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Division of Construction Codes and Licensing **REPORT ON PLUMBING PLANS**

PROJECT: Little Acorn Childcare, 1865 Wayzata Blvd, Long Lake, Hennepin County, Minnesota,

Plan No. PLB1703-00143

OWNERSHIP: Commercial Building Service, 4741 Lake Road S, Maple Plain, MN 55359 **SUBMITTER:** Paladin Plumbing LLC, 13963 45th Place NE, St. Michael, MN 55376

Plans Dated:

Date Received: March 14, 2017 Date Approved: April 13, 2017

This review is limited to the provisions of the Minnesota Plumbing Code, Minnesota Rules, Chapter 4714 and assumes the data on which the design is based are correct. Approval is contingent upon meeting the requirement(s) listed below. A copy of the approved plans and this report must be retained at the project location.

INSPECTIONS: All plumbing installations must be tested and inspected in accordance with the requirements of the Minnesota Plumbing Code. No plumbing work may be covered prior to inspection. The contractor/installer must obtain all required inspection permits from the City of Long Lake Building Official.

REQUIREMENT(S):

- 1. All plumbing must be installed in accordance with the 2015 Minnesota Plumbing Code (see Minnesota Rules, Chapter 4714).
- 2. Verify that the existing water supply and waste systems are sized to accommodate the added fixtures (see Minnesota Rules, Chapter 4714, Sections 610.7 through 610.12 and 703.0).
- 3. All sanitary drainage pipe within the building must be installed with a uniform slope of at least ¼-inch per foot (see Minnesota Rules, Chapter 4714, Section 708.1). Where site conditions preclude this slope, a minimum slope of ¼-inch per foot minimum may be utilized for piping 4 inches and larger if approved by the authority having jurisdiction.
- 4. Verify that a 2-inch trap and trap arm are provided for the clothes washer (see Minnesota Rules, Chapter 4714, Table 702.1). The waste and vent riser diagram and the Plumbing Fixtures Schedule incorrectly show a 1-½ inch trap.
- 5. Verify that the vent piping is sized as follows (see Minnesota Rules, Chapter 4714, Table 703.2):
 - a. The horizontal 1-½ inch vent serving the lower level single-compartment sink must be limited to 20 feet in length. Any additional piping must be at least 2 inches in size.
 - b. The vent piping serving all of the upper level fixtures must be at least 2-1/2 inches in size.
- 6. Based on a maximum developed length of pipe of 200 feet and a 48 psi building water pressure at the meter, and using Minnesota Rules, Chapter 4714, Sections 610.7 through 610.12:
 - a. The cold water distribution branch serving a water closet and a mop sink must be at least ¾ inches in size.
 - b. The cold water distribution branch serving two water closets must be at least 34 inches in size.

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- 7. Copper systems or tubing systems using copper alloy fittings may not exceed 8 feet per second for cold water, or 5 feet per second for hot water (see Minnesota Rules, Chapter 4714, Section 610.12). If copper piping or tubing systems using copper alloy fittings are installed, the hot water piping serving all of the new fixtures must be at least 1-½ inches in size.
- 8. Hot water supply systems in buildings where the developed length of hot water piping from the source of hot water to the farthest fixtures supplied exceeds 100 feet must be of the return circulation type (see Minnesota Rules, Chapter 4714, Section 601.1.2).
- 9. A single 2-inch trap and waste may serve the three-compartment sink if the trap is located beneath the center compartment and is not more than 30 inches from each compartment outlet (see Minnesota Rules, Chapter 4714, Section 1001.1).
- 10. A cleanout must be provided on a common vertical fixture drain or common vent serving two fixture traps that connect to a vertical drain at the same level. The cleanout must be the same nominal pipe size as the drain serving the fixtures. Where the vertical fixture drain is accessible through the trap opening, the cleanout may be eliminated (see Minnesota Rules, Chapter 4714, Section 707.4.1).
- 11. Above-ground PVC drain, waste, and vent systems should utilize restraint fittings or a minimum of 24-inch offset using 45-degree fittings every 30 feet. Expansion joints installed per the manufacturer's instructions may be installed in vertical runs exceeding 30 feet (see Minnesota Rules, Chapter 4714, Installation Standards 5 and 9).

NOTES:

- 1. The scope of this project consists of a daycare remodel. The plumbing includes eight water closets, eight lavatories, five single-compartment sinks, a two-compartment sink, a hand sink, a prep sink, a three-compartment sink, a dishwasher, two mop sinks, a clothes washer, twelve floor drains, and a water heater. The fixtures connect to the existing sanitary sewer and to the existing water distribution system.
- 2. This facility is served by existing municipal sewer and existing municipal water service connections.
- 3. This plan review is for the plumbing systems only and does not pertain to the licensing requirements for the facility. Additional plans, information and fee may be required by the licensing authority for review. Changes to the plumbing system may be required as a result. Revised plumbing plans showing any significant changes to the plumbing system must be submitted to and approved by this office prior to installation.
- 4. The plans and specifications were prepared by a licensed plumber. Only the plumber who has prepared the plans may use the plans for construction. If another plumber is contracted to install the plumbing, they must submit their own plans and specifications for the project.
- 5. The current Minnesota Plumbing Code, Chapter 4714, and related information can be found at: http://www.dli.mn.gov/CCLD/Plumbing.asp

Authorization for installation may be withdrawn if construction is not undertaken within one year. Additional recommendations or requirements may be made if changed conditions or additional information make improvements necessary.

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Approved:

Scott Sawyer, P.E.

Public Health Engineer

Plumbing Plan Review and Inspections Unit

651/284-5803

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cc: Paladin Plumbing LLC (via email)

Commercial Building Service

City of Long Lake Building Official (via email)

Hennepin County EHS (via email)

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