

BUILDING CONDITION ASSESSMENT
THE TEA PAVILION
200 JOHN STREET, NIAGARA-ON-THE-LAKE



April 27, 2022

Prepared by
Mark Shoalts, P.Eng., CAHP

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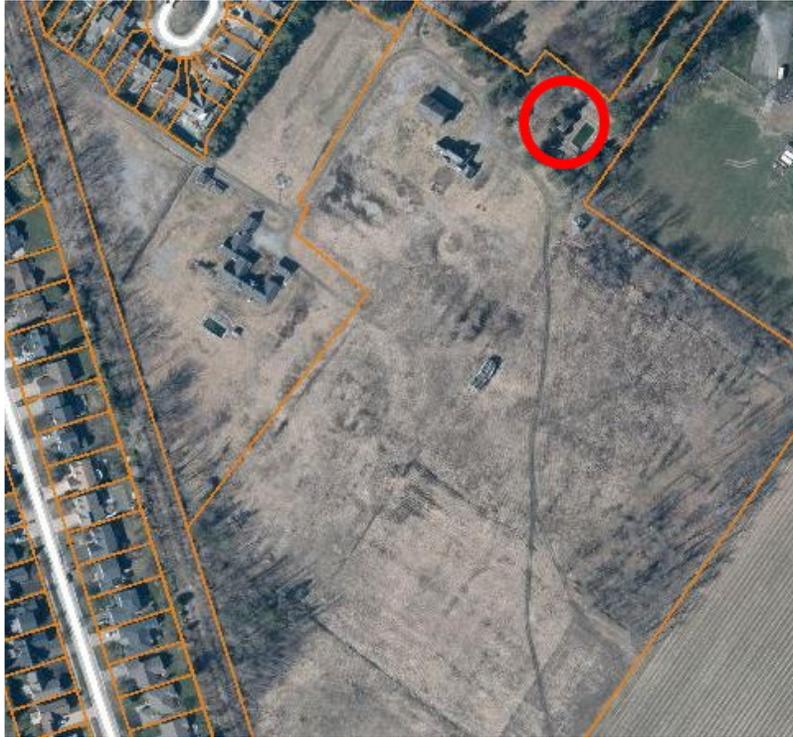


The Tea Pavilion East Elevation, April 2022

This Heritage Building Condition Assessment was commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the building known variously as the Bath Pavilion, Pool Pavilion, Tea House, and Tea Pavilion in June 2021 and April 2022 to provide a report on its structural condition. In this report we will use the name Tea Pavilion, which appears on plans for the building by Dunington-Grubb. The Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP provides further background. In the HIA the building is referred to as the Pool Pavilion.

This report describes the present structural and physical condition of the building.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south. The Tea Pavilion faces east toward the swimming pool.



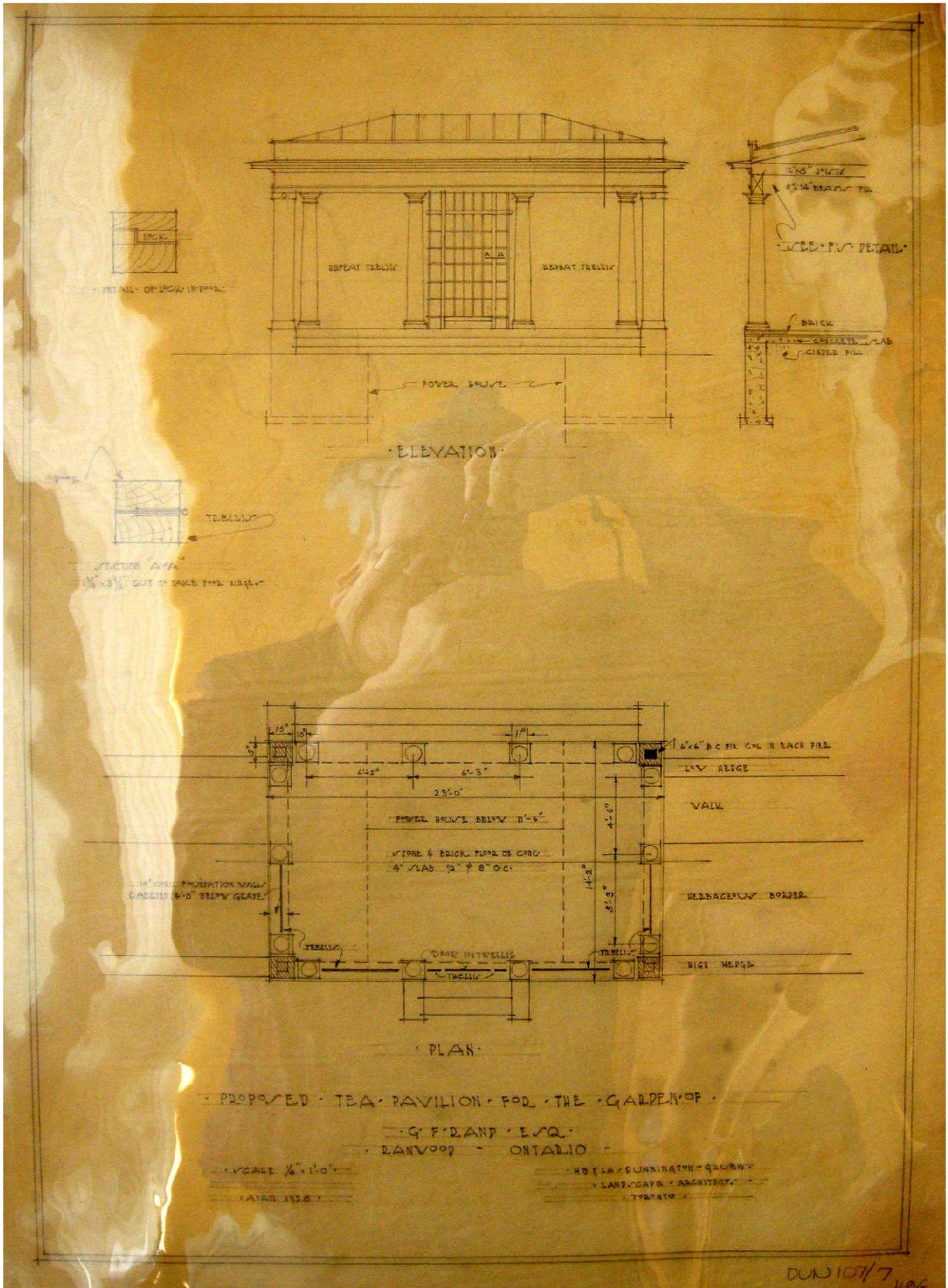
Tea Pavilion location

Building Description

The Tea Pavilion is a rectangular wooden Tuscan building constructed on a raised concrete and masonry plinth with open sides overlooking the swimming pool. The pavilion has round Tuscan columns supporting a low hipped roof with a large bracketed overhang and plain, almost austere detailing; clearly Tuscan but not academically so. The frieze and architrave are without any delineation. The column arrangement is hexastyle, but corner columns are groups of three with square centre piers and round flanking columns. There is a railing on the west or rear long side between the columns, but the other three sides are clear.

The floor is clay brick laid on a concrete slab in a basketweave pattern with a border of riven Whirlpool or Credit Valley sandstone. On the east side facing the pool there are brick steps the full width of the pavilion down to a generous brick pathway to the pool. On the west side there is a narrower set of sandstone and brick steps with low brick parapet walls on each side capped with sandstone.

In 1928 Dunington-Grubb produced at least two proposed plans for the tea pavilion, both of similar footprint but with differing details, neither of which was executed exactly. The present pavilion is similar to one of the plans, but that plan shows a “power house” below the concrete floor, with no indication of how it would be accessed or its explicit purpose. Presumably it was to be for equipment for the swimming pool, but it does not appear as if it was built.



April 1928 plan for Tea Pavilion
 Trellis and power house were not executed, as-constructed eave detail is simpler.

Building Condition

The Tea Pavilion is in poor condition. The metal (presumably copper) roof shown on the Dunington-Grubb plan was not installed and the present asphalt shingles are long past their service life; they have been leaking for years. Much of the tongue and groove wood ceiling has collapsed and substantial sections of the eave have deteriorated. Some of the wood columns exhibit serious decay, especially the bases. Three columns in particular are in poor condition and they appear to possibly be replacements that have failed for a second time. The staves on the centre pair of columns facing the pool and one column in the south end are delaminating and the paint is peeling badly. All of the other columns have retained their paint and no joints between staves are even discernible, much less delaminating. The good columns give every appearance of being solid, but they are hollow as evidenced by electrical switches mounted on two of them. There is no obvious reason why three of the twelve round columns would be in such poor condition. The bases of these three columns as well as the bases of several other columns are also in poor condition and require replacement.



End column



Front column

Staved columns failing



Corner columns in good condition

The roof leaks have led to the deterioration of some of the roof sheathing to the point where daylight shows between the planks. Many of the nails holding the ceiling have rusted off and the boards are hanging down or have fallen off completely. Leakage through the eaves has deteriorated a substantial portion of the soffit, although the eave brackets are generally good.



Deteriorated ceiling

The vegetation around the pavilion is overgrown and requires maintenance, and one cedar tree in particular must be removed. It is not part of the planned landscape plantings but it has grown against the rear overhang, damaging the fascia and roofing, which has led to rotted soffit and ready access for squirrels into the attic.



Cedar tree requiring removal

The eave, fascia, and brackets on the front of the pavilion have deteriorated substantially and a section requires replacement, including the cladding of the beam bearing on the columns. The condition of the beam itself was not observed and must be checked during the repairs.



Section of eave requiring replacement

The floor is in good condition within the footprint of the pavilion. The bricks are in excellent condition, the mortar is good, and the sandstone border is good. The mortar joints in the sandstone require some minor cutting out and repointing. The brick steps across the front of the pavilion are in poor condition. The bricks themselves are in good condition but many of

the mortar joints have failed and a substantial portion of the concrete back-up has failed, allowing the steps to collapse.



Collapsed brick steps

The bricks must be removed and salvaged, the failed concrete chipped away, and the steps rebuilt. The concrete back-up must be repoured and the bricks relaid. The mortar joints in brick pavers, treads, and risers are vulnerable to frost damage because they are often wet when they freeze. An appropriate mortar mix with air entrainment must be used, and a sealer to limit water penetration of the joints is advisable.

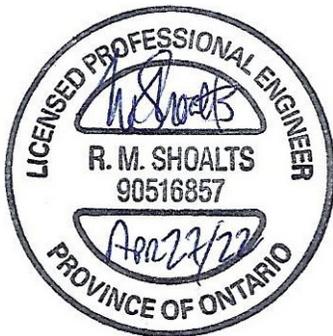
The steps on the rear of the pavilion require rebuilding as well. The brick and stone parapet walls have failed. The skyward-facing mortar joints in the stone capping cracked, allowing water into the wall. Freeze-thaw damage has broken apart the parapet walls and has broken down the concrete back-up. The stone capping and the bricks themselves are in good condition and must be salvaged for reuse. The skyward-facing joints in the capping must be caulked with an appropriate compound such as Permashink rather than pointed with mortar. Skyward-facing mortar joints in parapets and wall caps are prone to early failure and are the source of much damage in exposed masonry walls.



Failed parapet wall on rear stairs

Conclusions

The Tea Pavilion at Randwood is an attractive structure within a larger formal composition of a planned landscape. It has not had any maintenance for many years, which has led to the failure of some of its components, but the basic structure is still sound and much of the fabric is readily reusable for restoration of the pavilion. There are existing samples of anything that must be replicated, ensuring that a true and faithful restoration of the pavilion can be carried out.



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April 27, 2022

BUILDING CONDITION ASSESSMENT
THE BATH HOUSE
200 JOHN STREET, NIAGARA-ON-THE-LAKE



April 27, 2022

Prepared by
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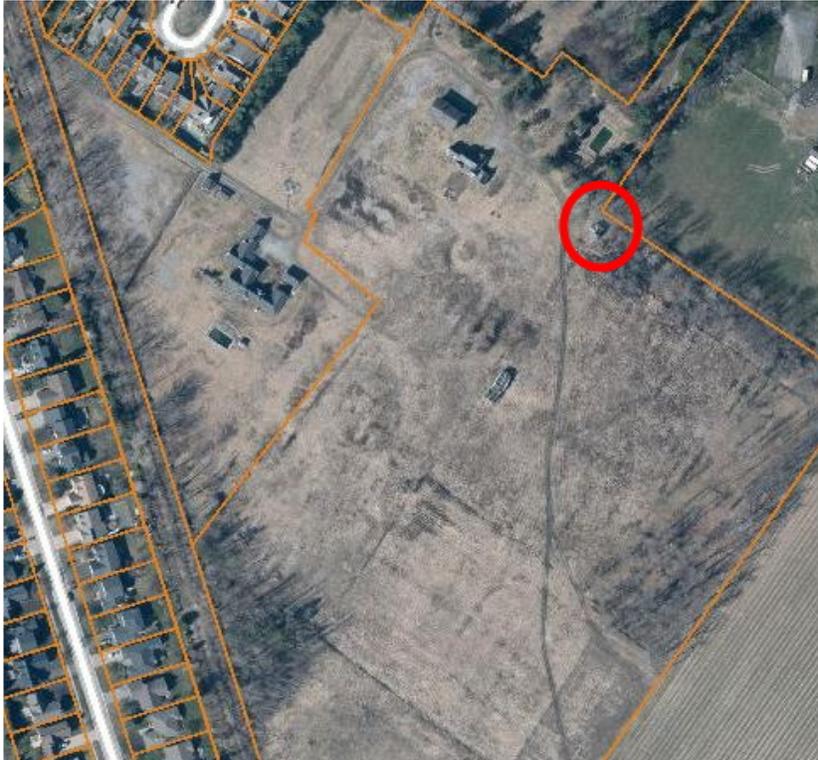


The Bath House West Elevation, April 2022

This Heritage Building Condition Assessment was commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the building known as the Bath House and the Tea House in June 2021 and April 2022 to provide a report on its structural condition. In this report we will use the name Bath House. The Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP provides further background. In the HIA the building is referred to as the Tea House.

This report describes the present structural and physical condition of the building.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south. The Bath House faces west and it sits slightly south of the swimming pool.



Bath House location

Building Description

The Bath House is a small temple form Greek Revival building with simple classical details, more vernacular than academic. The building has a projecting porch with four round Tuscan columns supporting a pedimented gable roof fronting the low hipped roof of the wider building behind, giving a good sense of a restrained classical whole¹. The simple frieze and architrave are well-proportioned; the columns are tetrastyle with matching flat pilasters on the front wall of the building. The columns are slightly smaller than would be traditionally proportionate, but that gives the building a certain lightness and delicacy. There is a single door centred in the facade and there are no windows in the front wall; the wall finish is smooth stucco and the porch floor is wood. The ends of the building each have a pair of widely-spaced casement windows with plain flat trim. Set into the rear (east) side of the roof is a flat platform with low walls around the sides and an opening in the centre of the rear wall, it is not clear if it is original to the building or what its purpose was. It could have been for mechanical equipment, but there is nothing mounted on it now.

The interior of the Bath House consists of a single large room with a small bathroom on the north side. The interior finishes have all been changed from the original; there is a drywall ceiling and the walls and floor are covered with painted plywood. The window and door casing is very plain but appears to be original. The pedestal sink and the toilet appear to be original but there is a newer shower in the bathroom. There is a small modern cabinet with a stainless steel bar sink in an alcove in the main room.

The only doors are the exterior door and the bathroom door, and they appear to be original.

¹ For a good explanation of the style refer to Harold Kalman, [A History of Canadian Architecture](#) Vol. 1 299-311

Although the Dunington-Grubb plans are dated 1928, it seems that it took quite a few years to realize the full design. Because it is tucked around a corner away from the swimming pool, there has been speculation that the Bath House could have been relocated from a different, original site to its present location but a 1934 aerial photograph appears to show the Bath House in its present location. The 1934 image does not appear to show the Tea Pavilion. The resolution is not very good, so it is not definitive. A 1953 image certainly shows both buildings in their current places.



Bath House South Elevation

Building Condition

The Bath House is in fair condition with some elements very poor and a few elements in quite good condition. The present asphalt shingles are long past their service life; they have been leaking in some locations for years. The drywall ceiling below the flat roof service platform has collapsed and the ends of a couple of the joists have deteriorated; there have been pieces scabbed on for repairs. The bathroom is not usable in its present condition, and it is not clear where the water supply is from or where the waste drains to. There is no heat in the building so the plumbing would be seasonal in any case. The small kitchen cabinet is an inexpensive low-quality melamine unit with a bar sink, it is of little value. The interior condition is fair to poor but the building is so small and plain that complete restoration is a simple matter.

The porch is intact and stable, although it needs some work. The concrete piers carrying the front of the porch are in poor condition and the porch floor itself is less than adequate. The floor framing and decking should be replaced. The corner columns exhibit some decay, especially the bases, and both corner columns have holes from woodpeckers that have become access holes for squirrels to nest in them. The staves on the corner columns are delaminating. The pilasters on the front wall are relatively good with the exception of their bases. There are holes from carpenter bees in the cornice and geison (the horizontal shelf below the triangular tympanum on the front of the porch). Woodpeckers have enlarged some holes and created others while pursuing carpenter bee larvae. The holes must be repaired and proper finishes applied to the woodwork to discourage both the bees and the birds, although they can be very persistent and very destructive.



Porch floor and column bases requiring replacement



Porch southwest corner showing delaminating column and insect and woodpecker damage. The concrete foundation of the building appears to be in good condition. It projects to form a water table at the floor line and it has been parged to match the stucco wall finish. There does not appear to be any settlement or significant cracking. The stucco on the building and the majority of the wood trims are in good condition. The trims require scraping and painting, but little repair is required other than the previously noted damage and deterioration on the front porch and the small section of the overhang on the south side.

The roofing is in poor condition and requires replacement. Roof leaks through the south eave have deteriorated a portion of the soffit, fascia, and frieze, and the leaks must be repaired as soon as possible to prevent further deterioration. The platform and its surrounding walls on the rear of the roof should be investigated further to try to determine its original purpose. Unless there is significant heritage value in the original purpose, it would simplify the roof, extend its longevity, and make maintenance much easier if it were removed and the roof and overhang were filled in to match the rest of the building. There was an opening in the rear

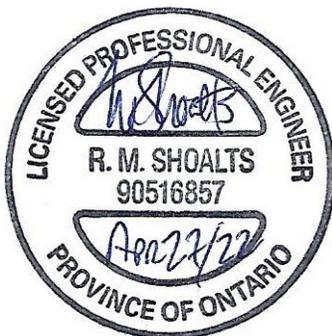
wall directly below the platform that seems to have been related but it has been covered by the plywood that was installed as an interior wall finish.



Rear wall of Bath House showing roof platform

Conclusions

The Bath House at Randwood is an attractive building that formed part of a larger formal planned landscape. Its location is somewhat perplexing in that it is disconnected from its stated purpose and it has little relation to the swimming pool. It has not had any maintenance for many years, which has led to the failure of some of its components, but the basic structure is still sound and much of the fabric is fully intact. The building could be lifted and relocated to better form a logical grouping with other heritage structures in the formal landscaping plan, and this would facilitate the replacement of the porch floor which is one of the items most in need of attention. This would also allow a proper examination of the main floor structure, which is not currently accessible. Barring the discovery of an important purpose for the roof platform, it could be removed and the rear of the roof could be filled in to present a more uniform appearance and to improve the weatherability of the building.



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April 27, 2022

BUILDING CONDITION ASSESSMENT
THE WHISTLE STOP
200 JOHN STREET, NIAGARA-ON-THE-LAKE



April 27, 2022

Prepared by
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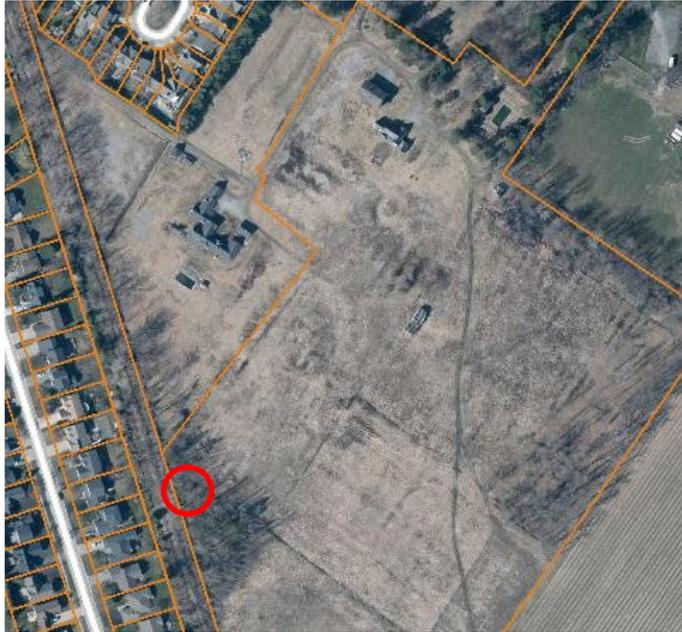


The Whistle Stop Northwest Aspect, April 2022

This Heritage Building Condition Assessment was commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the building known as the Whistle Stop in June 2021 and April 2022 to provide a report on its structural condition. The Whistle Stop is little more than a ruins, but there is sufficient material extant to determine the original configuration, construction, and appearance. No research into the historical significance of the building was carried out by Shoalts Engineering; see the Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP for the background. In the HIA the building is referred to as the gazebo near the former railway line.

This report describes the present structural and physical condition of the building.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south and the former rail line, now walking trail, runs northwest-southeast. The Whistle Stop was a three-sided structure with the entrance in the corner facing almost due south.



Whistle Stop location

Building Description

The Whistle Stop was a three-sided gazebo constructed as a shelter in which to wait for a train. It is a rare example of a private waiting area for a train; it is adjacent to the former Erie & Ontario (later Canada Southern, then Michigan Central) rail line which it accessed through a gate mounted on brick piers in the stone and concrete wall separating 200 John St. from the rail line. The Whistle Stop and the property perimeter wall are almost certainly contemporary. The building had low stone and concrete walls on three sides terminating at low stone piers framing an opening on the south corner.



Whistle Stop view from the south

The construction of the gazebo wall is very similar to the construction of the property boundary wall, with the exceptions that the interior side of the walls is bare concrete rather than faced with stone, and the top of the wall was finished with round cobbles set in the concrete rather than the poured concrete cap used on the perimeter wall. The sides were open above the stone walls, and the roof was supported on four wooden posts with large wooden brackets located at the west and east corners and on the two piers at the entrance. The beams supporting the roof were wide, thick planks laid flat, an unusual detail and structurally not very efficient. The roof rafters were exposed with beaded board sheathing and a wood shingle roof.



Remnant of roof sheathing, rafters, and plank beam, northwest corner



Intact but deteriorated framing, northeast corner

There was electrical power to the building as indicated by porcelain insulators near the entrance and a small fragment of wire, but there is no trace of the purpose for the electrical service. It may have been for interior lights only, or possibly for a light to indicate that someone was waiting for a train.



Porcelain electrical insulators beside south entrance

Building Condition

The Whistle Stop is essentially a complete ruins, but there are enough fragments of the wood structure and enough of the concrete and masonry walls and floor to enable one to replicate it. The wood structure has deteriorated to the point that with the exception of three or four brackets, none of it can be used in restoring the building. The various pieces are sufficiently intact to serve as patterns for replication. There is one small section of roof sheathing extant with a few fragments of cedar shingles; there appears to have been a fire some time in the past although the majority of the damage to the roof seems to be a consequence of failed roofing. The small amount of charred material on the ground could be from someone building a fire with collapsed pieces of the structure. It is not clear why the majority of the roof sheathing and all of the roofing is gone; the intact rafters are not charred and although the tops of some of the rafters are in poor condition with extensive rot, many appear relatively sound. There is not much roof sheathing on the ground, so it does not appear as though it simply fell off or blew off. Much of the roof may have been intentionally removed.



Broken and displaced wall and rafters, northeast corner

The concrete and stone walls are broken and displaced, and much of the former coping of cobbles is missing. The walls cannot function as support for the roof structure without extensive repairs. The extent of the former flagstone floor that remains is not clear, much of the interior appears to have a dirt floor but the flagstone might exist under a layer of debris.

Conclusions

The Whistle Stop at Randwood was an unusual structure, possibly unique in Niagara. It has not had any maintenance for many years, which has led to the failure of much of the building. The wooden superstructure of columns, brackets, beams, rafters, and roofing is far beyond any possibility of salvage and must be replicated completely with the exception of the wooden brackets at each corner. There is sufficient material to properly replicate the building in accordance with the recommendations for *restoration* in the Standards and Guidelines for the Conservation of Historic Places in Canada.



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April 4, 2022

BUILDING CONDITION ASSESSMENT
THE GUEST HOUSE
200 JOHN STREET, NIAGARA-ON-THE-LAKE



April 27, 2022

Prepared by
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The Guest House North Elevation, April 2022

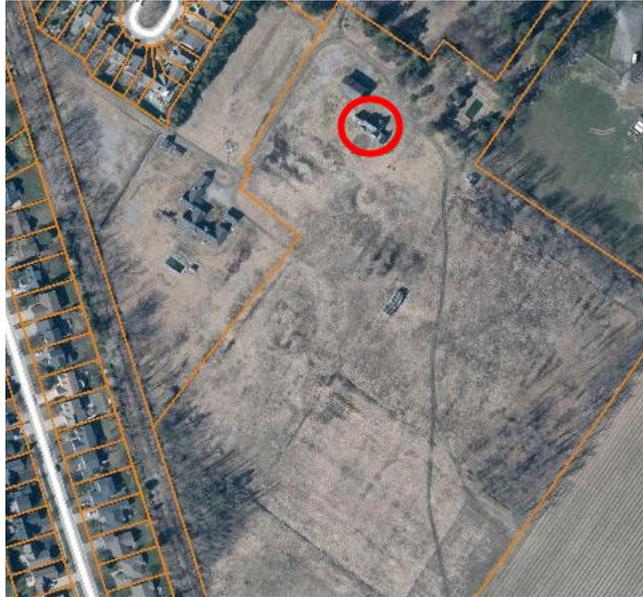
This Heritage Building Condition Assessment was commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the building known as the Guest House and the Calvin Rand Summer House in June 2021 and April 2022 to provide a report on its structural condition. In this report we will use the name Guest House. The Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP provides further background. In the HIA the building is referred to as the Guest House.

This report describes the present structural and physical condition of the building.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south. The Guest House faces north and it sits slightly south and west of the swimming pool.



The Guest House South Elevation, April 2022



Guest House location

Building Description

The Guest House is a somewhat rambling 1970s composition of vaguely Picturesque styling with smooth stucco walls instead of the more academic rustic stone, probably as a concession to the nearby buildings and the Rands' apparent preference for smooth stucco. The core of the dwelling is much older but it sprouted wings in all directions some time after 1971 when an aerial photograph shows only the original central block and a long Lord and Burnham Greenhouse extending from the south side that has since been dismantled and donated to Willowbank School for Restoration Arts.

The building has cedar shingles on its various gabled and shed roofs and built-up tar and gravel on its flat roofs. The profile from most perspectives gives a distinct impression of the 1970s, with large fixed windows overlooking the flat roofs to provide lighting with no views. Deeply recessed alcoves contain patio doors, and there is a generous allotment of windows that do provide views in all directions. The interior has a large great room with a fireplace, a small kitchen off the great room, and there are bedrooms in each of the wings, providing privacy for the bedrooms and a central gathering place for socializing.



Guest House Southeast Aspect

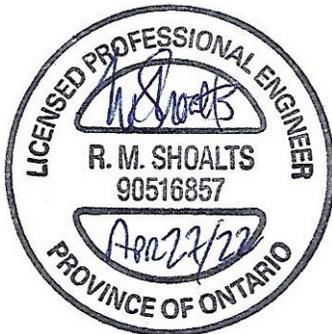
Building Condition

The Guest House exterior is in fair condition with some elements very poor and a few elements in quite good condition. The present cedar shingles are long past their service life and need to be replaced. The flat roofing is adequate for the most part but there are leaks where some of the many upper walls and roofs meet the flat roof. The stucco is in good condition overall and the windows and doors are fairly good with the exception of some that have been smashed by vandals. The exterior wood trims at the eaves and on the doors and windows is pretty well intact but they need scraping and painting. The brick chimney and concrete cap are in fair condition.

The interior of the house is in fair to poor condition. There has been some damage to drywall from vandalism, but the serious issue is the main floor structure in both the original house and in the west wing. The basement was not accessible because it is full of water, and the crawlspaces under the wings are only accessible from the basement. The wet conditions have existed for a long time, the author's foot went through the plywood floor in the west wing and there are numerous areas where it is soft. The great room and east wing have hardwood flooring which adds a layer of strength to the assembly but it is reasonable to assume that the floor structure condition is similar throughout the house. There is undoubtedly a serious mould problem in the basement and crawlspaces. The roof leaks have led to drywall damage and mould in several areas of the main floor. The kitchen cabinets are inexpensive low-quality melamine units of little value. The interior of the house would require extensive removals, remediation, and rebuilding to be usable.

Conclusions

Although the Guest House at Randwood contains in its core the remnants of an earlier dwelling, a 1970s makeover has removed almost all traces of it. All of the windows and doors have been changed, including size, style, and location. None of the interior partitions or finishes remain from the original building; what exists is in essence a 1970s residence. The building has serious issues with moisture, mould, and deterioration. A reconstruction project would necessarily be so extensive that a complete replacement would be more effective and more economical.



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April 27, 2022

BUILDING CONDITION ASSESSMENT
THE CARRIAGE HOUSE
200 JOHN STREET, NIAGARA-ON-THE-LAKE



April 27, 2022

Prepared by
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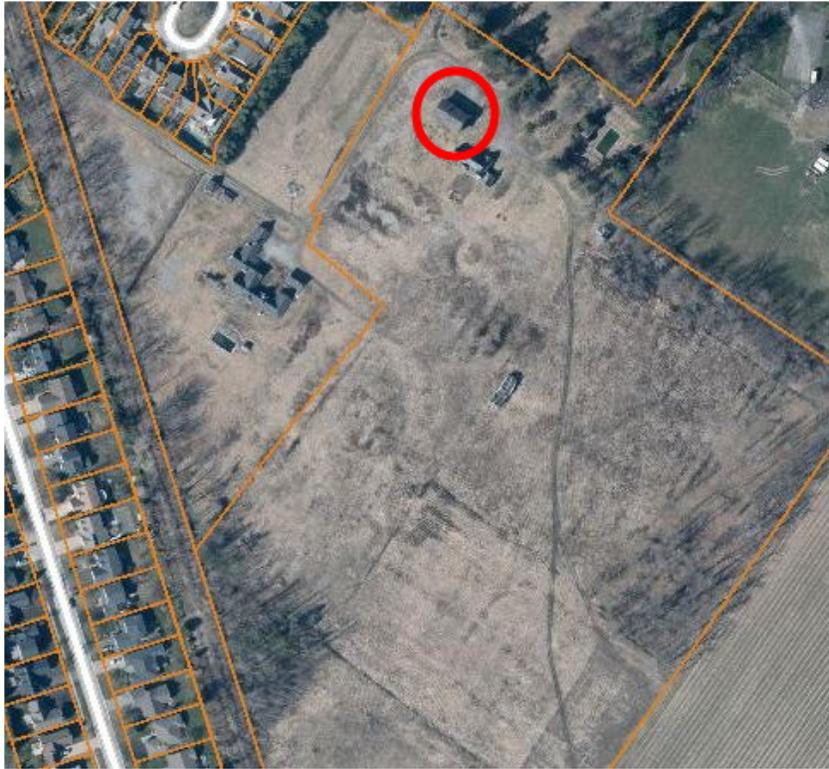


The Carriage House, October 2019

This Heritage Building Condition Assessment was commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the building known as the Carriage House on a number of occasions between October 2019 and April 2022. A meeting was held at the Carriage House in November 2019 with Mark Shoalts, Gerry Zegerius of Tacoma Engineers, Al Antonio of ACA Engineering, and Daniel Lewis of ERA Architects to provide a cursory review of its condition and the possibility of relocating it. At that point all parties were in agreement that the condition was reasonable and the building could be moved on the existing property, but it is too wide and too tall to move on a public thoroughfare. Partial dismantling to facilitate a move off site was agreed to be not feasible. The building has also been called the Coach House and the Garage. Garage is the most accurate name because it was constructed for automobiles, but there are two horse stalls in it and the impression is intentionally that of an earlier building. It was apparently constructed in the 1920s, it is visible in a 1934 aerial image. In this report we will use the name Carriage House. The Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP provides further background; in the HIA the building is referred to as the Garage.

This report describes the present structural and physical condition of the building.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south. The Carriage House faces north and it sits south and west of the swimming pool.



Carriage House location

Building Description

The Carriage House is a large two-storey structure of Prairie or Craftsman styling with smooth stucco walls, a Dutch gable roof with large overhangs, large glazed carriage and walk doors with diamond-shaped mullions above single wood panels, and six-over-six double hung windows on the second floor and in the rear and end of the ground floor garage. The wood framed building has a poured concrete foundation that extends approximately 8" above the concrete floor. A brick chimney extends through the asphalt-shingled roof and although there is a small fireplace at the lowest level, it is covered and has never been used. The existing furnace exhausts into the chimney as did the previous one.



Carriage House from the southwest; the open door is for the horse stalls

There are two bays for automobiles in the east half of the ground floor, which is divided by a staircase to the apartment and former hayloft on the second floor. The west end of the ground floor has two horse stalls, some storage cupboards and grain bins, and a workshop or third bay for a small vehicle. The interior of the ground floor is panelled with narrow beaded tongue and groove fir on the upper $\frac{3}{4}$ of the walls and on the ceilings, with fir casing on the doors and windows. The lowest portion of the walls in the garage is finished with cement plaster. The workshop bay has wider T&G pine on the walls for the most part. The fir panelling is varnished, the pine is painted.



Interior of garage; note new furnace, door to apartment



Interior of workshop, note ladder to hay loft

The second floor of the building has a chauffeur's or attendant's apartment in the east two thirds and the west third was originally a hay loft but has more recently been converted to living quarters. The original apartment was well-appointed with lath and plaster on the walls and ceilings and wood floors. The finishes in the converted hayloft are rather lower in quality.

There is plumbing on both levels of the building but the source of water and outlet for the waste is undetermined.

Building Condition

The Carriage House exterior is in fair condition with some elements poor and a few elements in quite good condition. The present asphalt shingles are past their service life and need to be replaced; some have recently blown off of the south side. The stucco is in generally good condition with some small areas of concern. The windows and doors are fairly good with the exception of some glass that has recently been smashed by vandals; the broken windows have been boarded up. The wide carriage doors have sagged a bit, which is to be expected; the hardware is original and in good condition. The doors can be restored.



Drive doors to the workshop

The exterior wood trims at the eaves, including the wide T&G soffits, and the doors and windows all need scraping and painting. There is a belt course moulding around the building at the line of the second floor, the flashing on top of it is rusting and requires paint. The brick chimney is in fair condition above the roof and excellent condition inside the building. The west end has an exterior door to the hay loft with a hoisting hook above it. There has been a fixed insect screen added to the door since the conversion to living quarters.



West end, trims need minor work and paint, hay loft door with hook above

The interior of the Carriage House is in fair to good condition on the ground floor and fair to poor condition on the second floor. The concrete floor is badly cracked. It is very likely that the concrete floor would have to be removed no matter what decision is made on retaining or relocating the Carriage House. The building was used as a garage for the storage and servicing of automobiles. There is a drain in the floor with an unknown outlet. There is also a hand pump near the back wall connected to iron pipe that emerges from the concrete floor. While it could be a water pump, there is plumbing in the building which makes that questionable. It is possibly an oil or fuel pump and it is possible that there is a tank under the floor; this requires further investigation.



Interior of garage, note hand pump at left

There are two water lines coming from below the floor in a corner where the floor has been broken out; there is an older copper line that is capped, and a newer poly line that is connected to exposed copper plumbing above grade. The plumbing requires further investigation because there are numerous items of varying age indicating several updates to the services. There are likely numerous concealed and abandoned lines.

The wood finishes throughout the ground floor are in very good condition. There are a few areas where less than sympathetic installations of newer equipment has done some damage but restoration would be fairly simple. A new furnace was installed with exposed ductwork and heating outlets were cut through the ceiling for the upper apartment. Plumbing lines have been run on the surface, and some strips of T&G panelling have been removed to allow access to concealed plumbing and electrical lines. Most of the damage is relatively minor.



Detail showing fir panelling, window casing, and sash in garage

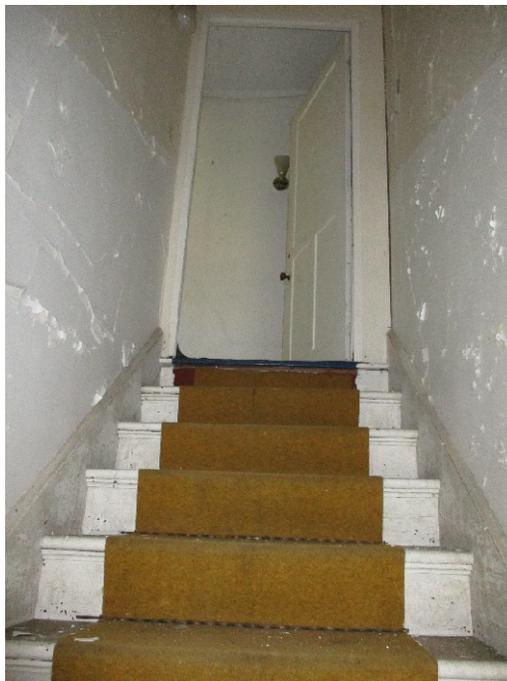


Ceiling detail in workshop



Harness storage cupboards in workshop with drawers below

An exterior door in the centre of the front wall leads directly to a wide stairway leading to the second floor apartment. There is also an interior door from the garage into the stairway. The apartment is large, bright, and airy with generous windows and large attractive wood trims. The floors are fir, with painted borders and unfinished centre sections in the larger rooms, indicating that they had always had floor coverings. The kitchen cabinets are old, possibly original.



Stairs to apartment

The plaster is in fair condition in some rooms and poor to very poor in others, particularly the ceilings. Several ceilings have had 12x12 acoustic tile installed leading one to surmise that they had experienced problems earlier. Services in the apartment have been updated with little

regard to aesthetics. An electric water heater sits in the kitchen with exposed wiring and plumbing. Very inferior cabinets have been added in the kitchen to increase storage space. The bathroom requires a complete overhaul to be usable.



Kitchen with original cabinets on the left, new on the right

Heating of the second floor is now provided by the new furnace on the lower level but there must have been a space heater originally, a metal chimney thimble with a metal cap remains in the ceiling.

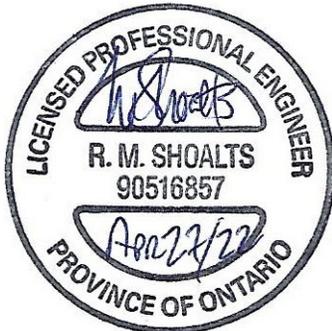
The conversion of the hayloft into living space was done very cheaply with inferior materials, indifferent workmanship, and little regard for functionality. The lack of maintenance has now made the space uninhabitable, but it was barely fit for occupancy when it was first finished. Incomplete insulation, hardboard panelling, and suspended tile ceilings in very poor condition are there at present.



Bedroom in former hay loft

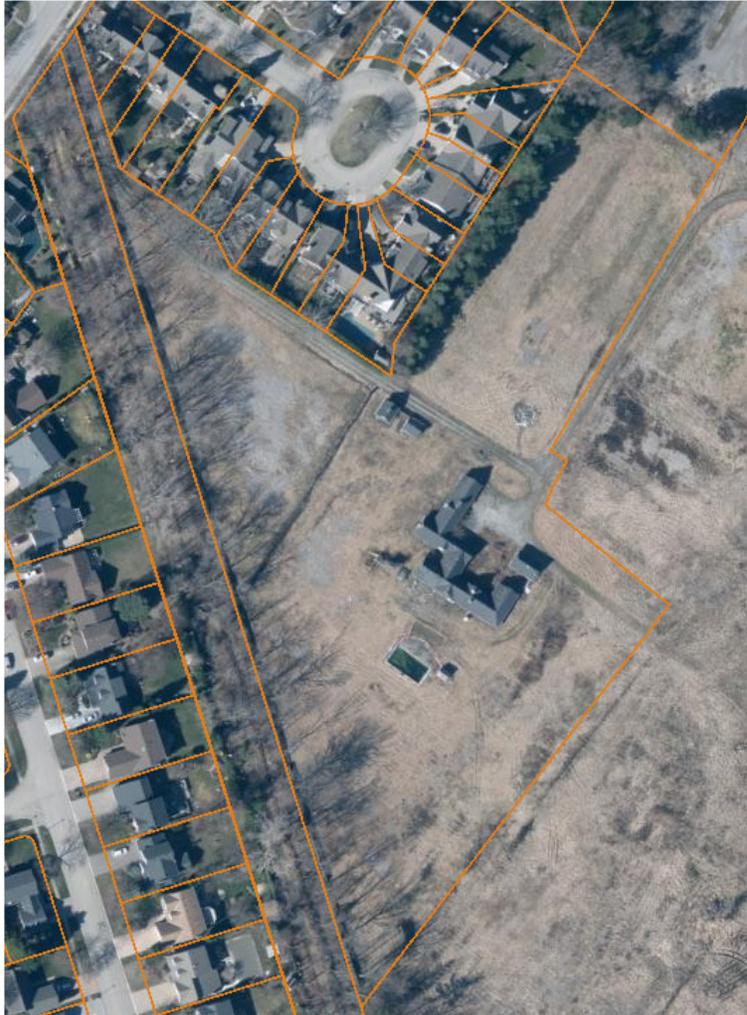
Conclusions

The Carriage House at Randwood is a large detached garage from early in the automobile age. The building is attractive, with intentional throwbacks to an earlier era while still embracing the new technology. Two horse stalls, a hay loft, and agricultural-looking doors maintain the impression of horse-drawn transport, although the intent was always to house the modern conveyances. The bay on the west end of the building seems to have been intended more for a gardener or groundskeeper than for a mechanic, and certainly its most recent use was for that purpose. The generous size of the building with high ceilings and large windows, including a lot of glass in the doors, make it readily adaptable to numerous uses if it is to be relocated and repurposed. The second floor apartment would be less likely to accommodate a different use without significant alterations. The building is not the simplest structure to move, but it is possible to do so as long as one does not have to move below utility lines or to travel on public roadways. The building's condition and its relationship to the site make it worth considering relocation as an option for repurposing and restoring it.



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April 27, 2022

BUILDING CONDITION ASSESSMENTS
588 CHARLOTTE STREET, NIAGARA-ON-THE-LAKE



April 4, 2022

Prepared by
Mark Shoalts, P.Eng., CAHP

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588 Charlotte Southeast aspect (June 2021)

These Heritage Building Condition Assessments were commissioned by Giuseppe Paolicelli of the Solmar Group of Companies. Mark Shoalts, P.Eng, CAHP, reviewed the buildings in the main domestic grouping in June 2021 and March 2022 to provide a report on their structural condition. The main building was constructed as a barn or stables building, apparently in the 1920s, and was converted to a dwelling some years later. There have been additions as well as other later alterations. There is a small building adjacent to the residence of similar vintage and uncertain original purpose, possibly a workshop, and there are two small agricultural sheds located northwest of the residence. No research into the historical significance of the buildings was carried out by Shoalts Engineering; see the Heritage Impact Assessment by Leah Wallace, MA, MCIP, RPP for the full background.

This report describes the present structural and physical condition of the buildings. This report is not intended to deal with the specific chronology but only the physical condition of the buildings and the potential impacts of remedial work that must be carried out because of soil contamination on the site.

For the purposes of this report, we have assumed that John Street runs east-west and Charlotte Street runs north-south and the courtyard of the residence we will call the north elevation.



588 Charlotte buildings, A – residence, B – workshop, C – shed 1, D – shed 2

Building Description: A – Residence

The residence at 588 Charlotte is a one-storey wood-framed stucco-clad building with a concrete slab-on-grade floor and no basement. The residence is a long, rambling structure with wings projecting in several directions. It has a steeply-pitched wood-framed roof with asphalt shingles, painted wood soffit and fascia, aluminum eavestroughs, and painted wood doors and windows. It was constructed as an agricultural accessory building with stables, storage, and a garage, probably in the 1920s. It was converted to a residence sometime between 1953 and 1965, based on aerial photographic evidence, when there were small additions constructed on the southwest and southeast corners as well as the addition of a gable on the south side and a fireplace and chimney in the central main section. Most, but not all, of the doors and fenestration were also changed at that time, in size, style, and location. One interesting feature is a dovecote, presently boarded-up, in the north end of the west wing. At present the building is vacant.



1953 aerial image, note no buildings at the arrow locations



1965 Aerial image, note additions at the arrow locations

Building Condition: A – Residence

The condition of the building is generally good; the roof shingles are of varying ages on different sections of the roof but most are in good condition. The eavestroughs are in good condition. The stucco is generally good with some small areas requiring minor repairs. The woodwork generally requires painting but is not deteriorated to any extent. The windows and doors are fair to good, requiring only paint for the most part. The interior of the building is in fair to poor condition, and would require upgrades and updating for use as a residence.

Exterior Conditions Affecting the Building

In March 2018, Soil Engineers Ltd. performed a Phase II Environmental Site Assessment on the property at 588 Charlotte Street. Hydrocarbons were detected in the soil and further investigation was recommended. In December 2020, Soil Engineers submitted a report to Solmar detailing the results of further exploration and monitoring wells. More work was again recommended but the results to that point showed hydrocarbon contamination requiring soil removal to a depth of approximately 4.5 metres below ground surface for an area of approximately 420 to 450 square metres with the caution that the horizontal limits were not completely defined. The area that was defined covers approximately 2/3 of the footprint of the residence at 588 Charlotte and extends beyond it to the north, south, and west.

The residence at 588 Charlotte has a foundation that is approximately 1.2 metres deep, and a concrete floor that is at grade. The wood framed walls sit on the concrete foundation essentially at grade. Excavation around and under the building to a depth of 4.5 metres or 3.3 metres below the bottom of the foundation would require lifting and temporarily supporting the building. This presents several major difficulties. The extent of soil removal required is greater than the possible spacing for temporary supports, so the supports would have to be located within the area to be excavated. The footprint of the building with wings extending off in several directions would require intersecting and conflicting shoring and cribbing to support the various parts. The absence of a wood-framed floor system necessitates temporary framework to lift every wall and partition, and the walls sitting directly on the foundation right

at grade make it very difficult to get lifting beams below the walls because it cannot be done without removing the floor slab and the top of the foundation. All plumbing and other services located in the floor would be removed. Cabinetry and other built-in millwork such as the stairs and gallery would either have to be removed or supported, and the fireplace would require support. Removal of the soil to 4.5 metres deep with the building and temporary support in place would be virtually impossible.

The building could not be relocated to allow soil removal without cutting it into at least four separate sections, possibly more, and all of the interior elements noted in the preceding paragraph would have to be removed. The modifications required to move the building would result in significant damage and the loss of much existing fabric; it is an impractical undertaking for a building of this nature.

Building Description: B – Workshop

Immediately north of the west wing of the residence is a small wood-framed stucco clad structure. Its original purpose is uncertain; the size is insufficient for a garage or carriage house, and the configuration and entrance doors are not practical for animal husbandry. A workshop or storage building is most likely, and the generous windows and brick chimney indicate workshop rather than storage.



North Elevation of Building B - Workshop

Although the resolution is insufficient to provide any detail, a 1934 aerial image does appear to show this building in place. If not exactly contemporary with the original stables building (now residence) it is certainly close to the same age. A number of differences in construction indicate that it was not likely built at exactly the same time as the stables. The original window and door styling of the stables on 588 Charlotte is similar to the carriage house on 200 John St., but the workshop on 588 is slightly different. The stables building on 588 Charlotte was framed on concrete foundation walls flush with the floor and very close to grade; the workshop foundation walls extend approximately 12" above grade. The exterior materials, colours, and general impression of the building are similar to the stables, contributing to the picture of a comprehensive domestic grouping.

There is a shelf-mounted brick chimney with a stovepipe hole on the east wall of the workshop, and a later woodstove with metal chimney more centrally located. The walls are lined with fir plywood, and the ceiling with hardboard and wood battens; there is a concrete floor. The interior finishes are not original.



East elevation of Building B - Workshop

Building Condition: B – Workshop

The workshop building is quite good. The asphalt shingles are in fair condition on the north side and they are newer and very good on the south side; there are no leaks. The building has PVC eavestroughs and downspouts that should be upgraded to aluminum at least, and preferably to galvanized steel. The exterior wood trims and windows are in good condition, requiring only minor repairs before scraping and painting. The doors have some minor damage and wear that must be repaired before scraping and painting. The stucco is also in good condition, requiring only minor repairs. The concrete foundation walls are in poor condition where they are visible above grade, both inside and outside the building. The interior finishes are in adequate condition although they are not up to the standard of the original building and consideration should be given to upgrading them to the level that would have originally existed. The concrete floor is severely cracked and settled and should be replaced.

Exterior Conditions Affecting the Building

The soil contamination discussed in the report section on the residence extends under at least 20% of the workshop building. Given the depth of excavation required and the size of the building, relocation is the only feasible option. The small size of the building, the absence of any interior partitions, and the fact that the foundation wall extends approximately 12" above grade make lifting and relocation of the building a relatively easy proposition. The concrete floor and the exposed portion of the foundation are in poor condition and relocation of the building provides the opportunity to replace them with new construction appropriate to the building.

Building Description: C – Agricultural Shed

Northwest of the residence on 588 Charlotte is a pair of small agricultural buildings, originally intended to house livestock. Because this was a hobby farm and the buildings are very small, it is not certain what the original use was for them. Building C is the smaller of the two, a low single storey stucco building with a gable roof, a single window in the north side, a pair of windows in the south side, and a board door in the east gable end. It does not appear in a 1934 aerial image but it is in a 1953 image. The exterior appearance and finishes are generally similar to the older buildings but less attention was paid to detail and there was a less skillful handling of design and construction. The interior is completely lined with painted tongue and groove panelling. There was originally a dirt floor, over which was later installed a floor of wood sleepers and waferboard which has since almost completely deteriorated. The small size and low ceiling could indicate a poultry house but the shape and configuration, including fenestration, is not of traditional design. There is a chicken-wire door inside the board and batten door to provide ventilation. There is a metal chimney or stovepipe thimble in the ceiling and a painted board on the west gable end appears to be covering a chimney thimble on the exterior; there are rust streaks on the stucco below it. It is not clear what type of heater could have been in this very small building and heaters for livestock would be unusual unless they were for exotic poultry such as peacocks or something.



Shed C East Elevation



Shed C South Elevation

Building Condition: C – Agricultural Shed

Shed C is in fair condition. The asphalt shingles are in fair condition on the north side and they are newer and very good on the south side; there are no leaks. The building has PVC eavestroughs and downspouts that are in poor condition. The exterior wood trims, door, and windows are in fairly good condition, requiring only minor repairs before scraping and painting. The stucco is in fair condition, although it requires some repairs due to deterioration and also to previous poorly-done repairs. The foundation is not visible above grade, either inside or outside the building and the soil is up on the walls in places. This has probably resulted in rot of some of the framing but it cannot be determined without cutting into the walls. The interior wood finishes on the walls and ceiling are in good condition, but the floor system of sleepers and waferboard has completely deteriorated to the point where much of the floor is exposed soil. Because of the small size and low ceiling, finding an alternative use for the building could be challenging.

Building Description: D – Agricultural Shed

Shed D, northwest of the residence on 588 Charlotte, is the second in a pair of small agricultural buildings apparently originally intended to house livestock. It is not certain what the original use was for Building D. It is a two storey stucco building with a gable roof, a single window in the west side, a pair of windows in the east side, and board doors one above the other in the north gable end. The upper level is a very diminutive hay mow, with a hoisting beam over the loft door. There is a vent in the opposite gable end, and a ventilating cupola on the roof. The cupola sides have been covered, restricting its ventilating capacity. The building does appear in a 1934 aerial image and the exterior appearance and finishes are generally similar to the main buildings on 588 Charlotte, so one can assume that it is contemporary with the residence (former stables) building.



Shed D North elevation



Shed D West elevation

Building Condition: D – Agricultural Shed

Shed D is in fair condition. The asphalt shingles are relatively new and very good condition with the exception of the cupola, which was not resingled at the same time as the roof. There are no leaks. The building has PVC eavestroughs that are in poor condition with no downspouts; the apparently intentional outlets are gaps in the troughs. The exterior wood trims, door, and windows are in good condition, requiring only minor repairs before scraping and painting. The stucco is in fair condition, although it requires some repairs due to deterioration and also to previous poorly-done repairs. The concrete foundation extends a few inches above grade, although the soil is up on the walls in places. The interior finishes are in reasonably good condition. Because of the small size and low ceilings, finding an alternative use for the building could be challenging.



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