



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

December 11, 2018

City of Rochester Hills
Planning Department
1000 Rochester Hills Dr.
Rochester Hills, MI 48309

Attn: Ms. Kristen Kapelanski, AICP
Manager of Planning

Re: **Brewster Village**
City File #18-015
Rochester Hills, Michigan

Dear Ms. Kapelanski:

Please find attached the following documentation for Site Plan Submittal for the above referenced project.

- An NFE written response to the City of Rochester Hills Building, Fire & Engineering review letters received from your office on November 29, 2018.

Sincerely,

NOWAK & FRAUS ENGINEERS

A handwritten signature in blue ink that reads 'Brad Brickel'.

Brad W. Brickel, P.E.
Senior Associate

Enclosures

cc: Robertson Brothers, Mr. Tim Loughrin, (6905 Telegraph Rd., Ste. 200, Bloomfield Hills, MI 48301)
Nowak & Fraus Engineers, Mr. Timothy L. Germain, P.E., Managing Partner
Project Files: K342

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Building Department

1. Provide individual residence plot plans for code compliant site drainage at the time of individual building permit applications.
 - a. Lots shall be graded to fall away from foundation walls a minimum of 6 inches within the first 10 feet.

Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048mm), the final grade shall slope away from the foundation at a minimum slope of 5 percent and the water shall be directed to drains or swales to ensure drainage away from the structure. Swales shall be sloped a minimum of 2 percent when located within 10 feet (3048mm) of the building foundation. Impervious surfaces within 10 feet (3048mm) of the building foundation shall be sloped a minimum of 2 percent away from the building. Section R-401.3
 - b. Driveway slopes shall meet the following requirements:
 - i. Approach and driveway: 2% minimum – 10% maximum.
 - ii. Side-entry garage: 2% minimum, 4% maximum.
 - iii. Sidewalk cross-slope (including portion in the driveway approach): 1% minimum, 2% maximum is allowed but a design slope of 1.5% will allow for construction inaccuracies.
2. Locate fire hydrants to comply with City of Rochester Engineering Standards.
 - a. Hydrants not locate within a public road right-of-way shall be located a minimum five feet from the edge of pavement or protected by bollards.
 - b. A minimum of three feet lateral clearance should be maintained on either side of a sidewalk to a hydrant.

All hydrants have been modified to meet the above requirement. Dimensions are shown on SP5.

3. Where ADA ramps are shown on Sheet SP4, please indicate the type of ramp from Sheet SP-7.

Each ramp is called out with the type per the details on SP7.

Fire Department

1. Provide documentation, including calculations of the available fire flow.

IFC 2006 503.4

- Fire flow data can be obtained by contacting the Rochester Hills Engineering Department at (248) 656-4640

This will be requested.

DPS/Engineering

General

1. Relocate the proposed utilities to maintain 10 feet of horizontal separation between existing and proposed utilities.

All proposed utilities are the minimum 10 feet away from existing utilities. This is specifically called out on the north side of units 22 and 23.

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Grading

1. Revise the grading plan as needed to maintain drainage on-site near the south east property.

This area will be graded to ensure all drainage remains on-site.