

NORTH YORKSHIRE COUNCIL**BUSINESS and ENVIRONMENTAL SERVICES****LEAD LOCAL FLOOD AUTHORITY****CONSIDERATIONS and RECOMMENDATION**

Application No:	ZC23/04361/EIAMAJ		
Proposed Development:	Erection of ground mounted solar farm (up to 43MW) and associated infrastructure including access to the A61, internal access tracks, customer substation, DNO building, storage container, 2no. power stations, pole mounted CCTV, fencing and landscaping.		
Location:	Land East Of Wormald Green Wormald Green North Yorkshire		
Applicant:	Harmony WG Solar Limited		
District/Borough:	Harrogate		
FRM Engineer:	Heather Lagan	LPA Case Officer:	Kate Broadbank

Note to the Planning Officer:

Thank you for consulting the Lead Local Flood Authority on the planning application referenced above.

The following documents are noted:

- Flood Risk & Drainage Assessment Report, Gondolin Land & Water, Reference GON.0078.0092, Version 1, Dated 08/09/2023.
- Email, Wormald Green Solar Development: Drainage Assessment to Address Existing Flooding Issues in Bishop Monkton, Gondolin Land & Water, Dated 15/08/2023.

In assessing the submitted proposals and reaching its recommendation the Authority would like to make the following comments:

1. Flood Risk

The site is located within Flood Zone 1. The applicant notes that there is a surface water risk on site, but it is low and follows topography and minor watercourses on site. As there is a surface water risk on site, the LLFA notes that a sequential test may be applicable, as per paragraph 168 of the NPPF.

Date:	06/03/2024	Approved by:	Emily Mellalieu Flood Risk Management Team Leader
FAO:			
Issued by:			

**LEAD LOCAL FLOOD AUTHORITY
CONSIDERATIONS and RECOMMENDATION**

Continuation
sheet:

Page 2 of 3

Application
No:



2. Runoff Destinations

It is noted that site runoff will be directed to a series of swales with check dams bounding the site with “gravel pits” to be installed down gradient of impermeable buildings to attenuate surface water. It is not clear however, ultimately where the surface water runoff destination is (infiltration/watercourse etc). **Further information required.**

3. Peak Flow Control

It is noted, through ReFH2 calculations that site runoff will be reduced from an average 900.29l/s (based off 1 in 100 year 240 minute storm) to 640 l/s. This is due to change of land use from crops/bare soil to grass and impermeable areas. However, it is not clear how this runoff from site will be controlled, furthermore, it does not appear to have been calculated with a climate change allowance (See section 6). **Further information required.**

4. Volume Control

It is noted that the ancillary buildings will have attenuation in the form of gravel pits down gradient of the buildings. It is unclear as to how the appropriate sizing for these has been calculated, a climate change allowance will be required, and the onward connectivity of the gravel pits will need to be demonstrated. **Further information required.**

5. Designing for exceedance

An exceedance flow plan has been submitted and is appropriate. It would be helpful however, to have the proposed SuDS features overlain on this plan. No runoff should leave the site up to the 1% AEP+CC storm.

6. Climate Change

As noted in section 3.2.3 of the Flood Risk and Drainage Assessment that climate change allowances for rainfall have been acknowledged. However, it is not apparent that these have been used within the design of the site. The site must not cause flooding on or offsite for a 1 in 100 plus climate change event. **Further information required.**

7. Maintenance Plan

A maintenance plan should be submitted. After construction the soil should be chisel ploughed, or similar, to mitigate soil compaction during construction. This will ensure that the site can infiltrate to its potential. Furthermore, during the first few years it is important to hold frequent inspections of the planting and soil to ensure it is growing properly, isn't bare and isn't compacted. Any remedial work should occur as soon as possible. **Further information required.**

8. Construction Plan

Rutting during the operation phase is a common problem with solar farm sites, especially during intense storms at the foot of the panels. This can alter natural flow paths and should be avoided where possible. Therefore, a Construction

**LEAD LOCAL FLOOD AUTHORITY
CONSIDERATIONS and RECOMMENDATION**

Continuation
sheet:

Page 3 of 3

Application
No:



Environmental Management Plan (CEMP) should also be provided. **Further information required.**

Recommendation to the Local Planning Authority:

The submitted documents are limited and the LLFA recommends that the applicant provides further information before any planning permission is granted by the LPA.