

NOTES & OBSERVATIONS

CLIENT: Walter Sedovic Architects Work Order 1559 DATE: 12/28/21

LOCATION: 785 Ridge Rd., Hamden, CT

PROJECT: Perform Detailed Storm Drainage Piping Inspection / Cleaning

TECHNICIANS: Calvin Anderson & Horace Hill

See Field Sketch & Internal Pipe Inspection Video

Overview

- On December 15, 2021, MES crew mobilized to assist Congregation Mishkan Israel facility with evaluating the existing condition of the storm roof drainage system causing water infiltration.
- The drain inlets involved with the investigation were numbered in the field (See MES Field Sketch)
- A portable, high resolution color camera was used to perform an internal inspection of the drainage piping

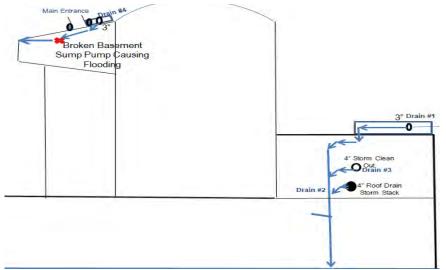


Photo from Sketch of Congregation Mishkan Israel

Page **1** of **6**



FINDINGS

- Crew began investigation with outside Drain #1 which is located near the north vents outside of the basement mechanical room.
- Drain #1 was clogged and there was water infiltration into the basement mechanical room during heavy rain events.
- The drain required heavy cleaning and took several hours on cleaning attempts to finally clear.



Photo from Drain Inlet #1 Before Clearing

Page 2 of 6





Photo from Drain Inlet #1 After Clearing

• Crew also inspected a roof drain storm stack Drain #2 in the basement mechanical room that is suspected connect to Drain #1 and drain inlet #3 (A 4" Clean out in the basement mechanical room).

Page 3 of 6





Photo from Drain #2 (No Defects Observed)

• Technicians also removed heavy leaves and dirt debris from Drain #4 (Near the Front Entrance) and Camera Video confirmed that the drain leads to the sump pit in the basement.

Page **4** of **6**





Photo from Drain #4 Confirmed Location in Sump Pit

- Crew tested and confirmed that the existing sump pump in the basement is broken and the cause for the flooding in the front entrance basement area.
- It was recommended that the sump pump be replaced immediately.

Page **5** of **6**





Photo from Broken Sump pump pit in Basement near Front Entrance

• A working and reliable sump pump is recommended to avoid excessive flooding in this area because the pump sends all of the water from Drain #4 into the storm outgoing pipe toward the main.

Thank you.

Page **6** of **6**