



DRAINAGE MEMO

PROPOSED
NEW BRITAIN LANDFILL
SOLAR PROJECT

DEMING ROAD
BERLIN, CONNECTICUT
HARTFORD COUNTY

Prepared for:

**C-Tec Solar
1 Griffin Road South
Bloomfield, CT**

Prepared by:

**All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension, Suite 311
Waterford, CT 06385**

October 2022

Table of Contents

INTRODUCTION	1
EXISTING SITE CONDITIONS.....	1
DEVELOPED SITE CONDITIONS	1
CONCLUSION	2

Drainage Memo
New Britain Landfill Solar
October 2022

Introduction

At the request of C-Tec Solar, All-Points Technology Corporation, P.C. ("APT") has undertaken the design development of a proposed 1.74 MW direct current (DC) solar electric generating facility in Berlin, Connecticut (the "Project"). The Project, known as the New Britain Landfill Solar project, involves the installation of solar panels and associated equipment on the capped New Britain Landfill along Deming Road in Berlin, Connecticut ("Site").

The purpose of this memo is to provide explanation as to why the Project does not require a stormwater analysis and is not anticipated to have any stormwater drainage impacts. The design is intended to be in full compliance with the State regulations while taking prevailing site conditions and practical factors into account.

Existing Site Conditions

The Site is an irregular shaped parcel located along Deming Road in Berlin, Connecticut, that consists of approximately 43.40± acres of developed land. The property has an existing capped landfill on most of the site. A wetland system surrounds two watercourses along the western and southern extents of the landfill.

The Site's existing topography generally slopes downward from the high point in the middle of the parcel in all directions. Within the project area, slopes range from approximately 0 to 12 percent throughout. The proposed solar modules will be kept off of any slopes that are above 15 percent. Elevations within the Site range from approximately 104 feet AMSL at the top of the landfill to approximately 35 feet AMSL along Willow Brook and the Mattabeset River to the west and south.

The site is an existing capped landfill. The landfill cap is covered with a layer of soil with pasture vegetation. The existing slopes around the perimeter of the cap are covered with soil and vegetation with drainage swales which collect existing stormwater runoff. A gravel access drive runs from the northeast to the center of the top of the landfill.

Developed Site Conditions

The Project will be constructed in the center of the top of the closed landfill. Access to the Site will be provided via the existing access drive from Deming Road. The Project includes the installation of 3,228 solar panels (Paradea 540W modules) on ballasted racking systems and associated utility features within 5.02± acres of the Site. There will be no ground penetration or earthworks associated with this project.

Existing surfaces are all considered impervious surfaces. There is therefore no net increase in impervious areas associated with this Project. All existing stormwater collections systems have

Drainage Memo
New Britain Landfill Solar
October 2022

already been designed and installed to accommodate stormwater runoff from the existing impervious surfaces. No portion of the project area is within a wetland setback area.

Conclusion

Since the existing landfill site has stormwater control devices already installed and there is no ground disturbance or increase of impervious areas associated with the Project, a Stormwater Analysis and additional stormwater management devices are not required for this Project. The proposed solar array is not expected to result in any change in runoff conditions to the surrounding areas and properties.