



AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement Addendum 3 –
Appendix 5.16 Cumulative Effects
Assessment Matrix (Stage 3 & 4)

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations
2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

Document Ref : 7.8.3.26

PINS Ref. : EN020022

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PINS REF.: EN020022

DOCUMENT: 7.8.3.26

DATE: 28 APRIL 2023

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CUMULATIVE EFFECTS ASSESSMENT MATRIX (STAGES 3 & 4)

Table 1 – Stage 3 & 4 Matrix for ES Chapter 15 (Landscape and Visual Amenity)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	<p>A supplementary assessment of potential cumulative landscape and visual effects arising from the construction and operation of Denmead Solar Farm and Battery Storage Scheme (The Solar Farm Scheme) in February 2023. This was prepared in response to the Solar Farm Application.</p> <p>The Assessment considered the Solar Farm Scheme alongside the Proposed Development and the Arcus/Statkraft Lovedean Greener Grid Battery Storage Scheme (The Battery Storage Scheme).</p> <p>In line with the assessment parameters set out in the Solar Farm Scheme, receptors were considered during construction, at Year 1 and Year 15. The spatial scope of the assessment was defined as 2km, as the nature of the Solar Farm was deemed to be such that cumulative effects arising from beyond this distance were not likely to be significant.</p> <p>Whilst the assessment parameters between the Solar Farm Scheme and the Aquind Scheme differ, we find that cumulative effects arising from receptors identified in the Aquind Scheme that lie beyond the 2km Study Area are mitigated to the extent that no additional significant effects beyond those</p>	<p>Embedded mitigation: Existing and proposed native hedgerows are to be managed to a height of 3m or over around the perimeter to provide visual mitigation and to enhance visual enclosure.</p> <p>Proposed mitigation: If sites are constructed concurrently then site liaison and management would be required where practicable, to reduce effects, in relation to impacts on landscape, visual amenity, construction traffic management and noisy activities.</p>	<p>A summary of the residual effects for common receptors between the Solar Farm and Proposed Development are set out below.</p> <p>Landscape character: During construction localised Major adverse (significant) effects on LCA D and LCA17, Major-Moderate adverse (significant) effects on LCA 3fi, Moderate adverse (not significant) effect on LCA 18 and Moderate-Minor adverse (not significant) effect on LCA10a.</p> <p>At Year 1 localised Major-Moderate adverse (significant) effects on LCA D and LCA 17, Moderate-Minor adverse (not significant) effects on LCA 18, Moderate adverse (not significant) effects on LCA 3fi and Minor adverse (not significant) effects on LA10a.</p> <p>At Year 15 localised Moderate adverse (not significant) effects on LCA 17, Moderate -Minor adverse (not significant) effects on LCA D and LCA 3fi, Minor adverse (not significant) effects on LCA 18, Moderate adverse (not significant) effects on LCA 3fi and Minor-Negligible adverse (not significant) effects on LA10a.</p> <p>Landscape features: During construction localised Major-Moderate adverse (significant) effect on land use, buildings and</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
				<p>identified in the Aquind Scheme are likely to occur.</p> <p>A summary of this assessment is presented below.</p> <p>Section 1 Converter Station:</p> <p>The proposals comprise a ground mounted solar farm (with provision for a battery storage facility) with associated plant and equipment. It would be located on a number of land parcels extending to approximately 92ha in the vicinity of the Lovedean Substation in Hampshire.</p> <p>Sensitive receptors include:</p> <p>Landscape character areas LCA D2: Hambledown and Clanfield Downland Mosaic (SDNP), LCA 17: Hambledon Downs (WCC), LCA 18: Forest of Bere Lowlands (WCC), LCA 3F: Horndean – Clanfield Edge (EHDC), and LCA 10a: Havant Thicket and Southleigh Forest (EHDC). Landscape features including the sites, topography and landform, land use, buildings and infrastructure, watercourses and drainage, and vegetation.</p> <p>Visual receptors such as local residents, recreational users of PRow in the immediate vicinity, and users of local highway.</p>		<p>infrastructure and Moderate adverse (not significant) effects on topography and landform, watercourses and drainage, and vegetation.</p> <p>At Year 1 localised Major-Moderate adverse (significant) effect on land use, buildings and infrastructure and Moderate-Minor adverse (not significant) effect on topography and landform, watercourses and drainage, and vegetation.</p> <p>At Year 15 localised Moderate adverse (not significant) effect on land use, buildings and infrastructure and Moderate-Minor adverse (not significant) effect on topography and landform, and watercourses and drainage, and a Moderate beneficial (not significant) effect on vegetation.</p> <p>Visual Amenity:</p> <p><u>Residential receptors</u></p> <p>Major-Moderate adverse (significant) cumulative effects on residential receptors during construction.</p> <p>Moderate adverse (not significant) cumulative effects on residential receptors during operation Year 1.</p> <p>Moderate-Minor adverse (not significant) cumulative effects on residential receptors during operation Year 15.</p> <p><u>Recreational receptors</u></p> <p>Major adverse (significant) effects on the Monarchs Way Long Distance Route, Moderate adverse (not significant) effect on Catherington Down and Minor adverse (not significant) effect on the informal paths</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
						<p>at Portsdown in proximity to Fort Widley during construction.</p> <p>Major-Moderate adverse (significant) effects on the Monarchs Way Long Distance Route, Moderate-Minor adverse (not significant) effect on Catherington Down and Neutral (not significant) effect on the informal paths at Portsdown in proximity to Fort Widley during operation Year 1.</p> <p>Moderate adverse (not significant) effects on the Monarchs Way Long Distance Route, Minor adverse (not significant) effect on Catherington Down and Neutral (not significant) effect on the informal paths at Portsdown in proximity to Fort Widley during operation Year 15.</p> <p><u>Highways receptors</u></p> <p>Major-Moderate adverse (significant) effect on Broadway Lane and Moderate adverse (not significant) effect on Anmore Lane, Edney's Lane, Whitehorse Lane, Unnamed minor road between Edneys's Lane and Anmore Lane, Old Mill Lane and Unnamed minor road between Old Mill Lane and Broadway Lane during construction.</p> <p>Moderate adverse (not significant) effect on Broadway Lane and Moderate-Minor adverse (not significant) effect on Anmore Lane, Edney's Lane, Whitehorse Lane, Unnamed minor road between Edneys's Lane and Anmore Lane, Old Mill Lane and Unnamed minor road between Old Mill Lane and Broadway Lane during operation Year 1.</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
						<p>Moderate-Minor adverse (not significant) effect on Broadway Lane and Minor adverse (not significant) effect on Anmore Lane, Edney's Lane, Whitehorse Lane, Unnamed minor road between Edneys's Lane and Anmore Lane, Old Mill Lane and Unnamed minor road between Old Mill Lane and Broadway Lane during operation Year 15.</p> <p>Effective site liaison and management of works would reduce construction phase activity to a level that is not significant.</p>

Table 2 – Stage 3 & 4 Matrix for ES Chapter 16 (Onshore Ecology)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	Ecology was scoped out of the Environmental Statement for the Solar Farm. However, site clearance and construction lighting activities have the potential to impact bird and bat species and therefore act cumulatively with the Proposed Development. The solar farm scheme does include designed in mitigation measures equivalent to that for the Proposed Development, addressing birds, bats, badgers and other species of principal importance. This will adequately prevent any significant cumulative effects.	None required.	There would be a negligible cumulative effect in relation to impacts on ecological receptors.

Table 3 – Stage 3 & 4 Matrix for ES Chapter 17 (Soils and Agricultural Land Use)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	<p>Agricultural land impacts scoped out of the Environmental Statement for the Solar Farm, with separate Agricultural Land Classification report prepared showing proposal would involve 12.5ha of Subgrade 3a (Best and Most Versatile) and 75.9ha Subgrade 3b (non-BMV). No significant effects identified.</p> <p>The Environmental Statement for the Proposed Development identified minor to moderate temporary and permanent adverse effects on agricultural land, and also specifically on BMV agricultural land in Section 1 of the scheme (total of 35ha of agricultural land of mostly Subgrade 3b, with 4.4ha BMV Subgrade 3a).</p> <p>Cumulative effects on all agricultural land would increase to moderate adverse effect but remain at minor to moderate adverse for BMV land.</p>	No applicable mitigation.	<p>Temporary and permanent moderate adverse effect on agricultural land which is significant.</p> <p>Temporary and permanent minor to moderate adverse effect on BMV agricultural land, which is not significant.</p>

Table 4 – Stage 3 & 4 Matrix for ES Chapter 21 (Heritage and Archaeology)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	Cumulative effects in relation to below-ground archaeological remains were previously scoped out. The Historic Environment Desk Based Assessment (HEDBA) produced for the Solar Farm development (Orion 2022) has not identified any impacts on potential below ground archaeological remains that would potentially lead to an elevated cumulative effect	No elevated cumulative effect has been identified. No additional mitigation is therefore proposed with respect to Scotland (Cottage).	<p>No elevated cumulative effect has been identified.</p> <p>The setting of Scotland (Cottage) will remain as minor adverse (not-significant) as reported in ES Chapter 21 (Document ref. 6.1.21).</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
				<p>and as there is no direct overlap between the Solar Farm development and the Proposed Development order limits there would be no cumulative impact. Therefore, an assessment of cumulative effects on below ground archaeology would remain scoped out.</p> <p>The cumulative effects assessment includes potential effects of the Proposed Development when combined with other major development proposals, specifically in relation to permanent changes to the setting of heritage assets located within and in the vicinity of the Order Limits (affecting heritage significance).</p> <p>The only sensitive above ground heritage asset (receptor) affected by the Proposed Development is the Grade II listed early-16th century Scotland (Cottage) of high heritage significance. This asset is predicted to experience a direct, permanent, long-term effect of minor adverse significance, through changes to its setting and how the asset is understood and experienced. Note: this asset was not considered a sensitive receptor in the Historic Environment Desk Based Assessment produced for the solar farm application (Orion 2022).</p> <p>Whilst the proposed solar farm would cover a wide area, the overall height of any above ground elements would be limited to 3.9m (for the proposed solar farm substation). Whilst this is</p>		

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
				<p>introducing further built form into a rural landscape alongside the Proposed Development, the combined magnitude of change on the setting of Scotland (Cottage) remains small. This takes into account the considerable distance (1.6km from its closest point) from the new built form from the combined developments. This small cumulative change will not have a significant effect on the overall heritage significance of Scotland (Cottage). There will not be an elevated environmental effect and the minor adverse effect as reported in ES Chapter 21 (Document ref. 6.1.21) remains minor adverse.</p>		

Table 5 – Stage 3 & 4 Matrix for ES Chapter 22 (Traffic and Transport)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
81	Tier 1	22/01243/CS3, Land Bound By Hope Street & Church Street Roundabout To The North, Commercial Road (A3) & Lake Road To The East, Charlotte Street To The South And Hope Street To The West	Outline planning application for demolition of existing buildings and the construction of a phased development of up to 2,300 residential units (Use Class C3), up to 10,000sqm non-residential uses (Use Classes E, F1 and F2), and associated servicing facilities, parking, plant space, open space (including a public park), landscaping, access and highways works. Phase 1 to comprise residential units and non-residential uses with full details of access, layout, scale and appearance provided, with landscaping reserved. Subsequent phases to comprise residential units and non-residential uses with details of strategic means of access provided with all other matters reserved	For the purpose of the traffic impact assessment, 596 residential units have been applied to Phase 1 of the development, which has a completion year of 2026. Non-residential use of Phase 1 equates to 164sqm. This is a small portion of the total non-residential development, and as such it has not been separated from the full non-residential trip generation assessment. The trip generation of the existing site (Sainsbury's and the car park for the Cascades shopping centre) has been subtracted from the Phase 1 trip generation. This results in a net loss of -39 two-way trips in the AM Peak and -325 trips in the PM peak.	Not significant. No additional mitigation required.	Negligible – not significant. Due to the net loss of traffic on the local network, the assessment of cumulative effect is considered to be negligible.
83	Tier 1	20/00407/OUT, Post Office Slindon Street	Outline application with all matters reserved except access and scale for the construction of a building up to 19-storeys/62m for circa 176 nos. dwellings (Class C3); parking and servicing with access from Lower Church Path; podium level open space and associated works following demolition and removal of existing buildings and structures (amended description and drawings)	The trip generation of the new development on Slindon Street results in an additional 70 vehicles daily. Eight vehicle movements will take place in the AM peak and 11 in the PM peak. Based on the trip distribution, a maximum of three additional vehicles will travel on the surrounding roads, including Station Street and Lower Church Path.	Effect not significant. No additional mitigation required.	Negligible – not significant. Due to both the low trip generation of the development and the distance from the Proposed Development, there is considered to be a negligible cumulative effect.
87	Tier 1	Havant Thicket, adjacent to Sir George Staunton Country Park, Reservoir and Pipe	Hybrid application seeking: 1) Full Planning permission for Development of a reservoir for raw water storage, A pumped storage reservoir, with the minimum required total storage capacity of 8,700 million litres (MI), to	Combined construction of the Reservoir and Pipeline would see peak of 200 HGV's	As HGV traffic associated with both Havant Thicket and the construction of the Proposed Development will not	Negligible – not significant. HGV traffic for both Havant Thicket and the construction of the Proposed

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
		Line, Middle Park Way, APP/20/00990 East Hants Ref: 51680/001	support the planned bulk supply transfer of at least 21Ml/d in extreme (currently defined as 1:200 year) drought conditions; Construction of an earth embankment adjacent to Staunton Country Park ; Construction of an overflow discharge/spillway at the south-western side of the reservoir and associated works; Construction of a new junction on the B2149 Manor Lodge Road and a new junction on Swanmore Road. Provision of viewing areas on the southern embankment and western edge of the reservoir. 2) Outline application for (matters to be considered outlined in Table 2.2 in the submitted Development Specification) control house partially incorporated within landscaped earth mounding adjacent to the south west embankment; together with provision of other earth embankments. Construction of a visitor centre / cafe, with storage areas and welfare facilities to the northwest of the reservoir to be used for recreational and education purposes; Provision of picnic area(s) and children's play area(s). Access routes from both junctions to the visitor car park; visitor car park comprising 193 car parking spaces and between 70 and 75 overflow spaces plus spaces for staff, coach/minibus and disabled drivers sited to the north west of the reservoir. Creation of a permanent wetland on the northern side of the reservoir and construction of bird watching hide/screen(s); recreational facilities for public amenity. Provision of perimeter tracks and a network of bridleways, cycle paths and footpaths; Construction of a slipway on the western bank of the reservoir for operational use only and a small section of the proposed pipeline (210m).	travelling through the A3(M) Junction 2. The HGV traffic associated with Havant Thicket will not travel between 08:00 – 09:00 and 17:00-18:00. A3(M) Junction 2 is a medium sensitivity receptor which continues to operate within capacity in the AM and PM peaks, albeit the A3(M) off-slips are approaching capacity in the Do Something scenarios in the AM and PM peak hours. Impact of operational traffic would be negligible.	travel within the AM and PM peaks no further mitigation is required.	Development will travel outside of peak hours, when the junction is less sensitive to additional traffic.
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles	Construction traffic to use the same routing for the construction of the Solar Farm and the Proposed Development. Should the	Update to Requirement 17 pertaining to construction traffic management to ensure that should construction	Negligible – not significant. The cap on the maximum number of two-way daily HGV movements remains the same as was previously

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
		Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	construction periods coincide, there is the potential for the magnitude of impact and duration of effect on the construction traffic route to increase.	periods coincide the previously stated maximum daily number of 71 two-way HGV movements at the access junction would not be exceeded by the combined construction of both the solar farm and the Proposed Development. This will be imposed as a condition of the Solar Farm permissions as per the request of HCC dated 6 th February.	agreed under Requirement 17 and as such the impact and duration of effect remains unchanged.
89	Tier 1	Land at Forty Acres Farm, Havant Road, APP/21/00605 Original Application is APP/18/00450 (Not on Previous List)	Erection of additional 34 dwellings on existing development site (new site total of 147 dwellings) Erection of 320 dwellings (including a 30% provision of affordable homes), 66 bed care home, provision of public open space, habitat mitigation zone, allotments, closure of existing access and creation of 2 new access points and associated infrastructure following demolition of existing buildings (approved 17.1.2020). Request to discharge condition nos 3, 4, 5, 6, 7, 8, 10, 11, 15, 16, 21 and 23 (Recd 23.1.2020). Request to discharge condition No. 29 (received 3.9.2020). Request to discharge condition No/s 12, 14, 25 and 28 (received 16.06.2021). Request to discharge condition No. 18 (received 05/07/2021).Request to discharge condition nos 4 & 8 (received 3.8.21). Request to discharge conditions 3 (resubmission) & 13 (received 16.9.21). Request to discharge condition 28 (received 21/02/2022). Request to discharge condition 4 (received 17/03/2022).Request to discharge	This residential development is forecast to generate 189 trips onto the highway network in the AM Peak, and 191 trips in the PM Peak. The majority of development traffic (85%) is anticipated to distribute onto the A27 and A3(M) via Rusty Cutter Roundabout and the A27 Teardrop Junction.	The Transport Assessment supporting this planning application applies TEMPro growth rates for the period 2015 – 2028 to surveyed traffic flows. TEMPro version 7 was used to generate those trip rates. Using the same parameters, the latest datasets released by TEMPro version 8 have been reviewed and new trip rates generated. TEMPro v8 indicates that background traffic growth in the comparable period 2015-2028 has significantly reduced. Future baseline traffic flows at the nearby A3(M) Junction 5 (including Rusty Cutter Roundabout and the A27 Teardrop	Negligible – not significant.

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			condition 26 (20.07.22). Land at Forty Acres Farm, Havant Road, Havant		<p>junction) are such that the development traffic comprises very small percentage impacts.</p> <p>Taking the reduction in background traffic growth forecasts compared to the level at which the assessment originally forecast, the reduction in background traffic is such that there would be zero net impact once the development is fully built and occupied.</p>	

Table 6 – Stage 3 & 4 Matrix for ES Chapter 23 (Air Quality)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	Potential cumulative effect from the transit of construction vehicles on the public highway resulting in: <ul style="list-style-type: none"> Suspended particles from construction site materials transferred to the road by vehicles; and Increased fossil fuel emissions. 	Contractors for the Proposed Development to coordinate the timing and direction construction vehicle transit on the public highway with Lovedean Green Ltd in order to minimise the impact of dust and emissions from construction vehicles using the public highways. Contractors for the Proposed Development to ensure all relevant dust mitigation measures from the CEMP are implemented.	With appropriate mitigation in place the residual effect will be negligible .

Table 7 – Stage 3 & 4 Matrix for ES Chapter 24 (Noise and Vibration)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development)	Noise and vibration were scoped out of the Environmental Statement on the basis of construction noise and vibration being unlikely to result in significant effects at the nearest receptors. The operational sources associated with a solar farm usually emit very low levels of noise and the layout of the battery storage facility includes inherent noise mitigation measures. A noise assessment was submitted in support of the planning application which details low levels of noise at sensitive receptors.	None required.	There would be negligible cumulative noise and vibration effects.

Table 8 – Stage 3 & 4 Matrix for ES Chapter 25 (Socio-economic)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
81	Tier 1	22/01243/CS3, Land Bound By Hope Street & Church Street Roundabout To The North, Commercial Road (A3) & Lake Road To The East, Charlotte Street To The South And Hope Street To The West	Outline planning application for demolition of existing buildings and the construction of a phased development of up to 2,300 residential units (Use Class C3), up to 10,000sqm non-residential uses (Use Classes E, F1 and F2), and associated servicing facilities, parking, plant space, open space (including a public park), landscaping, access and highways works. Phase 1 to comprise residential units and non-residential uses with full details of access, layout, scale and appearance provided, with landscaping reserved. Subsequent phases to comprise residential units and non-residential uses with details of strategic means of access provided with all other matters reserved	<p>The construction and operation of the cumulative scheme would lead to employment generation. This would result in a cumulative effect on socio-economic receptors when considered alongside the job generation from the Proposed Development.</p> <p>There is potential for cumulative effects to occur as a result of disruption from reduced access, noise, dust and visual annoyance, traffic congestion and reduced amenity from multiple sources. However, due to the distance between the cumulative scheme and Proposed Development and urban nature of the area with good transport linkages, it is likely that the cumulative effect on socio-economic receptors would be limited during construction and operation.</p>	None required.	<p>There would be a minor beneficial cumulative effect in relation to employment generation during construction and negligible effect during operation within the context of the labour market.</p> <p>There would be a negligible cumulative effect in relation to disruption and disturbance of socio-economic receptors.</p>
82	Tier 1	22/00024/OUT, Tipner Interchange Tipner Lane	Outline application, with all matters reserved, for the construction of a multi-storey Transport Hub (up to 28.5m above existing ground level) incorporating a park and ride facility and ancillary uses (up to 840sqm), with access from Junction 1 on the M275. The proposal constitutes EIA development	<p>The construction and operation of the cumulative scheme would lead to employment generation. This would result in a cumulative effect on socio-economic receptors when considered alongside the job generation from the Proposed Development.</p> <p>There is potential for cumulative effects to occur as a result of disruption from reduced access, noise, dust and visual annoyance, traffic congestion</p>	None required.	<p>There would be a minor beneficial cumulative effect in relation to employment generation during construction and negligible effect during operation within the context of the labour market.</p> <p>There would be a negligible cumulative effect in relation to disruption and disturbance of socio-economic receptors.</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
				and reduced amenity from multiple sources. However, due to the distance between the cumulative scheme and Proposed Development and urban nature of the area with good transport linkages, it is likely that the cumulative effect on socio-economic receptors would be limited during construction and operation.		
87	Tier 1	<p>Havant Thicket, adjacent to Sir George Staunton Country Park, Reservoir and Pipe Line, Middle Park Way, APP/20/00990</p> <p>East Hants Ref: 51680/001</p>	<p>Hybrid application seeking: 1) Full Planning permission for Development of a reservoir for raw water storage, A pumped storage reservoir, with the minimum required total storage capacity of 8,700 million litres (ML), to support the planned bulk supply transfer of at least 21ML/d in extreme (currently defined as 1:200 year) drought conditions; Construction of an earth embankment adjacent to Staunton Country Park ; Construction of an overflow discharge/spillway at the south-western side of the reservoir and associated works; Construction of a new junction on the B2149 Manor Lodge Road and a new junction on Swanmore Road. Provision of viewing areas on the southern embankment and western edge of the reservoir. 2) Outline application for (matters to be considered outlined in Table 2.2 in the submitted Development Specification) control house partially incorporated within landscaped earth mounding adjacent to the south west embankment; together with provision of other earth embankments. Construction of a visitor centre / cafe, with storage areas and welfare facilities to the northwest of the reservoir to be used for recreational and education purposes; Provision of picnic area(s) and children's play area(s). Access routes from both junctions to the visitor car park; visitor car park comprising 193 car parking spaces and between 70 and 75 overflow spaces plus spaces for staff,</p>	<p>The construction and operation of the cumulative scheme would lead to employment generation. This would result in a cumulative effect on socio-economic receptors when considered alongside the job generation from the Proposed Development.</p> <p>There is potential for cumulative effects to occur as a result of disruption from reduced access, noise, dust and visual annoyance, traffic congestion and reduced amenity from multiple sources. However, due to the distance between the cumulative scheme and Proposed Development and good transport linkages within the vicinity of the cumulative scheme, it is likely that the cumulative effect on socio-economic receptors would be limited during construction and operation.</p>	None required.	<p>There would be a minor beneficial cumulative effect in relation to employment generation during construction and negligible effect during operation within the context of the labour market.</p> <p>There would be a negligible cumulative effect in relation to disruption and disturbance of socio-economic receptors.</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
			coach/minibus and disabled drivers sited to the north west of the reservoir. Creation of a permanent wetland on the northern side of the reservoir and construction of bird watching hide/screen(s); recreational facilities for public amenity. Provision of perimeter tracks and a network of bridleways, cycle paths and footpaths; Construction of a slipway on the western bank of the reservoir for operational use only and a small section of the proposed pipeline (210m).			
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead Waterlooville Hampshire PO7 6JN East Hants Ref: 58038/003	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development).	<p>The construction and operation of the cumulative scheme would lead to employment generation. This would result in a cumulative effect on socio-economic receptors when considered alongside the job generation from the Proposed Development.</p> <p>There are a number of socio-economic receptors that could be affected by the construction of both the schemes. These include recreational routes, residences as well as recreational and business receptors, including Touch and Go Agility, Lovedean Granary B&B, Bird in Hand, Bezels Countryside Boarding Kennels and Cattery, Lower Chapters Bed and Breakfast as well as Shrover Hall. There could be increased disruption from reduced access, noise, dust and visual annoyance, traffic congestion and reduced amenity from multiple sources, in particular for Touch and Go Agility if the business uses the</p>	If sites are constructed concurrently then site liaison and management would be required where practicable, to reduce effects, in relation to impacts on landscape, visual amenity, construction traffic management and noisy activities.	<p>There would be a minor beneficial cumulative effect in relation to employment generation during construction and negligible effect during operation within the context of the labour market.</p> <p>There would be a moderate adverse cumulative effect in relation to disruption and disturbance of socio-economic receptors during the construction of the scheme.</p> <p>During operation, there would be a minor adverse cumulative effect as a result of reduced amenity of socio-economic receptors.</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
				fields near the schemes for dog training. During operation, there could be reduced amenity as a result of the operation of both of the schemes, in particular on Monarchs Way.		
89	Tier 1	<p>Land at Forty Acres Farm, Havant Road, APP/21/00605</p> <p>Original Application is APP/18/00450 (Not on Previous List)</p>	<p>Erection of additional 34 dwellings on existing development site (new site total of 147 dwellings)</p> <p>Erection of 320 dwellings (including a 30% provision of affordable homes), 66 bed care home, provision of public open space, habitat mitigation zone, allotments, closure of existing access and creation of 2 new access points and associated infrastructure following demolition of existing buildings (approved 17.1.2020). Request to discharge condition nos 3, 4, 5, 6, 7, 8, 10, 11, 15, 16, 21 and 23 (Recd 23.1.2020). Request to discharge condition No. 29 (received 3.9.2020). Request to discharge condition No/s 12, 14, 25 and 28 (received 16.06.2021). Request to discharge condition No. 18 (received 05/07/2021). Request to discharge condition nos 4 & 8 (received 3.8.21). Request to discharge conditions 3 (resubmission) & 13 (received 16.9.21). Request to discharge condition 28 (received 21/02/2022). Request to discharge condition 4 (received 17/03/2022). Request to discharge condition 26 (20.07.22). Land at Forty Acres Farm, Havant Road, Havant</p>	<p>The construction and operation of the cumulative scheme would lead to employment generation. This would result in a cumulative effect on socio-economic receptors when considered alongside the job generation from the Proposed Development.</p> <p>There is potential for cumulative effects to occur as a result of disruption from reduced access, noise, dust and visual annoyance, traffic congestion and reduced amenity from multiple sources. However, due to the distance between the cumulative scheme and Proposed Development and urban nature of the area with good transport linkages, it is likely that the cumulative effect on socio-economic receptors would be limited during construction and operation.</p>	None required.	<p>There would be a minor beneficial cumulative effect in relation to employment generation during construction and negligible effect during operation within the context of the labour market.</p> <p>There would be a negligible cumulative effect in relation to disruption and disturbance of socio-economic receptors.</p>

Table 9 – Stage 3 & 4 Matrix for ES Chapter 26 (Human Health)

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
81	Tier 1	22/01243/CS3, Land Bound By Hope Street & Church Street Roundabout To The North, Commercial Road (A3) & Lake Road To The East, Charlotte Street To The South And Hope Street To The West	Outline planning application for demolition of existing buildings and the construction of a phased development of up to 2,300 residential units (Use Class C3), up to 10,000sqm non-residential uses (Use Classes E, F1 and F2), and associated servicing facilities, parking, plant space, open space (including a public park), landscaping, access and highways works. Phase 1 to comprise residential units and non-residential uses with full details of access, layout, scale and appearance provided, with landscaping reserved. Subsequent phases to comprise residential units and non-residential uses with details of strategic means of access provided with all other matters reserved	<p>There is the potential for human health receptors (high sensitivity) to have increased disturbance related to dust, limited accessibility, and noise from demolition and construction activities. However due to the distance from the Proposed Development it is likely that these would result in a negligible (not significant) cumulative effect.</p> <p>There is the potential for employment opportunities to arise which would result in a minor beneficial (not significant) cumulative effect.</p>	<p>Effect not significant.</p> <p>No additional mitigation required.</p>	<p>Negligible (not significant) effect on health outcomes associated with air quality, noise and accessibility.</p> <p>Minor beneficial (not significant), effect on health outcomes associated with employment.</p>
87	Tier 1	Havant Thicket, adjacent to Sir George Staunton Country Park, Reservoir and Pipe Line, Middle Park Way, APP/20/00990 East Hants Ref: 51680/001	Hybrid application seeking: 1) Full Planning permission for Development of a reservoir for raw water storage, A pumped storage reservoir, with the minimum required total storage capacity of 8,700 million litres (MI), to support the planned bulk supply transfer of at least 21MI/d in extreme (currently defined as 1:200 year) drought conditions; Construction of an earth embankment adjacent to Staunton Country Park ; Construction of an overflow discharge/spillway at the south-western side of the reservoir and associated works; Construction of a new junction on the B2149 Manor Lodge Road and a new junction on Swanmore Road.	<p>There is the potential for human health receptors (high sensitivity) to have increased disturbance related to dust, limited accessibility, and noise from demolition and construction activities. However due to the distance from the Proposed Development, and construction traffic travelling at off-peak hours, it is likely that these would result in a negligible (not significant) cumulative effect.</p> <p>There is the potential for employment opportunities to arise which would result in a minor beneficial (not significant) cumulative effect.</p>	<p>Effect not significant.</p> <p>No additional mitigation required.</p>	<p>Negligible (not significant) effect on health outcomes associated with air quality, noise and accessibility.</p> <p>Minor beneficial (not significant), effect on health outcomes associated with employment.</p>

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
			<p>Provision of viewing areas on the southern embankment and western edge of the reservoir. 2) Outline application for (matters to be considered outlined in Table 2.2 in the submitted Development Specification) control house partially incorporated within landscaped earth mounding adjacent to the south west embankment; together with provision of other earth embankments. Construction of a visitor centre / cafe, with storage areas and welfare facilities to the northwest of the reservoir to be used for recreational and education purposes; Provision of picnic area(s) and children's play area(s). Access routes from both junctions to the visitor car park; visitor car park comprising 193 car parking spaces and between 70 and 75 overflow spaces plus spaces for staff, coach/minibus and disabled drivers sited to the north west of the reservoir. Creation of a permanent wetland on the northern side of the reservoir and construction of bird watching hide/screen(s); recreational facilities for public amenity. Provision of perimeter tracks and a network of bridleways, cycle paths and footpaths; Construction of a slipway on the western bank of the reservoir for operational use only and a small section of the proposed pipeline (210m).</p>			
88	Tier 1	22/00447/FUL - Denmead Farm Edneys Lane Denmead	Establishment of solar farm and battery storage facility with supporting development, on 4 separate parcels of agricultural land	There is the potential for human health receptors (high sensitivity) to have increased disturbance from construction activities	Effect not significant. No additional mitigation required.	Negligible (not significant) following the mitigation proposed by Air Quality and Traffic and Transportation,

ID	Tier	Application Reference	Application for development and brief description	Assessment of cumulative effect	Proposed mitigation applicable	Residual cumulative effect
		<p>Waterlooville Hampshire PO7 6JN</p> <p>East Hants Ref: 58038/003</p>	<p>located to the north, south and west of the National Grid Lovedean substation and which also straddles the district boundary between Winchester City Council and East Hampshire District Council (EIA Development).</p>	<p>including reduced air quality, due to effects from increased dust and vehicle emissions. Receptors are also likely to be affected during construction by disturbances to visual amenity, increased noise, and reduced accessibility.</p> <p>The impact of construction activities would be adverse, and of low intensity. It is therefore likely that these would result in a minor adverse (not significant) cumulative effect before mitigation.</p> <p>There is the potential for employment opportunities to arise which would result in a minor beneficial (not significant) cumulative effect.</p>		<p>effects on health outcomes associated with air quality, visual amenity, noise and accessibility.</p> <p>Minor beneficial (not significant), effect on health outcomes associated with employment.</p>

