings for remedial work, tendering, contract administration and field review, permit fees as may be appropriate.

The probable estimated costs to remediate property deficiencies or normal replacement items as outlined in the Report do not necessarily reflect competitive market rates for any particular type of work identified. It is understood and assumed that this building will continue to be part of a professionally managed portfolio of properties. As such, well qualified maintenance staff would be available to perform many smaller repair / replacement tasks on an ongoing basis and to aid and oversee larger tasks where outside contractors are required.

Probable cost estimates provided are based on the expectation that experienced property management staff will obtain competitive pricing using a combination of both internal staff resources and outside contractors accounting for project specifics and economies of scale.



The probable costs provided are budget figures only, based on the current market conditions, are in present (2023) dollars and do not include for inflation. The actual costs of construction may vary considerably depending on the time of year when tendering is conducted, the actual detailed scope of work and the economic climate of the construction industry. As an example, the preparation of a probable cost estimate requires making a number of assumptions, such as:

- The means and methods of construction the contractor will employ;
- The cost and extent of labour;
- Equipment and materials the contractor will employ;
- Contractor's techniques in determining prices;
- Market conditions at the time; and
- Other factors over which Cion has no control.

The repair and replacement recommendations in this report may require a more detailed investigation prior to implementation, however, the short-term costs associated with the anticipated repair of the identified physical deficiencies and replacement of components, which may have exceeded their normal expected service life, based on our recommendations, are summarized in the table below.



# 8.0 | FACILITY CONDITION INDEX

The Facility Condition Index (FCI) is a standard facility management benchmark that is used to objectively assess the current and projected condition of a building asset. By definition, the FCI is defined as the ratio of required renewal cost to current building replacement value. Building condition is often defined in terms of the FCI as follows:(Good) 0 to 5 percent FCI, (Fair) 5 to 10 percent FCI (Poor) 10 to 30 percent FCI, (Critical) greater than 30 percent FCI. The purpose of the FCI is to provide a means for objective comparison of facility or building condition as well as allowing senior decision makers to understand building renewal funding needs and comparisons.

#### FCI= Repair and Replacement of Deficiencies Current Replacement Value

Short Term Repair Cost (3 Year):	\$337,000.00
Approx. Building Replacement Cost:	\$3,399,500.00
FCI:	9.9%

Cost per Square Foot per Year Analysis:

Year	Cost / Sq.ft	
2024	\$	16.18
2025	\$	2.82
2026	\$	0.58
2027	\$	0.58
2028	\$	0.23
2029	\$	1.63
2030	\$	12.78
2031	\$	-
2032	\$	0.06
2033	\$	0.23



We trust this report satisfies your immediate requirements. If you have any questions regarding the information in this report, please do not hesitate to contact this office.

Sincerely,

Prepared by:

Mahad Mohamed Studio Manager E: <u>mahad.mohamed@cion.com</u>

C.c: Kelly Worden, Studio Manager



# 9.0 | REPORT LIMITATIONS

1. The site inspections are strictly visual in nature except where stated otherwise. No destructive testing or laboratory analysis is undertaken. Assumptions pertaining to a component's current condition and remaining service life are based upon the visual observations of those systems, structures and components exposed to view and apparent as of the day of the inspection. Deficiencies that exist but not recorded are not apparent given the limited level of the building condition assessment offered and commissioned. The building condition assessment does not eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with the property. This report is limited in scope to only those components which are specifically referenced. It is likely that conditions not uncovered by the building condition assessment exist which may affect the costs, timing or effectiveness of the recommendations detailed in the building condition assessment.

The review associated with the building condition assessment is limited to technical and construction items. Cion Corp. has not/will not conduct(ed) investigations into the nature and reasoning for the deficiencies found at the site and property whether visually inspected or of an inherent, hidden nature. As such, no legal survey, soil tests, assessment for environmental contaminants, engineering investigations, detailed quantity survey compilations, nor exhaustive physical examinations are made, nor are they within the Scope of the building condition assessment.

The inspections and reporting associated with the building condition assessment will not address environmental issues including, but not limited to, the existence, competence or performance of fuel storage tanks or the existence of asbestos, radon gas, lead paint, urea formaldehyde, toxic or flammable chemicals, water or airborne illness or disease.

- 2. Verification as to the accuracy or completeness of the drawings and information provided are not undertaken. Quantities were determined using the drawings except where otherwise noted or determined from the site inspections or from information provided by the Client. Cion Corp. relies upon the information (in terms of accuracy and completeness) provided by the client and/or its agents.
- **3.** In the preparation of the building condition assessment, it is assumed that a normal level of maintenance outside of what is called for in the Building condition assessment will be undertaken.
- **4.** This report is intended solely for the Client named. The material in it reflects Cion Corp. best judgement in light of the information available at the time of the building condition assessment.

It shall not be distributed without the knowledge and permission of Cion Corp. It shall not be relied upon for any other purpose than as agreed with the Client without the written consent of Cion Corp. It shall not be used or relied upon by any other person unless that person is specifically named in the proposal of offer of services submitted prior to the engagement. The client agrees to maintain the confidentiality of the report and reasonably protect the report from distribution to any other persons. If the client or its agent directly or



indirectly causes the report to be distributed to any other person, the client shall indemnify, defend, and hold Cion Corp. harmless against the claim of any third party.

It shall not be used to express or imply warranty as to the fitness (both physically and financially) of the property. No portion of this report may be used as a separate entity.

- 5. Cost estimates presented in the building condition assessment are based on estimated quantities and the Consultant's best judgement and experience with similar projects. The cost estimates are preliminary and meant as order of magnitude budget estimates only, and are subject to confirmation by competitive tendering and also subject to change and are dependent upon factors over which Cion Corp. has no control, including but not limited to: market conditions; contractor availability; methods and bidding practices; and the cost of labour, materials and equipment.
- 6. Any time frame given for undertaking future repair or replacement work represents a best guess opinion based upon the component's apparent condition and level of maintenance. Failure of the item or optimum repair/replacement times may occur sooner or later than shown in the building condition assessment.
- 7. Cion Corp. shall not be responsible for any consequential loss, injury or damages suffered by the Client including but not limited to loss of use and earnings.

In issuing the building condition assessment, the Consultant does not assume any of the duties or liabilities of the designers, builders or past or present owners of the subject property. Owners, prospective purchasers, tenants or others who use or rely on the contents of the report do so with the understanding as to the limitations of the documents reviewed, the general visual inspections undertaken and understand that the Consultant cannot be held liable for damages they may suffer in respect to the purchase, ownership or use of the subject property.

- 8. The total amount of all claims the Client or its agents may have against Cion Corp. under this engagement and all future engagements pertaining to updates to the building condition assessment, including but not limited to claims of negligence, negligent misrepresentation and breach of contract, shall be strictly limited to direct loss or damage arising from such breach of contract or such tort or such negligence and further, shall be strictly limited to the policy limits of the company's errors and omissions insurance policy.
- 9. The company assumes no liability whether in contract or in tort and including the negligence of the company for:
  - 1. The actual, alleged or threatened inhalations of, ingestion of, contact with, exposure to, existence of, growth or presence of; or
  - 2. Any costs or expenses incurred to prevent, respond to, test for, monitor, abate, mitigate, remove, clean-up, contain, remediate, treat, detoxify, neutralize, assess or otherwise deal with or dispose of; or



3. The actual or alleged failure to detect, report, test for, monitor, clean up, remove, contain, dispose of, treat, detoxify, neutralize, or in any way respond to, assess the effects of or advise of the existence of any fungi or any spores, mycotoxins, odours, or any other substances, products or by-products produced by, released by, or arising out of the current or past presence of fungi.

"Fungi" means any form of fungus, including but not limited to, yeast, mould, mildew, rust, smut or mushroom.

**10.** By engaging Cion to undertake the services as outlined in this report, the Municipality agrees to the above conditions.

In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety, including the RFP and its amendments.



APPENDIX A |

ESTIMATED ANNUAL EXPENDITURE TABLE



### Public Works Buildings Projected Expenditure Table

	Chart Tama					Long Torm						
	Short-Term			Long-Term								
Component	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033		
Main Shop: A1030 - Slab on Grade - Floor slab						\$ 20,000.00						
Main Shop: B1010 - Floor Construction - Mezzanine Floor						\$ 3,000.00						
Main Shop: B1020 - Roof Construction - Steel Framed Structure												
Main Shop: B2010 - Exterior Walls - Corrugated Metal Siding		\$ 20,000.00										
Main Shop: B2020 - Exterior Windows - Steel and Vinyl Framed Windows	\$ 5,000.00											
Main Shop: B2030 - Exterior Doors - Hollow Metal Doors							<b>^</b> / • • • • • • •					
Main Shop: B2030 - Exterior Doors - Overhead Doors	A 40 000 00						\$ 48,000.00					
Main Shop: B3010 - Roof Coverings - Metal Roofing	\$ 40,000.00											
Main Shop: C1010 - Partitions - Interior Windows Main Shop: C1020 - Interior Doors - Wood/Metal Interior Doors										\$ 4,000.00		
Main Shop: C1020 - Intend Doors - Wood Metal Intend Doors	\$ 8,000.00									\$ 4,000.00		
	\$ 8,000.00						¢ = 000.00					
Main Shop: C2010 - Stair Construction - Metal Staircase Main Shop: C3010 - Wall Finishes - Painted Drywall & Vinyl Covered Drywall							\$ 5,000.00 \$ 3,000.00					
Main Shop: C3010 - Wall Finishes - Painted Drywall & Viny Covered Drywall Main Shop: C3010 - Wall Finishes - Wood Panelling							\$ 5,000.00					
Main Shop: C3010 - Wall Finishes - Wood Parlelling Main Shop: C3010 - Wall Finishes - Exposed Steel Framing and Insulation							\$ 2,000.00					
Main Shop: C3010 - Wall Finishes - Exposed Steel Framing and Insulation							\$ 2,000.00					
Main Shop: C3020 - Floor Finishes - Vinyl Composite Tile Flooring	\$ 4.000.00											
Main Shop: C3020 - Floor Finishes - Ving Composite The Flooring	\$ 4,000.00	\$ 1,000.00										
Main Shop: C3030 - Ceiling Finishes - Ceiling Tile	\$ 10,000.00	\$ 1,000.00										
Main Shop: 02010 - Plumbing Fixtures - Kitchen & Washroom Fixtures	\$ 10,000.00				1		\$ 3,000.00					
Main Shop: D2020 - Domestic Water Distribution - Domestic Water Piping							\$ 3,000.00					
Main Shop: D2020 - Bornestie Water Distribution - Domestie Water Fibing	\$ 30,000.00						φ 0,000.00					
Main Shop: D2095 - Domestic Water Heaters - Domestic Water Tank Heater	φ 30,000.00							Low				
Main Shop: D3023 - Furnaces - Furnace - 1								LOW				
Main Shop: D3023 - Furnaces - Furnace - 2												
Main Shop: D3045 - Exhaust Ventilation Systems - Exhaust 1												
Main Shop: D3045 - Exhaust Ventilation Systems - Exhaust 2												
Main Shop: D3045 - Exhaust Ventilation Systems - Ceiling Mounted Industrial Fans		\$ 2.000.00										
Main Shop: D3053 - Unit Heaters - Electric Baseboard Heaters		\$ 3,000.00										
Main Shop: D3060 - Controls & Instrumentation - Air Compressor		φ 0,000.00		\$ 10,000.00								
Main Shop: D5010 - Electrical service & Distribution - Distribution Panels				• • • • • • • • • • • • • • • • • • • •								
Main Shop: D5022 - Lighting Equipment - Fluorescent Fixtures		\$ 11,000.00										
Main Shop: D5030 - Communications & Security - Communications Equipment							\$ 10,000.00					
Main Shop: D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Light and	1	\$ 2.000.00					,					
Main Shop: G2020 - Parking Lots - Asphalt and Gravel Parking Lot			\$ 10,000.00				\$ 40,000.00					
Main Shop: G2041 - Fences And Gates - Chain-link Metal Fence			,				\$ 50,000.00					
Main Shop: G4010 - Electrical Distribution - Emergency Generator												
Main Shop: G4020 - Site Lighting - lighting & Flood Lights		\$ 6,000.00										
Main Shop: G4030 - Site Communications & Security - Communications Transmission	3											
Quonset Hut: A1030 - Slab on Grade - Floor slab												
Quonset Hut: B1020 - Roof Construction - Building Structure							\$ 5,000.00					
Quonset Hut: B2010 - Exterior Walls - Corrugated Metal Siding	\$ 160,000.00											
Quonset Hut: B2023 - Windows - Wood - Wood Framed Windows	\$ 17,000.00											
Quonset Hut: B2030 - Exterior Doors - Hollow Wood Doors	\$ 2,000.00											
Quonset Hut: B2030 - Exterior Doors - Overhead Door												
Quonset Hut: D2010 - Plumbing Fixtures - Water Closet & Lavatory		\$ 2,000.00										
Quonset Hut: D2020 - Domestic Water Distribution - Domestic Water Piping									\$ 1,000.00			
Quonset Hut: D2030 - Sanitary Waste - Septic Tank and Drainfield							\$ 30,000.00					
Quonset Hut: D2095 - Domestic Water Heaters - Domestic Water Heater					\$ 4,000.00							
Quonset Hut: D3023 - Furnaces - Oil Fired Furnace												
Quonset Hut: D3045 - Exhaust Ventilation Systems - Exhaust ductwork												
Quonset Hut: D5010 - Electrical service & Distribution - Distribution Panels												
Quonset Hut: D5020 - Lighting & Branch Wiring - Ceiling Mounted Industrial Fans	\$ 2,500.00											
Quonset Hut: D5022 - Lighting Equipment - Fluorescent Light Fixtures							\$ 5,000.00					
Quonset Hut: D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Light a	1	\$ 500.00										
Quonset Hut: G4020 - Site Lighting - Wall Packs		\$ 1,000.00										
Quonset Hut: G3060 - Fuel Distribution - Furnace Oil Storage Tank												

Quonset Hut: G3060 - Fuel Distribution - Underground Fuel Storage Tanks and Pump		\$	10,000.00		
Sand Storage Building: A1010 - Standard Foundations - Concrete Foundation Walls					
Sand Storage Building: B1020 - Roof Construction - Domed Roofing Structure					
Sand Storage Building: B3010 - Roof Coverings - Asphalt Shingle Roofing					
Storage Building: A1030 - Slab on Grade - Floor slab					
Storage Building: B1020 - Roof Construction - Pitched Roofing Structure					
Storage Building: B2010 - Exterior Walls - Corrugated Metal Siding					
Storage Building: B2030 - Exterior Doors - Hollow Metal Door					
Storage Building: B2030 - Exterior Doors - Overhead Door					
Storage Building: B3010 - Roof Coverings - Corrugated Metal Roofing					
Storage Building: D5010 - Electrical service & Distribution - Distribution Panels					
Storage Building: D5022 - Lighting Equipment - Fluorescent Fixtures					
Storage Building: D5091 - Exit & Emergency Light Systems - Exit Sign, Emergency Lig					



APPENDIX B |

PHOTOGRAPHS

























