



December 8, 2023

Supervisor Don Murday (OWNER)
Green Garden Township
P.O. Box 1116
Frankfort, Illinois 60423

Re: Green Garden Township
25506 S. Center Road, Monee, Illinois 60449
Architect's Project Number: 23-075
Existing Facility Report

Dear Mr. Murday:

On October 26, 2023, Tria Architecture and Larson Engineering performed a visual survey of the existing Township owned facility at 25506 S. Center Road, Monee, Illinois 60449. No destructive testing or testing of materials on site was performed at this time. The results given below are based solely upon this visual survey. While we understand that it is the intent of the Township to remove the existing barn structure, in the interest of a complete facility survey our team completed a visual survey of the barn as well as the main building and have included both in this report.

FOUNDATION:

Description:

Both the barn and the main building appear to be on concrete foundations that extend above grade.

Observations:

At the barn, several small cracks are visible in the concrete.

Recommendations:

Repair the cracks at the barn foundations.

STRUCTURAL SYSTEM:

Description:

The barn is constructed of steel open web arches with wood members connecting them. The end walls are constructed of wood framing. A portion of the building has a concrete floor slab. The remainder is a gravel floor.

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The main building consists of single-wythe masonry bearing walls with wood roof framing above. The back section of the building (kitchen, toilet rooms, mechanical) appears to have been an addition.

Observations:

The structural systems appear to be in good condition.

Recommendations:

Nothing.

EXTERIOR WALL SYSTEMS:

Description:

At the main building, the exterior walls are single wythe split face concrete masonry units.

At the barn, the exterior skin is a metal panel wall system.

Observations:

At the main building, there are areas of mortar joint cracking, a corner with more severe masonry cracking and two locations of damaged masonry units. No insulation was observed in the wall system.

The metal skin around the barn is worn, dented and damaged. The paint is in poor condition. The wood blocking at the jambs of the overhead doors is rotted and damaged. The overhead doors are in poor condition.

Recommendations:

The masonry around the main building needs to be tuckpointed where cracks exist, and damaged units replaced. The failing paint should be removed and repainted. Insulation should be added to the exterior wall system where none currently exists.

The metal wall panels around the barn are in need of replacement. The wood blocking around the overhead doors needs to be replaced as well. The overhead doors should be replaced.

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INTERIOR:

Description:

The Community Room is finished with wood wall paneling and hard wood flooring. The exposed SAT ceiling is hung below an older 12x12 tile ceiling with the original panel ceiling finish attached to the underside of the roof joists above that. No roof or ceiling insulation is visible at the rear of the building.

The restrooms also have wood wall paneling and SAT ceilings but the floor appears to be a vinyl tile product.

The kitchen has gypsum board walls with 12x12 tile ceiling and 12x12 tile flooring.

Observations:

The wood floor in the Community Room is worn and scratched in many areas. The 12x12 tile ceiling above the SAT ceiling is older and has collapsed in several areas. The original panel ceiling on the rafters appears to be intact but access to the above ceiling space was very limited.

The floors and walls in the restrooms show signs of past water damage. The restrooms do not meet Illinois Accessibility requirements.

The floor in the kitchen is worn and the edges of the tiles are curling. The kitchen does not meet IDPH requirements for a commercial kitchen. The appliances are residential grade, the countertops are not an approved material, the flooring is not appropriate for this use.

The interior floors are at different levels. The Community Room is approximately four inches above grade at the front entry. A ramp has been installed in the entry vestibule, but there is not a landing at the top to meet the door into the Community Room. There is a step down into the kitchen and another step down from the kitchen to the back corridor. There are two steps down from the restroom corridor to the back corridor. The back door has a raised sill. The back door provides the second egress from the building and these level changes make the path of egress dangerous in an emergency and not accessible to people with disabilities.

Recommendations:

All 12x12 ceiling tiles should be tested as well as the panel ceiling attached to the rafters.

The 12x12 ceiling above the SAT in the Community Room needs to be removed to prevent further collapse and damage to the SAT ceiling below. The wood

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flooring should be refinished.

The restrooms need to be expanded and renovated to meet accessibility requirements. New finishes should be used that are appropriate for the use.

The kitchen needs to be renovated and brought up to code or removed from the services provided in the building.

Renovate the back portion of the building to provide a safe, accessible second exit route.

ROOF SYSTEM:

Description:

The barn has a metal panel roof system and the main building is asphalt shingles

Observations:

The barn roof is in fair condition. Some trim/flashing elements are missing or damaged.

The main building roof is in good condition. A section of gutter has been damaged and some trim/flashing elements are missing or damaged.

Recommendations:

Replace damaged or missing trim/flashing elements and replace the damaged section of gutter.

MECHANICAL SYSTEMS:

Description:

The main building currently has a single gas furnace providing heat only to the building. The age and model of the unit was not readily available at the time of observation.

The barn located behind the main building has a gas-fired unit heater inside for freeze protection.

Observations:

The existing furnace unit in the main building has ductwork through the ceiling area above the addition to supply restrooms and kitchen. Ductwork also runs through the ceiling and attic to feed the Community Room. It appears that return ductwork connects to a plenum on the backside of the furnace in the Mechanical

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room, however, this will require confirmation. Although age data was not available, the visual appearance of the unit leads us to believe that it is an older model.

Model information was not readily available for the gas-fired unit heater in the barn; however, the unit looks to be newer. The existing gas line is tapped off at the meter and to interior of barn.

There were no existing exhaust fans observed in the building; this includes restrooms and kitchen/breakroom.

Recommendations:

It is recommended that the existing furnace unit is replaced with new. Outside air and dampers will need to be part of the new system to comply with current codes. Existing ductwork may be reused if it is in good condition. If the building is remodeled, the ductwork may need to be reworked.

It is recommended that the existing diffusers be replaced if the building is to be remodeled. May be replaced one for one, but should be evaluated in the case of a remodel for accurate size and placement.

Install new above-ceiling exhaust fan in each of the two restrooms to provide a minimum of 70 cfm of exhaust each. If the exhaust fans run continuously during hours of operation, cfm can be reduced to 50cfm. This will need to be done for code compliance.

It is recommended to install new above-ceiling exhaust fan (100-150cfm) in kitchen area. If replacing the stove, adding a hood will suffice.

PLUMBING SYSTEMS:

Description:

The main building is currently on a well and septic system.

All plumbing fixtures requiring hot water are served from 30-gallon gas hot water heater. Rheem Richmond Essential model number 8VP20-1.

Observations:

The well and septic systems are located below grade and could not be visually inspected while on site. The well and septic systems should be inspected by a reputable company to determine whether they are in good condition.

Hot water heater is located in storage area in the rear of the building.

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Recommendations:

It is recommended to replace the existing hot water heater. It is recommended that the capacity be verified if the building is remodeled. Depending on new plumbing fixtures, the hot water heater may need to be upgraded. The age of the water heater is unknown and it is recommended that the hot water heater is inspected by a plumber and serviced if deemed in good condition.

Thermostatic mixing valves will need to be installed for every hand washing sink to comply with current code.

It is recommended to relocate the septic system to allow for paving of the parking lot and to relocate the tank access so it is not in the parking area.

ELECTRICAL SYSTEMS:

Description:

The main building is equipped with an existing recessed panel located in the kitchen. The panel is 100A, 240/120V/1PH. There is a second panel located in the barn that is 60A, 240V/1PH.

Observations:

Main panel is Siemens and looks to be in good condition. There are no extra spaces in the existing panel, however, it should be adequate for a remodel.

The panel in barn has older fuses instead of circuit breakers.

The main building interior lighting has been observed and all lighting appears to be functional. The majority of the existing light fixtures are fluorescent, and some are incandescent.

The barn is equipped with fluorescent strip lighting.

The existing lighting is controlled by local switches.

Recommendations:

In the barn, the wiring should be inspected and any cloth wiring should be replaced. The Owner may want to replace the panel to eliminate the fuses.

It is suggested that all interior light fixtures be replaced with an LED counterpart. LED light fixtures will use less power and cost less to operate. Emergency egress lighting will be integral to fixtures for Community Room, hallway and restrooms. Emergency battery packs should be added to the storage area and kitchen.

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In the barn, it is suggested that the existing fluorescent strips be replaced with their LED counterpart.

Most LED light fixtures have a 50,000-hour life expectancy. This is the equivalent to approximately 13-15 years. Other LED light fixtures have a 100,000-hour life expectancy. This is the equivalent to approximately 26-28 years.

It is suggested to replace the existing switches with dimmer style switches. Code requires occupancy sensors in restrooms, corridors and open areas.

Provide new tamper-proof receptacles in Community Room and hallway.

Provide GFCI receptacles in kitchen.

FIRE PROTECTION SYSTEMS:

Description:

The building is not currently equipped with a fire suppression system (sprinkler).

Building is not currently protected by a fire alarm system. Based on occupancy being assembly with an occupant load under 300, a fire alarm system is not code required.

SITE LIGHTING:

Description:

The site lighting was observed during the day and operation of light fixtures was not verified.

Observations:

There is an existing LED pole light mounted above the corner of the front of the building. This appears to be fairly new and is expected to remain. It appears to be controlled by an integral photocell. There is an existing light above the corner of the barn that appears to be older. The lamp type was not verified. It appears to be controlled by an integral photocell. There is an existing exterior light fixture at the rear door. The lamp type was not verified but appears to be a screw-in style without a lamp.

Recommendations:

It is suggested that light fixture above rear door be inspected and replaced if not operable. Add remote emergency fixture over door for egress purposes.

It is suggested to replace the light fixture above barn to be LED.

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Pictures:



Figure 1 Space between Barn and Main Building



Figure 2 Ponding of water adjacent to Barn

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Figure 3 Ponding of water in parking lot



Figure 4 Damaged gutter

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Figure 5 Damaged masonry



Figure 6 Septic tank cover

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Figure 7 Area above rear portion of building



Figure 8 Area above Community Room ceiling

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Figure 9 Original panel ceiling on roof joists

This facility assessment is the first step in the process of the Space Needs Assessment. We are currently working with the Township to determine the needs for the building and will create floor plan options to meet those needs once they are established.

Sincerely,

TRIA ARCHITECTURE, INC.

Ronald E McGrath
Principal Architect

REM/jp

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