



PROPERTY INSPECTION PROFESSIONALS

March 8, 2010

Client  
Client Contact Address

Re: North Dearborn Parkway, Chicago, Illinois 60611

Dear Buyer and Client,

On September 28, 2009, Tomacor completed an inspection of the above referenced premises. Present during the inspection were Tom Corbett of Tomacor Incorporated, the seller, the seller's real estate agent and her assistants.

**Purpose of Inspection:** The intent of the consulting inspection is to visually screen for "exposed to view" readily accessible systems and/or components of the property which may need major repair and/or are "significantly deficient." The observations of the inspector are disclosed to the client in this report. The intent of this report is to comply with the State of Illinois Home Inspection licensing standards 225 ILCS 441.

**In order to comply with the State of Illinois licensing standards the following information is relevant: This was a visually conducted inspection.**

- The building is approximately 100 years old. The property is a single family home.
- The structural components of the building are concrete and masonry foundation, brick walls with an interior wood frame.
- The drain waste and venting system is of copper, plastic and cast iron material.
- The heating is gas forced air and is vented through a plastic pipe.
- The water heater is gas fired and is vented through a metal pipe.
- The unit is equipped with multiple masonry fireplaces.
- The main gas shut off is located at the building's exterior, while the electrical shut off is located in the basement.
- The electrical panel is 400 amps/240 volts and is located in the basement of the building. The wiring methods consist of copper conductors. Conduit is used to distribute the electricity. The copper wire appears to be 400kcmil. The main electrical disconnect is located in the basement.
- The building insulation was not seen or inspected.
- The roof covering is single-ply modified bitumen. The roof structure is wood frame. The roof was inspected by walking it. The pitch of the roof is low slope.
- The attic insulation could not be observed and a vapor barrier was not observed.
- There was no crawl space to observe.

- Smoke detectors are present throughout the unit.

Tomacor, Inc.	Inspector: Thomas A. Corbett	Telephone: 312-475-0835
License # 451.000127	License #: 450.000.450	Expiration Date: 11/2010
333 West North Ave Suite 342	Start time: 8:00AM	Approximate age: 100 years old
Chicago, Illinois 60610	Fees for service: To be determined	Weather: Sunny & Warm

This report is written in compliance with the State of Illinois licensing law 225 ILCS 441.

**The following systems and or components were not inspected:**

<u>Component/System</u>	<u>Reason</u>
<b>Roof top air conditioning (4)</b>	<b>Too cold and did not respond to thermostat setting</b>
<b>Steam equipment (bath)</b>	<b>Limited time</b>
<b>Burglar alarm</b>	<b>Needs repair work</b>
<b>Top floor washer/dryer</b>	<b>Limited time</b>
<b>Roof top heating equipment (RTU)</b>	<b>Did not respond to control</b>
<b>Garage furnace</b>	<b>Gas off</b>
<b>Basement ejector</b>	<b>Other inspector stated it was broken.</b>
<b>Heated bathroom floors</b>	<b>Limited time</b>
<b>Light fixtures</b>	<b>Limited time</b>
<b>Garage south wall outlets, several interior outlets</b>	<b>No access</b>
<b>The main service panel and the wires and breakers behind it</b>	<b>Too heavy</b>
<b>Equipment in the cable room</b>	<b>Not connected</b>
<b>Steam humidifier</b>	<b>No access</b>

Should you desire, please send Tomacor, Inc. a copy of the architect stamped, city approved blueprints for our review. This is a critical step in the inspection process. There will be an additional fee for this service. It is important that you retain a copy of these blueprints for your own future reference in locating system maintenance points and construction details that should have been completed during the construction phase.

The inspection revealed the following deficiencies:

**General Conditions**

1. A Tomacor inspector evaluated all of the existing fireplaces. They were either abandoned, sealed over at the roof line, blocked, not in operation, or without flue liners. The living room, dining room and other fireplaces must be fully cleaned and serviced and flue liners added in order to make them safe and operational. It is anticipated that the fire box opening (interior) will need to be reduced in size at the top in order for the fireplaces to collect smoke and send it out of the building. These existing fireplaces were used for coal at one time but were not designed for wood or natural gas burning. Tomacor recommends

a budget of \$60,000 to repair, replace components, and bring these fireplaces back to a functional condition. Complete the required repairs immediately. See photo section.

2. The water pressure at the top floor was poor. Add a booster pump to take the water to the top floor level. Budget \$3,000-\$5,000 for this repair.
3. The exterior masonry, sills, lintels, capstones, and other components are without flashing and weep holes at the room addition and other new areas of the building. Flashing and weep holes are designed to keep water away from the inner core of the masonry wall and send it to the exterior. The professional repair would be to remove the sills and brick work over the windows then install the missing flashing and weep holes. It is Tomacor's opinion that repairs could exceed \$2,000 per masonry opening (mostly at the West side addition). See photo section.
4. The east elevation of the property is an attractively detailed sandstone which appears to be over 120 years old. It has been recently repaired and rebuilt in order to meet Historic Trust Standards. During the course of the reconstruction it appears that the masonry contractor retained to reconstruct this façade used a Portland Cement based mortar rather than a lime based mortar to complete the detailing of the home. In addition, multiple joints were opened and rebuilt around the entry stair leaving the surrounding stone at a significantly darker color than the repair to the sandstone. Finally, a small section of the sandstone is peeling from the east elevation requiring additional repair.

Tomacor is not clear who the "restoration contractor" is and we do not understand the procedures he used in restoring the east elevation to historic standards. We do understand that the work that has been done does not appear to meet professional standards due to what appears to be Portland Cement based mortar. Under these circumstances it is critical to obtain the blueprint restoration drawing for the east side restoration of the home. This drawing is available through the homeowner who completed the restoration and through the City of Chicago Department of Landmarks. It is Tomacor's understanding that the Landmarks Department has merged with another department.

Tomacor understands that the façade has been donated to the Historic Trust in order to receive a tax incentive from the State and/or City. It is important, therefore, to confirm all procedures and evaluate all drawings.

Obtain the blueprints for this elevation as soon as possible. Forward them to our office for our evaluation. There is an extra fee for this service.

5. The property has been recently fully renovated. Under these circumstances the architect stamped, City signed blueprints should be available for our review and your possession. This document is critical in order to understand the scope and nature of the work which was planned for this project. In addition, it is expected that a typical home buyer obtain permit documents from the City of Chicago showing inspections and the name of

contractors etc. All of this information should be obtained and kept in your working file for future reference should building problems develop.

6. During the examination of the basement area of the home it was noted that the furnace supply air was located in the ceiling yet an inadequate amount of return air was provided at the floor. This installation deficiency will lead to "stratification" of the heating and cooling in the basement. It is expected that additional return air will be needed in order to balance the system at this level.
7. The inspection of the property revealed that many of the window screens are missing. Have these screens installed as soon as possible.
8. Since the year 2000 it is Tomacor's understanding that a cold water booster pump has been needed for all new construction and rehabs. This pump has not been installed in your house yet it has been planned for in the 2 abandoned 1.5 inch valves connected to the cold water main. Tomacor believes that in order to get good water pressure to the top floor this pump and/or pressure tank will need to be installed. Budget \$3,000 to complete the installation of this tank.

## **Exterior**

1. The building's electrical service sits at the southeast corner of the property attached to the garage. Commonwealth Edison requires a 10 ft or more clearance between electrical service and pedestrian access. Create a metal or wooden fence, or a similar type of blockage at the top of the garage garden area to prevent access to the electrical service wiring. The installation is hazardous and should be repaired immediately. See photo section.
2. The building's downspout hubs are not sealed into the concrete and sidewalk as is required. The open hubs allow for rodent access from the city sewers into the property. Seal the hubs using newspaper and mortar or similar product immediately. See photo section.
3. The south side bay is located in a court yard area with several exhausts from natural gas burning equipment. In addition, the basement level bathroom window is located within several feet of the exhausting gasses. The concentration of flue gas in this courtyard is hazardous and could result in carbon monoxide poisoning to those in the area during use. It is important to not concentrate carbon monoxide gas in a closed area or next to a window.

During the examination of the P.V.C. piping (exhaust gas issue noted above) in the courtyard area it was noted that some of the material was used for intake air while other pipes were used for exhaust air. As a rule of thumb, Tomacor anticipates a 12 inch or more gap between the intake pipe which sucks in air from the outside and the exhaust pipe which sends poisonous gas to the exterior. Rework these pipes sending them to an

approved location and conforming with the Peoples Gas and City of Chicago standards immediately. Tomacor recommends a repair budget of \$4,000 or more to remove the poisonous gas from this restricted area. See photo section.

4. During the course of the inspection it was discovered that the basement dryer flue was installed through the basement wall and ceiling using flexible plastic piping or duct work. This is a hazardous condition causing the duct work to collect lint and heat. This installation is a fire hazard and it requires the opening of drywall in the basement at multiple points followed by the installation of a rigid metal exhaust flue. Budgets \$3,000-\$4,000 to complete this repair. See photo section.
5. The area above the wine cellar rear door has never been sealed to the elements. Fiber glass has been left in place as a sealant above the door. Complete the professional installation in this area while repairing the dryer exhaust. See photo section.
6. Tomacor's analysis of the south side bay area revealed that it is not fully caulked at its east side where the cornice and sheet metal work join the masonry. Seal this area as soon as possible and before the winter of 2009.
7. During the inspection of the roof it was noted that multiple vents or flues have been extended through the roof's surface to an improper height. This type of installation prohibits the installation of a "storm collar or storm flashing" as needed. This installation will encourage leaks in the roof. Replace the poorly installed vents. See photo section.
8. Remove the construction debris which has been left on the roof's surface. See photo section.
9. There are multiple points on the roof's surface where it has been improperly flashed or not terminated. The north side flashing is open at its top and should receive a "termination bar or counter flashing". Anticipate water if these repairs are not made before December 2009. See photo section. It should also be noted that 1 or more roof level chimneys are missing flashing and/or counter flashing at the roof line. Repair them as well.
10. The roof inspection revealed several installed galvanized sheet metal flues where the masonry fireplace flues extended beyond the roof line. Complete the required repairs to these flues and relocate them as needed. Complete the required lining of the roof top chimneys. See photo section.
11. A poor roof patch has been completed at the southeast corner of the main roof. The petroleum based patching material will not adhere to the modified bitumen of the original roof. See photo section.
12. The upper level gutters are filled with leaves and need immediate cleaning.

13. The roof top heating and air conditioning units have suffered minor hail damage. See photo section.
14. The overhead garage door does not rebound when it is struck. Complete the required repair.
15. The garage alarm is not working. Repair it.
16. The garage has recently received a space heater mounted by the ceiling which did not respond to controls. In addition, the exhaust flue for this heater extends to the stairs connecting the grade and the garage roof top. It is important to connect the garage heater flue to an approved flue exhaust assembly which is typically expected to run through the roof line and exhaust to the air above the garage roof.
17. The garage is equipped with hot and cold water which also extends to the roof deck and fountain at the east wall of the garage. These supply pipes must be insulated and drained each year to prevent freezing. Have the seller point out the contractor he/she uses to drain the pipes each fall and turn them on each spring. In addition have the entire assembly drained (including the waste piping below the garage sink) and "set up" for the winter months before possession. The name of the company used should be written down and kept for future reference. Should this maintenance not take place the basement of the property could also get water.
18. There appears to be an under ground sprinkler in place for the home. This equipment must be serviced and "set up" for the winter months as soon as possible. Expect the same person to shut the system down and to turn it on again in the spring and summer months. Use the same person as for point # 17 above.
19. A hand rail is needed to connect the grade with the garage roof, Budget \$800 to install a metal handrail at the garage stair level.
20. Tomacor understand that there have been recent and multiple garage roof leaks which have been addressed by the current homeowner. We believe that these leaks will return during the winter months due to multiple deficiencies.

During the course of the inspection it was noted that the garage roof appeared to be overloaded for the size and capacity of the open web trusses which are carrying the weight above. A garage roof repair to solve the problem would typically involve an architect or structural engineer and blueprints. If these are not forthcoming you must obtain a structural engineer to evaluate the garage roof and recommend repairs. Other engineers are also available. Tomacor recommends that you ask him to evaluate the load on the garage roof and to recommend repairs. It is our opinion that the earth and masonry sitting on the garage roof will need to be removed and the structure be repaired to meet a minimal structural standard within the City of Chicago. When complete anticipate a

budget of \$20,000 or so to complete the structural repairs of the garage roof. Confirm with an engineer of your choice.

21. The top floor south side bathroom which sits over the courtyard below is equipped with an exhaust diverter that is missing one of its blades. Install the missing blade to this diverter over the bathroom door at the building's exterior or anticipate water and birds getting into the building.
22. The top floor bathroom balcony over the courtyard needs to be prepped and painted at its steel undercarriage. This is also true for the west side balcony at the first floor. Complete the prepping and painting of this equipment as soon as possible.
23. The north side outlet at the garage roof deck exhibits an "open ground" while the Ground Fault circuit interrupter (GFCI) is not working. This installation is hazardous and needs to be repaired immediately.
24. The light fixture near the rear exit of the building has not been fully secured to the wall. Secure the light fixture.
25. The GFCI is not working at the east elevation of the home.
26. Provide a minimum light well cover at the east elevation.
27. The recent repairs completed to the masonry tuckpointing joints on the garage are of poor quality and will fail over the short term. Remove all loose mortar and complete the tuckpointing per professional standard as noted by the Brick Industry Association Technical Notes series.
28. Tomacor recommends that the garage service door receive an automatic closer in order to protect the pipes from freezing during winter or fall months when the garage is heated.
29. Should there prove to be unused exhaust or intake air piping within the south side courtyard, Tomacor insists that they be covered to prevent rodent access or harborage.

## **Interior**

1. The library or television room which extends beyond the wall as a bay along the south side of the building is cold during winter months. Tomacor's evaluation revealed a low volume of supply air which is consistent with the colder bay. Tomacor recommends that the copper sheet metal used to finish the bottom of the bay be removed and the area professionally insulated with special attention focused in the furnace supply duct in the bay area. When complete close up the bay. It is possible that a second heating duct may be needed in this room. The blueprints would help to determine whether they were part of the plan. In order to fully repair this room, some destruction testing will be required in

order to more fully understand what the problem is. In addition, the west outlet here along the south wall is not working.

2. The windows in the first floor bay did not properly open. These need to be repaired to provide adequate functioning.

### *Basement*

1. Tomacor met a 2<sup>nd</sup> inspector during the course of inspecting the property. This inspector told Tomacor that the basement ejector pump would not shut off during its normal operation. This pump needs to be repaired immediately or replaced and installed to professional standard.
2. The installed circulating pump for the water heater has been disconnected and needs to be repaired. Complete the required repair as soon as possible.
3. The basement mechanical room uses room air for combustion purposes. The area is significantly inadequate in size for combustion air needed to make hot water for the building. Without adequate combustion air a negative pressure environment is created in the mechanical room which could draw poisonous gasses back into the area. In addition, without adequate combustion air there will not be enough oxygen to combine with the natural gas, causing a condition known as a "rich burn" which automatically produces carbon monoxide. Should interior air be used for combustion, this room would need 250 square inches of "free vent area" in a door or series of vents, to support the water heater. Make this repair as soon as possible. See photo section.
4. Tomacor's examination of the basement furnaces revealed that they were dirty and full of construction debris from the most recent renovation of the property. In addition, one furnace was left open at its "air intake port" allowing it to remove needed combustion air from the mechanical room. Both furnaces must be fully cleaned and serviced, including removing the debris on the electrical motors in order to maintain their useful life expectancy. One furnace includes a flow-through humidifier which was not functioning. Have them repaired immediately.
5. The inspector noticed a strong gas odor in the mechanical room in front of the 2 furnaces. Repair this.
6. Tomacor noted multiple cables, cad 5, and other in the basement communication room. It could not be determined which of these cables was in use or which area they serviced. Under these circumstances Tomacor recommends that all of the cables be installed where they are needed and used throughout the home. This repair should be undertaken immediately. Should the blueprint be available it would help us understand where the cables go and their purpose.

7. Tomacor's evaluation of the basement level carpet in the hallway is that it has been soiled or water stained along its center line to a point where it needs to be replaced. Repairs could be \$1,000 or more.
8. Within the mechanical room in the basement are one or more drain lines which extend over the floor creating a trip hazard. Connect these drain lines into an approved drain and waste assembly.
9. The hand held shower in the basement south east bath does not provide enough water to be used. In addition, its valve is broken. Complete the required repair immediately.
10. The sink control or "pop up" in the bottom of the sinks is not working in the southeast corner bathroom in the basement area. Repair both of these "pop ups."

#### *Kitchen and 1<sup>st</sup> Floor*

1. The inspection revealed that supply air was being delivered to the kitchen area below the base cabinets without the use of sheet metal boots and register covers. The absence of this equipment prohibits the homeowner from dropping the volume in this area while sending more volume to another area on the floor. In addition, the inside of the base cabinet heats up. This installation will not deliver adequate heat to the kitchen and it remains a violation of the professional and industry standards in this area.
2. The spray attachment at the sink functions irregularly and is sometimes difficult to turn off.
3. The inspection revealed that the outlet and receptacle behind the television at the southeast corner of the kitchen is not functioning. Actually, the right half of the outlet works yet the receptacle on the left side is without power. Complete the required repairs as soon as possible.
4. The electrical wiring has been cobbled together beneath the kitchen area bar sink. Some of this wiring is used to provide power for the under cabinet lighting and it should therefore be housed in a metal box safe from contact.

#### *2<sup>nd</sup> Floor*

1. During the inspection of the 2<sup>nd</sup> floor it was noted that the east side bedroom is equipped with a window that will not fully close at its east wall. The window was discovered in this condition yet it should be closed during winter months. Complete this repair immediately.
2. The west wall outlet in the 2<sup>nd</sup> floor west bedroom was not functioning and needs repair.
3. The east window in the 2<sup>nd</sup> floor west bedroom at the south wall is sticking and is without screens.

4. The lock hardware on the toilet room door in the Jack and Jill bathroom is loose.
5. The walk-in closet light is not working in the center bedroom on the 2<sup>nd</sup> floor level. In addition, the east wall outlet is not working.
6. The 2<sup>nd</sup> floor central hall area immediately outside of the laundry room at the north wall includes an outlet with an open ground. Complete the repair to this area immediately.
7. There is an open ground at the 2<sup>nd</sup> floor east bedroom along its west wall. The open ground is a deficiency with the outlet in this location. Make the repairs.
8. The 2<sup>nd</sup> floor east bedroom includes a central window which is not operating and is without screens.

### *3<sup>rd</sup> Floor*

1. The 3<sup>rd</sup> floor northeast corner room or study includes a window without a screen at the south wall. In addition, the top sash in this window falls. Complete the required repairs.
2. The north wall in the west side 3<sup>rd</sup> floor suite includes an outlet that is not working. Make the repairs.
3. The south side bathroom includes doors that are sticking when they are used.

### **Conclusion**

Tomacor's inspection of this unique historic property on north Dearborn revealed some significant deficiencies in areas which must be addressed immediately. It is not understandable why the cold water main booster pump was not installed or the wood burning fire places not rehabbed or repaired to meet industry and professional standards. The current living room fireplace should be considered hazardous and needs to be repaired immediately and in sequence with the other fireplaces throughout the home.

The unique historic and attractive east elevation/ façade needs to be repaired. The protocol used to repair this elevation should be explained in detail through the presentation of the blueprints and building permits to the buyer.

The interior and exterior of the building shows well generally, yet is losing the long term battle due to lack of maintenance. The architectural detailing is attractive and consistent with the 1880's or 1890's. The existing 400 amp service is professionally installed generally, yet many outlets were noted as improperly wired or not functioning. The service life on much of the mechanical equipment is less than 10 years and in some cases shorter than that. The building is attractively detailed and it is anticipated that the architectural blueprints are probably 15-20 pages long. It is important to obtain these blueprints immediately.

Sincerely,

Thomas A. Corbett  
President, Tomacor Inc.

SAMPLE