Letter of Intent for Demolition of Single Family Home And Construction of New Single Family Home at 114 N Blount Street, Madison, WI 53703

March 28th, 2022

Planning Division City of Madison Department of Planning & Community & Economic Development 215 Martin Luther King Jr. Blvd., Ste 017 Madison, Wisconsin 53703

Applicant and Owner: Gregory Werth 1210 Troy Drive Madison, WI 53704

Introduction:

I purchased this vacant home in December of 2021 with the intentions of fully restoring it back into habitable condition. The current structure was built in the 1850's, and moved to this location in the 1920s. There have been multiple additions to the original structure since that time. Unfortunately, the house has been neglected for so long that it is no longer possible to save while still resembling a historic house, as so many aspects of the building would need to be replaced to get the home back into safe and habitable condition.

Demolition has never been my intent with any property I have acquired for repair over the years. The preservation of old houses is both my passion and livelihood. I have dedicated my life to preserving old homes, and have saved many houses in Madison over the past decade. I am a home restoration professional. This is the first time I have encountered a house that is truly beyond saving. The building I intend to rebuild in this location will match the general aesthetic of the existing home, and I will save and re-use as many parts of the original home as are feasible.

I spent considerable time and effort removing the interior plaster to begin my rehabilitation efforts, and have uncovered the following issues present in the home:

Building Conditions:

Foundation:

The block wall foundation was built prior to the home's arrival at the site. The foundation was built to the wrong dimensions, and had to be altered prior to the home being seated upon it. In order to make the house and foundation 'match', the top 5 courses of block were offset from the bottom courses, which compromised the bearing strength of the foundation prior to it ever being used. The upper courses of block create a wider footprint that the lower courses of block, which is particularly bad in this instance, as this balloon-framed house is designed to bear on the outer edge of the foundation.

The entirety of the foundation is heavily bowed in from frost-heave as well. Due to improper grading, maintenance and drainage, the freezing of the soils around the home have pushed the foundation in, which has severely compromised what was left of its integrity. The entirety of the block wall foundation would need to be

replaced, and I anticipate from visible step-cracking that the lack of improper footing would have to be addressed as well.

The beams that were intended to support the flooring and roof systems of the original home were never properly supported, as they were cut both upon arrival and with later alterations to the structure. Indeed, the entire center of the home has been wholly unsupported and steadily caving in for at least the past 50 years. At some point, a basement stairwell was added in a location and manner such that the entire main support structure of the home was compromised and destroyed.

At some point in more recent history, the sills of the flooring system were spray-foamed. The foam covers the joist tails and rim boards, which were already rotting due to the moisture levels in the basement, as well as sitting in direct contact with the concrete block wall through capillary action. The spray foam ensured that the moisture was 'locked in' to the lumber, which maximized the speed at which the rotting occurred. I have observed many areas where the entire floor framing system is completely 'turned to dust' from this spray-foam application, and is no longer bearing on the foundation whatsoever.

Framing:

This house was 'balloon framed', which is typical of a house of this vintage. Balloon framing was implemented in the 1800's to speed up the framing process, and is usually not such a bad thing, structurally speaking. However, this home was built without sheathing. Sheathing is absolutely critical in balloon framing, as it typically performs as the sole source of shear strength and often replaces the door and window headers used in conventional framing.

Alternatively, some homes may have used let-in bracing and headers as an alternative to the sheathing process. Again, this house was built without any of this. The house has nothing to keep it standing straight.

Think of it this way: all strength comes from triangles. If you build a stud wall without attaching anything to it, you can convert it from a rectangle to a parallelogram by simply pushing the end of the wall. If you nail a sheet of plywood to the stud wall you create hundreds of triangles (one for every three nails) which will hold the stud wall square. Essentially that is what has happened to this building. Rather than using sheathing to give the exterior walls strength, the original builder attached six inch siding to the stud walls, which does not provide any shear resistance whatsoever.

The house is visibly tipping over and caving in.

Entire interior bearing walls were removed to allow access between existing rooms or new additions. The walls, doorways, and transitions were left unsupported, notably within the original structure. The bearing wall that was meant to bear the 2nd floor and southern eave of the home's main gable has been replaced with no load-bearing features. This condition has existed for at least 50 years, and has added to the sagging and twisting of the center of the home.

Nearly all of the windows, doorways, and general openings of the building were installed without structural support. This is uncommon even in balloon-framed houses of this era. I have mentioned earlier that the home has no sheathing, which would alleviate the undue stress caused by these openings. It cannot be overstated how important of a role sheathing would have played in the longevity and integrity of this home. At this point, it would be dangerous and ineffective to add sheathing, as the house is prone to collapse and would be even more so upon removal of the siding to access the studs to sheathe. Another factor is that the house's lean is so aggressive that

adding sheathing would essentially 'lock in' the home to its current improper and non-plumb position for the remainder of its life.

The home was also built with undersized lumber. The floor joists are sized and spaced such that they are overspanned by many feet. This leads to significant deflection and sagging of the floors and interior support systems. These problems are significant, and immediately visible upon entering the home. The problems have also been exacerbated by the many modifications of the home throughout its life due to improper cutting, boring, notching, and supporting of the undersized joists.

The rafters of the original structure sit upon a single top plate, and are offset from the bearing studs in nearly every instance. In any properly built home, the rafters would be sitting upon a double top plate, which acts as a continuous header, transferring the weight of the roof system and snow loads through the studs and down to the foundation. In this instance, the roof loads have been improperly unsupported since the house was built in the 1850's and the entire roof, wall, and floor loads have been improperly supported on the foundation since the house was moved to this location in the 1920s.

At some point, the original chimney that was built for the home was improperly removed. The chimney had extended from the basement floor up through two stories and above the roofline. Only the lower portions of the chimney were removed on the first floor and the basement. This left the entire top half of the chimney to remain bearing on the second floor, upon a single joist. This was not only extremely dangerous for the occupants, but placed inconceivable stress upon the entire already undersized floor framing system of the second floor. I have removed the remainder of the chimney, but the damage done to the floor framing system remains measurable and visible, and an obvious 'crater' exists in the center of the second floor.

Roof:

The rooflines of this building have many conflicting drainage planes, as the house was improperly added to time and time again. The main purpose of a roof is to shed water. The way the rooflines interact on this structure promotes the pooling and seeping of water, and these conditions have contributed greatly to the building's demise. While perfectly planned and implemented flashing would have alleviated some of these problems, the impact of gravity upon water cannot be overcome. The many leaks that have obviously occurred in various parts of the sagging and unsupported roof were rarely fixed within a reasonable time frame. This has been a major contributor to the moisture levels, rotting, and mold growth in the structure's ceilings, walls, and basement.

Additions:

The house was also remodeled and added to multiple times without any thought toward structural design. The rear kitchen addition was built as a lean-to, and the roof has leaked many times - often for years before repairs were made. The entire floor system of the kitchen addition has been half-heartedly repaired, with no attention paid to structural support. The main bearing beam in the rear center of the house has literally snapped in half from the rot and decay allowed to occur in the kitchen addition. The kitchen floor joists, which had been allowed to rot alongside the roof framing above, have decayed beyond the point of functionality. Indeed, the snapping of the main support beam for the rear of the home has pulled the kitchen addition inward, causing it to separate from the exterior foundation entirely. I believe all this occurred prior to the spray foaming I mentioned in the 'Foundation' section, the application of which has rotted that which was remaining of the kitchen addition at that time. In many instances the original 2x4 exterior wall and ceiling framing have rotted to be pencil thin or non-existent.

Due to the kitchen being built as a lean-to structure, its elevation is roughly a foot lower than the remainder of the house. This is an unusual condition, that greatly impacts the functionality of the home. This problem of elevation is greatly exacerbated by the fact that the rear porch and deck were built to this same unusual elevation. This means that a theoretical re-build of the kitchen would require the demolition of at least half of the remainder of the house to make things normal, functional, and correct.

The rear additions were not properly placed on their foundations either. The rear enclosed porch, which is the newest part of the home, was built upon a pier foundation. I am under the impression that the pier foundation was built for an exterior deck and re-purposed for this additional living space. The foundation is arguable sized for the load it is carrying - however, the load is unbalanced, uncentered, and dangerously cantilevered beyond the foundation's structure. The entirety of the rear enclosed porch was crudely designed and incorrectly placed upon this would-be foundation. Besides being structurally unsound, this has led to significant moisture issues, and has welcomed decades of animal infiltration into the crawl space area.

Perhaps immediately upon arrival of the home to the existing location in the 1920s, an addition was built to accommodate a stairwell accessing the second floor. This stairwell was well built, although it does not meet code for safety or functionality. However, the wall bearing the second floor and roof of the home was altered to accommodate the stairwell with no replacement of its bearing features. This 'original addition' was later extended beyond the foundation in the rear of the home to accommodate a bathroom. The bathroom is 'cantilevered' over the foundation in such a way that is not allowed through traditional structural design.

Perhaps the most egregious 'addition' of all was the interior stairwell into the basement of the home. Originally, the basement was accessed by an exterior hatch, which is still present in the rear of the home. Within the past maybe 70 years, a new 'stairwell' was added in the very center of the building. In order to add this stairwell, a number of floor joists of the original structure were arbitrarily cut and left unsupported. The stairs were placed in the <u>exact</u> location in which the intersecting main support beams of the entirety of the house met. These beams were ruthlessly hacked away for the accommodation of the stairs. The structural nature of the beams was paid no attention to, and was in no way supported for the remainder of the house's existence. The stairs that were added are dangerously steep, crude, structurally unsound, and unusable without going down them in a ladder-like fashion. The entire house is visibly and actively collapsing into the location of this inconsiderately-added stairwell location.

Demolition Standards:

With these circumstances, I am left with the pursuit of demolition, such that a safe home can be built upon this lot. The home I intend to build will have a nearly identical footprint and placement on the lot, albeit a bit skinnier to accommodate a driveway, and taller to accommodate standard ceiling heights and proper joist sizing.

In preparation for the demolition permit application, emails were sent to Alder Brian Benford of District 6, one to the Capital East Business Association, and one to the Tenney-Lapham neighborhood association. I have met with multiple members of the Tenney-Lapham neighborhood association to show them the conditions of the property. Some of those who took the time to view the property have expressed their support in the demolition of the structure.

A Recycling Plan is currently in the planning stages, soon to be submitted to the city recycling coordinator. A summary of the Recycling Intent is as follows:

1) Salvage the porch spindles and supports for use on the replacement structure.

- 2) Salvage the windows and doors that are not yet broken and donate to Habitat Re-Store
- 3) Fluorescent tubes, lamps, mercury thermometers will be recycled per the city's requirements
- 4) Existing concrete and stone will be brought to Madison Crushing for recycling
- 5) Metal will be stripped and sorted for recycling at Alter Metals
- 6) Shingles will be removed and taken to Dane County Landfill separately from other materials

Proposed Development Schedule:

Date of Application: March 28th, 2022 Date of Plan Commission Hearing: May 9th, 2022 Commencement of Demolition: June 2022 Begin Construction: July 2022 Completion of Construction: January 2023

Thank you for your time and consideration of my proposal.

Sincerely

Gragory Uterth

Gregory Werth