

C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture & Landscape Architecture, D.P.C.

MEMORANDUM

DATE: April 26, 2017

TO: Jim Moras/William Shaw

FROM: Jonathan Dippert

RE: **Liberty Street Site Characterization – Supplemental Investigation**

CC: Chris Angier, Ed Canning, Kirk Moline, Dan Reilly, Ray Wuolo,
Jonathon Carter

In accordance with item No. 10 of the Supplemental Investigations letter to New York State Department of Environmental Conservation (NYSDEC) dated November 29, 2016, roof drain sampling points were observed and evaluated in the field. A roof drainage sketch was prepared to summarize the sections of roofs with gutters, apparent rain runoff directions based on observed slopes, and proposed stormwater sampling points.

Eight (8) roof downspouts were identified and are accessible to be sampled. One (1) grab water sample per roof downspout will be collected. The water samples from the roof downspouts will be sampled and analyzed for PFCs, TOC, and major Cations (Ca, Mg, Na, and K) and Anions (Cl, SO₄, CO₃, and HCO₃). The collection of water samples will include field measurements for geochemical parameters (ORP, pH, conductivity, temperature and turbidity) as per existing work plan protocol.

Sampling protocol will follow the Site Characterization Work Plan's Field Sampling Plan and Quality Assurance Project Plan. The samples will be collected conforming to the Field Sampling Plan procedure for surface water sampling. Deviations to the procedure due to field conditions will be documented in the field notes/forms.







The sampling event will coincide with a storm event with at least 0.1-inch of precipitation (defined as a "measureable" event), providing the interval from the preceding measureable storm event is at least 72 hours. The grab samples will be collected during the first 30 minutes (or as soon as thereafter as practical, but not to exceed one hour) of the roof discharge.

Figure depicting the sample locations is attached. Sample locations will be surveyed in the field with GPS methods.



ROOF DRAINAGE SKETCHMAP - SGPP - LIBERTY ST.
Prepared by: C.T. Male & Associates
Date: March 08, 2017
Not to Scale

Legend

	Courtyard Area		Catch Basin
	Direction of Roof Slope		Downspout Extension
	Gutter		Proposed Sample Location

