15 May 2020

Nicole Brewer A/Director Resource and Energy Assets Department of Planning, Industry and Environment Locked Bag 5022 PARRAMATTA NSW 2124



Dear Nicole,

Re: Jindera Solar Farm (SSD-9549) Request for Additional Information

As requested, please see a consolidated response to your request for information (dated 05/05/2020) below. If you require further clarification, please don't hesitate to contact me by my details below.

Yours sincerely,

Sarah Hillis

Senior Environmental Consultant (02) 6923 1562 0413 343 912 Sarah.h@nghconsulting.com.au



No.	Issue	Sub-issue	Proponent Response		
	Traffic				
1	Further clarification on the use of Ortlipp Road and the emergency site access point, including traffic associated with the construction and operation of the transmission line, substation and battery energy storage.	 Confirm how the substation and battery components will be delivered to site. Confirm restricting heavy vehicle movements into the site from site access 4 (Ortlipp Road) will not inhibit the construction of the transmission line. Confirm if existing fencing will be removed in order to construct the transmission line. 	 Please also see our response to item 4 and 5 below. The substation and battery components will be delivered via Walla Walla Jindera Road, and traverse the eastern portion of the site. Ortlipp Road will not be used as a general haulage route for delivery of solar infrastructure. However, it is likely that up to 20 heavy vehicle movements per day (10 vehicles) and 12 light vehicle movements (6 vehicles) will be required on Ortlipp road for the 4 to 6 week construction period of the transmission line. This is likely to be made up of the delivery of heavy machinery, concrete, transmission lines and cable tensioning equipment, cable drums and transmission line accessories. (See also Item 4 below). Existing fences will not be removed for the construction of the transmission line. Strict controls will be in place to ensure that no heavy vehicle deliveries enter or leave the solar site via Ortlipp Road. We provide further information as Item 5 (below) to explain use of the Ortlipp Road access point for operational traffic associated with the on-site sub-station. 		
2	Confirm the haulage route from the State Road Network (Hume Highway) and provide a figure which identifies this route.	As a minimum the following details are required: Development footprint polygon. Transport route from the Hume Highway. The proposed Glenellen Solar Farm and where the haulage route is common for the two projects. Label all relevant roads, waterways, townships etc.	The proposed haulage route from the Hume Highway is as follows: Thurgoona Road. Catherine Crescent. Dallinger Road. Union Road. Wagga Road. Urana Road. Jindera Walla Walla Road (as required). All traffic will come from the south (northbound) to ensure no heavy vehicle traffic movements on Glenellen Road, or lesser unsealed roads to the north.		

 Mark the road upgrades and site access points. The above route was determined from the National Heavy Vehicle Regulator. The route planner is an interactive web-based tool which is continuously updated by (NHVR). The routes have been confirmed by use of the Transport for NSW Restricted Access Mapping tool, published by Transport for NSW. The routes have been modelled for 26m B-double routes and over-sized over-mass routes (OSOM).

The Proponent is satisfied that the largest design traffic will be accommodated by the existing geometry of the proposed road network. It is likely that additional permits will be required for any OMOD vehicles entering the site via Urana Road, from its intersection with Hueske Road. Such permits can only, practically be obtained near the time of the proposed movements.

The proposed haulage route has been inspected by the proponent including observations of the layout of junctions to ensure the full route is suitable for the proposed traffic, vehicle types and vehicle numbers.

The haulage route is shown on the map at Appendix A.1 to this document and is also included as a separate document uploaded to the portal.

- The development footprint of each of the intersections are included.
- The transport route from the Hume Highway is included.
- The development footprint of both the Jindera Solar Farm and Glenellen Solar Farm, and where the haulage route is common for both is included.
- All relevant roads, waterways, towns etc. labelled.
- All road upgrades and site access points are labelled.

- 3 Confirm the number of over-dimensional and heavy vehicle movements per day during both construction and operation of the development.
- Confirm the number of over-mass and overdimensional vehicles required for the construction period.
- Confirm the maximum number of heavy vehicle movements per day during operations.
- Please also see Item 4 below
- It is expected no more than 10 overmass and over-dimensional vehicle movements (5 vehicles) will be required during construction, operation and decommissioning.
- Up to 8 heavy vehicle movements per day (4 vehicles) may be required during operations.
- The proponent can confirm they are committed to constructing the Urana

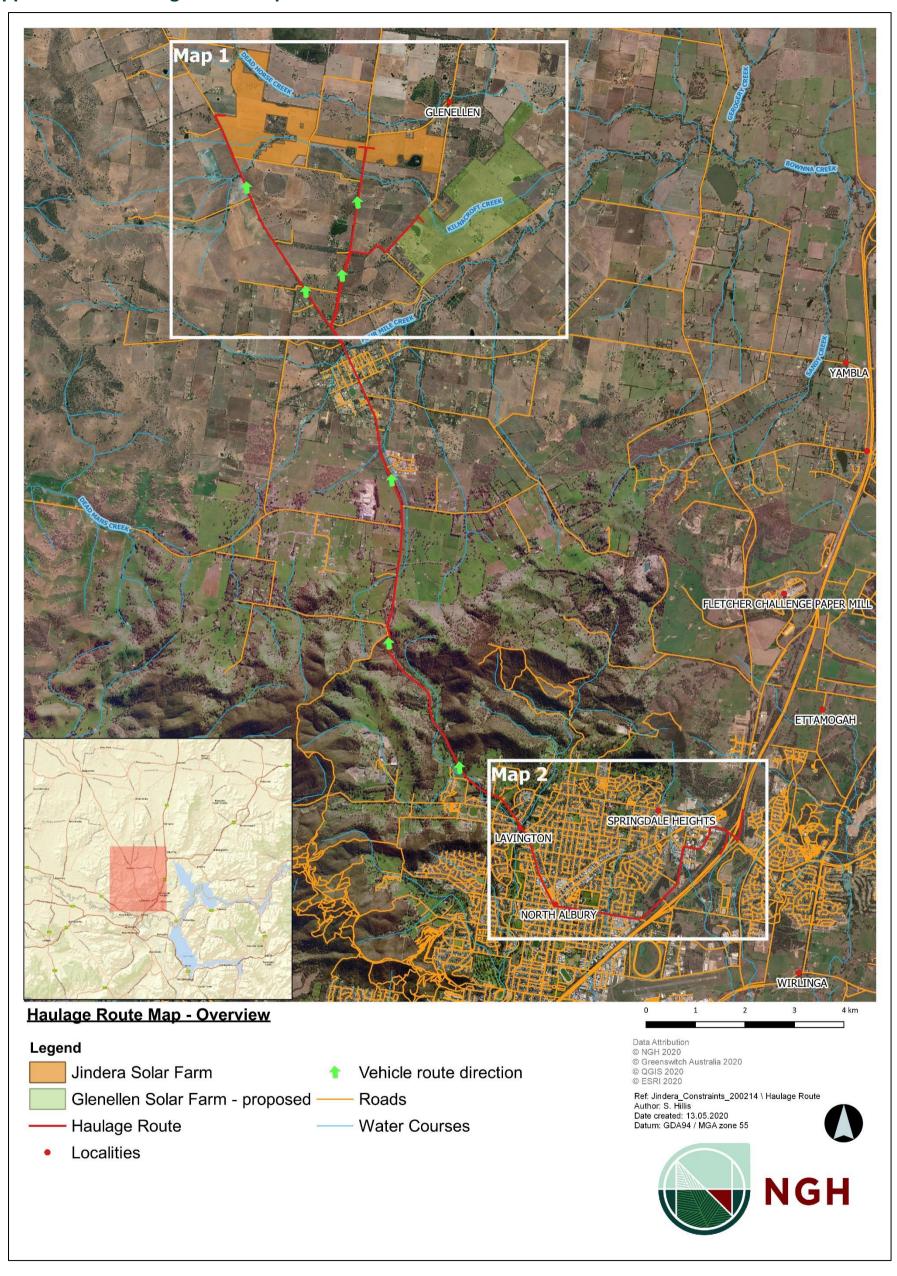
		Confirm that the commitment for a BAL intersection treatment is for southbound vehicles turning left from Urana Road into site, as per TfNSW advice.	Road/site access intersection as per the TfNSW advice, being a Channelised Right Turn-Short (CHR(s))/Basic Left Turn (BAL). This is to allow staff to turn left from Urana Road into the site. However, it is important to note that there will be no southbound heavy vehicle movements to the site, with no trucks turning left from Urana Road to the site.
4	Confirm traffic numbers.	 Confirm the construction/ decommissioning and operational traffic requirements for the Solar Farm. Confirm the construction/ decommissioning and operational traffic requirements for the Transmission Line. Confirm the total number of over-mass over-dimensional (OMOD) vehicles. 	The final traffic numbers associated with construction, operation and decommissioning for both the Solar Farm and the Transmission Line are detailed below in Appendix A.2 The table consolidates the traffic numbers, setting out numbers for solar farm and transmission line and finally, combined vehicles for both elements of the project.
5	Confirm maintenance access requirements.	 Confirm the requirement to use Ortlipp Road as a maintenance access. Confirm the requirement to use Klinberg Road as a maintenance access. 	Maintenance access from Ortlipp Road is required to directly service and monitor the internal substation.

			the reverse route. The access point provides separation between staff maintaining the sub-station and the remainder of the solar farm. • Whilst the table in Appendix A.2 suggested 2 heavy and 4 light vmpd, in practice the access will rarely be used. • It is also proposed that the Ortlipp Road access point will be used for access to the project site in case of an emergency. Klinberg Road • The proponent is cognisant of matters raised by DPIE in respect of the use of the Klinberg Road for maintenance traffic. As such the Proponent withdraws its proposal to use this access for maintenance traffic, subject to the Ortlipp Road access being acceptable for use for maintenance traffic. • It is proposed that the Klinberg Road access point will be used for access to the project site in case of an emergency.	
	Heritage			
6	Heritage item figures.	Revise figure 13 of the ACHAR to indicate whether items will be avoided, salvaged etc.	 Figure 13 of the ACHAR has been revised. See Appendix A.3 and separate attachment in the portal. 	
	Subdivision			
7	Subdivision requirements.	 Confirm that you do not seek to subdivide the land on which the onsite substation is to be located. Provide a subdivision plan. 	The Proponent is now required to subdivide for the substation. This has been addressed, and the subdivision plan provided, in the separate Amendment Direction (submitted 13/05/2020), which was requested DPIE or the portal on 07/05/2020.	
	Main project layout			
8	Amendments required to the main project layout.	 Ensure panel array legend icon matches the map layer. Add label for R18 on Glenellen Road. 	 The panel array legend item matches the map layer – it is simply a black transparent box. The label for R18 has been included. See Appendix A.4 and separate attachment in portal. 	

9	Clarification of stream order.	 Clarify the stream order and buffer from Kilnacroft Creek. Update the layout map to reflect. 	 The stream order of Kilnacroft Creek has been confirmed as a Third Order Stream. The Proponent has committed to a 30m setback (buffer) from the creek for all solar infrastructure. The Layout Map has been updated to reflect. 		
			See Appendix A.4 and separate attachment in portal.		

Appendix A Revised mapping and images

Appendix A.1. Haulage route maps





Haulage Route - Map 1

Legend

Jindera Solar Farm

Glenellen Solar Farm - proposed

Haulage route

Jindera Solar Farm

— Glenellen Solar Farm

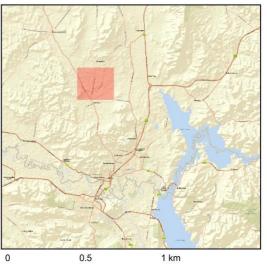
Common haulage route

Roads

Watercourses

- Intersections and Upgrades

 Main access Channelised
 Right Turn Short Basic Left Turn
- X Main access Basic Left Turn
- X Main Access Basic Right Turn
- X Emergency/maintenance access
- **X** Emergency access



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Ref: Jindera_Constraints_200214 \ Haulage route -

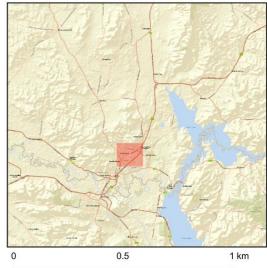
Map 1 Author: S. Hillis Date created: 15.05.2020 Datum: GDA94 / MGA zone 55



Haulage Route - Map 2

Legend

- Haulage route
- Roads
- Watercourses
- Localities



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© DSFI 2020

Ref: Jindera_Constraints_200214 \ Haulage route - Map 2
Author: S. Hillis
Date created: 13.05.2020
Datum: GDA94 / MGA zone 55



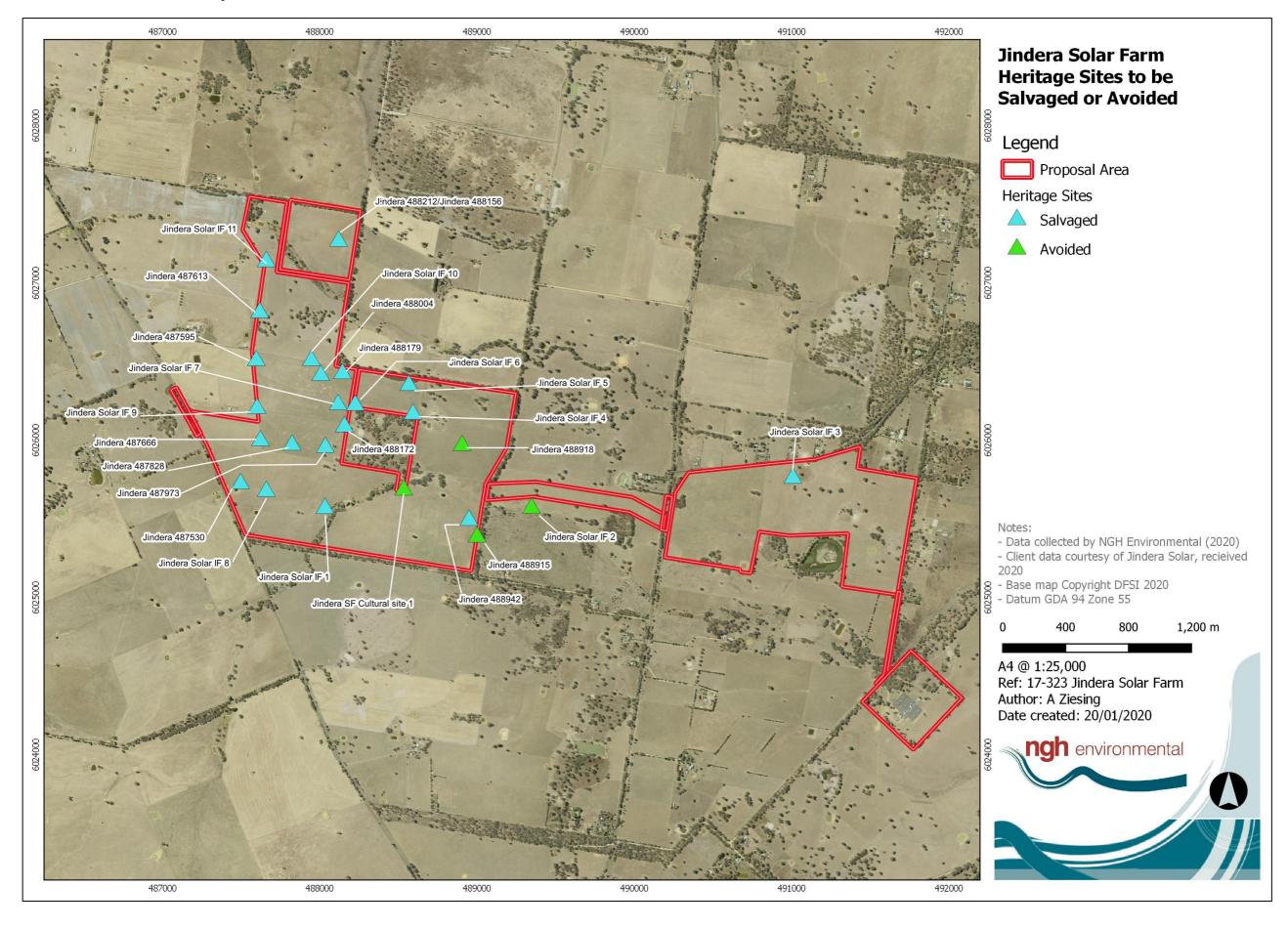
Appendix A.2. Final traffic numbers

	Solar Farm		Transmission / Ortlipp Road		TOTAL Traffic (Solar Farm + Transmission line)	
Vehicles Movement per Day (vmpd)	Construction and decommissioning*	Operation	Construction and decommissioning*	Operation	Construction and decommissioning*	Operation
Heavy Vehicles	40 (vmpd)	8 (vmpd)	20 (vmpd)	2 (vmpd)	60 (vmpd)	10 (vmpd)
Light vehicles	200 (vmpd)	8 (vmpd)	12 (vmpd)	4 (vmpd)**	212 (vmpd)	12 (vmpd)**
OMOD total	10			10		

^{*}in practice, decommissioning traffic is expected to be less

^{**}No more than 4 vmpd to use Ortlipp Road maintenance access gates

Appendix A.3. Isolated finds map



Appendix A.4. Project Layout

