Traffic Management Plan

Gravel Pit Solar Apothecaries Hall Road & Wapping Road East Windsor, Connecticut

PREPARED FOR

Gravel Pit Solar, LLC 1166 Avenue of the Americas, 9th Floor New York, NY 10036

PREPARED BY



100 Great Meadow Road Suite 200 Wethersfield, CT 06109

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Introduction

This Traffic Management Plan (TMP) has been prepared to fulfill the requirements of 2(l) of the Gravel Pit Solar Project's Decision and Order issued by the Connecticut Siting Council on Feburary 25, 2021. The purpose of the TMP is to describe traffic management practices during the construction of the Project.

This Plan was prepared by VHB in association with Gravel Pit Solar, LLC.



Purpose of This Plan

A TMP lays out a set of strategies for managing the work zone of a construction project. Work Zone Objectives are:

- > Provide a high level of safety for workers and the public
- > Minimize congestion and community impacts
- > Provide contractor adequate access to the roadway to facilitate work.

This TMP includes:

- > Project Description
- > Work Zone Impact Assessment
- Work Zone Impact Strategies
- > Emergency Response & Contact Info



Project Description

The Gravel Pit Solar Project is a 120 megawatt solar farm on existing farmlands and gravel pits as well as associated utilities, access paths, fencing, and landscaping to support this use.

3.1 Project Schedule

Project construction is expected to begin in the summer of 2021 and be completed by the end of 2022.

3.2 Construction Entrance

There are five proposed construction entrances to the project work areas.

- 1. Reuse of an existing paved entrance to the Windsorville Road gravel pit from Windsorville Road approximately 1,300 feet to the west of Wapping Road.
- 2. Reuse of an existing paved entrance to the Windsorville Road gravel pit from Apothecaries Hall Road across from its intersection with Chamberlain Road.
- 3. Reuse of an existing farm road entrance to the north of Plantation Road approximately 2,900 feet to the east of its intersection with Rye Street.
- 4. Reuse of an existing paved entrance to the south of Plantation Road approximately 2,300 feet to the east of its intersection with Rye Street.
- 5. A proposed access road entrance to the south of Plantation Road approximately 3,400 feet to the east of its intersection with Rye Street. There exists a farm road entrance approximately 50 feet to the west of this proposed location.

Windsorville Road is a two-lane Town-owned roadway with a posted speed limit of 35 miles per hour in the vicinity of the Project Site. A double yellow centerline is striped on the road. No shoulder lines or sidewalks are provided on the road adjacent to the construction site.

Apothecaries Hall Road is a two-lane Town-owned roadway with a posted speed limit of 35 miles per hour in the vicinity of the Project Site. A double yellow centerline is striped on the road. No shoulder lines or sidewalks are provided on the road adjacent to the construction site.

Plantation Road is a two-lane Town-owned roadway with a posted speed limit of 35 miles per hour in the vicinity of the Project Site. A double yellow centerline is striped on the road. No shoulder lines or sidewalks are provided on the road adjacent to the construction site.

No access to the site will be provided directly from any State road. Therefore, obtaining an encroachment permit from the Connecticut Department of Transportation (CTDOT) is not required.

3.3 Construction Traffic

The following traffic is anticipated at the site during construction:

3.3.1 Employees

Between 20 and 50 employees per day are projected on the site during construction activities planned for 2021. Starting in the spring of 2022, up to 250 employees per day are expected on site during peak construction. Employees are expected to arrive at the site at approximately 6:30am and depart the site at 5:00pm. It is anticipated that the majority of employees will park their personal vehicles in the designated staging areas on the site. No parking for employees shall be permitted within the right-of-ways of any Town-owned roadway.

3.3.2 Truck/Equipment Deliveries

Grading equipment (i.e. earth movers, bulldozers, excavators, front end loaders, sheep foot rollers) will be delivered during the 2021 construction season. Truck deliveries are expected to between 10-25 per day during the 2022 construction season. Additionally, one daily FedEx delivery is anticipated. In the unanticipated event of a wide load trailer handling a delivery to or from the site, the use of escort vehicles shall be employed.

3.3.3 Construction Restrictions

Construction activities such as excavation/grading and installation of the solar panel systems will typically be limited to normal daytime working hours. Construction activities beyond normal daytime work hours would be minimized to the extent practicable.

3.3.4 Traffic Control

Normal construction activities are not expected to impede traffic on any Town roadways. However, in the rare occasion that large truck deliveries are expected to impede traffic, trained construction flagging personnel shall be employed as well as a police officer (if required). For other times, primarily due to the low volume of native traffic on the adjacent roadways, the use of flagmen and police details is not warranted provided that sight lines are maintained and traffic on the roadways is not impeded.



Work Zone Assessment

VHB on behalf of Gravel Pit Solar, LLC completed a traffic engineering investigation to evaluate access to the Project Site from Windsorville Road, Apothecaries Hall Road, and Plantation Road in East Windsor, Connecticut.

4.1 Sight Distance Evaluation

A Professional Engineer from VHB visited the Project Site on March 5, 2021 to measure the available sight distance from the driveway locations at a distance of 15 feet from the traveled edges of Windsorville Road, Apothecaries Hall Road, and Plantation Road along the site frontage and to observe other potential conditions that may affect the safety and operation of site access during construction. The available sight distance was compared with the sight distance requirements outlined in the CTDOT Highway Design Manual. The minimum required sight distances were calculated based on realistic design speeds in the vicinity of the site entrances. The results of the sight distance investigation are summarized below.

Intersection Sight Distances

	Available Sight Distance			Meets Standard	
	Exiting Site Looking Left	Exiting Site Looking Right	Minimum	Left	Right
1. Windsorville Road Existing Entrance (35 mph)	±500′	±500′	390′	YES	YES*
2. Apothecaries Hall Road Existing Entrance (35 mph)	±615′	±480'	390′	YES	YES
3. Plantation Road North Existing Entrance (45 mph)	±1,700′	±1,500′	500′	YES	YES
4. Plantation Road South Existing Entrance (45 mph)	±870′	±950′	500′	YES	YES
5. Plantation Road South Proposed Entrance (45 mph)	±290′	±910′	500′	NO**	YES

As noted in the table above, adequate sight distance, based on CTDOT guidelines, is available at all proposed driveways, except for the Plantation Road South proposed entrance. Additional information on the sight distance measurements at each driveway is provided below.

- 1. The Windsorville Road existing entrance has a posted speed limit of 35 mph and a horizontal curve with posted advisory speed of 25 mph exists approximately 450 feet to the left (west) of the entrance. A design speed of 35 mph was selected for this driveway, since this horizontal curvature limits the speed of vehicles approaching the site. *An "attention" sign and a fallen tree partially obscure sight lines to the right (east). The fallen tree will be removed and the sign relocated further from the road at the onset of construction to improve sight lines. With these removals, adequate sight distance will be available in both directions exiting the driveway based on the 35 mph design speed.
- 2. The Apothecaries Hall Road existing entrance has a posted speed limit of 35 mph and the road is stop-controlled approximately 130 feet to the west of the site entrance at the railroad track at-grade crossing. A design speed of 35 mph was selected for this driveway, as speeds exceeding 35 mph are generally not feasible for vehicles approaching the site entrance from either direction. Based on the 35 mph design speed, adequate sight distance is available in both directions exiting the driveway.
- 3. The Plantation Road existing north entrance has a posted speed limit of 35 mph and conservatively, design speeds of 45 mph have been assumed. Based on this 45 mph design speed, adequate sight distance is available in both directions exiting the driveway.
- 4. The Plantation Road existing south entrance has a posted speed limit of 35 mph and conservatively, design speeds of 45 mph have been assumed. Based on this 45 mph design speed, adequate sight distance is available in both directions exiting the driveway.

5. The Plantation Road proposed south entrance has a posted speed limit of 35 mph and conservatively, design speeds of 45 mph have been assumed. This proposed entrance is approximately 50 feet to the east of an existing farm road entrance. **The sight line exiting the site to the left (west) is obscured by an existing barn when analyzing 15 foot distance from the travelway edge, in accordance with CTDOT guidelines. However, adequate sight lines to the left are available measured from 12-13 feet from the edge of the road. Therefore, motorists exiting the site will be able to pull forward far enough to see oncoming traffic without encroaching into the travel lane.

4.2 Additional Circumstances

Due to the more favorable sight distances for exiting, truck/equipment should use the western existing access road (across from 47 Plantation Road) to exit project areas south of Plantation road.



Work Zone Impact Strategies

Following implementation of the of the TMP, traffic patterns will be reviewed for performance and safety issues. Should any observed conditions warrant it, this Traffic Plan will be re-assessed and revised to address the observed conditions.



Emergency Response & Contact Info

The Gravel Pit Solar Project will have an emergency response plan during construction. Emergency contacts are listed below:

Gravel Pit Solar, LLC Project Manager

Aaron Svedlow (207) 233-3644 <u>aaron@nleservices.com</u>

Gravel Pit Solar, LLC Asset Manager

Oliver Fornell
(212) 478-0000
Oliver.Fornell@deshaw.com

EPC Superintendent and Project Manager

To be determined Information to be provided when available

Urgent Emergencies

Dial 911