

FLOOD PROOFING – STATE OWNED BUILDINGS

FIELD DATA SUMMARY SHEET

Building No.: 06022 (Old No. 5012)

126 State Street

Location: Montpelier Complex

100-Year Flood Elev. 524.6

Total No. of Floors: 2

(Floors including basement – 3)

Gross Floor Area: 7,375 sq ft

Rentable Area: 6,247 sq ft

Lowest Level Floor Elev. 517.4

First Floor Elev. 524.9

Type of Structure: Wood frame structure with basement. Basement walls constructed of stone and mortar, floor concrete.

Primary Area Usage: OFFICE space is the primary usage of all floors except the basement floor. Basement primary usage is for utilities.

Primary Flood Damage:

Electrical distribution panel mounted on the wall, +/- 48 inches above basement floor.

Plumbing, water heater on basement floor.

Heating condensate pumps located on the basement floor.

Communication panel mounted on wall, +/- 24 inches above the floor.

Note: No flood damage but large conduits (5) through basement walls, with nothing in conduits provides floodwaters access to the basement floor. Conduits should be sealed.

Potential Methods for Damage Reduction:

Electrical distribution panels, switch panels, service connections, wall penetrations and meter below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation.

Heating condensate pumps below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation.

Plumbing wall penetrations, water heaters, toilets, sinks, floor drains below the 100-yr flood elevation protect from water infiltration or elevate above 100-yr flood elevation. Typically toilets, sinks and floor drains below the 100-yr flood elevation require back-flow valve installation. If back-flow prevention not practical, all restrooms, sinks, toilets could be moved to the 1st floor above the 100-year flood elevation. This building did not have a sewer lift station.

Dry-floodproofing this building or individual rooms may not be practical; the difference between the 100-year flood elevation and the basement floor is 86 inches. Typically the rule of thumb for dry-floodproofing is only used for flood depths less than three feet (36 inches). Dry-floodproofing old existing buildings may be technically feasible, however sealing the walls and floors of older buildings have a high probability of failure due to unforeseen factors in the older buildings.

Dry-floodproofing and wet floodproofing not applicable at this building due to depth of flooding.

Another option to reduce flood damage is by elevating the entire building and moving utilities above the 100-year elevation, or by moving utilities to a separate building that is above the 100-year elevation.

