Dear Mr Shaikh,

At yesterday's Issue Specific Meeting you kindly invited me to ask 2 questions of the Applicant on Noise. I'm writing now due to concerns I have about the answers given, especially to question 2.

Whilst acknowledging that there was an assessment of noise impact during the operational phase on residential receptors I asked the Applicant to explain:

1. How the rather limited number of residential receptors listed in Chapter 13 Noise and Vibration [APP-050] was selected and
2. Why there was no similar noise assessment for these receptors during the <u>construction</u> phase of the project

The answer given to (2) was "*Noise impact assessment (APP-050) does include an assessment of construction phase noise on residential receptors that is all set out there. It's also expanded in the construction appendix 13.2 which is APP- 212 as well. It is fully considered at all residential receptors".*

Having re-checked I can confirm that **table 13.6.2** deals with **operational** phase noise only.

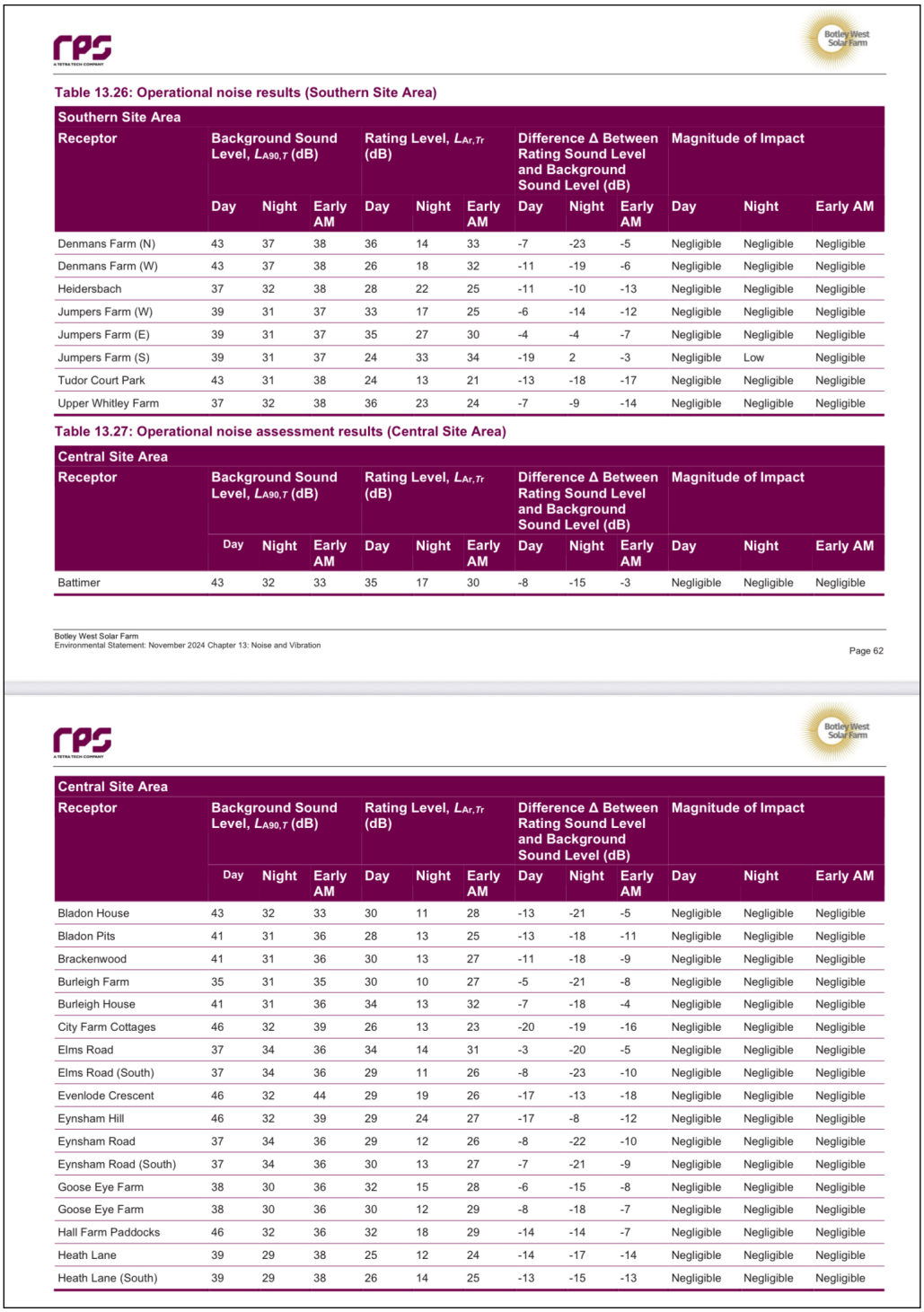

Table 13.26: Operational noise results (Southern Site Area)

Southern Site Area												
Receptor	Background Sound Level, $L_{A90,T}$ (dB)			Rating Level, $L_{Ar,Tr}$ (dB)			Difference Δ Between Rating Sound Level and Background Sound Level (dB)			Magnitude of Impact		
	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM
Denmans Farm (N)	43	37	38	36	14	33	-7	-23	-5	Negligible	Negligible	Negligible
Denmans Farm (W)	43	37	38	26	18	32	-11	-19	-6	Negligible	Negligible	Negligible
Heidersbach	37	32	38	28	22	25	-11	-10	-13	Negligible	Negligible	Negligible
Jumpers Farm (W)	39	31	37	33	17	25	-6	-14	-12	Negligible	Negligible	Negligible
Jumpers Farm (E)	39	31	37	35	27	30	-4	-4	-7	Negligible	Negligible	Negligible
Jumpers Farm (S)	39	31	37	24	33	34	-19	2	-3	Negligible	Low	Negligible
Tudor Court Park	43	31	38	24	13	21	-13	-18	-17	Negligible	Negligible	Negligible
Upper Whitley Farm	37	32	38	36	23	24	-7	-9	-14	Negligible	Negligible	Negligible

Table 13.27: Operational noise assessment results (Central Site Area)

Central Site Area												
Receptor	Background Sound Level, $L_{A90,T}$ (dB)			Rating Level, $L_{Ar,Tr}$ (dB)			Difference Δ Between Rating Sound Level and Background Sound Level (dB)			Magnitude of Impact		
	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM
Battimer	43	32	33	35	17	30	-8	-15	-3	Negligible	Negligible	Negligible

Central Site Area												
Receptor	Background Sound Level, $L_{A90,T}$ (dB)			Rating Level, $L_{Ar,Tr}$ (dB)			Difference Δ Between Rating Sound Level and Background Sound Level (dB)			Magnitude of Impact		
	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM
Bladon House	43	32	33	30	11	28	-13	-21	-5	Negligible	Negligible	Negligible
Bladon Pits	41	31	36	28	13	25	-13	-18	-11	Negligible	Negligible	Negligible
Brackenwood	41	31	36	30	13	27	-11	-18	-9	Negligible	Negligible	Negligible
Burleigh Farm	35	31	35	30	10	27	-5	-21	-8	Negligible	Negligible	Negligible
Burleigh House	41	31	36	34	13	32	-7	-18	-4	Negligible	Negligible	Negligible
City Farm Cottages	46	32	39	26	13	23	-20	-19	-16	Negligible	Negligible	Negligible
Elms Road	37	34	36	34	14	31	-3	-20	-5	Negligible	Negligible	Negligible
Elms Road (South)	37	34	36	29	11	26	-8	-23	-10	Negligible	Negligible	Negligible
Evenlode Crescent	46	32	44	29	19	26	-17	-13	-18	Negligible	Negligible	Negligible
Eynsham Hill	46	32	39	29	24	27	-17	-8	-12	Negligible	Negligible	Negligible
Eynsham Road	37	34	36	29	12	26	-8	-22	-10	Negligible	Negligible	Negligible
Eynsham Road (South)	37	34	36	30	13	27	-7	-21	-9	Negligible	Negligible	Negligible
Goose Eye Farm	38	30	36	32	15	28	-6	-15	-8	Negligible	Negligible	Negligible
Goose Eye Farm	38	30	36	30	12	29	-8	-18	-7	Negligible	Negligible	Negligible
Hall Farm Paddocks	46	32	36	32	18	29	-14	-14	-7	Negligible	Negligible	Negligible
Heath Lane	39	29	38	25	12	24	-14	-17	-14	Negligible	Negligible	Negligible
Heath Lane (South)	39	29	38	26	14	25	-13	-15	-13	Negligible	Negligible	Negligible

Central Site Area												
Receptor	Background Sound Level, $L_{A90,T}$ (dB)			Rating Level, $L_{Ar,Tr}$ (dB)			Difference Δ Between Rating Sound Level and Background Sound Level (dB)			Magnitude of Impact		
	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM
Jericho Farm	37	34	36	29	17	26	-8	-17	-10	Negligible	Negligible	Negligible
Manor Road	39	29	38	27	9	25	-12	-20	-13	Negligible	Negligible	Negligible
Mill Farm	43	32	33	23	9	21	-20	-23	-12	Negligible	Negligible	Negligible
New Barns Farm	38	30	36	31	6	11	-7	-26	-28	Negligible	Negligible	Negligible
New Wintles Farm	46	32	39	12	15	27	-34	-15	-9	Negligible	Negligible	Negligible
Purwell Farm	38	30	36	30	11	23	-8	-20	-13	Negligible	Negligible	Negligible
The Beeches	41	31	36	20	11	22	-21	-21	-11	Negligible	Negligible	Negligible
The Paddock	43	32	33	25	21	28	-18	-11	-16	Negligible	Negligible	Negligible
Toll Cottage	46	32	44	30	14	26	-16	-23	-13	Negligible	Negligible	Negligible
Worton Rectory Farmhouse	38	37	39	29	8	14	-9	-29	-25	Negligible	Negligible	Negligible
Yarnton Nursing Home	38	37	39	16	17	30	-22	-15	-3	Negligible	Negligible	Negligible

Table 13.28: Operational noise assessment results (Northern Site Area)

Northern Site Area												
Receptor	Background Sound Level, $L_{A90,T}$ (dB)			Rating Level, $L_{Ar,Tr}$ (dB)			Difference Δ Between Rating Sound Level and Background Sound Level (dB)			Magnitude of Impact		
	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM	Day	Night	Early AM
Field View Lane	45	31	39	22	8	19	-23	-23	-20	Negligible	Negligible	Negligible
Hordley Cottages	37	33	34	33	13	29	-4	-20	-5	Negligible	Negligible	Negligible
Lower Dornford Farm	40	31	38	28	9	24	-12	-22	-14	Negligible	Negligible	Negligible
Milford Bridge Cottage	37	33	34	20	6	18	-17	-27	-16	Negligible	Negligible	Negligible
Mulberry Cottage	40	31	38	24	10	20	-16	-21	-18	Negligible	Negligible	Negligible
Old Weaveley Farm	45	31	39	29	18	26	-16	-13	-13	Negligible	Negligible	Negligible
Reeves Cottage	45	31	39	34	13	29	-11	-18	-10	Negligible	Negligible	Negligible
Sansoms Barn	37	33	34	28	10	24	-9	-23	-10	Negligible	Negligible	Negligible
Studys Castle	37	33	34	26	21	24	-11	-12	-10	Negligible	Negligible	Negligible
Threshers Barn	45	31	39	24	16	21	-21	-15	-18	Negligible	Negligible	Negligible
Upper Dornford Barn	40	31	38	23	6	20	-17	-25	-18	Negligible	Negligible	Negligible
Upper Dornford Cottages	40	31	38	27	7	23	-13	-24	-15	Negligible	Negligible	Negligible
Weaveley Farm	45	31	39	32	13	28	-13	-18	-11	Negligible	Negligible	Negligible
Wooton Downs Cottages	40	31	38	21	4	18	-19	-27	-20	Negligible	Negligible	Negligible

There is no equivalent to table 13.6.2 for Construction Noise in either APP-050, or APP-212.

Incidentally table 13.2.6 omits many sensitive receptors.
Some of the most significant are listed here but many more exist:

1. Dornford Cottage, one of the closest and most impacted properties in the Northern Site (different from all the other “Dornford” properties listed)
2. Oxford Crematorium, very close to the cable route
3. The Oxford School of Drama at Sansom’s Farm
4. Grove Road, Bladon, several properties adjacent to red line boundary
5. Bladon Primary School
6. Bladon Churchyard (containing the much visited Churchill’s Grave)
7. College Farm and other properties on Lower Rd
8. Lake View House, Cumnor

The only assessment of potential magnitude of impact during construction is table 13.25 which assesses any receptors <1344m from solar pile driving to be of **high** impact. There are over 5,000 within 1km but **none** of these have been assessed despite this general assessment.

Magnitude of impact

13.9.14 The magnitude of the impact at various distances from the boundary of the solar PV array areas for each of the Northern, Central, and Southern Site Area is presented in **Table 13.25**: below.

Table 13.25: Construction noise impact assessment – solar pile driving

Potential Magnitude of impact	Solar pile driving Distance d to receptor (m) for magnitude of impact
High	$d < 1,344$
Medium	$1344 \leq d < 2,113$
Low	$2113 \leq d < 3,500$
Negligible	$d > 3,500$

13.9.15 The assessment above has been undertaken based upon predicted noise emission levels from the boundary of the solar PV installation areas. The number of receptors per impact magnitude band equates to the total number of receptors affected across the whole site.

13.9.16 Due to the nature of the operations, all receptors would not be affected simultaneously across all sections. Moreover, the solar pile driving works would be very transient in nature and move across each of the PV installation areas thus receptors could be exposed to high noise levels built this would occur only for a short period of time.

13.9.17 The prediction of noise impacts has not accounted for screening provided by intervening buildings and thus the levels at receptors within built-up areas are likely to be at least 5 - 10 dB lower than those predicted.

The view expressed in para 13.9.16 is repeated in APP-212 Appendix 13.2 in paragraph 1.5.11 *"the solar pile driving works would be very transient in nature and would move across each of the installation areas. Thus receptors may be exposed to high noise levels but this would occur only for a short period of time"*

No evidence is provided for this statement or consideration of cumulative impact

and in 1.15.3 " if required, noise screens could be installed around the solar pile driver where the installation occurs very close to residential receptors"

but these residential receptors have not been identified or assessed.

I have raised elsewhere the need for a full residential amenity assessment on visual, noise, traffic, Socio-evonomic, health and many other impacts. The consideration of noise impacts on residential amenity is just one of many in areas that have been inadequately addressed.

Thank you
Yourse sincerely
Rosemary Lewis