







Moneystone Quarry Proposed Solar Farm

Construction (Traffic) Method Statement



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Project Quality Assurance Information Sheet

Moneystone Quarry Proposed Solar Farm Construction Method Statement

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MONEYSTONE QUARRY SOLAR FARM CONSTRUCTION (TRAFFIC) METHOD STATEMENT

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1.0 INTRODUCTION

1.1 Introduction

- 1.1.1 This Construction (Traffic) Method Statement (CMS) has been prepared by Stratus Environmental Ltd. on behalf of Solar Building Company Ltd., in support of a planning application for the development of a solar photovoltaic (PV) farm at Moneystone Quarry, Staffordshire.
- 1.1.2 The site is situated approximately 1.3km to the south east of the village of Whiston, within the landholding of Moneystone Quarry. The overall site area will amount to approximately 14.3ha. The proposed development is a solar PV farm consisting of photovoltaic panels running east-west across the site and it is expected that the proposed development will generate a peak electrical output of approximately 8.5 MWp.
- 1.1.3 Access to Moneystone Quarry is via Eaves Lane, which can be accessed from the A52 at Whiston to the north.

1.2 **Purpose of this Report**

1.2.1 This Construction (Traffic) Method Statement sets out the proposed access arrangements to the application site, the anticipated construction programme, construction vehicle numbers, construction worker numbers and the proposed construction hours. Solar farm typically have negligible associated traffic movements during operation (at most, generally a visit for maintenance purposes using a light van once a week). As such, only impacts relating to the construction of the development are considered.

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2.0 CONSTRUCTION OPERATIONS

2.1 Introduction

2.1.1 The main traffic and transport related effects will be associated with the movement of HGVs to and from the site during the construction phase of the development. This statement sets out the predicted potential impacts resulting from construction traffic associated with the proposed development.

2.2 Access Arrangements

- 2.2.1 The application site will be accessed using the existing quarry entrance located on Eaves Lane. This junction is suitable for HGV traffic and will not need to be upgraded.
- 2.2.2 Construction traffic will access the site via the A52 to the north west at Whiston. Vehicles will travel along Eaves Lane before turning right into the site at the existing site entrance (see figure 2.1 below). There will be two set down areas. One on the northern edge of area D and one to the west of area E on an existing car park. The set down areas will be secured by temporary fencing and lit, however, these shall be removed once constructed. Drawing SBC1000/17/07 identifies the location.
- 2.2.3 Access to the northern part of the site is gained from the southern part via the existing on-site tunnel underneath Eaves Lane as shown in drawing SBC1000/17/07.

Figure 2.1: Existing Access to Application Site



Looking south along Eaves Lane. Source: Google Maps ©2013 Google.

2.2.4 Once operational, the application site will be unmanned and access for occasional maintenance will typically be made by light goods vehicles. Maintenance and inspections will take place on a monthly basis. The access during the operational phase will be via the existing quarry site entrance on Eaves Lane, see drawing SBC1000/17/07 for location and details of the proposed access arrangements.

2.3 Vehicle Routing

- 2.3.1 Vehicles delivering equipment to the site will be articulated heavy goods vehicles (44 tonnes and 16.5m in length). All HGV deliveries will originate from the west, via the A52. Upon arriving in Whiston, HGVs will turn onto Eaves Lane. HGVs will continue eastbound along Eaves Lane for approximately 1.4km to the existing quarry entrance see Figure 2.1 above. HGVs leaving the application site will take the same route.
- 2.3.2 Light goods vehicles (LGV) accessing the site during the construction phase will be subject to the same routing restrictions as HGVs. Similarly, routing restrictions for LGVs visiting the facility during the operational phase will be the same as for HGVs during the construction phase.

2.4 Hours of Operation

2.4.1 It is proposed that hours of operation are as follows:

Monday to Friday	0800 hours to 1800 hours
Saturdays	0800 hours to 1600 hours

2.4.2 Deliveries to the site will be carried out within the above times. Under exceptional circumstances, working/deliveries outside these hours may be required. In these cases, prior permission will be sought from Staffordshire Moorlands District Council.

2.5 Staff Movements

- 2.5.1 An estimated 40 staff will be on site during the construction period, depending on the phases of the construction schedule. It is envisaged that staff trips will be mainly made by private vehicles (LGVs). All vehicle parking will be provided within the temporary construction compound, there will be no parking on the public highway.
- 2.5.2 Assuming a worst-case scenario of all staff members arriving by single-occupancy private vehicle during the peak construction period, a total of 40 vehicles will arrive on site prior to the AM peak and an equal number will depart after the PM peak.
- 2.5.3 Once the site is operational, there will be no staff based on the site. However, routine weekly visits will be required.

2.6 **Proposed Vehicle Movements**

- 2.6.1 The construction of the solar farm is expected to last circa 3 months. During this period, there would be journeys associated with the arrival and departure of site staff and the delivery of parts and construction materials.
- 2.6.2 Table 2.5.1 provides a breakdown of expected vehicular movements and an indicative construction schedule. Expected HGV volumes and timings are based on best estimates at this stage and will be dependent on a number of factors, such as shipping schedules.
- 2.6.3 Initial movements in weeks 1 and 2 will arise from staff movements and deliveries of site security measures: security fencing and construction compound. There would

also be a number of other deliveries of cabling, machinery and a temporary site welfare cabin in weeks 2 and 3. This would be followed deliveries of Type 1 materials for road surfacing and drainage. Equipment such as inverters, transformers, control room and the solar panel support frames in weeks 3 to 12.

- 2.6.4 It is envisaged that approximately 120 vehicle deliveries will be required to the get the panels and frames to the site.
- 2.6.5 A further 31 HGV deliveries will be needed for the concrete sleepers.
- 2.6.6 In total, the construction of the solar farm will result in approximately 206 deliveries spread out over the 3 month construction period. It is therefore unlikely that, even at the most intense period of construction when solar panels, frames and concrete sleepers are being delivered, there would be circa 3 HGV deliveries per day. As all deliveries will result in a return journey for the vehicle, this corresponds to 412 HGV movements in total or an average of 6 HGV movements per day.

Construction Activity	Month		
	1	2	3
Delivery of plant, equipment and materials	10	10	10
Erection of security fencing and construction compound	5		
Cabling on site	2		
Delivery of inverters/transformers/substation		4	4
Delivery of frames and panels	40	40	40
Delivery of concrete sleepers		31	
Removal of plant and equipment			10
Total	57	85	64

Table 2.5.1: Indicative Delivery Vehicle Movements during Construction Phase

2.6.7 The figures from **Table 2.5.1** have been converted into daily flows based on an average of 4 weeks per month and an average of 6 working days per week (24 days per month).

3.0 CONCLUSION

- 3.1.1 The construction of the solar farm would result in the temporary generation of construction and staff-related traffic over an approximate 3 month construction period. During this period there will be a total of 412 HGV movements, corresponding to an average of slightly more than 6 movements per day, during the construction period.
- 3.1.2 As a quarrying site, the identified road route is known to have the capacity to accommodate a significant number of HGV movements. HGV movements arising as a result of the proposed development will be easily accommodated by the surrounding road network.
- 3.1.3 It is considered that transport impacts related to the operational phase of the development would be minimal.
- 3.1.4 On the basis of the trip generation outlined above, it is expected that the construction of the proposed solar farm will have no significant impact on the local highway network.