

Building Condition Assessment

DNSSAB Temagami Ambulance Services Building
7 Stevens Road, Temagami, Ontario

Date: May 31, 2018 DRAFT REPORT



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Building Condition Assessment

DNSSAB Temagami Ambulance Services – Stevens Road, Temagami, Ontario

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Project No. 218050

Building Condition Assessment

DNSSAB Temagami Ambulance Services – Stevens Rd., Temagami, Ontario

EXECUTIVE SUMMARY

In May of 2018, the District of Nipissing Social Services Administration Board retained Mitchell Jensen Architects Inc. and their sub-consultants, Piotrowski Consultants Ltd., to perform a Building Condition Assessment (BCA) for the Temagami Ambulance Services Building, located on Stevens Road, Temagami, Ontario.

CONSULTANTS

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BUILDING CONDITION ASSESSMENT (BCA) - METHODOLOGY

The BCA portion of the study was intended to:

1. Assist the District of Nipissing Social Services Administration Board who operate the Ambulance Services and the Town of Temagami who owns the building, to understand the physical condition and life expectancy of the components Temagami Ambulance Building, located on Stevens Road, Temagami, ON. This study also provides suggestions on how the building might be renovated to better accommodate the current and future needs of the Ambulance Services based upon requests made by staff on site.
2. Provide a non-destructive Architectural, Mechanical and Electrical review as to record and document by way of digital photograph the present status of specified building elements.
3. Assess the Present Condition of building elements based on a prescribed rating system provided by the Capitol Centre:
 - "Good": Reasonable condition and does not require any capital expenditure at present date. Estimated Remaining Life (RL) to be 10 to 20 years.
 - "Fair": Deteriorating condition likely to become "poor" within a few years if not addressed. Estimated Remaining Life (RL) to be 5 to 10 years.
 - "Poor": Observable deterioration requiring capital repair. Estimated Remaining Life (RL) to be 0 to 5 years. Note that if the condition was rated as "Poor" along with a Priority level of "A", the Remaining Life (RL) was noted as 0 years.
4. Establish a Priority rating for each building element reviewed based on the following grading system provided by the Capitol Centre:
 - "A" Life Safety: Hazardous condition which cannot be deferred and which could lead to loss of life or critical or extremely severe injury.
 - "B" Structural Integrity: Conditions which lead to the deterioration of structural elements where a failure to do so will lead to unsafe conditions and will eventually render the building structurally unsound and physically obsolete; incapable of performing the task it was designed to do.

Note: intrusive investigation and/or destructive analysis was not part of the mandate of this assessment. Some recommendations for additional investigative work have been identified.
 - "C" Legislative Requirement: All property elements which must be upgraded so that they comply with revision to existing or to the requirements of newly adopted legislation. Work required by municipal orders to comply is not included in this priority.
 - "D" Building Functionality: The repair and replacement of building elements which have a direct and significant impact on primary building systems. These building systems must be maintained in order to protect the value and operational viability of the asset.

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Included within this priority is the repair or replacement of building elements which have reached the end of their useful life. This work is necessary in order to maintain tenant's quality of life and to prevent this building from becoming physically or functionally obsolete.

"E" Cost Effective Upgrades: Upgrades with cost-effective initiatives which improve the operational efficiency of a property and which have a reasonable payback.

5. The BCA-Architectural report also includes a chart which, within the Architectural and Landscape elements, provides the following:
 1. Photographic Index, visually documenting the noted observations and areas of concern.
 2. A standard template for comparative reporting of observations and comments. Based on the full report and photographic index. Items highlighted in red are for immediate action life safety and orange are high priority but not directly related to fire safety but do not pose an immediate potential risk to life.
 3. An estimate of each building element's Useful Life based on industry standards. Note that the Useful Life of different materials varies according to usage / abuse, frequency of regular maintenance / repair and the quality of the building material and installation.

SUMMARY

The Ambulance Service Building, located on Stevens Road in Temagami appears to have been constructed in 1987-88. The drawings were from another building done in c. 1980 and the actual construction of this facility was mirrored from those drawings. The building is a single storey and includes 2 ambulance garage bays and offices with living quarters, approximately 670 s.f. (204 s.m.). The basic structure is wood framed with roof trusses on block foundation and slab on grade. The exterior walls are clad with a face brick veneer and vinyl siding at roof gable level. The windows are a combination of wood and vinyl and are generally original. The garage doors are original and are a translucent material. The facility is staffed 24hrs/day, 365 days a year, staff are not permanent residents as most staff are part-time employees. The office area has undergone some renovations to include a bedroom for 24/7 accommodation. It is unclear if this work was undertaken with a permit and change of use permit, which may have required upgrades to be undertaken. Details of our findings are contained in the Building Condition Assessment Report (BCA).

It is unclear if the building was originally designed to be a "post disaster building" under the Ontario Building Code.

During our inspections, some areas of potential or actual concern were identified which warrant additional investigation. For example:

- o Perform a Designated Substance Survey (DSS)
- o Cracking at foundations as noted in the report. Further structural investigation is required.

Current construction noted as not meeting the Ontario Building Code (OBC) indicate that the existing construction does not meet the current OBC, but at the time of construction it may have been acceptable. This does not imply that modifications to the identified building elements are required to be achieved as existing construction is not required to be modified to meet current codes, with the exception of Ontario Fire Code (OFC) Maintenance and Retrofit requirements. The use of the building was altered and renovations occurred to include living accommodations for staff in order to help the facility function 24/7. These renovations and the change of use appear to have been completed without permits and may

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require portions of the building to be upgraded to suit the modified condition. The current CBO (Monte Cummings) of Temagami was on site at the time of review and confirmed this interpretation.

Damage to fire separations, missing firestopping, door latching, closing and hardware condition/functionality were observed that should be remediated immediately to fulfill the Owner's obligations under Part 2 of the Ontario Fire Code. For a complete listing refer to the report and the Legislative Requirements listed therein.

Deficiencies related to fire separations and closures in those separations present a potential life safety risk and immediate attention is required to undertake corrective measures and protect residents in the interim. This information should be shared with the Chief Building Official and Fire Official so they are aware of the issue. Corrective measures may require professional design, review and permits to implement the changes, as the comments included in the report are not intended direct construction and may require more detailed information for permits.

Accessibility was reviewed on site and confirmed with the operators, that all workers (emergency responders) that are on site are required to be able bodied to provide the required services and as such accessibility in the building was not a requirement. If a worker is injured they would receive modified duty which would not be at this location, and public access to the building is very limited.

Continued maintenance and regular observation of the building is necessary to ensure that building materials reach their maximum useful life and to ensure that defects are identified quickly before they can manifest into larger, more costly problems.

Mitchell Jensen Architects Inc.



ANDREW BRUCE-PAYNE, B.Arch. OAA
Architect | Director of Compliance and Sustainability

Building Condition Assessment - Architectural

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Site Work

Parking Lot / Driveways

The parking area is located to the east of the building and is in FAIR condition with a rough aggregate finish which generally slopes away from the building to the road. There were no curbs or catch basins observed. No line painting was visible. Paving at the overhead door sills to the two ambulance bay was deteriorating/sunken away from the concrete curb. Asphalt is ramped up at the main entry door and still contains a step of approx. 3". There is no level area at the door and it is not flush with the door sill level so it is not barrier free accessible.

Action: Patching of pavement at the overhead door sills should be undertaken.

Sidewalks and Pads

Only one small poured concrete pad was located at the rear exit door. The pad appeared in FAIR condition and was dropped approximately 2" below the door sill.

Planter Bed

The planter bed located at the front of the office portion of the building was constructed from pressure treated 6x6 lumber raised above the level of the asphalt pavement surface, and appeared in GOOD condition.

Action: None.

Grass areas

The areas of grass around the building are generally in GOOD/FAIR condition. Grass areas under eaves drip line are deteriorated and water has cut a groove into grass. Grade directly adjacent to the building generally slopes away from the foundation.

Action: Repair of eavestroughs and downspouts will eliminate damage to grass and prevent splash up onto brick and foundation.

Wood Deck Patio Area

The wood deck is approximately 12'x12' and constructed from pressure treated lumber. Floor joists appear to be 2"x8" joist and is raised approx. 12 – 14" above grade. There is a single step, made from an 8x8, to the platform and privacy screens made from posts and rails with a tight privacy lattice. Deck boards were 2x6 and appeared to be in GOOD condition. This deck is mounted on precast concrete deck blocks that sit on grade, no settlement was obvious. It appears to be constructed within the last 5 years.

Action: Step does not meet the minimum tread depth require by OBC. Reconstruct step to proper depth.

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Site Grading

The grade level is generally lower than the main floor level of the building by about 4-6 inches and sloped slightly away. To the rear of the property there is a forested rock outcrop which slopes toward the building then levels out to a gently swale. No complaints of water at the building were noted by the owners and users. The owners noted a sanitary easement to the back of the property approximately 15' from the back of the building. A cleanout was observed at this location in roughly in line with the rear exit door. The existing easement extent would need to be confirmed if an addition was planned to the rear of the building.

Action: None.

Shed Building

A painted wooden (chip board) shed building was located on a concrete pad at the rear of the property and is used for small exterior storage. The shed was not part of the review.

Building Exterior

Foundations

The owner provided the original drawing for the building which indicated 10" concrete block foundations on strip footings to an approx. depth of 80". The drawings show 2" of insulation on the inside of foundations down 4' and horizontally for 4' around the perimeter of the building. Block outline could be seen through parging. In three locations there was deterioration of a mostly isolated to a single block. One located at the north-west corner block is cracked at the corner, and three others the face of the block is deteriorated through the parging at the south east corner and the fourth location at the south west corner. At the north-west and south east locations, no obvious reason for the localized deterioration and it is isolated to a single block with no cracking observed in the brick above. At the south west corner step cracking was visible in the lower 2 feet of the brick on both sides of the corner potentially indicating some settlement.

Action:

- *Patch and repair two locations of damaged block at foundation recommended within the next year to eliminate potential of further deterioration.*
- *Engage a structural engineer to review the potential settlement issue at the south west corner.*

Foundation Parging

Foundation wall parging appears generally in FAIR to POOR condition some isolated locations where foundation deterioration was noted with hairline cracks at joints and deterioration at the above noted foundation damage.

Action: Watch for further deterioration/opening of cracks. Patch and repair parging, work may coincide with foundation repairs recommended in the next 2-3 years.

Waterproofing

No waterproofing visible for inspection. Staff did not report of any leaks.

Face Brick and Sill Copings

Observed face brick (rough faced) with raked joints was found to be in generally in GOOD condition and did not exhibit efflorescence. Weep holes were apparent in the bottom course of brick. Weep holes did not appear to have insect baffles and there was no apparent through wall flashing drip edge present. No vent

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course was observed at top of wall or below windows. The original building sections show the air space connecting to the attic space. Metal lintels were observed above original window openings. No lintels were installed at brick above AC unit openings or above overhead door openings. The openings are small with not much brick above and no signs of cracking brick or mortar. The lintel function above overhead doors may be provided by the steel head frame at the opening, as no signs of brick. No control joints were observed in the brick.

Mortar appeared generally sound with no obvious deterioration except at joints in precast concrete window sills and one isolated location at the south west corner of the ambulance bay (refer to foundation notes above).

Typical windows sills were coped with precast concrete copings which appear to be in GOOD condition and sloped to drain away from the window. There were several joints within the span of a window and the mortar between was generally cracking.

Action: Install insect baffles in vent holes. Repair mortar joints in precast sills or replace with one piece sills.

Vinyl Siding

Prefinished vertical vinyl siding located on gable ends of roof trusses, appears to be original and in FAIR condition. Some chalking of vinyl was apparent. The bottom of the vinyl siding where it contacts brick does not have a drip flashing to shed water past the face of the brick below.

Action: Drip flashings should be installed when siding is replaced.

Roofing – Asphalt Shingles

The asphalt shingle roofing was replaced approximately 5 years ago according to the owner. The roof is a relatively low slope roof. A drip edge starter strip does not appear to have been installed, and it is unclear if ice and water shield was installed at the eaves. No ridge venting or venting devices were installed for the peak of the roof. Based on the age of the roofing and no obvious curling the shingles appear to be in GOOD condition. Plumbing vent appear to be installed with proper boot. Shingles installed over base of satellite dish.

The attic over the office was accessed during the visit and it was observed to be wood framed roof trusses with plywood decking. The insulation was a mix of fiberglass batt and loose cellulose insulation of varying thicknesses and was somewhat disturbed in several locations. It appeared to be approximately 6" thick near the access hatch. Insulation baffles were observed at the eaves in every second truss space. The attic to the upper roof was inaccessible at the time of visit.

Flashing at low roof to wall appears to be missing. Vinyl siding extend right to shingle level. No leaks inside the building were reported.

Action:

- *Install drip edge starter strip.*
- *Install continuous ridge vent or other vent at high portion of both roofs to obtain adequate venting required by OBC.*
- *Install additional eaves baffles for proper ventilation consider length for increased insulation for thermal performance of roof and save energy cost.*
- *Investigate for presence of flashing at low roof to wall.*

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Rainware

Eavestroughs are seamless aluminum and appear in GOOD condition but downspouts have all been fallen off or sheared at the connection to the trough.

Action: Eavestroughing and downspouts should be reinstated around the perimeter of the building. Consider installing splash pads at bottom of downspouts to direct water away from building.

Soffits and Fascias

Fascias are aluminum clad and appear in GOOD condition.

Soffits are vented aluminum and appear in GOOD condition. Some old hornet nests were observed.

Windows – Vinyl & Wood

Windows are double glazed, combination of wood and vinyl, with a mix of fixed glazing and horizontal sliders which appear to be original to the building. Gaps in frames and poor seals at glazing to frames were observed. Users commented that water comes through windows in driving rains. Windows are in POOR condition and should be replaced.

One window at the bedroom appears to be newer and is a vinyl vertical hung slider and appeared to be in FAIR condition. Insect screens observed appeared in generally GOOD condition.

Action: Replace old vinyl and wood windows with new windows ASAP to reduce potential water infiltration inside the building. Consider low-e and argon filled for energy efficiency.

Entrance Door

Exterior insulated hollow metal door with sidelite sealed glass unit were in FAIR to POOR condition. The paint finish is scratched and rusting at sill of jamb frames, door and sidelite. Door hardware was generally older but appeared in FAIR condition. Weather stripping and sweep was in POOR condition. The aluminum thresholds were not thermally broken, but were in FAIR condition. Door is combination keypad locked.

Action: Replace failing weather stripping. Consider replacing door and hardware or remove rust and repaint.

Exit / Service Doors

Exit service doors are of insulated hollow metal construction in pressed steel frames. The frame is not thermally broken. The doors appear to be original construction and are in FAIR condition, showing signs of light corrosion on frame at sill. Closer was removed. Weather stripping and threshold appeared in FAIR condition.

Action: Replace closer. Remove rust and repaint door and frame. Periodically review hardware for operation and wear, replace as needed (consider lever handles).

Exterior Overhead (Garage) Doors

Two power operated exterior overhead doors were observed on the double ambulance garage bay. The doors are translucent plastic/vinyl/poly-carbon material. The weather seals appear to be in FAIR/POOR condition, but are starting to deteriorate at the sill and bottom edge of the jamb. The sill seal appears to have shrank. Staff did not complain about the operation of the doors, but indicated the doors are not thermally efficient.

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Some rusting was observed at the bottom of the jamb frames on the bay doors and chips in the paint around the perimeter metal frame.

Poured concrete sills at overhead doors are cracked and spalled in several locations. Sill in POOR condition.

Actions:

- *Replace weather seals*
- *Remove rust and repaint frames.*
- *Patch concrete sills/foundation.*
- *Consider replacing overhead doors with more energy efficient doors.*

Caulking

Caulking condition and age varies throughout the applications on the exterior of the building. Dark grey caulking appears to be older and is cracking and pulling away from frames in some locations, POOR condition. Caulking at window sills (light grey) appears to be newer and is in FAIR condition.

Action: Repair/replace sealants. Periodically inspect sealants nearing end of expected life.

Building Interior

OFFICE AREA & SLEEPING ROOMS

Ceilings

Ceilings consists of drywall with paint finish fastened to underside of strapping fastened to wood trusses. Gypsum wallboard was in GOOD condition. Paint finishes were in FAIR condition and could use some freshening up.

Walls

Typical interior walls are wood stud framed with gypsum wallboard each side and paint finished. The paint finish was in FAIR condition. Walls were typically original construction with the exception of the walls at the Bedroom which was renovated from janitors and storage closets, extending into the office space.

Floors

The floor construction is poured concrete slab on grade construction. The flooring was typically VCT with rubber base. The VCT was showing signs of wear specifically in high traffic areas at main entry. Some chipping and gaps between joint in tiles were observed. VCT is in FAIR condition.

Action: Repair/replace damage VCT and base. Wax and reseal.

Interior Doors

Interior doors are typically solid core wood doors in hollow metal frames. The doors are wood veneer and appear to be in FAIR to GOOD condition with minor scratches and nicks. Hollow metal frames are in generally GOOD condition with some nicks and scratches. Hardware appears original, so doors and frames are generally unmodified.

Door widths are typically 32" wide and 7'-0" high. This does not meet current accessibility requirements.

Action: None.

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Door Hardware – Typical Interior Doors

Residential grade door hardware was in use. Round knob style passage sets with push button lock and floor mounted door stops. Closers were not typically installed. Passage sets and hinges appear to be in generally FAIR condition, but may be approaching expected life cycle.

Action: Consider replacing passage sets with lever style commercial grade.

Window trims and seals

Window trims are typically gypsum wallboard returned to the window frame. The sleeping room has painted wood trims and are in GOOD condition. Sealant around frames to windows appears to be missing. Refer to also to Building Exterior notes.

Action: Seal around window frames.

Openings for A/C units

It appears openings were made in the north wall of the existing lounge and office area to accommodate AC units. The openings are not trimmed and are sealed with spray foam around the AC units.

Action: Review with mechanical report comments, patch and repair openings as required to match existing assemblies.

Millwork:

Millwork with upper and lower cabinets appears original, but is in FAIR condition. Staff indicated counter and millwork area were a bit small and wished to expand into the office/lounge area with separate cabinets for coffee and relocating the large refrigerator. The staff indicated less requirement for office space and more for living space.

Action: Investigate the potential to revise the office layout to suit staff request for better functionality.

Use of Space

The original floor plan was modified to eliminate two closets and a janitor storage room to make a bedroom for 24/7 occupancy. It is unclear if this work was done with a permit and change of use.

STORES/EQUIPMENT ROOM

Ceilings

Ceilings consists of drywall with paint finish fastened to underside of strapping fastened to wood trusses. Gypsum wallboard was in GOOD condition. Paint finishes were in FAIR condition and could use some freshening up.

Walls

Typical interior walls are wood stud framed with gypsum wallboard each side and paint finished. The paint finish was in FAIR condition. Some holes for wiring were observed in walls, but the wall does not appear to require a rating.

According to the original drawings, the wall separating the stores/equipment area from the vehicle bays is constructed from wood stud framing, batt insulation of cavity with regular gypsum board on office side and "5/8" FG drywall" (assumed to be Fireguard) on the vehicle bay side. An additional layer of 20 ga. metal liner panel was installed on the vehicle bay side.

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Action: Reinstate wall rating and air seal for fumes from garage area. Refer to Legislative Requirements below.

Floors

The floor construction is poured concrete slab on grade with VCT finish and rubber base. The VCT was showing signs of wear/chipping specifically edge of pump access door. VCT is in FAIR condition.

Action: Repair/replace damage VCT and base. Wax and reseal.

Interior Doors

Door was solid core wood doors in hollow metal frames. The door is wood veneer and appear to be in FAIR to GOOD condition with minor scratches and nicks. Hollow metal frame is in generally GOOD condition with some nicks and scratches.

Door widths are typically 32" wide and 7'-0" high. This does not meet current accessibility requirements.

Action: None.

Door Hardware – Typical Interior Doors

Residential grade door hardware was in use. Round knob style passage sets with push button lock and floor mounted door stops. Closers were not typically installed. Passage sets and hinges appear to be in generally FAIR condition, but may be approaching expected life cycle.

The Stores/Equipment room has an additional keyed padlock and hasp.

Action: Consider replacing passage sets with lever style commercial grade and remove padlock and hasp with a deadbolt and thumb-turn to prevent potential to lock someone inside this room.

Millwork:

Wood storage cabinets and lockers were present. The cabinets were old but still functional.

Open cabinets for linen storage. The cabinets were old but still functional.

Medical supply storage was contained in plastic slide-out bins on a metal storage rack system. Units were tilting out of the storage units and should be fixed or replaced.

Two two-tier lockers were provided for part time staff, and appear in GOOD condition.

Radio communications system and water heater were located in this room.

Users complained about storage area being too small and a desire to reorganize the space. An additional refrigerator was located in this room for additional food storage, but could be relocated.

Actions: Review storage needs and potential to expand store/equipment space. Potential to relocate lockers and fridge. Recommended to be implemented at same time as fire separation repairs noted above.

STAFF WASHROOMS

Ceilings

Same as typical, but some signs of moisture accumulation from shower with streaks in paint finish. Drywall does not appear to be blistering or sagging.

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Action: Repaint finish and refer to mechanical comments for exhaust comments.

Walls

Construction same as typical, but some signs of moisture accumulation from shower with streaks in paint finish. Drywall does not appear to be blistering or sagging.

Action: Repaint finish and refer to mechanical comments for exhaust comments.

Floors

Same as typical VCT. Floors may be slippery when exiting showers.

Action: Consider providing floor mats or changing flooring to more slip resistant finish.

Doors and Hardware

Same as typical.

Washroom Accessories

Wall mounted wood hand paper towel dispensing unit, wall mounted plastic hand soap dispensing units and wall mounted mirror. Washroom accessories are in FAIR condition.

Shower Unit

Shower units were a 1 piece plastic surround with metal and glass door system. The sealant at the top of the unit to wall finishes was deteriorated. The shower unit appeared in FAIR condition and no complaints of leaks.

Action: Reseal perimeter of shower units.

Millwork

A small wood veneer vanity was located in the corner of each washroom. The wood finish was showing signs of wear on the finish. The p-lam countertops had signs of the start of delamination at the exposed end. Sealant was missing at p-lam to wall.

Actions: Reseal at countertop. Watch for further deterioration of end trim. Refinish cabinet fronts.

2 BAY VEHICLE GARAGE

Ceilings

Ceilings consists of drywall with a skim coat finish fastened to underside of strapping fastened to wood trusses. From the original drawings the drywall is indicated as Fire Guard 5/8" thick. Gypsum wallboard appeared in FAIR to GOOD condition.

Attic Access Panels

The attic access panel in the upper roof was not accessible at the time of the visit. The access panel/door to the lower roof area was clad over with exposed rigid SM insulation screwed to the face of the door. The door was an insulated wood panel with no closer or latching. The wall to the attic space forms part of a fire separation and should be constructed with a rated closure on both access doors.

Action: Replace both attic access hatches with proper fire rated, insulated, swinging access doors complete with closer spring, seals and latching mechanism.

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Walls

The exterior walls according to the original drawings are wood frames insulated, contain a vapour barrier and regular gypsum board finish clad with 20 ga./ metal liner panel on the interior surface.

The wall separating the office area from the vehicle bays is constructed from wood stud framing, batt insulation of cavity with regular gypsum board on office side and "5/8" FG drywall" (assumed to be Fireguard) on the vehicle bay side. An additional layer of 20 ga. metal liner panel was installed on the vehicle bay side. The finish is dirty likely due to exhaust.

Floors

The floor construction is poured concrete slab on grade construction. The slabs are sloped to drain into two large floor trough drains located centered on each vehicle bay. There are no slab saw cuts to control cracking. The slabs are cracked in several locations to generally from the garage door openings back to the drains. Slabs are in FAIR condition. A joint has opened up along the interior wall at the slab to foundation connection.

Action: Repair cracks and seal floor. Seal joint at floor slab to interior wall condition.

Interior Doors

Interior doors are typically hollow metal doors in hollow metal frames. The doors appear to be in FAIR to GOOD condition with minor scratches and nicks. Hollow metal frames are in generally GOOD condition with some nicks and scratches. The door and frame do not have a label indicating a rating, the rating label on the frame may have been removed.

Hardware appears original, so doors and frames are generally unmodified.

Door widths are typically 36" wide and 7'-0" high. There is a 6" high curb at the door opening and to the vestibule exit door.

Action: Replace door with ULC listed fire rated door and frame, complete with associated hardware. Compliance alternative in the OBC Part 11 C8 & F8 existing allowed to be considered ¾ hour rated, which is acceptable in a 1 hour FRR separation confirmation of acceptance of this would be required by the CBO and Fire Inspector..

Door Hardware –Interior Door to Office

The closer for the door providing access to the office area was not marked as ULC listed. The door was equipped with a closer and latching passage set. No weather-stripping was observed. A kickstand stop was installed on the door and should be removed as this is a fire rated door required to close and latch.

Action: Replace hardware with ULC listed hardware applicable for ¾ hour rated closure. Do not install kickstand door hold open. Install weather-strips and bottom edge seal around the door opening. Consider using lever handle hardware.

Use of Space

The garage bay is used for the storage of two ambulance vehicles. The bay is used to wash down the vehicles and store miscellaneous equipment and tools. There are also loose oxygen tanks stored against the wall in the space (refer to comments on Storage of Oxygen Tanks). The users have commented the size of ambulance vehicles has increased since the original construction of the building and there is no longer room to remove the gurney and have the vehicle fully inside the garage bay. The users mentioned that there is sometimes the smell of exhaust in the residence/office portion of the building.

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The garage bay under current OBC would be required to be separated from the remainder of the building by a fire separation with a 1 hour Fire Resistance Rating, and sealed with an air barrier system to prevent the passage of gas and fumes through to the remainder of the building. This may require further investigation to determine if such a barrier exists. The original drawings do not indicate an air barrier or fully rated fire separation between the two areas of the building. The assembly appears to be constructed as previously noted, with a single layer of 5/8" fireguard gypsum on one side and regular gypsum on the other.

It may be possible to remove the non-rated gypsum board from the one side, install a new air barrier (more likely a non-permeable barrier like vapour barrier) which is sealed at perimeter and all penetrations, and install new rated gypsum board. The doors and access hatches should all be modified to have weather-strip air seals and contain the required ratings. This would include the door at the vestibule and the two attic access hatch doors. All hardware should be ULC listed for the rating and have closers and latching hardware.

Action:

- Upgrade the partition and modify doors and hardware as noted above.
- Consider an addition to accommodate length of vehicles and stretcher/gurney removal.

Storage of Oxygen Tanks

There were several oxygen tanks stored in the southwest corner of the garage bay, including 12 small tanks and 3 large tanks (chained to the wall). Under Article 5.6 of the OFC, non-flammable compressed gases above 150kg are required to be stored to prevent mechanical damage and held securely in place. A separate rated room does not appear to be required by the OBC or OFC for this type and quantity of compressed oxygen gas storage.

Action: Provide attachments or restraints on tanks to prevent damage and secure storage.

Exit Alcove/ Laundry Area

There is a small alcove that leads to an exit at the rear of the garage bay. The alcove contains a laundry sink and an electric stacked washer and dryer unit. The equipment does not block the path to the exit door. The floor of this alcove is raised from the garage floor level. The VCT flooring in this area is chipping at the exit door threshold.

Action: Repair VCT flooring and base as required.

Legislative Requirements

Listed below are various legislative codes and acts that preside and apply to the “Ambulance Services” building occupancy. Each section identifies and addresses specific concerns that became apparent during the BCA site investigation.

Retrofits and upgrades should be designed by Architects and/or Engineers as required by law, and permits obtained for work. The items noted in this report are not meant to be used as documents for the basis of repair.

ONTARIO BUILDING CODE

The building appears to be constructed as a Part 9 small building under the Ontario Building Code. Although not called up as such on the drawings there appears to be an attempt to create a rated wall between the two occupancies of the facility. Current code would designate the facility as having three major occupancies: Group D Business and Personal Services, Group C Live/Work Unit and a Group F, Division 2, Medium Hazard (Storage Garage), which would require a 1 hour Fire Resistance Rating separation between the two (9.10.9.11(3&4) and 9.10.9.16 (2,4&5)).

The OBC is not retroactive and would apply to the facility only to guide the work of change of use, renovation or addition, but if the deficiency poses a serious risk to life safety Authorities may issue orders to comply. Work done without a permit can be required to make upgrades to suit what should have been required.

Renovation to add a bedroom (sleeping accommodations) to the office area may or may not have been done under a building permit and may require a change of use permit. This effectively creates a residential occupancy, live/work unit. While most of the staff is part time and no-one lives at the building for extended durations the unit still accommodated sleeping facilities and is run 24 hours a day 365 day a year. Part 10 and 11 of the OBC govern Change of Use and Renovations. There is a potential reduction in performance level related to the fire separation noted above and would have required upgrading to at least a ¾ hour rating with an air barrier (sealed) system.

- Upgrade the wall entire between the garage and office/living occupancy to be a required fire separation with air seal.
- Upgrade the door between the garage and office/living unit to be fire rated and have seals, closer and latching hardware.

ONTARIO FIRE CODE

The Ontario Fire Code (OFC) applies to existing buildings and outlines requirements that the Owner is obliged to maintained and retrofitted on an ongoing basis.

Fire Separations (damages to walls, floors and ceilings)

Ontario Fire Code, indicates that it is the owner's responsibility to ensure that where an existing fire separation exists and are damaged as to affect the fire resistance rating, the damaged fire separation shall be repaired so that the integrity of the fire separation is maintained.

- Penetrations through rated assemblies (walls and ceilings) at electrical and pipe locations shall be firestopped;

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Closures (hardware and door hold open devices on doors)

Doors in fire separations are to be equipped with closures as to maintain the integrity of the fire separation (closers, latching hardware, etc.). Doors shall not obstructed, blocked, wedged open and altered in any way that would prevent the intended operation of the closure. (OFC, article 2.2.3.3).

Actions:

- Upgrade attic access doors to be proper rated closures with appropriate hardware.
- As noted in the OBC requirements upgrade the door between the garage and office/living unit.
- Periodically review hardware to make sure it is working properly, and repair/replace where it is not.

Storage of Combustible Liquids

OFC, article 4.2.4 and 4.2.8, indicate the maximum quantities of flammable or combustible liquids allowed within Business & Personal Service occupancies. A 1 hour fire separation is required around the room used for storage and if over a certain volume is to be contained mechanical ventilation and spill protection requirements come into effect.

Action: It is recommended that a review of the quantities and types of materials being stored be reviewed and limit the quantities to those which can be contained within a flammable liquid storage cabinet.

No products were openly visible, but a snow blower which requires gas was located in the corner.

Storage of Compress Gas (Oxygen)

The storage of compressed oxygen tanks in the garage portion of the facility are to be stored to prevent damage and secured to prevent tanks falling over. This is governed by Part 5.6 of the OFC.

ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT

Designated Substance Survey

The Ontario *Occupational Health and Safety Act* requires that a list of all designated substances at a facility be provided and/or made available to all workers working within the facility. A Designated Substance Survey (DSS) identifies the designated substances present, their locations and concentrations. This information allows workers involved in with the demolition, renovation and daily activities to take appropriate steps to control exposure of workers and the general public from the designated substances that are present.

Action: It is recommended that a licensed contractor be engaged to perform a Designated Substance Survey (DSS) throughout the facility as to determine if any hazardous materials is present on site as defined by the Ontario Occupational Health and Safety Act.

This would be required for work to be conducted in the future on this building, and is typically provided by the Owner of the building.

Ministry of Labour

Roof attic access is currently available through a door located in the middle of the garage bay and requires a movable ladder to access. These are areas of limited access with no equipment to be serviced. An appropriate lift or access ladder may be required to access these attic access hatches.

It may be desirable to relocate the upper roof access hatch to provide access from a single ladder to both access doors.

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ACCESSIBILITY FOR ONTARIO WITH DISABILITIES ACT (AODA)

Maintenance

Preventative and emergency maintenance of accessible elements in public spaces is required by the AODA. This will affect sidewalk, parking areas, seating area and paths within the subject property exterior site.

Areas to be reviewed would include:

- uneven surfaces in parking areas, sidewalks, curbs and tactile warnings at traffic routes in locations providing access to the building;
- slopes and grading of sidewalks and potential ramp requirements;
- pavement parking lines, sizes and locations of accessible parking spaces and signage;

As noted previously the occupants/workers at the building are required to be fully mobile in order to provide the required emergency services, public and outside access to the building is very limited and as such modification inside the facility to meet new or current standards of accessibility do not really make sense. Access to the front door and a barrier free operator could be considered if this approach to the services and access to public changes.

Requested Modifications for Use of Building

The staff indicated that there were some functionality/operational issues within the facility. The comments noted were as follows:

1. Expansion of the garage:

Expanding the garage bay to allow room for the removal of a stretcher from the back of the ambulance while fully inside the garage bay. The current ambulance is 23'4" in length and the bay is only 30' deep. This would require an expansion of approximately 10ft in the depth of the garage. There are two potential solutions for expansion; expansion to the back yard or expansion into the driveway parking lot.

Expansion to the back would require significant openings and modification to the structural back wall of the garage. The expansion in this direction is limited by an easement for sanitary lines that run through the back of the property, the extent of the easement would need to be confirmed, but the line is approximately 15 ft from the back face of the building. With this option the roof line may extend the full depth of the addition as the addition does not required the full height of the garage bay.

Expansion out the front of the garage bay may be limited by setbacks, but the adjacent building is at least 10 – 15 ft closer to the road than the ambulance building. The connection of roofs would be more challenging in this option as the full height of the garage bay is likely required, which would lead to gabling the roof the opposite direction and tying into the existing roof which has structural implications. The presence of the openings for the existing two garage bays would also need to be considered as they would be in the middle of the space where the vehicles would be parked. Walking around the parked vehicle in the bay may be an issue unless more of the structural wall is able to be removed.

The building should be a post disaster structure and would require Structural assessment and drawings for any modification to the structure. It is unclear if it was originally constructed as a post disaster structure, but I would assume it was not. This may become a more critical and costly issue to deal with, if expanding to the back of the garage.

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Both preliminary options present structural issues and constraints on size, and require more in depth review with surveys, bylaws and structural engineers input.

2. Converting the closed office to a 2nd bedroom

This is a fairly simple renovation to undertake if the upgrades are already made for the change of use for sleeping accommodations based on previous renovations. The modifications listed in both this report and the mechanical/electrical report would accommodate this alteration.

3. Modifying the stores/equipment room

The request to modify/increase storage capacity and functionality within the existing room or potentially relocate some portions of storage functions to the expanded garage area were mentioned. The recommendations outlined in this report require modifications to the demising wall for rating upgrades, so renovation will be required in this room. Cabinetry is old and some is less than ideal for the required purposes.

Options for increasing capacity and the flexibility of the space are expanded if there is an addition to the garage area allowing the opportunity to open up portion of the equipment/stores space to the work/living area. This may also provide an opportunity to separate the utility functions and recommended mechanical upgrades (HRVs and furnace) within a separate room in the back of the current equipment/stores area where the water heater, radio equipment and pump access are located.

4. Expanding counter space

Staff mentioned the potential of removing the office desk in the living space to provide new coffee counter and prep area. Potentially adding a hot plate for cooking and relocating the refrigerator to this location. The options for expanding the living space are increased if the other above modifications to expand the garage and stores are undertaken.

Disclosure

This report was prepared based on visual (non-destructive) observations and our best judgement in light of the information available and the observations. Existing conditions not included in the report were not readily apparent at the time of the review. The report is does not certify compliance with past or present regulations. The report is to be read as a whole in conjunction with the reports provided by Piotrowski Consultants, contained within.

This report was prepared for the sole use of the Owner, Town of Temagami and the District of Nipissing Social Services Administration Board. Third party reliance on, or use of the contents of this report is prohibited, and waives any rights to claims by those parties.

The review did not include a structural assessment of the fitness of the building, but includes areas noted as potential issues which may require further review and assessment by a licensed structural engineer.

End of Architectural report

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Building Condition Assessment – Photo Index

DNSSAB Temagami Ambulance Services – Stevens Road, Temagami, Ontario

Pictures – Site Areas

Photo 1 - Parking Lot Entrance



Photo 3 – Planting Bed



Photo 2 – Asphalt ramping at entry door



Photo 4 – Concrete Pad and Wood Deck



Photo 5 – Heaved Path at West Exit Stair

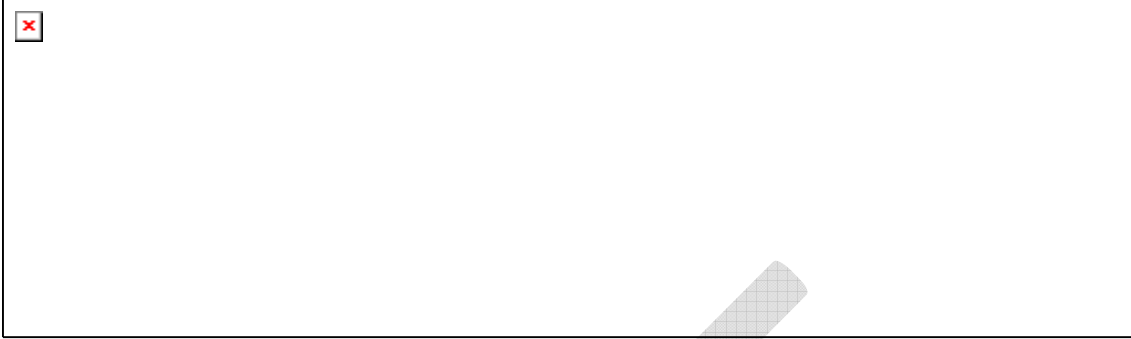


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Photo 6 – Grading at rear of property (Panoramic)



Pictures – Building Exteriors

Photo 7 – Foundation block cracked at N-W corner



Photo 9 – Spalling of parging and block S-E corner



Photo 8 – Spalling of parging and block S-E corner



Photo 10 – Step cracking in mortar joints at S-W corner

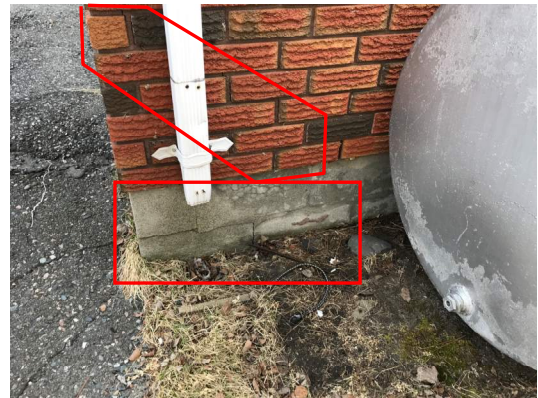


Photo 11 – Step cracking at SW corner



Photo 12 – Cracked mortar at concrete copings



Photo 13 – Caulking of Vinyl and Drip trim missing



Photo 14 – No drip edge or venting of roofs.
No apparent metal flashing at vinyl siding to upper roof
Downspouts missing or disconnected.



Photo 15 – Attic Insulation and Venting



Photo 16 – Wood/Vinyl windows in poor condition and sealant failure



Photo 17 – Window weather-stripping broken. Sealants have failed.



Photo 19 – Exit/service door rust and missing hardware



Photo 18 – Entrance Door rusting frame and Non barrier free accessible step.



Photo 20 – O/H door not thermally insulated



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Photo 21 – O/H door rusting frames and chipped sills/foundations



Photo 22 – O/H door lintel to be confirmed. Weather stripping and sealant deteriorating.



Photos – Building Interiors

Photo 23 - Typical interior finishes.



Photo 24 – Gaps at thru-wall A/C units



Photo 25 – Typical wood door with knob style hardware, chips in hollow metal frame paint finish.



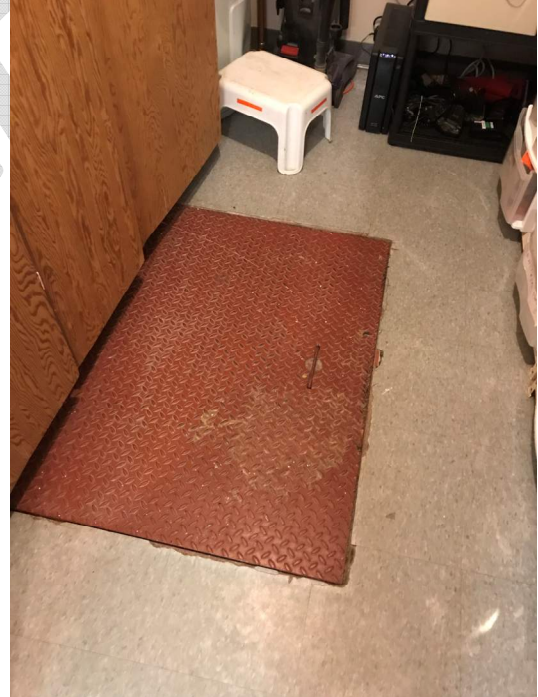
Photo 27 – Stores/equipment new racks and possibly reorganization required.



Photo 26 – Space renovated to a bedroom.



Photo 28 – Chips in flooring around hatch.



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Photo 29 – Moisture streaks in paint in washrooms.



Photo 31 – Seals cracked at top of shower units



Photo 30 – Seals missing at washroom counters



Photo 32 – Rating label missing on interior door from garage to vestibule



Photo 33 – Cracks in garage floor slab.



Photo 34 – Raised step to exit.
Seal at slab to base of interior wall



Photo 35 - Access panel not rated closure and covered with exposed foam insulation



Photo 36 – Attic access hatch has no ladder access for upper roof. Confirm rated closure.



Photo 37 – Oxygen tank storage. Some tanks loose and require protection from damage.



End of Pictures

Building Condition Assessment - 2018

DNSSAB Temagami Ambulance Services

Stevens Road, Temagami, ON

Condition Status:

Good

Fair

Poor

Priority Legend:

A - Life Safety

B - Structural Integrity

C - Legislative Requirements

D - Building Functionality

E - Cost Effective Upgrades

date of review: May 9, 2018

reviewed by: Andrew Bruce-Payne - Mitchell Jensen Architects
Tom Krajci - Piotrowski Consultants Ltd.

date built: 1987-88

of floors: 1 floor, no basements

| Building Element | Photo # | Condition | Priority | Useful Life (UL) in Years | Approx Age at 2017 Review | Observation / Status | Comments / Notes |
|------------------------------|----------------------|-------------|----------|---------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| 1 SITE WORK | | | | | | | |
| Parking Lot | 1 | Fair | D | 30 | 30 | No line painting, deterioration at sills to overhead doors. Rough aggregate small amount of heaving. | Patching of asphalt at overhead door sills should be undertaken when sills repaired. |
| Planter Bed | 3 | Good/Fair | - | 20 | Unknown | Pressure treated 6x6 edging. | |
| Sidewalk Pad - Service Exit | 4 | Fair | D | 15-20 | Approx. 5 to 7 | Minor chipping and spalling of surface and edges. | |
| Main Entry | 2 | Poor | A / D | 15-20 | Unknown | No flat area at entry door. 3-4" drop at door. Not accessible. | |
| Grass Areas | 4, 5 & 6 | Good | D | Life | 30 | Grass fairly level, but slope away from building. Some deterioration under eaves drip line. | Issue would be fixed by repairing downspouts. |
| Wood Deck Patio Area | 4 | Good | A / D | 15-20 | Approx. 5 to 7 | Pressure treated wood. Only 12-16" above grade. Privacy lattice screens. Supported on grade deck blocks. Pressure treated 8x8 step. | Step is smaller than allowable. Revise step construction. |
| Lean-to Shed | - | Fair | B / D | 15 | Approx. 5 to 7 | Shingled, painted plywood and wood framed lean-to structure for storage of OPP sled. | Operated by OPP. Not part of review. |
| Storage Shed | 5 | Fair | B / D | 15 | Approx. 5 to 10 | Shingled roof, painted chip board walls and stud framing on concrete pad. Storage only. | Not part of review. |
| 2 STRUCTURE | | | | | | | |
| Structural Systems | * | * | B / D | Life | 30 | No structural review conducted. Minor cracking in foundation at S-W corner and cracking in vehicle bay slab. Maybe initial settlement that has stopped, but should be confirmed by Structural Consultant. | Obtain structural review of slab cracks and stepped crack at brick on S-W corner. |
| 3 BUILDING EXTERIOR | | | | | | | |
| Foundations | 7, 8, 9, 10 & 11 | Fair | B / D | Life | 30 | Isolated cracks at S-W and N-W corners and some spalling at S-E corner. | Obtain structural review of slab cracks and stepped crack at brick on S-W corner, and implement repairs ASAP. |
| Parging | 7, 8, 9, 10 & 11 | Fair | B / D | 25 | 30 | Some cracking and spalling of parging observed. | Repair damaged sections of parging. |
| Waterproofing | n/a | n/a | n/a | n/a | n/a | No waterproofing visible at time of inspection. | Staff did not report any leaks. |
| Face Brick | 7, 8, 9, 10, 11 & 12 | Good | D | Life | 30 | Bricks appear sound, no efflorescence, spalling or cracking observed. Insect baffles missing | Install insect baffles in weep holes. |
| Mortar Joints | 10 & 11 | Good / Fair | D | Life | 30 | Raked joints generally sound. Step cracking observed at S-W corner. | Investigate and repair step cracking at SW corner |
| Sill Copings & Mortar Joints | 12 | Good / Fair | D | Life | 30 | Concrete coping appear generally sound. Mortar joints are cracked and failing. | Repair mortar joints at copings. Consider replacing with one piece copings at larger openings. |
| Vinyl Siding | 13 & 14 | Fair | D | 25 | 30 | Drip flashing missing, some chaulking of vinyl. | Add drip flashing when siding replaced. |

Building Condition Assessment - 2018

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Stevens Road, Temagami, ON

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|----------------------------|-------------|---------------|-----------|---------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Roofing - Asphalt Shingles | 14 | Good | B / D | 20-30 | Approx. 5 | Shingles appear in good condition. | May prematurely deteriorate if no top venting is installed. |
| Venting @ Ridge | 14 | Poor | B / D | 20-30 | - | No ridge vent or box vents installed in upper portion of both roofs. Lower soffit is vented. Vents | Install ridge vents or box vent in both upper and lower roofs. |
| Venting @ Eaves | 14, 15 & 16 | Poor | B / D | 20-30 | 30 | Insulation baffles install every 2nd truss space. No light visible which usually indicates blockages. | Install proper baffles at each truss space along eaves and ensure not blocked. Increase length of baffle for potential future increased attic insulation. |
| Soffits & Fascias | 14, 15 & 16 | Good | B / D | 40 - 50 | 30 | Aluminum vented soffits and preformed fascias. | |
| Drip Edge | 14 | * | B / D | 20-30 | * | No starter strip drip edge visible. | Install drip edge to protect bottom edge of roof sheathing. |
| Flashings | 14 | * | B / D | 20-30 | * | No flashing observed from low roof to adjacent wall. No leaks reported. | Confirm presence of flashing. |
| Attic insulation | 15 | Fair | A / D / E | Life | 30 | Insulation was a mix of batt and blown cellulose. Insulation depth did not appear significant at +/- 4-6" | Previous roof leaks have caused wetting of insulation in several areas. Some areas where water, staining and potential mould were observed in the 3rd floor ceiling. Further investigations, testing for mold and potential replacement is recommended. Wet insulation does not perform well. |
| Eavestrough & Downspouts | 14 & 16 | Good/ Poor | A / D | 20 | Approx. 5 | Eavestroughs continuous and good condition, but downspouts are all either missing or disconnected at the trough. | Repair/replace downspouts and connections within 1 year. Consider installing splash pads at the bottom of each downspout to direct water away from building. |
| Windows - Vinyl & Wood | 16 & 17 | Poor | A / C | 30 | 30 | Weather stripping deteriorated, seals cracked and missing. Windows at life expectancy. Reports of leaks when raining. | Replace windows and sealants (exterior and interior) within next 1 year. Check for damage at sill construction below windows. |
| Window Sills | - | - | D / E | - | - | See concrete coping notes. | |
| Entrance Door & Sidelite | 18 | Fair | D / E | 30 | 30 | Some rusting on frame and door. Frame not thermally broken. | Repaint door and frame. When time to replace provide thermally broken frame and insulated door likely within 5 years. |
| Sidelite | 18 | | D / E | 20 | 30 | No signs of condensation noticed, but sealed unit getting old. | Consider replacing door, frame and glass sidelite. |
| Hardware | 18 | Fair/Poor | D / E | 15 - 20 | Unknown | Keypad access control, knob style set. Threshold not thermally broken. Weather-stripping appears in Fair condition. Sweep is deteriorating and not sealing. Closer appears to be functioning properly. | Replace door sweep. Consider replacing hardware and using thermally broken threshold when replacing the door system within next 5 years. |
| Exit / Service Doors | 19 | Fair | D / E | 50 | 30 | Some rusting on frame and door. Frame not thermally broken. | Repaint door and frame. When time to replace provide thermally broken frame and insulated door. |
| Hardware | 19 | Poor / Fair | | 15 - 20 | 30 | Weather-stripping deteriorating, closer missing or removed, threshold not thermally broken. Panic device is old, but not likely used much. | Service hardware, replace closer, weather-stripping, sweeps and threshold within the next 1-2 years. |
| Exterior O/H Garage Doors | 20, 21 & 22 | Fair / Poor | D / E | 25 | 30 | Weather-stripping deteriorating, some rusting on opening frame. No operational issues noted. Complaints of significant heat loss. | Consider replacing O/H doors, but minimally replace weather-stripping and conduct maintenance within the next 1-2 years. Remove rust and repaint door frames. |

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| Building Element | Photo # | Condition | Priority | Useful Life (UL) in Years | Approx Age at 2017 Review | Observation / Status | Comments / Notes |
|-----------------------------------------|-------------|-------------|-----------|---------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Caulking | | | | | | | |
| Exterior Doors | 18 | Fair / Poor | B / D / C | 7 - 10 | 30 | Sealant cracked at perimeter of frame | Replace sealant within 1-2 years |
| O/H doors | 21 & 22 | Poor | B / D | 7 - 10 | 30 | Sealant cracked at perimeter of frame | Replace sealant within 1-2 years |
| Window openings | 16 & 17 | Fair / Poor | B / D / C | 7 - 10 | Varies | Appears some resealing at sills has occurred, but cracking and missing around perimeters of windows typical | Replace sealant with window replacement but within next 1-2 years. |
| BUILDING INTERIOR | | | | | | | |
| Main Floor | | | | | | | |
| <i>Office Area & Sleeping Rooms</i> | | | | | | | |
| Ceilings | 23 | Good | D | Life | 30 | Generally gwb appears in good condition. Paint is in fair condition. | |
| Walls - Paint Finish | 23, 24 & 26 | Good / Fair | D | Life | Unknown / Varies | Paint finish could use a refresh. Wallpaper decorative band. Holes around AC units. Refer also to mechanical report. | Patch holes at AC unit penetrations, refer also to Mechanical report related to thru-wall AC units. Repaint as required. |
| Flooring | 23 & 25 | Fair | D | 20 | 30 | VCT original with some joint seams opening. VCT wearing, could use a wax coat. Rubber base generally acceptable. | Wax VCT. |
| Doors | 25 sim. | Fair | C | 30 | 30 | Typical - Solid core wood doors with mahogany veneer. Hollow metal door frames. Bi-fold hollow core doors on closet in closed office. Doors and frames have some scratches and minor paint splatters on doors. | Door widths do not meet accessibility standards. |
| Door Hardware | - | Fair | D | 15 | Unknown assumed original | Typical doors have knob style handles with privacy push button lock, standard hinges and are equipped with a floor stop. Hardware appears in Fair Condition, though a past anticipated service life. | When replacing hardware consider lever style handles. |
| Windows | | - | - | - | - | See Exterior Notes. | Windows appear to be adequate size for sleeping rooms and living spaces by the OBC. |
| Millwork | - | Fair | D | 30 | 30 | Small kitchenette unit located in corridor wood veneer with plastic laminate counters appear in Fair condition. Sink and under counter fridge at this location. | |
| Use of Space - Office Area | 23 | N/A | D | N/A | N/A | Space used as living area and office combined. Staff indicated desire to change Closed office to another sleeping room. Staff also indicated a desire to add a coffee counter and relocated the large fridge to the corner of the common room and remove the office furniture. | Consider modifications to layout as required and obtain design and permit for work as required. |
| Use of Space - Sleeping Room | 26 | N/A | D | N/A | N/A | Original floor plan modified to house a sleeping room for staff. | |

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| Building Element | Photo # | Condition | Priority | Useful Life (UL) in Years | Approx Age at 2017 Review | Observation / Status | Comments / Notes |
|--------------------------------|---------|-------------|-----------|---------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stores / Equipment Room | | | | | | | |
| Ceilings | 27 | Fair | D | Life | 30 | Generally gwb appears in good condition. Paint is in fair condition. | |
| Wall Finishes | 27 | Fair / Poor | A / C / D | Life | 30 | Generally wallboard appears in fair condition, but wall should have been constructed as a fire separation with an air barrier from garage space. | Reconstruct wall as a fire separation with an air barrier system. |
| Flooring | 28 | Fair / Poor | D | 20 | 30 | VCT in fair to poor condition. Some joints opening and tile chipped around edge of floor access panel. | Repair/replace damaged VCT. |
| Doors | 25 | Fair | D | 30 | 30 | Solid core wood doors with mahogany veneer. Hollow metal door frames. | |
| Door Hardware | 25 | Fair | D | 15 | 30 | Typical doors have knob style handles with privacy push button lock, standard hinges and are equipped with a floor stop. Hardware appears in Fair Condition, though a past anticipated service life. Door also has a latch and hasp to lock door from exterior side. | Consider revising door hardware to remove latch and hasp using a deadbolt with thumb turn to allow exiting if locked accidentally. |
| Millwork | 27 & 28 | Fair / Poor | D | 30 | 30 | Shelves and gear storage cabinets were old built-in plywood construction. They are old but still functional. Appears there is not enough storage room in space. Some metal storage shelving units are also located in the space with plastic sliding drawer totes which were not very secure. | Replace shelving, replace wooden lockers. Consider this modification with potential reorganization of room for use and repairs to the rated wall assembly. |
| Use of Space | 27 | N/A | D | N/A | N/A | Room used for linen and medical supply storage, radio server, water heater, staff lockers and fridge for long term food storage. Staff indicated a desire for better organization and more room for storage. | Consider modifications to layout as required and obtain design and permit for work as required. |
| Staff Washrooms | | | | | | | |
| Ceilings | | Fair | C | Life | 30 | Gypsum board appears in good condition, no sagging noticed. Streaking from moisture on ceilings from shower humidity noted. | |
| Walls Finishes | 29 | Fair | C | Life | 30 | Gypsum board appears in good condition. Streaking from moisture on ceilings from shower humidity noted. | |
| Flooring | - | Fair | D / A | 30 | 30 | VCT flooring. Flooring may be slippery when wet. | Consider providing mats or slip resistant flooring. |
| Doors | - | Fair | D | 30 | 30 | Solid core wood with mahogany veneer finish. Minor scratches. Frame is hollow metal. Minor scratches in paint finish. | Patch finishes as needed. |

Building Condition Assessment - 2018

DNSSAB Temagami Ambulance Services

Stevens Road, Temagami, ON

Condition Status:

Good

Fair

Poor

Priority Legend:

A - Life Safety

B - Structural Integrity

C - Legislative Requirements

D - Building Functionality

E - Cost Effective Upgrades

date of review: May 9, 2018

reviewed by: Andrew Bruce-Payne - Mitchell Jensen Architects
Tom Krajci - Piotrowski Consultants Ltd.

date built: 1987-88

of floors: 1 floor, no basements

| Building Element | Photo # | Condition | Priority | Useful Life (UL) in Years | Approx Age at 2017 Review | Observation / Status | Comments / Notes |
|-------------------------------|-------------|-------------|----------|---------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Hardware | - | Fair | D | 15 - 20 | 30 | Knob style set with push button privacy lock. Old but still functional. | Replace once it fails. Consider lever handle set in future install. |
| Washroom accessories | 29 | Fair / Poor | D | 15 | Unknown | No barrier free grab bars present. Basic residential grade towel bars installed. Mirrors are splotchy. Likely nearing end of life expectancy. | Replace accessories on as needed basis. |
| Shower / Tub Surrounds | 31 | Fair | D | 20 | 30 | 1-piece, corner shower unit with acrylic surround and glass/metal framed sides. Acrylic a bit scratched and discoloured. | |
| Millwork | 30 | Fair / Poor | D | 30 | 30 | Washroom vanity from wood veneer with Plam countertop. Some wear on veneer varnish finish. Edge of plam starting to delaminate. | Repair or replace countertop as needed. Refinish veneer as needed. |
| Sealants | 30 & 31 | Poor | D | 10 | Unknown | Sealant failed or missing at countertop and at perimeter of shower unit. | |
| Vehicle Bay (2 bays) | | | | | | | |
| Ceilings | 36 | | C | Life | 30 | Rated gypsum ceiling. Skim coat finish. Finish dirty from vehicle exhaust. | |
| Upper Roof Attic Access Panel | 36 | Poor | C / A | Life | 30 | Not accessible at time of visit. No access by ladder. Located in middle of vehicle bays. Not likely rated and insulated, with closure and latching hardware. | Provide rated and insulated attic access hatch closure. Consider relocating hatch adjacent to wall hatch to lower roof and install fixed ladder for access. |
| Wall Finishes | 35, 36 & 37 | Fair | D | Life | 30 | Gypsum board clad with metal liner panel. Interior wall shared with office/living area indicated to be constructed with Fireguard gypsum on garage side. | Confirm Fireguard gypsum in place and continuous. If not rated board upgrade wall separation for entire wall. |
| Upper Roof Attic Access Panel | 35 | Poor | C / A | Life | 30 | Plywood panel screwed in place. Exposed foam insulation. Located in a rated wall to lower attic space. No access by ladder. Not a rated closure with latching hardware. | Provide rated and insulated attic access hatch closure. Consider installing a fixed ladder for access to be shared with upper roof access hatch. |
| Flooring | 33 & 34 | Fair / Poor | D | Life | 30 | Bare concrete. Cracks in concrete and at sills of overhead doors. Joint of floor to interior demising wall seal has failed. Trench drains are located directly under vehicle parking areas, floors sloped to drain. | Engage structural engineer to assess cracking. Repair as required and seal floor. Seal joint at junction of floor to wall. |
| Doors | 32 | Fair | C / A | 50 | 30 | Hollow metal door and frame. Rating label may have been removed. | Provide new rated hollow metal door and frame. |

Building Condition Assessment - 2018

DNSSAB Temagami Ambulance Services

Stevens Road, Temagami, ON

Condition Status:

Good

Fair

Poor

Priority Legend:

A - Life Safety

B - Structural Integrity

C - Legislative Requirements

D - Building Functionality

E - Cost Effective Upgrades

date of review: May 9, 2018

reviewed by: Andrew Bruce-Payne - Mitchell Jensen Architects
Tom Krajci - Piotrowski Consultants Ltd.

date built: 1987-88

of floors: 1 floor, no basements

| Building Element | Photo # | Condition | Priority | Useful Life (UL) in Years | Approx Age at 2017 Review | Observation / Status | Comments / Notes |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|----------|---------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Door Hardware | 32 | Fair / Poor | C / A | 25 | 30 | Kick stand hold open installed on base of rated door which is not allowed by OBC and OFC. Door required to close and latch. No weather-stripping or sweep seal on door. Knob style hardware. Closer was present. | Provide new hardware (ULC listed fire rated), weather-strip and sweep seals for controlling fumes from garage car exhaust. |
| Oxygen Storage | 37 | N/A | C / A | N/A | N/A | Oxygen tanks stored in open garage area against wall. Several small tanks are inside a tank holder. Several small tanks are loose. Three large tanks appear to be chained. | Ensure all tanks are secured and stored to prevent mechanical damage. Consider locating in a separate rated room, but not required by OFC. |
| Use of Space | - | N/A | N/A | N/A | N/A | Staff indicated length of garage too short to have ambulance fully inside and remove a stretcher from the vehicle due to increase in vehicle size. Heating and ventilation issues noted. Sometime exhaust smells in office living area. | Consider options for extending garage to accommodate staff requirements. Upgrades to wall and fire separation indicated elsewhere combined with mechanical recommendations to deal with exhaust smells. |
| <i>Exit Alcove</i> | | | | | | | |
| Ceilings | 34 | Good/Fair | D | Life | 30 | Rated gypsum good condition. Paint finished. | |
| Wall Finishes | 34 | Fair | D | Life | 30 | Some scratches in paint finish. Wall is required to be rated separating garage from office/living space. | Confirm rated gypsum installed and all penetrations fire stopped. Repair ratings as required. |
| Flooring | 34 | Fair / Poor | D | 20 | 30 | VCT flooring, joints opening and chipped edges at door threshold. Edge of step not protected and visual strip not present. | Patch and repair VCT as needed. Provide high contrast nosing at step. |
| Doors and hardware | | | | | | See Exterior Service Exit Door for comments. | |
| Use of Space | - | N/A | N/A | N/A | N/A | Space used for access to exit door. Contains a stacked washer and dryer unit and a laundry sink beside the exit door. | |
| General Notes: 1. Useful Life (UL) can exceed estimated UL when proper maintenance and conditions apply. 2. UL has been estimated based on industry standards. Existing components may vary from assumed norms due to past use, levels of maintenance and variations in construction materials. 3. Some components require more in depth investigation and analysis to ascertain their present status. | | | | | | | |

Building Condition Assessment

Ambulance Garage - 7 Stevens Avenue, Temagami

Building, Services and Equipment Review

Contents

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| 2. PURPOSE AND METHODOLOGY OF THE STUDY | 2 |
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1. INTRODUCTION

1. Piotrowski Consultants Ltd. was commissioned by Andrew Bruce-Payne (Mitchell Jensen Architects) to conduct a building condition assessment of 7 Stevens Avenue, Temagami (Ambulance Garage). Our report describes existing building services and equipment condition, and recommends upgrades within a given timeline as well as energy efficient upgrade options.

2. PURPOSE AND METHODOLOGY OF THE STUDY

1. The purpose of this study is to review the mechanical, electrical and architectural building systems, evaluate their current state and, if required, recommend courses of action to extend the building's service life.

Our recommendations within this report are based on:

- Existing conditions
 - Standard Materials
 - Life Safety
 - Best Engineering Practices
 - Applicable Codes and Standards
2. Information in this report is based on site investigations of exposed services with non destructive / intrusive techniques, as well as discussions with maintenance and operational staff.

3. MECHANICAL

1. Plumbing

1. The existing plumbing, piping, domestic water, domestic hot water and sanitary appear to be original with an estimated age of 29 years. No issues with the plumbing piping have been reported.
2. Some plumbing fixtures such as the water closets appear to have been upgraded however the lavatories, counter sink and showers show signs of age. Recommend upgrading plumbing fixtures in next major washroom renovation.
3. Two trench drains are located in the garage in each bay and appears to be in good working order. No oil interceptor was found on site.
4. The existing domestic hot water tank is electric and located in storage room.
5. One sanitary grinder pump is in a pit located in the Storage Room pumps all sanitary from the building to the towns forced sanitary system. Regular maintenance on the pump system is recommended.

2. Mechanical Ventilation

1. The existing washrooms (2 total) both have ceiling mounted exhaust fans both in good condition. Signs of high humidity was observed with water streaks on walls in both washrooms. The washroom with the outside wall appears to be the worse condition.

To improve ventilation in the crew quarters and help reduce the humidity level, a heat recovery ventilator (HRV) is recommended to be installed.
2. The garage consists of one wall mounted exhaust fan which appears past its useful age. It is recommended to be upgraded and interlocked with an air intake.

3. Heating

1. Two electric unit heaters serve the garage. The units struggle to heat the garage. It is recommended to upgrade the heater a to natural gas type and sized to suit the heat loss
2. Baseboard and fan forced heaters are used to heat the crew quarters. Units are in acceptable condition. Upgrade to natural gas heating should be considered.

4. ELECTRICAL

1. Electrical Distribution

1. All electrical equipment shall be properly labeled to identify critical equipment ratings. At each distribution point, circuit breakers, fuses and switches shall be marked in a conspicuous and legible manner to indicate which portion of the installation they protect and the maximum over current protection rating that is permitted.
2. All equipment shall be rated to withstand the maximum available fault current. This rating shall be clearly marked on the equipment. A minimum equipment rating of 10kAIC is adequate for a 200A service. The fault current rating of existing panel board breakers is not present.
3. One meter working clearance must be maintained in front of all electrical distribution equipment.
4. The existing electrical panels in the garage area are housed in a make-shift wooden box. This is not a suitable enclosure for a space that is often used to power wash vehicles and equipment. The enclosure should be weatherproof and have a NEMA 3R rating. The electrical panels themselves are not weatherproof or moisture proof. Humidity can easily develop inside the panels causing rust and corrosion over time. Such conditions can lead to electrical faults and failures.
5. The electrical panels were manufactured by Federal Pioneer, now under the Schneider Electric umbrella. Replacement breakers are available through Schneider.
6. Power is transferred from the utility to the generator via two, three pole breakers connected with a slide breaker link. A written procedure is adhered to the panel face. While this has presumably served the facility well over the years, our recommendation would be to procure and utilize a proper manual transfer switch for your emergency power needs. This recommendation is based on the age of the equipment and the assumption that electrical maintenance was rarely, if ever, performed. A new, manual transfer switch provides safer and more reliable switching between sources.
7. The switching between normal and emergency power is currently via two, three pole breakers. The service is 120/240V, single phase. This implies that the neutral is being switched. The neutral should only be switched when the emergency supply has its own separately derived ground and the neutral of the generator is bonded to that separately derived ground at the

generator. By all appearances, the generator does not have its own separately derived ground. Therefore, if the neutral is switched, there will not be a complete ground return path to the generator and the emergency supply will essentially be operating as an ungrounded system. Ungrounded systems of this nature pose severe electric shock hazards. The new manual transfer switch should be two pole switch with a solidly connected neutral. The only connection between the neutral conductor and ground should be at the service entrance.

2. Wiring Devices

1. Exterior receptacles shall be provided with cover plates suitable for wet locations, whether or not a plug is inserted into the receptacle, and marked "Extra Duty".
2. The outlet boxes shall be installed in a manner that the intended seal between the outlet box and the cover is ensured. The cover shall be fitted to make a proper weatherproof seal.
3. In some instances, power bars are utilized due to an inadequate number of receptacles or a lack of receptacles in key locations. Additional receptacles should be installed to accommodate equipment needs. Power cords laying across the floor are a tripping hazard and can become a fault hazard if worn.

3. Interior/Exterior Lighting

1. Fluorescent and incandescent fixtures are located throughout the interior. The outside of the building is illuminated with either incandescent wall mounts or metal halide wall packs.
2. Retrofitting all fixtures to LED and adding occupancy sensors would provide significant energy savings and lower maintenance costs.
3. Dimming control can also be added to interior fixtures for further energy savings.
4. These measures would bring the building into compliance with current energy efficiency requirements of the Ministry of Municipal Affairs, Supplementary Standard SB-10 which has been adopted by the Ontario Building Code.
5. Most fixtures do not have lenses. Wire guards should be installed in service rooms or work areas where tubes have the potential of being physically damaged or broken.

4. Life Safety Systems

1. Existing smoke and CO sensors are to be replaced as per manufacturer's recommendations.
2. A fire alarm system is not required for this occupancy.
3. Emergency lighting appears adequate. Emergency lighting is required at all exits and at all principal routes providing access to exits.
4. Emergency lighting must function reliably for a period for 30 minutes upon loss of normal power. Monthly and annual testing is required as per the requirements of the Ontario Fire Code.
5. Receptacles to which emergency battery packs connect, must be mounted no less than 2.5m above the floor and within 1.5m of the equipment. The receptacles for the emergency battery packs in the washrooms are definitely not at proper height.
6. While illuminated exit signage is not required for this occupancy, installation of the current green pictogram sign with white graphic symbol would provide a clean, contemporary appearance and long term reliability. These could be tied into the existing emergency lighting circuits.

5. REPORT DISCLOSURE

This report is intended solely for the use of Mitchell Jensen Architects and DNSSAB. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Decisions made or actions taken as a result of our work shall be the responsibility of the parties directly involved in the decisions or actions. Any third party user of this report specifically denies any rights to any claims, whether in contract, tort and/or any other cause of action law, against the Consultants, its officers, agents, sub-consultants and employees.

The design reflects the Consultant's best judgment in light of the information reviewed by them at the time of its preparation. Unless otherwise agreed in writing by Piotrowski Consultants Ltd., it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. This is not a certification of compliance with past or present regulations. No portion of this report may be used as a separate entity, it is written to be read in its entirety.

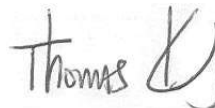
The work does not wholly eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with the property. No physical or destructive testing and no design calculations have been performed unless specifically recorded.

Conditions existing but not recorded were not apparent and/or noted given the level of study undertaken.

Only the specific information identified has been reviewed. The Consultant is not obligated to identify mistakes and insufficiencies in the information obtained from the various sources or to verify the accuracy or completeness of the information.



Ryan MacVicar, P.Eng.



Thomas Krajci, M.E.Sc., P.Eng.

APPENDIX A



M-1 - Plumbing fixtures (WCs, Urinals, sinks)



M-2 - Plumbing fixtures (Faucets)



M-3 - Sanitary Pump (Grinder pump)



M-4 - Electric DHWH



M-5 - Trench Drains (Garage)



M-6 - Trench Drains (Garage)



M-7 - Garage Exhaust Fan (Domex)



M-8 - WR Ceiling Mounted Exhaust Fans



M-9- Electric Unit Heater (Garage)



M-10 - Electric Unit Heater (Garage)



M-11- Electric Baseboard (Crew Quarters)



M-12 - Electric Baseboard (Crew Quarters)



M-13 - Through the Wall AC



M-14 - Fire Extinguisher (Crew Quarters)

APPENDIX B



E-1 - CO Detector



E-2 - Smoke Detector



E-3 - Fluorescent lamp (Interior)



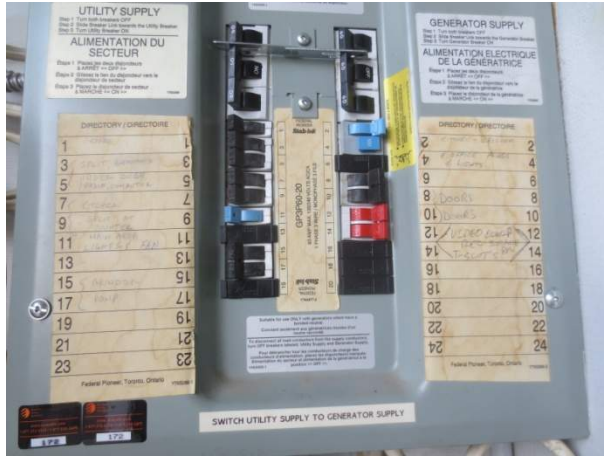
E-4 - Exterior Lighting



E-5 - Emergency Lighting



E-6 - Electrical Panel



E-7 - Emergency Subpanel



E-8 - Emergency Generator (Honda 6.5 kW)

| | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------|-----------|----------------------------------------|-------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------|
| Temagami Ambulance Service Building - Building Condition Assessment 7 Stevens Road Temagami, Ontario | | | | | | | Building Age - Original building - 29 Years Date Reviewed - May 9, 2018 Reviewed By - Piotrowski Consultants Ltd. Job Number - 6160 | | APPENDIX C |
| Priority 1 - Currently Critical (Immediate) 2 - Potentially Critical (Year 2) 3 - Recommended (3-5 years) 4 - Operational (6-10 years) 5 - Does not meet current codes/standards (grandfathered) | | Condition G - Good F - Fair P - Poor | | | | | | | |
| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) / Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations | |
| MECHANICAL | | | | | | | | | |
| Plumbing | | | | | | | | | |
| Piping, fittings and valves | - | 4 | G | 29 | 30 | 1 | From discussions with building operator, there are no significant issue. The piping , fitting and valves are close to exceeding there useful life. | Recommend upgrading piping in the next major renovation. | |
| Plumbing fixtures (WCs, Urinals, sinks) | M-1 | 4 | F | Varies | 30 | - | Some plumbing fixtures are showing signs of age. Some fixtures have been recently upgraded. | Recommend upgrading plumbing fixtures when washrooms are upgraded. Recommend using low flow plumbing fixtures to reduce water usage. | |
| Plumbing fixtures (Faucets) | M-2 | 4 | F | Varies | 7 | - | Some plumbing fixtures are showing signs of age. Some fixtures have been recently upgraded. | Recommend upgrading plumbing fixtures when washrooms are upgraded. Recommend using low flow plumbing fixtures to reduce water usage. | |
| Sanitary Pump (Grinder pump) | M-3 | 4 | F | Unknown | 10 | - | Existing pump not visible. | Provide regular maintenance on pump. | |
| Electric DHWH | M-4 | 3 | G | 10 | 15 | 5 | | Monitor and replace when leaking may start. | |
| Two Trench Drains (Garage) | M-5 & M-6 | 4 | G | 29 | 30 | 1 | Appear to be in good working order | Recommend to clean trench as required. | |
| Ventilation | | | | | | | | | |
| Garage Exhaust Fan (Domex Fan 1/12 HP) | M-7 | 2 | F | 29 | 20 | 0 | No intake for garage. | Recommend upgrading exhaust system. | |
| Washroom Ceiling Mounted Exhaust Fans (2) | M-8 | 4 | G | 5 | 20 | 15 | Fans are operational however still high humidity issue in washrooms | Recommend providing Heat Recovery Ventilator (HRV) for crew quarters and washroom. | |

| | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------|-----------|--------------------------------------|-------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------|
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| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations | |
| Heating Systems | | | | | | | | | |
| Electric Unit Heater (Garage) (2) | M-9 & M-10 | 3 | F | 10 & 29 | 20 | 10 & 0 | Existing electrical heaters are operational, however have trouble heating the space in winter conditions | Recommend upgrading to natural gas fired unit heater as with increased heating capacity. Energy costs will be greatly reduced. | |
| Electric Baseboard (Crew Quarters) | M-11 & M-12 | 4 | F | 29 | | | Existing baseboards are in fair condition | | |
| Through the Wall AC | M-13 | 3 | P | 20 | 15 | 0 | Two existing through the wall AC units | Recommend sealing up in winter to reduce heat loss. | |
| | | | | | | | | | |
| Fire Protection | | | | | | | | | |
| Fire Extinguisher (Garage) | - | 4 | G | - | - | - | | To be verified and tagged annually. | |
| Fire Extinguisher (Crew Quarters) | M-14 | 4 | G | - | - | - | | To be verified and tagged annually. | |

Temagami Ambulance Service Building - Building Condition Assessment
7 Stevens Road
Temagami, Ontario

Building Age - Original building - 29 Years
Date Reviewed - May 9, 2018
Reviewed By - Piotrowski Consultants Ltd.
Job Number - 6160

APPENDIX C

Priority
1 - Currently Critical (Immediate)
2 - Potentially Critical (Year 2)
3 - Recommended (3-5 years)
4 - Operational (6-10 years)
5 - Does not meet current codes/standards (grandfathered)

Condition
G - Good
F - Fair
P - Poor

| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) / Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations |
|-----------------------------|-----------------|----------|-----------|----------------------------------------|-------------------|--------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| ELECTRICAL | | | | | | | | |
| Lighting and Sensors | | | | | | | | |
| CO Detector | E-1 | 3 | F | - | | - | | Recommend replacement as per manufacturer's recommendations. |
| 2 Smoke Detectors | E-2 | 3 | F | - | | - | | Recommend replacement as per manufacturer's recommendations. |
| Interior Lighting | E-3 | 3 | P | Varies | 20 | 0 | Variety of T8's and T12's light fixtures through facility | Recommend upgrading light fixtures to energy efficient LED complete with occupancy control in some areas. |
| Exterior Lighting | E-4 | 3 | P | 29 | 20 | 0 | Existing outside lights appear to be original to the building. Consist of incandescent and metal halide. | Recommend upgrading outside lighting to energy efficient LED. |
| Emergency Lighting | E-5 | 3 | F | | | | Emergency Lighting located in both washrooms, main office and garage | Regular maintenace as per Ontario Fire Code. |

Temagami Ambulance Service Building - Building Condition Assessment

7 Stevens Road
Temagami, Ontario

Building Age - Original building - 29 Years

Date Reviewed - May 9, 2018

Reviewed By - Piotrowski Consultants Ltd.

Job Number - 6160

APPENDIX C

Priority

1 - Currently Critical (Immediate)

2 - Potentially Critical (Year 2)

3 - Recommended (3-5 years)

4 - Operational (6-10 years)

5 - Does not meet current codes/standards
(grandfathered)

Condition

G - Good

F - Fair

P - Poor

| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations |
|------------------------------------------|-----------------|----------|-----------|-----------------------------------------|-------------------|-----------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Electrical Distribution | | | | | | | | |
| Main Electrical service 200A 120/240V SP | E-6 | 4 | F | 29 | 20 | 0 | | Replace existing wooden enclosure in garage with NEMA 3R weather proof enclosure. |
| 60A Emergency Subpanel | E-7 | 4 | F | 15 | 20 | 5 | | Replace existing two, 3-pole 60A breakers with proper manual transfer switch - 2 pole switch with solidly connected neutral. |
| Emergency Generator (Honda 6.5 kW) | E-8 | 4 | F | 10 | 20 | 10 | | |

| | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------|-----------|----------------------------------------|-------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------|
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| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) / Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations | |
| MECHANICAL | | | | | | | | | |
| Plumbing | | | | | | | | | |
| Piping, fittings and valves | - | 4 | G | 29 | 30 | 1 | From discussions with building operator, there are no significant issue. The piping , fitting and valves are close to exceeding there useful life. | Recommend upgrading piping in the next major renovation. | |
| Plumbing fixtures (WCs, Urinals, sinks) | M-1 | 4 | F | Varies | 30 | - | Some plumbing fixtures are showing signs of age. Some fixtures have been recently upgraded. | Recommend upgrading plumbing fixtures when washrooms are upgraded. Recommend using low flow plumbing fixtures to reduce water usage. | |
| Plumbing fixtures (Faucets) | M-2 | 4 | F | Varies | 7 | - | Some plumbing fixtures are showing signs of age. Some fixtures have been recently upgraded. | Recommend upgrading plumbing fixtures when washrooms are upgraded. Recommend using low flow plumbing fixtures to reduce water usage. | |
| Sanitary Pump (Grinder pump) | M-3 | 4 | F | Unknown | 10 | - | Existing pump not visible. | Provide regular maintenance on pump. | |
| Electric DHWH | M-4 | 3 | G | 10 | 15 | 5 | | Monitor and replace when leaking may start. | |
| Two Trench Drains (Garage) | M-5 & M-6 | 4 | G | 29 | 30 | 1 | Appear to be in good working order | Recommend to clean trench as required. | |
| Ventilation | | | | | | | | | |
| Garage Exhaust Fan (Domex Fan 1/12 HP) | M-7 | 2 | F | 29 | 20 | 0 | No intake for garage. | Recommend upgrading exhaust system. | |
| Washroom Ceiling Mounted Exhaust Fans (2) | M-8 | 4 | G | 5 | 20 | 15 | Fans are operational however still high humidity issue in washrooms | Recommend providing Heat Recovery Ventilator (HRV) for crew quarters and washroom. | |

| | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------|-----------|--------------------------------------|-------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
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| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations |
| Heating Systems | | | | | | | | |
| Electric Unit Heater (Garage) (2) | M-9 & M-10 | 3 | F | 10 & 29 | 20 | 10 & 0 | Existing electrical heaters are operational, however have trouble heating the space in winter conditions | Recommend upgrading to natural gas fired unit heater as with increased heating capacity. Energy costs will be greatly reduced. |
| Electric Baseboard (Crew Quarters) | M-11 & M-12 | 4 | F | 29 | | | Existing baseboards are in fair condition | |
| Through the Wall AC | M-13 | 3 | P | 20 | 15 | 0 | Two existing through the wall AC units | Recommend sealing up in winter to reduce heat loss. |
| Fire Protection | | | | | | | | |
| Fire Extinguisher (Garage) | - | 4 | G | - | - | - | | To be verified and tagged annually. |
| Fire Extinguisher (Crew Quarters) | M-14 | 4 | G | - | - | - | | To be verified and tagged annually. |

Temagami Ambulance Service Building - Building Condition Assessment
7 Stevens Road
Temagami, Ontario

Building Age - Original building - 29 Years
Date Reviewed - May 9, 2018
Reviewed By - Piotrowski Consultants Ltd.
Job Number - 6160

APPENDIX C

Priority
1 - Currently Critical (Immediate)
2 - Potentially Critical (Year 2)
3 - Recommended (3-5 years)
4 - Operational (6-10 years)
5 - Does not meet current codes/standards (grandfathered)

Condition
G - Good
F - Fair
P - Poor

| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) / Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations |
|-----------------------------|-----------------|----------|-----------|----------------------------------------|-------------------|--------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| ELECTRICAL | | | | | | | | |
| Lighting and Sensors | | | | | | | | |
| CO Detector | E-1 | 3 | F | - | | - | | Recommend replacement as per manufacturer's recommendations. |
| 2 Smoke Detectors | E-2 | 3 | F | - | | - | | Recommend replacement as per manufacturer's recommendations. |
| Interior Lighting | E-3 | 3 | P | Varies | 20 | 0 | Variety of T8's and T12's light fixtures through facility | Recommend upgrading light fixtures to energy efficient LED complete with occupancy control in some areas. |
| Exterior Lighting | E-4 | 3 | P | 29 | 20 | 0 | Existing outside lights appear to be original to the building. Consist of incandescent and metal halide. | Recommend upgrading outside lighting to energy efficient LED. |
| Emergency Lighting | E-5 | 3 | F | | | | Emergency Lighting located in both washrooms, main office and garage | Regular maintenace as per Ontario Fire Code. |

Temagami Ambulance Service Building - Building Condition Assessment

7 Stevens Road
Temagami, Ontario

Building Age - Original building - 29 Years

Date Reviewed - May 9, 2018

Reviewed By - Piotrowski Consultants Ltd.

Job Number - 6160

APPENDIX C

Priority

1 - Currently Critical (Immediate)

2 - Potentially Critical (Year 2)

3 - Recommended (3-5 years)

4 - Operational (6-10 years)

5 - Does not meet current codes/standards
(grandfathered)

Condition

G - Good

F - Fair

P - Poor

| | Photo Number(s) | Priority | Condition | Approximate Age (yrs) Age Varies (V) | Useful Life (yrs) | Estimated Remaining Life (yrs) | Observations | Recommendations |
|------------------------------------------|-----------------|----------|-----------|-----------------------------------------|-------------------|-----------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------|
| Electrical Distribution | | | | | | | | |
| Main Electrical service 200A 120/240V SP | E-6 | 4 | F | 29 | 20 | 0 | | Replace existing wooden enclosure in garage with NEMA 3R weather proof enclosure. |
| 60A Emergency Subpanel | E-7 | 4 | F | 15 | 20 | 5 | | Replace existing two, 3-pole 60A breakers with proper manual transfer switch - 2 pole switch with solidly connected neutral. |
| Emergency Generator (Honda 6.5 kW) | E-8 | 4 | F | 10 | 20 | 10 | | |