Pre-Demolition Investigation and Demolition Process of 305 Main Street

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Preface

In spring of 2021, Delmar Construction Limited was asked to do an inspection on the building located at 305 Main Street, Yarmouth, Nova Scotia. 2 inspections were completed, highlighting several structural deficiencies and possibilities of structural failures. The latter prompted the Town of Yarmouth to engage in the process to mitigate the danger to the public, first by asking the owner to make the required repairs, and then by issuing a demolition order. Delmar Construction Limited was contracted by the Town of Yarmouth to manage the demolition project of the building, including pre-demolition investigation, preparing documents for bidding, and managing & supervising the demolition.

This report will serve as a record to the work done at 305 Main Street, and to keep the Town of Yarmouth updated with the progress of the demolition. This includes the pre-demolition investigation, tender process, preparation for the demolition and the demolition itself. This report will also serve as an information package to the demolition bidders. It will be updated on a regular basis as more information is known regarding the project and includes the most up to date information as of the issuing of the tender.

Throughout the report, the building will be referred to as 305 Main Street but encompasses the properties from 303 Main Street to 309 Main Street.

Table of Contents

1 - Introduction

On August 11th and 12th, 2021, Delmar Construction Limited employees preformed a pre-demolition investigation of the structure located at 305 Main Street, Yarmouth N.S. This investigation consisted of sampling for hazardous materials, creating a detailed plan of the building, as well as investigating the tie between the building at 305 and the neighbouring building to the north.

After the pre-demolition investigation was completed, a tender package was created and sent to several demolition contractors serving Nova Scotia.

2 - Pre-Demolition Investigation

The first day of inspections consisted mainly of sampling materials and localized demolition to investigate the structure details. The second day consisted of an inspection of the interface between both structures, as well as taking site measurements to create a building plan.

2.1 Sampling

2.1.1 Sampling Procedure and Safety

Sampling of asbestos and lead was preformed by Delmar Construction employees with experience in contamination treatment, sampling, and abatement. All the sampling work was preformed in accordance with Delmar Construction's safety policy, and Delmar's asbestos sampling safe job procedure. A site hazard assessment was also completed prior to entering the site. A copy of these 3 documents is included in Appendix 1. Gloves, as well as facemasks with respirators were worn by all present during sampling.

2.1.2 Sampling of Asbestos and Lead

Throughout the day on Wednesday, August 11th, 27 samples were taken for asbestos sampling. These samples were based on materials that commonly contain asbestos, such as plaster, ceiling tiles, flooring, and drywall compound. Samples were taken throughout all 3 floors of the building. The building appears to consist of several additions, built at different timeframes. Samples were taken from each addition/phase of the structure. While the crew was unable to access the south-west portion of the building due to structural deficiencies, samples from the same phase of the building were collected.

One sample was taken for lead. This sample was collected from old wall paint within the building. The remaining paint throughout the building was cracking and flaking, which is often an indication of paint containing lead.

Throughout the sampling process, each sample was given a unique identification number, and noted on a floor plan corresponding to where the sample was taken within the building. This will allow for easy identification of which areas within the building may contain harmful materials. This plan is shown in Appendix 2.

All samples were bagged in plastic zip-lock bags, packaged in cardboard boxes and sent for testing. Figure 1 shows sampling of materials on the third floor of the building.

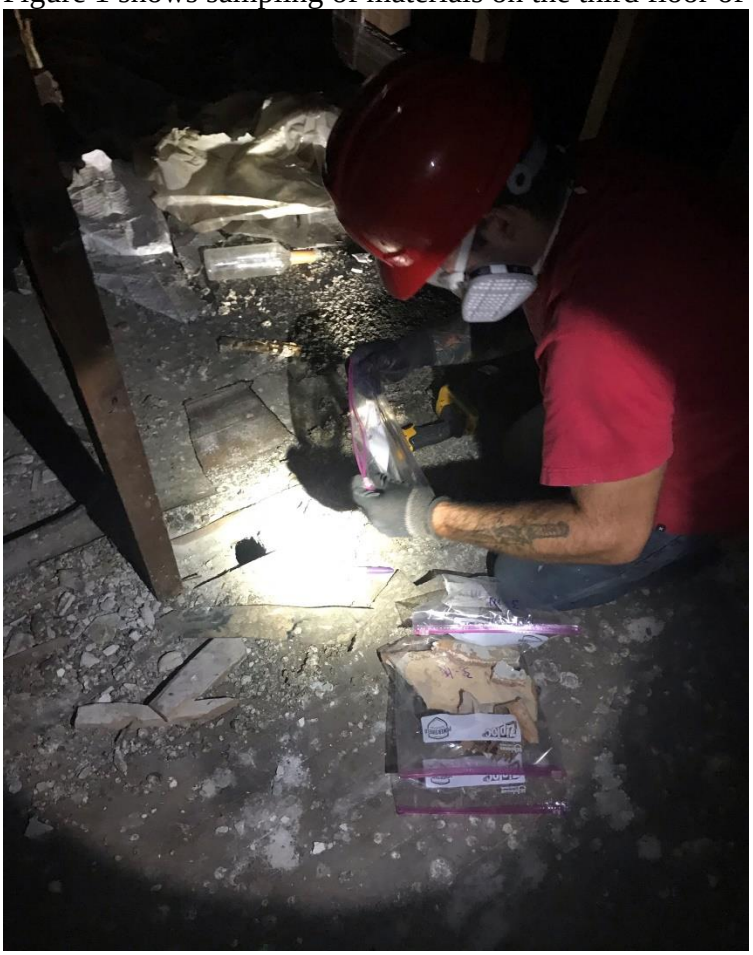


Figure 1 – Sampling of materials

2.1.3 Testing of Samples

All samples were boxed up and sent on August 12th to Design 1 Indoor Environmental Inspection, located in Halifax. The company will test all 28 samples to determine if any harmful materials are present within the building materials.

In the event that samples return positive, and abatement will be required to eliminate it. A thorough discussion will be required with the Town of Yarmouth, Delmar's containment specialist, and possibly Design 1 to determine the most cost-effective way to contain asbestos. Since access to the southwest corner of the building is not permitted due to structural deficiencies, it will not be possible to abate and remove asbestos from this portion of the structure. During demolition, closure of the street and hosing down of the building to limit dust particulate will likely be the required procedure for the southwest portion of the building. The procedure for the demolition of the remainder of the building will depend on the most economical and safest way to contain the harmful debris. It is important to note that the above paragraph is simply speculation, and no conclusions should be drawn before the test results have returned.

2.2 Building Layout & Plan

2.2.1 Building Construction

Throughout both days of investigation, the crews examined the structure of the building. As previously mentioned, the building appears to consist of several additions, constructed at different times. The building consists of an outer brick cladding, varying from 2 to 3 layers of bricks. These bricks appear to be exterior load bearing walls, in some cases. There are 2 brick walls which run transversely through the building, indicating a former exterior wall. The interior of the building is wood framing, including floor joists, floorboards, studs, and rafters. There are also a few steel beams and columns, used as load bearing structure. The roof of the building consists of asphalt shingles and tarred roof.

2.2.2 Building Interior

The interior of the building is littered with construction debris such as plaster, rotted wood, old boards, and insulation (see Figure 2). There is also a large amount of garbage scattered throughout the building, which seem to be from current and past occupancies (see Figure 3). This garbage varies from old furniture, personal items, waste from fast food and old appliances/fixtures. It is recommended that items of significance be collected, and the owner given a chance to reclaim some of the items.

Figure 2 - Construction Debris within building

Figure 3 – Garbage within building

2.2.3 Interface between 305 and Ice Works

One of the main concerns which needed to be investigated prior to the demolition was the fact that the building in question was touching its neighbour to the north. 3 test holes were made in the north wall of the building, one on each floor, to investigate the interface between the 2 buildings. On all 3 floors, the north wall contained 2 courses of brick, followed by a 1" void between both buildings. This void was occasionally filled with mortar that seeped in, as well as accumulated debris from the roof over time. There is no evidence of any brick ties or other means of fastening both buildings together. On the Main Street side, the seam between buildings is filled with a caulking compound. Figure 4 shows a cross section of the wall interface. Figure 5 shows the investigation of the wall interface. Left is the crew punching through the wall, center is a closeup of the investigation hole and right is looking inside the void between both walls. These photos were taken at the third storey. No mortar or debris was present at this hole.

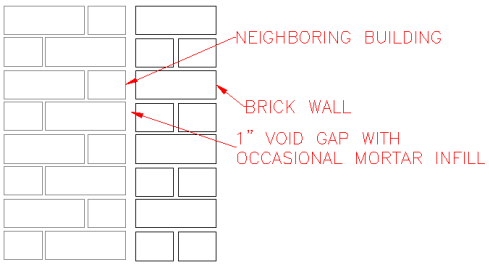


Figure 4 – Typical wall interface

Figure 5 – Investigation of the wall interface

The roof of the building in question also butts up against the neighbouring building to the north. It is heavily flashed with shingles, metal flashings and approximately 3" of tar. The tar and flashings are applied directly to the wall of the neighbouring building (see Figure 6). There is also a rafter between the brick wall and the neighbouring building, which catches the edge of the roof. This rafter is nailed directly to the neighbouring building (see Figure 7). Figure 8 shows a cross section of the roof interface between both buildings. There is also a chimney protruding through the roof, which belongs to the building at 305 Main. Metal bars which protect the neighbouring building's windows have been installed, with one fastened to the chimney. While the chimney appears to be completely independent of the neighbouring building, the window guard will need to be removed prior to demolition. Figure 9 shows the chimney protrusion through the roof of 305, as well as the protective grating for the neighbouring building which is fastened to the chimney.

Figure 6 – Investigating the roof interface

Figure 7 – Rafter nailed to neighbouring building

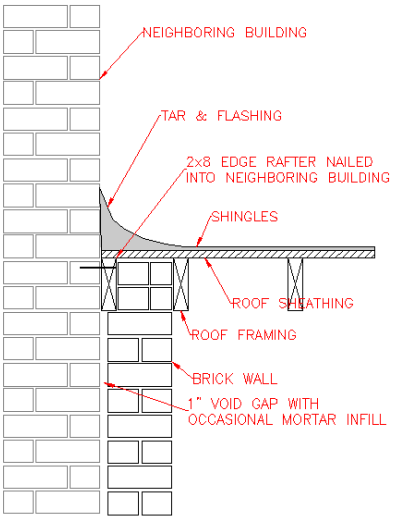


Figure 8 – Cross section of roof interface


Figure 9 – Chimney protrusion

Although there is no evidence that both buildings are tied together in any way, it is recommended that both buildings be completely separated at the roofline by hand prior to major demolition. It is also recommended that the chimney be removed by hand for the top 10 feet, to ensure that the chimney is not tied from the inside to the neighbouring building. The exact demolition plan will be coordinated at a later date with the successful demolition bidder.

2.2.4 Building Geometry

The building is bound on all 4 sides by other buildings or infrastructure. On the north, the building is butted up against Ice Works, a 3-storey building with a restaurant on the first floor and residential spaces on the upper 2 storeys. To the south is a gravel parking lot with 25 spaces reserved for tenants to nearby apartments. To the west is Main Street, which has 2 lanes of traffic, and a sidewalk on each side. Retail stores are found on both sides of the street. The east side of the building is bordered by a small alleyway, and an apartment building. The site plan can be found in Appendix 3.

Figure 10 shows the western elevation of the building, taken from the opposite side of Main Street. As seen, space is limited. The building butts up directly against its neighbour to the north, and a reserved gravel parking area lies to the south. Figure 11 shows the southern elevation of the building. The portion clad with vinyl siding is the section of the building that was temporarily shored by Delmar Construction in spring of 2021. Access to this section is restricted. A small gravel parking area belonging to the property is also shown in this photo (where the Delmar pickup is parked). This space is the only space that is owned by the building. The larger gravel parking area in the foreground is reserved parking for neighbouring apartment buildings, but can be vacated during the demolition and used as a work area. Figure 12 shows the eastern elevation of the building. The grey building is Ice Works to the north. The 2 buildings are touching for the full length of the Ice Works building. There is a gap between the east wing and Ice Works at the roof level, which serves as a drain trough for the roofs from the front portion of the building. Figure 13 shows the alleyway on the eastern side of the building. The distance from the building to the apartment unit to the east is approximately 24’8”.

Figure 10 – West Elevation


Figure 11 – Southern Elevation

Figure 12 – East elevation

Figure 13 - Alleyway

2.2.5 Structural Deficiencies

During the pre-demolition investigation, the building was explored in much more detail than during the 2 inspections in spring of 2021. Several new areas were investigated, including the apartment on the second floor, and the basement. Throughout the pre-demolition investigation, several more structural deficiencies were noted, in addition to the deficiencies noted in both investigation reports from spring 2021 (see Appendix 5 for both reports).

During the investigations throughout different areas of the building, notably the roof, the mortar between the bricks along the exterior wall was noted to be in very poor condition. Bricks were easily removed by hand without use of pry-bars or hammers. This should be kept in mind during the demolition to ensure that localized collapses or flying debris do not occur.

While investigating the basement, the first-floor joists and floorboards were noted to have severe rot. These floor joists were bearing on the stone foundation, both of which were extremely wet due to water infiltration from above and dampness in the basement. This rot issue carried up to the second level floor joists. These joists were rotted to a point where the second floor was unstable. Both locations were noted to be directly below the trough at the back of the roof between both buildings. While debris generally prevents access to these areas of the building, it is strongly discouraged that anyone should access these portions of the building. Figure 14 shows the decay of the first-floor structure visible from the basement of the building.

Figure 14 – Structural decay in the basement

Any contractors who would like to visit the building should not enter without one of Delmar's employees present. Guidance through the building is required to avoid the unsafe areas.

2.3 Investigation Results

2.3.1 Asbestos Testing

Design 1 Indoor Environmental Inspections provided a report on August 14th, 2021. All asbestos samples were analysed, and no asbestos was found in any of the samples. It is therefore safe to assume that there is no significant amount of asbestos within the building. The report can be found in Appendix 6.

2.3.2 Lead Testing

Design 1 Indoor Environmental Inspections provided a lead analysis report on August 26th, 2021. The report highlighted lead contents of 6460 mg/kg. The lead results are from several paint samples taken throughout the building. The lead may be disposed of as C&D at the local landfill in Yarmouth. However, appropriate measures should be taken as necessary to avoid any

contamination while the demolition is taking place. A copy of the lead report can be found in Appendix 7.

3 – Demolition Planning

A tender for the safe demolition of the building will be prepared and given to potential bidders by invite only. Proper planning should be taken to ensure the structure is removed in a safe manner.

3.1 Demolition Considerations

3.1.1 Safe Removal of Structure

The successful bidder must complete the safe and controlled demolition of the building located at 305 Main Street. Care should be practised to protect any neighbouring infrastructure, including parking spaces, buildings and sidewalks. During the collapse of the building, appropriate arrangements shall be made to close off streets/sidewalks to prevent any possibilities of injuries to public. A thorough demolition plan should be developed prior to commencing demolition. This includes walk-throughs as required. Appropriate hoarding structures, barricades and retaining walls should also be considered prior to demolition. Coordination to vacate neighbouring areas such as parking lots should be considered and planned out by the demolition contractor two weeks prior to demolition.

3.1.2 Removal of Foundations

The removal of the foundations should keep in mind the stability of neighbouring structures. The foundations on the sides of the building bordering Ice Works and the Main Street sidewalks should not be removed in their entirety in order to prevent any instabilities for the neighbouring structures. These foundations should only be removed to 6” below sidewalk level. Any fill used in the basement should be compacted to 100% in layers to avoid settling.

3.1.3 Site Access

The property includes the alleyway to the east of the building. Access to the property shall be assumed from Kirk Street, through the alleyway. Coordination with the neighbouring properties shall be done 2 weeks prior to demolition to confirm this access route. Travel over the Main Street sidewalks should be avoided to prevent any damage to the town infrastructure.

3.1.4 Debris

Debris, dust and flying objects should be kept in mind during demolition, as the building is surrounded by other businesses and residences. Dust should be kept to a minimum by hosing down the structure during its demolition.

3.2 Safety Plan

A detailed safety plan along with hazard assessments should be completed 2 weeks prior to any demolition. This safety plan should be created by the demolition contractor, in conjunction with Delmar Construction. The Town of Yarmouth should also review this safety plan. This safety plan should address the potential risks to workers, as well as the public.

3.3 Timeline & Building Integrity

The building should be removed in an appropriate timeframe. The structure should be down on the ground before the first probable snowfall, due to concerns over the structure's capabilities. If this is not possible due to scheduling issues, a plan should be developed by Delmar Construction and the Town of Yarmouth, to protect the public in the event of a pending snowstorm. Details regarding this plan should only be discussed at a later timeline if it is clear that the project will not be down in a reasonable timeframe.

A new, sturdier barricade should also be constructed in the alleyway on the east side of the building. This alleyway should be closed off completely due to concerns for the structural stability of the east brick wall along with the impending hurricane season.

Apart from the 2 issues mentioned above, the building does not currently pose any imminent danger to the public or properties surrounding the building.

4 - Pre-Demolition Investigation Conclusion

The pre-demolition investigation revealed valuable information useful to the planning and execution of the safe removal of the building at 305 Main Street. While the investigation was thorough, further information may be required to complete a proper demolition plan. In this event, future investigations should be planned. Further photos are also available, upon request. Additionally, guided site visits can be arranged at the convenience of any party interested. While no asbestos was detected in the samples, the amount of dust and airborne particulates should still be limited.

Furthermore, during the demolition, care should be exercised when separating 305 from Ice Works, in order to avoid any possible ties that were undiscovered during the pre-demolition investigation. While the investigation provides good indications that these are 2 separate buildings, the wall in its entirety was not investigated.

In the wake of the removal of 305, appropriate measures should also be taken into account to prevent water infiltration to the Ice Works building (to be coordinated with the Town of Yarmouth following the demolition).

5 - Tendering Process

Following the pre-demolition investigation, a tender package was created and sent to several demolition contractors serving Nova Scotia.

5.1 Tender Documents

To ensure all potential bidders had enough information to accurately bid the project, a tender package was sent. This tender package included the pre-demolition report (this report), as well as the Tender Invitation Document (see Appendix 8). An amendment to this report, as well as the Tender Invitation was made, and sent out to bidders following the official site visit.

5.2 Invitation of Tender

On August 17th, 2021, the tender package was sent, by email, to the following demolition contractors:

- Verhagen Demolition
- RD Harris Excavation
- Maritime Demolition
- Capital Demolition
- Volcano Demolition
- Total Demolition
- Dexter Construction

Bidders were instructed to review the tender package and confirm interest by August 20th, 2021. A tentative date for an official on-site meeting was set on August 23rd, 2021. The tender closing deadline was set for September 2nd, 2021 at 09:00 AST.

Of the above-mentioned contractors, Verhagen, RD Harris, Dexter's and Capital Demolition expressed interest in the project.

5.3 Official On-site meeting

The official on-site meeting was held on August 24th, 2021. The meeting was changed from the above-mentioned date to accommodate bidders' availability. 2 bidders attended the meeting. The meeting consisted of a walk-through of the building, showing all 3 floors to both bidders. A walk-around of the property was also done. A copy of the official meeting summary is included in Appendix 9. This meeting recap was sent to the Town of Yarmouth, which included several questions brought up by the bidders for the Town to answer. These answers were included in Addendum 1.

5.4 Tender Results

The tender closed on September 2nd, 2021. One bid was received. There were no requests to extend the tender closing deadline. Verhagen Demolition submitted a price of $273,300.00, HST included. Both RD Harris & Dexter Construction expressed interest but notified Delmar that they did not have enough resources in place to complete the project on the requested timeline. Capital Demolition expressed interest earlier on during the tender process but made no correspondence.

5.5 Estimated Tipping Fees

While it is very difficult to estimate the exact weight of the building and corresponding tipping costs, a rough estimate has been made. An additional 20% has been added to the numbers to account for uncertainty and building variations.

We estimate approximately 475 tons of brick, rock & concrete is found within the building. Additionally, we estimate approximately 155 tons of wood (clean and dirty wood) is found within the building. The latter includes estimated weights for shingles, plaster & drywall.

Tipping fees at the Yarmouth Solid Waste Park are $128/ton for C&D, $10/ton for brick & concrete, and $58/ton for wood. While it is unreasonable to assume that all of the materials will be perfectly separated and that no loads will be brought to the C&D site, this assumption would yield a cost of approximately $12,700.00 + HST of tipping fees. On the other extreme, if all materials were sent to C&D, it would cost approximately $80,700 + HST in tipping fees, which is also an unreasonable assumption. In the tender, bidders were instructed that materials be sorted as much

as practically feasible, to minimize tipping fees. Since the building's shell is primarily of the same material, separation of the brick should be relatively easy.

5.6 Total Costs

The Town of Yarmouth has requested final project cost. Below is an estimated breakdown of the different categories and their associated costs for the project. It is important to keep in mind that these prices (aside from the Demolition Contract and Construction Management Fee) are only for budgeting purposes only and are not firm costs. Prices may change based on the longevity of the project, material price fluctuation and product availability.

Item	**Cost**
Construction Management Fee	$18,000.00
Demolition Contract	$242,000.00
Tipping Estimate	$60,000.00
Traffic Control	$7,358.00
Barricades, Fencing	$5,050.00
Ice Works Reinstatement	$12,800.00
Delmar's Markup	$34,520.80
Sub-Total	$379,728.80
HST	$56,959.32
Project Total	**$436,688.12**

5.7 Recommendations

Delmar Construction's recommendation to the Yarmouth Town Council to award the demolition tender to Verhagen Demolition. While they were the only bid, we believe that the bid is honest due to the tendering process.

Following the awarding of the contract, preparations between Delmar Construction and Verhagen Demolition would begin as soon as possible, to arrange any required services (such as barricades, hoarding and traffic control), street & sidewalk closures, as well as developing a proper demolition plan and safety plan. Neighbouring property owners should be given an advanced notice prior to the demolition. Verhagen confirmed that they would have the project completed within one month of beginning. Following the demolition, Delmar Construction should work with the Town of Yarmouth, as well as the owners of Ice Works to determine what re-instatement of the Ice Works building should take place, and where the ownness lies.

Appendix 1 – Safety Documents

Safe Job Procedure –Asbestos and lead sampling 39

1. Assemble all required PPE and tools, including:
    - Disposable tyvek coveralls
    - Disposable booties
    - Half face respirator with p100 HEPA cartridges
    - Water mister
    - Water supplies
    - Cutter tools
    - Scoop
    - Sample collection bags
    - Wiping cloth or disposable wet wipes
    - Disposable bags
    - Duct tape
2. Don disposable tyvek coveralls, booties, gloves and half face respirator
3. Inform any workers of potential asbestos hazard and instruct them to stay outside of the sampling area
4. Identify location of sampling
5. Wet material to be sampled to minimise dust
6. Cut out sample
7. place in a sealable bag and label asbestos sample
8. Vacuum and wet wipe the surrounding area of the sample and seal the sampled area with tape
9. Decontaminate any tools used in collecting the sample
10. dispose of PPE in a designated asbestos waste bag
11. Doff mask and decontaminate
12. Submit samples to a lab for analyze

*** same procedure to take lead samples

USE OF METAL SCAFFOLDS .18

General

These are various types of metal scaffolds and they all have a right and wrong way to be erected.

The misuse of scaffolding is the cause of numerous serious injuries. Every worker who designs or constructs a scaffold should be competent and know what the manufacturer's specifications are for that type of scaffold. Every worker who erects scaffolding shall have proper training.

The scaffold type, which will be suited for the job and capable of withstanding the loads to be imposed on it, must be determined before the job begins.

Ensure that:

1. the scaffold you intend to use is the correct one for the job;
2. the location in which the scaffold is to be constructed is level or is capable of presenting secure footing by use of mud sills or some other devise;
3. the feet of the scaffold should rest in the center of the mudsill and the mudsill should project at least one feet beyond the scaffold foot. Mudsills may be placed either along the length or across the width of the scaffold frames as long as soil is compacted or replaced with gravel or crushed stone where the soil is soft. Where mudsills are placed on sloping ground, the area should be leveled by excavating wherever possible. Where single mud sill are unable to be installed either the short way 5' or the long way 10' an individual mudsill may be used as long as it is documented in the work plan.
4. the scaffold will be erected by a trained competent worker;
5. legislative and manufacturer's requirements have been compiled with;
6. safe access and egress to both the scaffold and the general work area has been provided;
7. leveling adjustment screws shall not be extended over one foot;
8. tower scaffolds have outriggers or are guyed and have all component parts secured in place (i.e. cross braces, pins, lateral braces);
9. scaffold work platforms have perimeter
   Guard rails - Horizontal rails 0.92 meters (3') to 1.07 meters (3 ½') above the platform;
   Intermediate rails – Horizontal rail midway between scaffold platform and top rails;
   Toe board – Horizontal member at platform level no less than 102mm (4") in height above platform level;
10. scaffold planks are of number one grade materials with maximum spans of 3.1 meters (5 ½' on light duty and 2.3 meters (8') on heavy duty) with a maximum projection beyond the ledge of no more than 300 mm (12"), with a minimum of 6 inches.

Revised Jun 2014

USE OF PORTABLE LADDERS .21

General

Ladders can be used safely if they are given the respect they deserve.

Before using any ladder, make sure that it is good condition and is the right ladder for the job to be done.

1. When setting up a ladder, secure the base and "walk" the ladder up into place.
2. The ladder should be set a t the proper angle of one (1) horizontal to every four (4) vertical.
3. Before using a ladder, make sure it is secured against movement.
4. When in position, the ladder should protrude one (1) meter above the intended landing point.
5. Workers shall not work from the top two rungs of a ladder.
6. Don't overreach while on a ladder. It is easier and safer to climb down and move the ladder over a few feet to a new position.
7. Always face the ladder when using it. Grip it firmly and use the three-point contact method when moving up or down.
8. The minimum overlap on an extension ladder should be one (1) meter unless the manufacturer specifies the overlap.
9. Keep both metal and wood ladders, away from electrical sources.

- For further information see the Occupational Health and safety Act, Regulations and Codes of Practice.

USE OF STEP LADDERS .23

General

As with all ladders, make sure that the stepladder is in good condition and is the right ladder for the job to be done.

Step-ladders are to be used only on clean and even surfaces.

1. No work is to be done from the top two steps of a stepladder, counting the top platform as a rung.

2. When in the open position ready for use, the incline of the front step section shall be one (1) horizontal to six (6) vertical.

3. The stepladder is only to be used in the fully opened position with the spreader bars locked.

4. Tops of step ladders are not to be used as a support for scaffolds.

5. Don't overreach while on the ladder. Climb down and move the ladder over to a new position.

6. Only CSA Standard ladders will be used.

- For further information see the Occupational Health and safety Act, Regulations and Codes of Practice.

1 Always wear proper PPE while erecting scaffold following CSA standard Z797 "Code of Practise Access Scaffold". Wear PPE while working in scissor lift or Zoom boom.

2 Complete a Hazard Assessment and complete either a Safe Work Plan or Safe Work Procedure

3 Consider the work that has to be accessed from the work area. Set up the proper fall protection system so that reaching over the rails is minimized. Do not allow space for a person to fall between the platform and the building

4 Visually inspect the scaffolding making sure all clamps, braces, rails are in place as per the safe job procedure for erecting scaffolding

5 Construct work platform large enough to comfortably work and strong enough to support workers and materials required. Platforms are to have no tripping hazards only tool required for the job should be on the platforms.

6 Access to the work platform should be such that anchor points are easily accessible or that suitable rails are provided to easily step off of the ladder onto the platform.

7 If using a ladder make sure to follow the safe job procedure for setting up extension ladders. Never use a step ladder as a regular ladder.

8 Wear the proper PPE. in this case a harness / lanyard for fall protection unless other measure have been taken such as platforms and suitable rails

DEMOLITION OF STRUCTURES AND CUTTING INTO EXISITING FINISHES (for inspection and investigation purposes)

1. **Perform a Demolition Hazard Assessment.**

2. **Wear appropriate Personal Protective Equipment .**

3. **Never cut into walls, floors or ceilings without checking for live wires, waterlines or communication cables or other services. Shut down any services where there is any possibility of cutting into them with power tools or any conducting tool. Ensure proper Lock out Tag procedures are followed. Communicate with all personnel onsite.**

4. **Cover any equipment, furniture or finishes that may get damaged**

5. **Cover any HVAC or other air supply units that will be affected if any.**

6. **When preparing to demolish an entire structure with heavy equipment .**

a. **Disconnect all services and ensure they are cut away from the structure.**
b. **Make sure the structure is cut free from any remaining buildings.**
c. **Verify the building is empty prior to starting demolition**
d. **Barricade off the entire area to ensure no one wanders into the building.**
e. **Protect nearby areas from flying debris**
f. **Have spotters on both sides of the building to keep everyone clear , and to report any flying debris or other developments .**
g. **Never enter a structure after it is partially demolished.**

7. **Determine the required separation for acceptance of debris at the land fill.**

please note that this is for inspection and investigation purposes only

Delmar Construction Ltd Task Hazard Assessment

Location: 305 Main St

Date: 11/08/2021

Supervisor: Mark Bourque Inspected by Nathan Muise

Page 1 of 1

Severity: 1)Highest 2)Medium 3)Moderate 4)Low

Program Requirement		Access / Egress Hazards	Overhead Hazards
1. Manual	Truck	15. Aerial Lift (fall arrest, inspected)	27. Barricades / Signs in place } barricade holes / weak flooring
2. Fire Extinguisher	Truck	16. Scaffold (inspected tagged)	28. Hole coverings identified
3. First Aid Kit	Truck	17. Ladders (tied off)	~~29. Harness / lanyard inspected~~
4. Emergency Plan		18. Hoisting equipment	~~30. Tie-off point identified~~
5. Safety Committee needed	NO	19. Excavation	31. Falling items
6. All PPE as needed	Yes	20. Confined Spaces	~~32. Hoisting overhead~~
		21. Trenching	~~33. Roof Pitch~~
Environment Hazards		23. Public Access	34. Others working overhead
7. Work area clean	NO		
8. Noise in area	Yes	**Personal Limitations**	**Equipment**
9. MSD sheets on site	NO	23. Safe Work Practices	ACM, lead, Feces	~~35. Mobile Equipment~~
10. Waste Containers	N/A	24. Potable Water	Truck	~~36. Vehicles~~
11. Other Trades on site	N/A	25. Facilities	N/A	~~37. Tools inspected~~
12. Weather Conditions / Temps	N/A	26. Appropriate Training	Yes	~~38. Ladders~~ 6' ladder
13. Lighting	Poor			~~39. Job Procedures~~
14. Infectious Control	Feces			40. Electrical Cords

Equipment, Tools Materials, Conditions	Potential Health and Injury Hazards	Priority	Required Action	Responsibility	Date Completed
- Feces	infection	1	PPE	everyone	11/08/2021
- asbestos	respitory issues	1	PPE - samples	Nathan	11/08/2021
- house keeping	debris	1	due diligence	everyone	11/08/2021
- lead * possible	debris	1	PPE - Samples	Nathan	11/08/2021
- South west corner floors unstable	falling	1	Place barricades	everyone	11/08/2021
- test holes	cut, working off ladder, asbestos, lead,	1	PPE	everyone	11/08/2021

Priority Legend 1) Now 2)48 hours 3)1 week 4) ASAPracticle

Nathan Muise Nicholas Collins [illegible] Mark Bourque Owen Landry

Pre-demolition investigation to take place at 303-305 and 307-309 Main St, Yarmouth, Nova Scotia

ASBESTOS SAMPLING

Delmar Construction will inspect /collect asbestos samples of all building materials that predate 1992 and have the samples analyzed by an environmental hygienist to determine if the building materials contain asbestos. Attached is a copy of our SAFE JOB PROCEDURE for asbestos/lead sampling

Building materials of concern are but not limited to:

- *Plaster*
- *Drywall joint compound*
- *Ceiling tiles*
- *Floor tiles*
- *Linoleum*
- *Insulated pipe wrap*
- *Roofing materials*
- *Exterior/interior wall insulation(ex. Vermiculite)*

LEAD PAINT SAMPLING

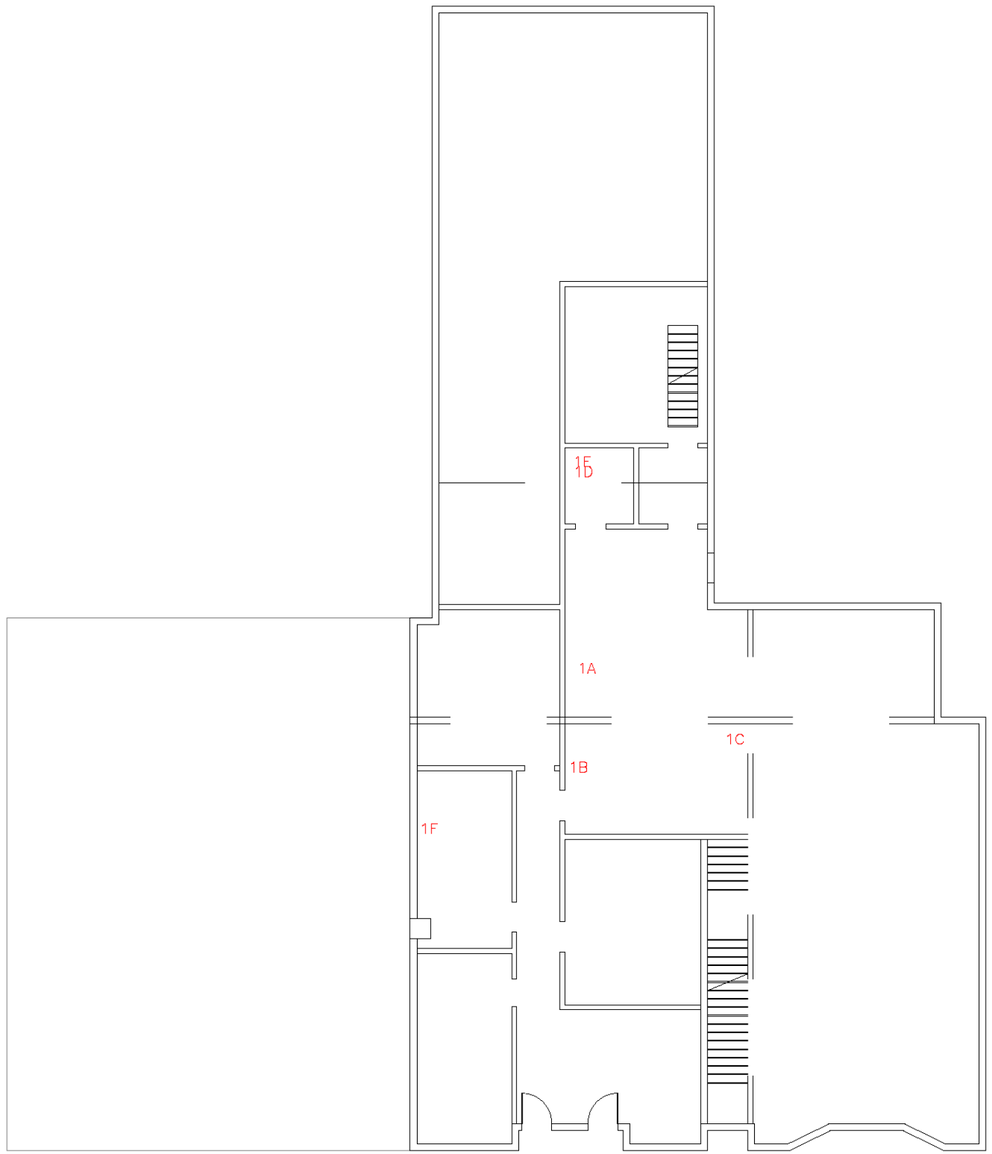
While asbestos is of concern there are other airborne hazards to take into consideration such as lead paint, the removal process for lead paint is very similar to that of an asbestos abatement. Delmar Construction will collect samples of any paint of concern and have these samples analyzed by an environmental hygienist

AIR QUALITY

Air quality in the two buildings has been compromised due to:

- *Possible asbestos airborne particles from debris left from previous demolition of the interior*
- *Excessive pigeon feces*
- *Mold growth from moisture/flooding*

Appendix 2 – Sample Locations



General Notes

No.	Revision/Issue	Date

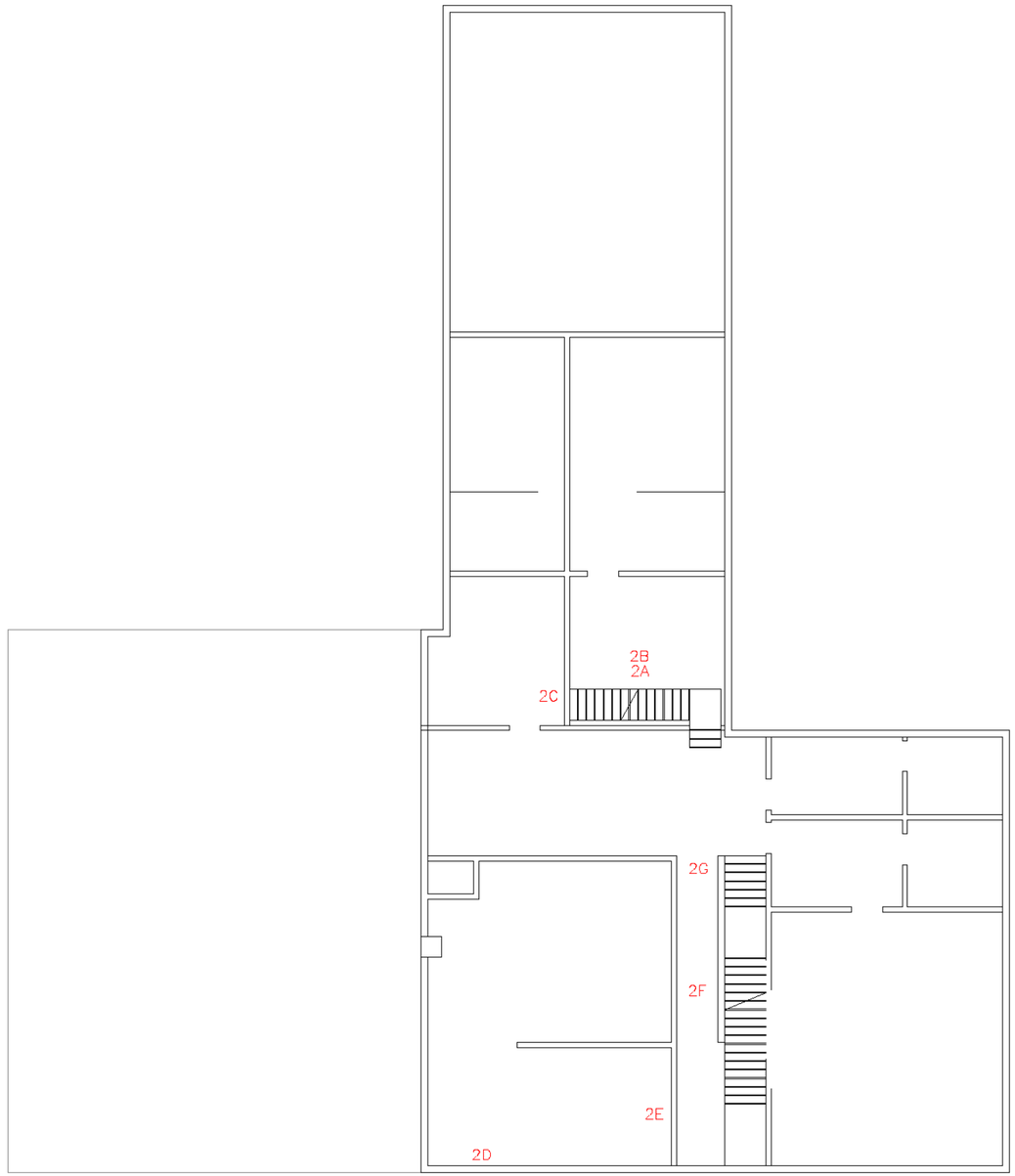
Firm Name and Address

Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address

305 Main Street
Sample Locations –
First Floor

Project	Sheet
Date	A1
Scale	



General Notes

No.	Revision/Issue	Date

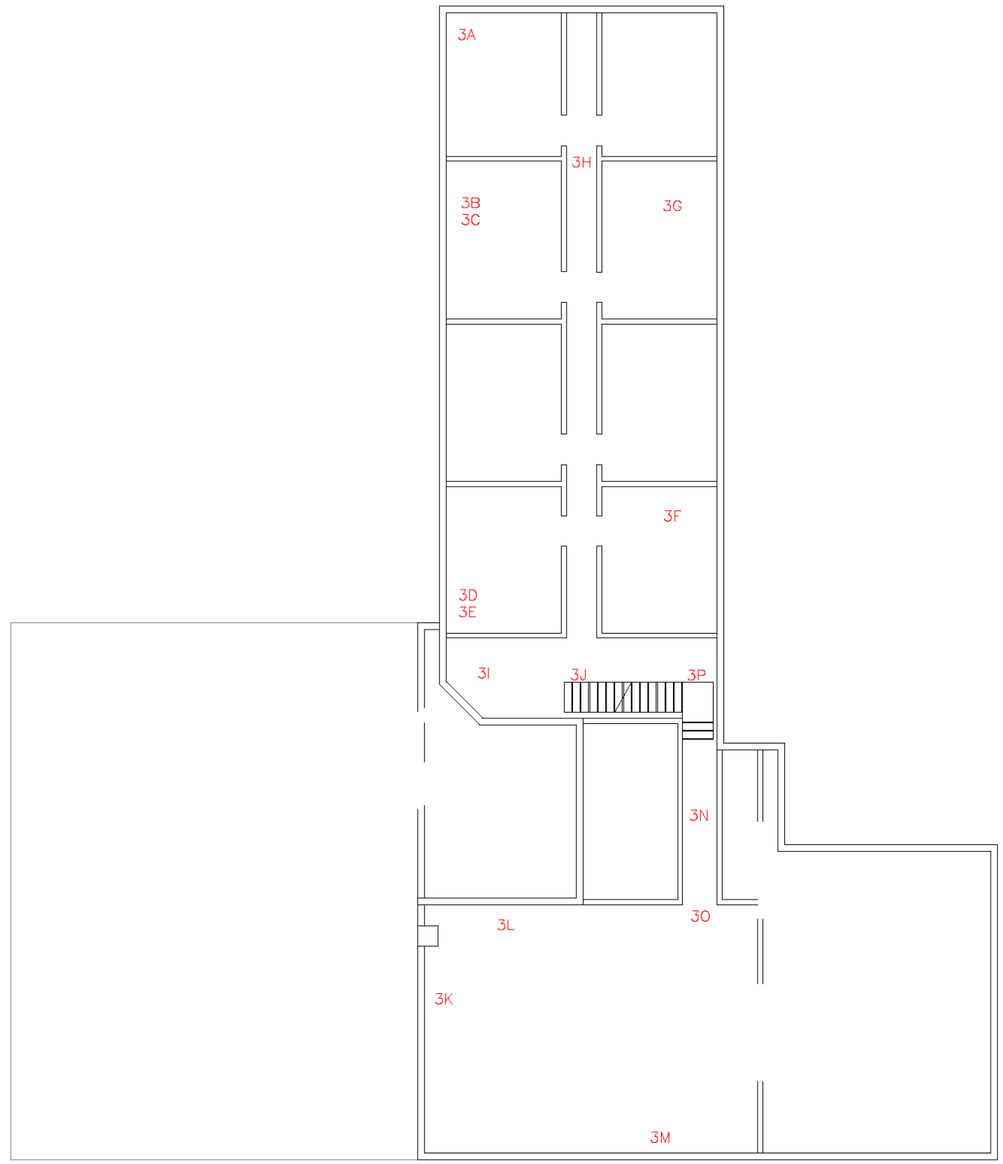
Firm Name and Address

Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address

305 Main Street
Sample Locations –
First Floor

Project	Sheet
Date	A2
Scale	



General Notes

No.	Revision/Issue	Date

Firm Name and Address

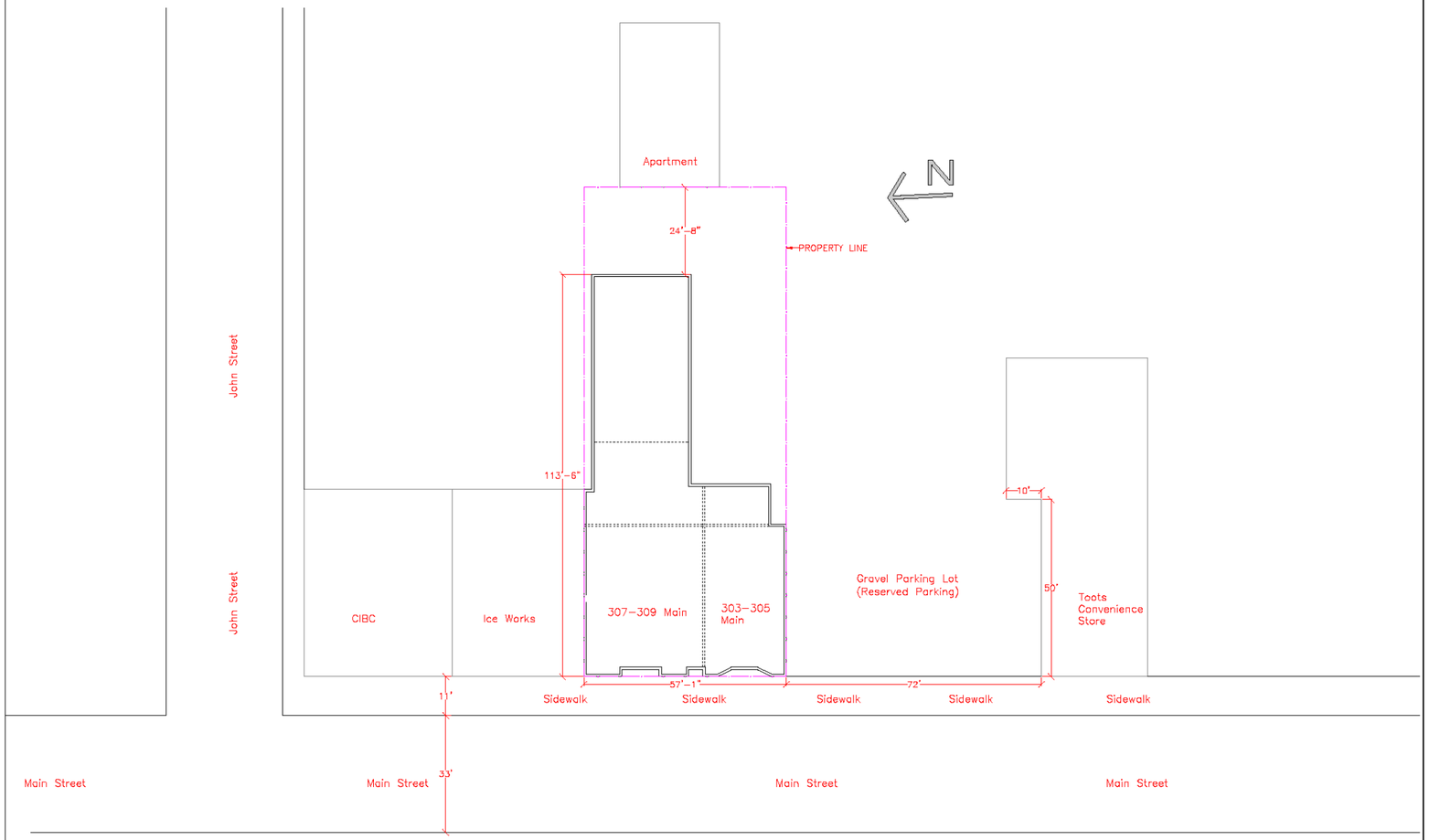
Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address

305 Main Street
Sample Locations –
First Floor

Project	Sheet
Date	A3
Scale	

Appendix 3 – Site Plan



General Notes

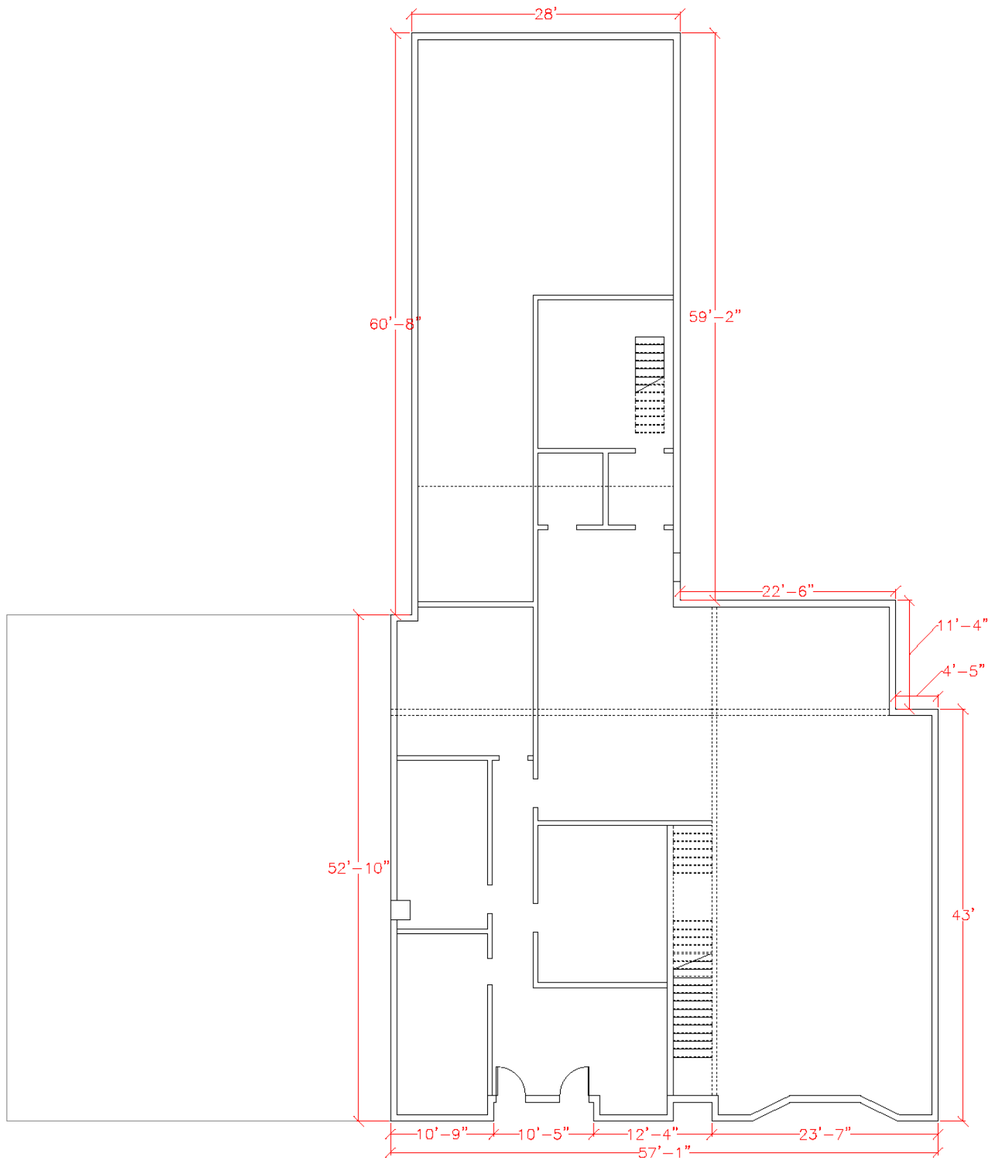
No.	Revision/Issue	Date

Firm Name and Address
Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address
305 Main Street
Site Plan

Project	Sheet
Date	A8
Scale	

Appendix 4 – Building Plan



General Notes

No.	Revision/Issue	Date

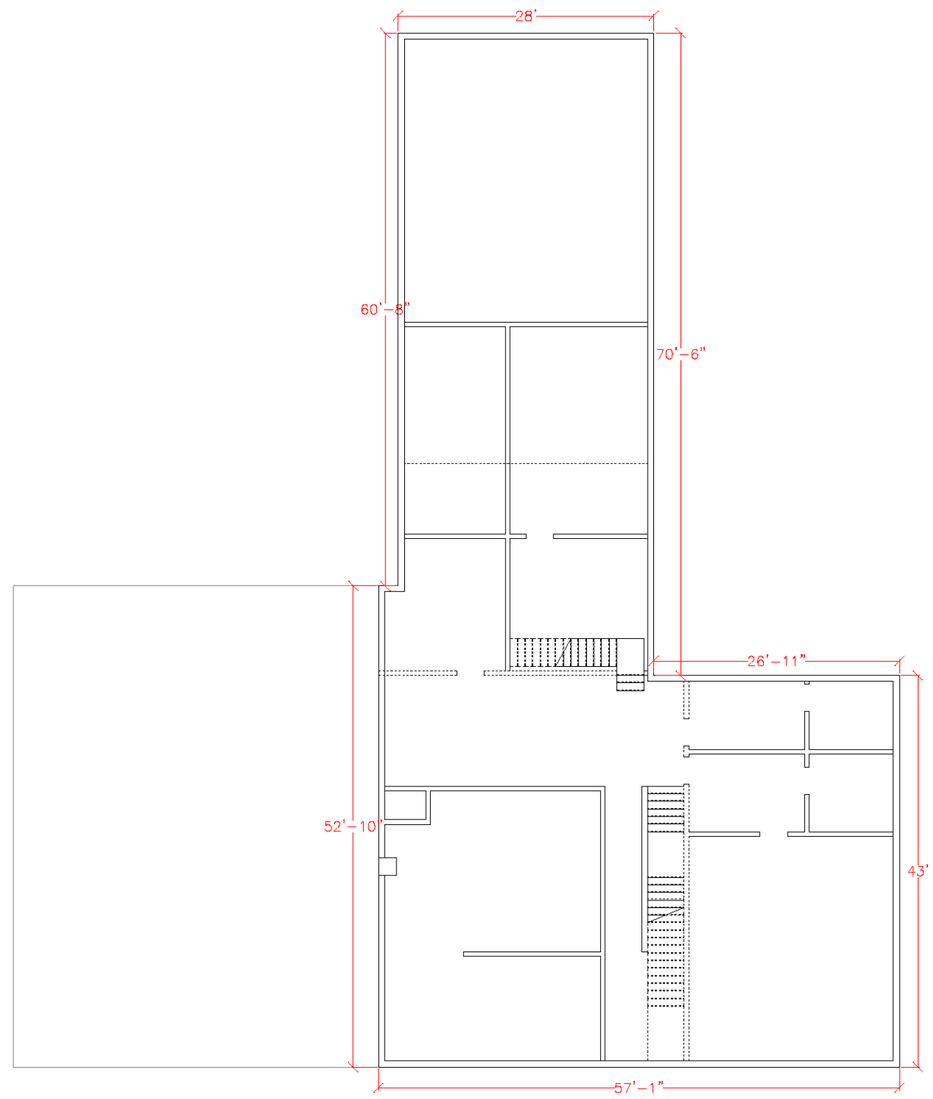
Firm Name and Address

Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address

305 Main Street
First Floor Plan

Project	Sheet
Date	A4
Scale	



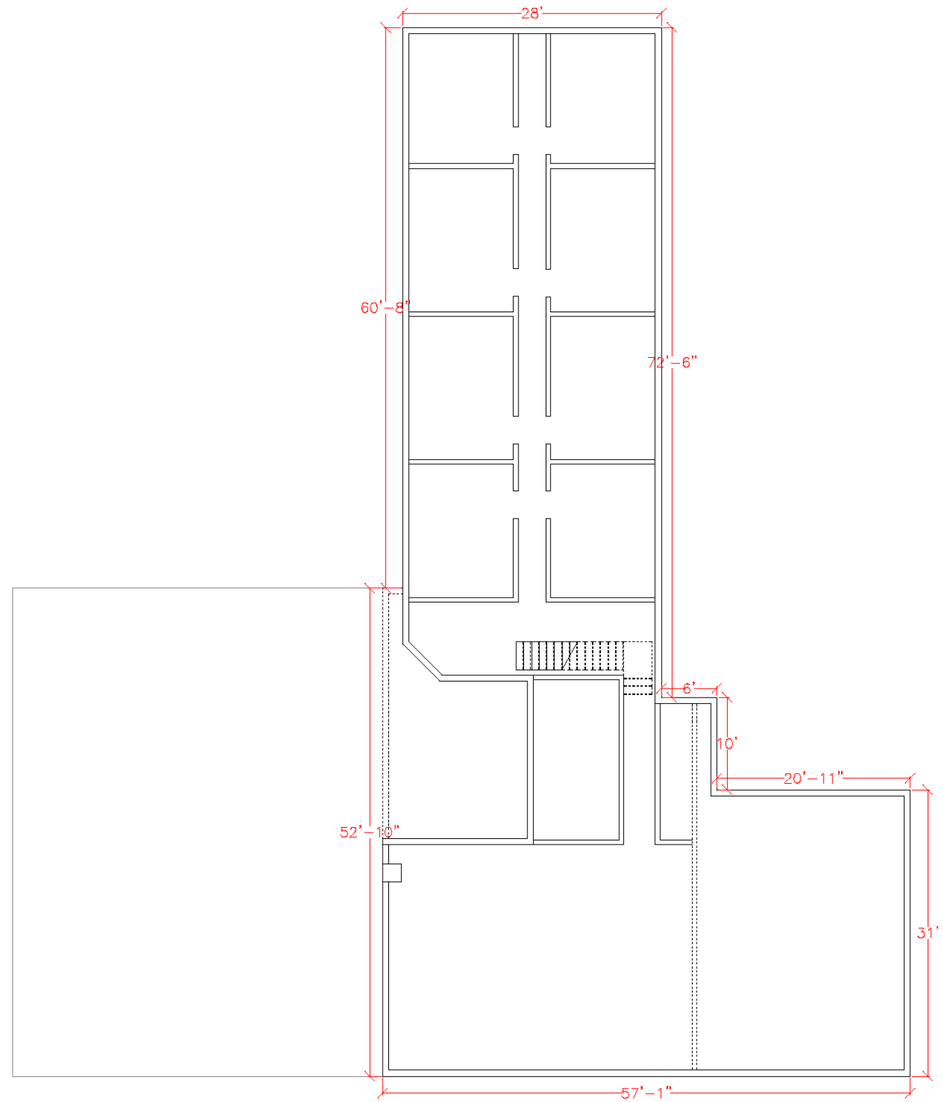
General Notes

No.	Revision/Issue	Date

Firm Name and Address
Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address
305 Main Street
2nd Floor Plan

Project	Sheet
Date	A4
Scale	



General Notes

No.	Revision/Issue	Date

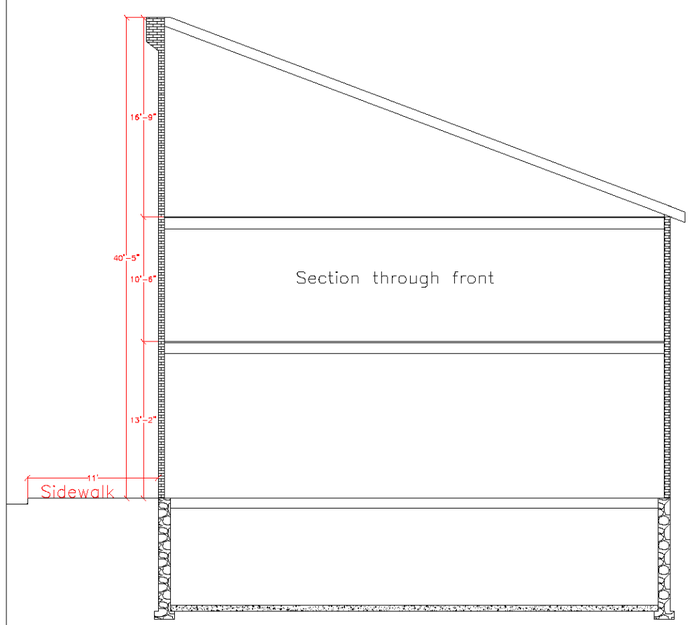
Firm Name and Address

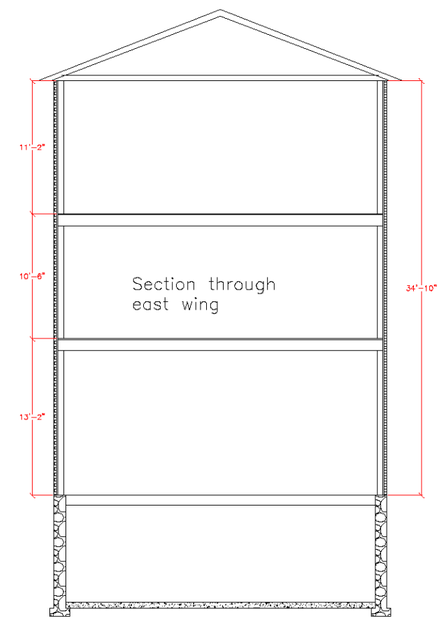
Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address

305 Main Street
3rd Floor Plan

Project	Sheet
Date	A6
Scale	





General Notes

No.	Revision/Issue	Date

Firm Name and Address
Delmar Construction
77 Parade St.
Yarmouth, NS

Project Name and Address
305 Main Street
Sections

Project	Sheet
Date	A7
Scale	

Appendix 5- Inspection Reports of Spring 2021

Delmar Construction Limited

77 Parade St., Suite 1, Yarmouth, N.S. B5A 3B3
tel – (902-742-4672) fax – (902-742-7271)
E-mail delmar.con@ns.sympatico.ca

Apr 21, 2021

Natalie Smith
Director of Planning
Town of Yarmouth.

Regarding: 305 Main St. Roof-Structure Inspection

Nick Cottreau, EIT and I completed a visual inspection of the structure at 305 Main Street Yarmouth on Wednesday April 14th, 2021.
We navigated our way through the darkness and extreme debris to the roof by climbing through a window onto a portion of the roof. We were then able to walk around and see the entire roof.
The south west portion of the roof had been covered with a tarp at some point in the past but had since completely deteriorated leaving only wood straps to hold it down. This would indicate that the roof had leaked possibly years ago and ever since the tarp had disintegrated. It was very evident that this area was leaking. The structure also had a very noticeable sag across its with of 37 feet. The sag was not measured but would be estimated to be 4 to 6 inches.
The roofing material in this area is in very poor shape. The eastern portion of the building had been re-roofed in recent years and appeared in good condition.

We then proceeded down one level to the 3rd floor level. Water damage was very obvious bellow the above described south west portion of the roof. The Floorboards were rotted to a point where we could see into the floor structure. The floor joist were at least partially rotted from what little could be seen.
The structure in this area would be very questionable as to whether it could support any occupancy loadings. The structure was sagging in a similar manner and orientation to the roof just above.

We then proceeded down to the second level. The same sag was observed in the south west portion, in the same area that the sag was observed above. Water from the roof leak was also penetrating down to the second level, but there was too much debris and bird feces to observe the surface of the second floor.

We then went down to main St. level of the south west portion of the building. A large portion of the main floor structure had been removed, exposing the basement level. Some of the remaining floor joists have broken and sagged down into the basement. It was difficult to tell if this was due to rot or excessive loading or both. The Structure was shored with 6x6 timbers and laterally braced. The main wood beam in the basement was shored with 6x6 lumber and a hydraulic jack. There was a steel column located around the center of the missing floor structure. It had compressed its supporting member by about 4” causing the column and all of the 3 levels of structure to sag that same 4” or so. The compression that occurred appears to be due to rot in the wood frame that would have been caused by years of water infiltration. This was quite alarming to witness. The

first reaction was to realize that the entire structure supported by this single steel column could have come crashing down on to the demolition crew prior to shoring being put in place.

Even with the shoring in place it seems that the main steel column and its wooden support beam is propped up by a hydraulic jack. Collapse is avoided only by the performance of this hydraulic jack. A hydraulic jack should not be used as a permanent structural component. A permanent structural solution should replace the jack immediately.

The building was a construction safety disaster. Multiple safety hazards include open stair wells, mould, nails projecting out of wood debris, extreme amounts of bird feces. That is just to name a few.

The building is in the process of being stripped of its interior finishes, but most has just been left on the floor. In many areas the debris has been scattered for years including matrasses, plaster etc.

The south east portion of this structure is in very poor shape. As it stands today It is a safety hazard to any occupants including construction workers. In order to rebuild and repair this structure, a plan must be developed by a competent person to further shore the structure to provide adequate support so that the steel and wood frame can be raised safely back in place. This plan should include an analysis of the structure to determine what must be added or reinforced in order to support the loads applied by the new occupancy. This applies to the entire structure. This plan must be executed before any further interior demolition occurs and prior to next possible heavy snow loads.

A plan to replace the hydraulic jack must be done immediately. If the hydraulic jack failed, it is possible that the building could partially collapse onto the sidewalk, street or adjacent property. Once the hydraulic jack is replaced with suitable structure, I do not believe the building is in imminent danger of collapse at least until the next substantial snow load. The sidewalk should be closed to pedestrians and parking restricted on Main Street until the Hydraulic Jack is eliminated.

Our inspection was concentrated in the south west portion of the structure, but the plan mentioned above must include the entire structure since this property is made up of several different structures that are linked together.

The person that opened the door for our entry the day of the inspection was an employee of the building owner and he stated that it was the intent to create 8 residential units in this building.
It is my experience that a remedial plan as described above will be costly and it is possible that it may not be economically feasible to repair/reinstate this structure for the purpose of housing 8 residential units.

Glen Muise (Yarmouth Town building inspector) had originally asked Delmar Construction limited to see how much it would cost to repair the roof structure and roof. It is my opinion that the roof structure or roofing cannot be safely repaired without first reinstating all support structure on the lower levels.
Doing any work on the roof structure will further compromise the lower support structure.

It is my opinion that it will not be economically feasible to salvage the South west portion of the building. The remainder of the building would require some cost analysis of a remedial plan versus demolition.

Mark Bourque

Delmar Construction Limited

77 Parade St., Suite 1, Yarmouth, N.S. B5A 3B3
tel – (902-742-4672) fax – (902-742-7271)
E-mail delmar.con@ns.sympatico.ca

June 2, 2021

Natalie Smith
Director of Planning
Town of Yarmouth.

Regarding: 305 Main St. Eastern exterior wall inspection.

On June 2nd Nick Cottreau and I inspected the eastern facing exterior wall of 305 Main St.

We observed several cracks in the 3 storey brick structure .-Some were reported by Glen Muise as being relatively recent and some had been existing for years.
We were only able to inspect the exterior of the building from ground level. We were able to view the construction components of the wall from the interior of the third level only.

From the interior we could see the back side of the exterior sheathing. The sheathing was in very poor condition. In some locations it was rotted enough to have fallen away and exposed the back side of the brick veneer. The Brick veneer was one single course of brick on the third level and it appears to be one thickness veneer all the way from ground level to the top of the third level.
Some of the brick ties had become exposed where the sheathing was missing.(See photo).
The ties where galvanized and in relatively good shape, but the nails fastening them to the sheathing were completely rusted.

As a result of our inspection, we determined that at least the eastern third level exterior sheathing is decayed to a point of offering no structural value. The nails fastening the brick ties are corroded beyond any use on the third level. These nails should have been galvanized or Stainless steel to avoid corrosion. It is safe to assume that all the nails fastening the ties on this wall are corroded beyond any effectiveness on all three levels of the easterly wall.

As a result of the corroded nails and sheathing, the brick is now free standing since it is not tied to the wood structure. It is industry standard for the brick to be supported by the main building structure. In this case it was wood sheathing and studs. Therefore, the brick is in danger of collapsing during any substantial wind loading or pressure of any kind.

The third level of the easterly building itself has no lateral stability due to the fact that the sheathing is rotted and there was no other lateral bracing found within the walls in this area. This means the entire eastern end of the structure is unstable at least on the third level. In a high wind, the eastern wall of the building would not be able to adequately transfer the wind forces from the walls to the foundation. No other lateral bracing measures were found on the third floor in the eastern part of the building.

The floor structures would offer some lateral stability, but it is not enough to safely stabilize this structure during heavy wind loads.

The laths and plaster would have offered a small amount of lateral bracing, but it has since been stripped from all walls on the third level.

It is my opinion that the easterly facing wall is in danger of at least a portion of its brick veneer collapsing in a wind event. I also believe the third level is in danger of heavy structural damage during a wind event. The first and second level were not accessible on the day of inspection, but I would be very concerned that the same condition exist on these levels since the water entering through the brick veneer can run all the way down to ground level and rot the sheathing and nails on these levels as well.

Mark Bourque

c.c. Jeff Gushue CAO, Glen Muise Building Official

Appendix 6 – Asbestos Report

August 14, 2021

Delmar Construction
77 Parade St
Yarmouth, NS

E-Mail: avery.a@ns.sympatico.ca

Re: Sample Analysis Results

Here are test data for sample(s) that you collected for analysis for asbestos content by light microscopy method EPA 600/R-93/116.

Sample Label	Description	Friable	Asbestos Content
3-G	Flooring	no	No asbestos detected
3-B	Flooring	no	No asbestos detected
3-I	Flooring	no	No asbestos detected
2-G	Paper	yes	No asbestos detected
3-E	Plaster	yes	No asbestos detected
2-A	Flooring	no	No asbestos detected
3-A	Plaster	yes	No asbestos detected
3-P	Flooring	no	No asbestos detected
3-D	Plaster	yes	No asbestos detected
3-F	Plaster debris	yes	No asbestos detected
3-K	Plaster	yes	No asbestos detected
1-F	Plaster	yes	No asbestos detected
3-M	Plaster	yes	No asbestos detected
2-F	Plaster	yes	No asbestos detected
3-H.11	Plaster	yes	No asbestos detected
3-N	Flooring	no	No asbestos detected
2-D	Fibreboard	yes	No asbestos detected
3-A.2	Plaster	yes	No asbestos detected
3-C	Flooring	no	No asbestos detected
2-C	Flooring	no	No asbestos detected
2-E	Flooring	no	No asbestos detected
1-B	Drywall joint filler	yes	No asbestos detected
1-D bath	Drywall joint filler	yes	No asbestos detected
1-E back room to basement	Plaster	yes	No asbestos detected
2-B	Fibreboard	yes	No asbestos detected
1-A	Drywall joint filler	yes	No asbestos detected
1-C	Drywall joint filler	yes	No asbestos detected

Design1 Indoor Environmental Inspections
20B – 780 Windmill Rd, Dartmouth, NS, B3B 1T3
902-539-0606 • www.design1environments.ca

1. Limit of detection – 0.1%. Reported concentrations based upon microscopical examination.
2. As per Nova Scotia Department of Labour and Advanced Education – "Asbestos containing material" means a material identified by an appropriate laboratory analytical method (e.g. EPA 600/R-93/116, NIOSH 9000, or NIOSH 9002) to contain at least 0.5% of any type of asbestos, and vermiculite that is identified to contain any amount of asbestos using EPA method 600/R-04/004 if other analytical methods do not identify the presence of asbestos.
3. Note that plaster (which was normally mixed on-site) tends to be non-homogenous with respect to asbestos concentration. Samples collected adjacent to each other may be of different composition in terms of asbestos content. Plaster basecoat in the same building originating from the same mix may have asbestos content of 0.5-2%, to just above the limit of detection but not above 0.5%, to none being detected; as well, more than one type of plaster may be present in a given building.

Results on the sample submitted for lead testing will follow under separate cover.

We trust the enclosed report is to your satisfaction. If you require additional information, please contact the undersigned.

Design1 Indoor Environmental Inspections

Kim W. Strong, M.Sc.
kim@design1environments.ca

Appendix 7 – Lead Report

August 26, 2021

Delmar Construction
77 Parade St
Yarmouth, NS

E-Mail: avery.a@ns.sympatico.ca

Re: Sample Analysis Results

Here are test data for sample(s) that you collected for analysis for lead content. The sample was analysed by AGAT Laboratories in Dartmouth.

The lab report is attached, and data are summarised below.

Sample Label	Description	Lead content (mg/kg)	Guideline (mg/kg)
3-0	Paint	6460	1000

We trust the enclosed report is to your satisfaction. If you require additional information, please contact the undersigned.

Design1 Indoor Environmental Inspections

Kim W. Strong, M.Sc.
kim@design1environments.ca

AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 21X788347

PROJECT:

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
http://www.agatlabs.com

CLIENT NAME: DESIGN1 INDOOR ENVIRONMENTAL INSPEC

SAMPLING SITE:

ATTENTION TO: KIM STRONG

SAMPLED BY:

Lead In Paint (ICP-OES)

DATE RECEIVED: 2021-08-16 **DATE REPORTED: 2021-08-25**

		SAMPLE DESCRIPTION:		Delwar 3-0
		SAMPLE TYPE:		Paint
		DATE SAMPLED:		
Parameter	Unit	G / S	RDL	2866212
Lead In Paint	mg/kg		10	6460
Total Sample Mass	g			0.415

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
Analysis performed at AGAT Halifax (unless marked by *)

Certified By:

AGAT Laboratories

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: DESIGN1 INDOOR ENVIRONMENTAL INSPEC
PROJECT:
SAMPLING SITE:

AGAT WORK ORDER: 21X788347
ATTENTION TO: KIM STRONG
SAMPLED BY:

Soil Analysis

RPT Date: Aug 26, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Lead in Paint (ICP-OES)															
Lead in Paint	2849416	2849416	8040	8040	0.0%	< 10	120%	80%	120%	101%	80%	120%	81%	70%	130%

Certified By:

AGAT Laboratories

11 Morris Drive, Unit 122
Dartmouth, Nova Scotia
CANADA B3B 1M2
TEL (902)468-8718
FAX (902)468-8924
http://www.agatlabs.com

Method Summary

CLIENT NAME: DESIGN1 INDOOR ENVIRONMENTAL INSPEC

AGAT WORK ORDER: 21X788347

PROJECT:

ATTENTION TO: KIM STRONG

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Lead in Paint	MET-121-6103 and MET-121-6113	SM 3120B	ICP/OES
Total Sample Mass			

AGAT Laboratories

Unit 122 • 11 Morris Drive
Dartmouth, NS
B3B 1M2
webearth.agatlabs.com • www.agatlabs.com

Chain of Custody Record

P: 902.468.8718 • F: 902.468.8924

Report Information
Company: Design 1
Contact:
Address:
Phone: Fax:
Client Project #:
AGAT Quotation:

Report Information (Please print)
1. Name: Kim STRONG
Email:
2. Name:
Email:

Report Format
☐ Single Sample per page
☐ Multiple Samples per page
☐ Field Form Included
☐ Export

Laboratory Use Only
Arrival Condition: ☐ Good ☐ Poor (see notes)
Arrival Temperature: 21.2
Hold Time:
AGAT Job Number: 21X788347
Notes:

Turnaround Time Required (TAT)
Regular TAT ☒ 5 to 7 working days
Rush TAT ☐ Same day ☐ 1 day ☐ 2 days ☐ 3 days
Date Required:

Regulatory Requirements (Check)
☐ Lis. Guidelines on Report ☐ Direct. Guidelines on Report
☐ PIRI
☐ Tier 1 ☐ Res ☐ Pet ☐ Coarse
☐ Tier 2 ☐ Com ☐ IN/Pet ☐ Fine
☐ Gas ☐ Fuel ☐ Lube
☐ CCME ☐ NCWQ
☐ Industrial ☐ NSEQS Conc Sites
☐ Commercial ☐ HRM 101 ☐ Storm Water
☐ Rec/Park ☐ Waste Water
☐ Agricultural
☐ FWAL
☐ Sediment ☐ Other

Drinking Water Sample: ☐ Yes ☐ No Salt Water Sample ☐ Yes ☐ No
Reg. No.:

Invoice To Same Yes ☐ / No ☐
Company:
Contact:
Address:
Phone: Fax:
PO/Credit Card#:

Sample Identification	Date/Time Sampled	Sample Matrix	# Containers	Comments - Site/Sample Info. Sample Containment	Field Filtered/Preserved	Sample Matrix Visual Inspection	Metals - Total Available	Mercury	CCME	pH	TSS / TDS	Lab	Total Phosphorus	Chloride	Total Metals (Hg, Fe, Mn, Cu, Zn, Ni, Pb, Cr, Cd, Al, As, Se, Ag, Sb, Ba, Be, B, Co, Li, Mo, Sn, Tl, V)	Total Petroleum Hydrocarbons	CCME CWS TPH/BTEX	NH3	TKN	NO3	NO2	FCB	TC - EC / FC - MPN / HPC	Recalcitrant C - MPN - All	Metals	Chem. Lab	Metals - NVR
Delivery 3-0		Plant																								X	

Sampled/Relinquished By (Print name)	Date/Time	Received by (Print name)	Date/Time	Pink Copy - Client / Yellow Copy - AGAT / White Copy - AGAT	Page of
Kim STRONG	16 Aug 11:48		Aug 16 2021 11:50		NP: 70233

Page 4 of 4

Appendix 8 – Tender Invitation

1 - Preface

The Town of Yarmouth has contracted Delmar Construction Limited to manage the demolition of a decaying building on Main Street in downtown Yarmouth, Nova Scotia. The demolition was prompted by concerns over the structural integrity of the building, following 2 inspections carried out in the spring of 2021.

The building, hereafter referred to as 305 Main Street, encompasses properties from 303 Main Street to 309 Main Street. The property number is PID 90197799.

See attached pre-demolition report for a full detailed writeup of the current building condition.

2 - Bidding

Demolition contractors will be invited to bid the demolition project on 305 Main Street. The tender shall be by invitation only. **The bids must be received by 09:00 AST on September 2nd, 2021**. Bids will be examined at Delmar Construction's office at 09:30 AST on September 2nd, 2021. Bidders must fill out the attached bidding form and include all required documents. **All interested bidders must confirm their interest by August 20th, 2021.**

The successful bidder will be notified shortly thereafter of the award.

3 - Scope of Project

All bidders must provide a lump sum price for the following work:

- Safe and controlled demolition of the building at 305 Main Street
- Sorting and removing debris from the site
- Trucking to landfill
- Landfill tipping fees shall <u>not</u> be included in bid. Tipping fees will be taken care of by others.
- Disposal of debris in accordance with any applicable landfill regulations
- Excavation and removal of the foundation walls and footings (see attached pre-demolition report for exceptions, Section 3.1.2)
- Backfilling of excavated area in layers and compaction to 100%
- 4" topping of class A gravel and grading of site
- Reinstatement of any damaged neighbouring infrastructure (e.g. sidewalks, roads, buildings, parking lots, etc.). If the Ice Works building envelope require upgrading due to the demolition, this work shall be done by others.
- Capping of all town services for the building (sewer and water)
- Disconnection and capping of power service in accordance with NS Power
- Work with Delmar Construction and Town of Yarmouth to develop all required safety plans and demolition plans
- Work with Delmar Construction and Town of Yarmouth to determine hoarding/fencing. Hoarding & fencing shall be by others
- Lead contaminated materials will be accepted at the local land fill. Appropriate measures should be taken in handling & trucking lead contaminated materials.
- Development of a Hazard Assessment 2 weeks prior to beginning Demolition
- Developing a Covid-19 protocol site specific for the job

The attached demolition report provides guidance as to how some of the above items should be treated. The report should be used as a guide when pricing. It is encouraged to read the report in its entirety to become familiar with the scope of the job. Bidders should carefully examine Section 3 of the report, as it highlights some of the important obstacles that must be planned well in advance of beginning demolition work.

4 - Site Visit

One official site visit shall take place with all of the interested bidders. A fixed date is yet to be determined and will be based on the availability of bidders (tentative date to be August 23rd).

Additional site visits may be arranged by request, at any time throughout the business week. Contractors should not enter the building except if accompanied by one of Delmar Construction's employees. The deadline for arranging site visits shall be 09:00 AST on August 31st, 2021.

5 - Contact & Questions

Primary contact for this job shall be the following:

Nicholas Cottreau, EIT
Delmar Construction Limited
77 Parade Street, Yarmouth, NS
Office: (902) 742-4672
Email: nick@delmarconstruction.ns.ca

All questions must be submitted by email, no later than 09:00 AST on August 31th, 2021. An addendum answering all questions will be issued on this day and sent to all bidders.

Note: Approximately 120 additional photos of the building (interior and exterior) are available and can be made sharable upon request.

6 - Required Information

In addition to submitting the attached bid form, bidders must also submit the following:

1. All bidders must provide a copy of Liability Insurance in the amount of $5,000,000.
2. Workers Compensation Clearance Letter
3. Letter of Good Standing with Nova Scotia Construction Safety Association
4. Project timeline (It is desirable to have the building torn down before there is a significant chance of snowfall)

7 - Payment

Invoices should be submitted monthly and will be paid within 15 days.

8- Addendum 1 2021-08-27

In addition to Addendum 1, see updated pre-demolition report, updated and dated 2021-08-26. Updated sections of the report are mentioned below.

8.1 Tipping Fees

Following a discussion with contractors, tipping fees are no longer to be included in the bid. This has been changed in the interest of the town, as it will lower bid costs by eliminating uncertainty. Tipping fees will be taken care of by others. Contractors must still include trucking to the landfill.

However, while tipping fees are not included in the tender, it is not an excuse to do no sorting at all. It is the Town of Yarmouth's expectation that large timbers, steel, copper, etc would be separated and delivered to the landfill as recyclables and not C&D. There should be a balance of sorting costs and tipping fees at the land fill, to minimize total costs. All debris should be sorted as per Yarmouth County Solid Waste Park Guidelines.

8.2 Liability Insurance

Liability insurance requirements has been changed from $2,000,000.00 to $5,000,000.00.

8.3 Services to building

There is one potable water service to the building, entering from Main Street. The curb stop has now been closed. There is also one sanitary lateral from Main Street. Both of these services are to be capped at the foundation wall. No digging of the street or sidewalks is necessary.

One underground power entrance is located along the Main Street side of the building. There is another overhead power entrance on the north side of the building from the CIBC parking lot & John Street. Both these power supplies should be removed/capped in accordance with NS Power.

8.4 Lead Testing

The lead test results have been received. A section addressing this has been added to the pre-demolition report (Section 2.3.2). Materials containing lead will be accepted at the local land fill as C&D. Appropriate measures should be taken in handling & trucking lead contaminated materials.

8.5 Parking Lot to South

The Town of Yarmouth has advised that the large gravel parking lot to the south of the building can be vacated during demolition and used as a work area as required. Section 2.2.4 in the pre-demolition report has been updated to reflect this information.

8.6 Initial Site Visit

An initial site visit was held on Tuesday, August 24th. Further site visits may be arranged upon request by any contractor. The initial site visit was not a requirement for the bidding of the job. However, all bidders must attend at least one site visit.

Form of Quotation

Below is the bid for the Demolition project of 305 Main Street, Yarmouth, NS. Included in the bid are all items described in the document "Tender Invitation for the Demolition of 305 Main Street", dated 2021-08-27.

Sub Total of completed project $_____

Add Harmonized Sale Tax (15%) $_____

Project Total Price $_____

The bidder acknowledges they have received and reviewed the following addendums:

Addendum # _____ Dated: _____

Addendum # _____ Dated: _____

Signature:

Dated this _____ day of _____ 202_____

_____ _____

Name of Firm Proposing Address

_____

Signature of Signing Officer

Appendix 9 – Official Site Meeting Summary

Official On-Site Meeting for 305 Main Street

Date & Duration
Tuesday, August 24th, 2021
On site from 12:45 to 14:00 AST.

Members present
RD Harris
Verhegan Demolition
Delmar Construction (Nick Cottreau)
Town of Yarmouth (Marc Brophy)

Scope of site visit
Both contractors were given a guided tour by Nick Cottreau from Delmar throughout the building. The basement, all 3 floors, and the roof were visited. All 3 investigation holes were shown. A walk-around of the perimeter of the building was also preformed, highlighting all critical areas, and neighbouring properties.

Proposal to remove tipping fees from tender scope
By suggestion of both contractors on site, it would be in the towns interest to remove tipping fees from the tender scope. It will be the demolition contractor's responsibility to truck debris to the land fill, but all tipping fees will be billed to Delmar.

Sewer and water services
Both contractors requested further information on the services that supply the building. Would it be possible to get a plan of the sewer & water services and their entry points into the building? We'd also like to know where the shutoff/curbstop is in order to plan the demolition out. Furthermore, it is to confirm that the capping the services just on the inside of the foundation wall facing Main Street will be sufficient, since we are leaving that foundation intact 6" below finish grade.

Parking lot to the south
Marc mentioned that the parking lot to the south can be vacated and used during the demolition process. This was confirmed following the meeting and added in the tender addendum.