Responses to Campbell Reith's Audit Comments on AKT II BIA Addendum - (submitted on 8th July of 2019) - CR reference 12985-60. Rev D1

Item	Yes/No/NA	Campbell Reith Comments	AKT II RESPONSE
Are BIA Author(s) credentials satisfactory?	No	Evidence of experience in engineering geology, and/or evidence of the input of an engineering geologist, is required.	The proposed works are limited to small localised areas of excavation at basement level to a maximum depth of 2.2 m which is above the recorded ground water level located at 7m below basement level. There is no impact to hydrogeological and hydrological environment, or land stability as accepted by CR in their audit report - Ref CL 5.6 & 5.7. Therefore a Hydrogeologist/Geologist Engineer is not required
Is data required by CI.233 of the GSD presented?	Yes	In BIA document and supporting appendices	Closed
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes		Closed
Are suitable plan/maps included?	Yes		Closed
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes		Closed
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	No	It is noted in the BIA text that the culverted River Fleet runs within 25m of the site, but this is not identified in the screening assessment.	Based on the Lost Rivers map of London by Barton the site is located within 100m approximately the old Fleet River. It is also accepted by CR in the audit report that there are no slope stability concerns - Ref CL 5.6. Closed on this basis.
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	No	As above, but it is accepted there are no local or wider impacts to subterranean flows.	Closed based on CR acceptance in their audit report - Ref CL 5.7. that there is no impact to hydrogeological and hydrological environment
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	No	The BIA does not identify that the surrounding streets have a medium risk of surface water flooding. However, it is accepted there are no impacts to surface water flows/flooding.	Closed based on CR acceptance that there are no impact to surface water flows/flooding.
Is a conceptual model presented?	Yes	Ground and groundwater conditions are described but are based on desk study information.	Closed
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	No	Not provided.	Closed based on CR acceptance in their audit report - Ref CL 5.6. that there are no slope stability concern.
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	No	Not provided, but it is accepted there are no significant impacts.	Closed based on CR acceptance in their audit report - Ref CL 5.7. that there is no impact to hydrogeological and hydrological environment
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	No	Not provided, but it is accepted there are no significant impacts.	Closed based on CR acceptance in their audit report - Ref CL 5.7. that there is no impact to hydrogeological and hydrological environment
Is factual ground investigation data provided?	No		The ground investigation was undertaken following the submission of the BIA and CR's audit comments. A copy of the SI report has been provided as part of the Basement Construction Plan
Is monitoring data presented?	No		Refer to the outline structural movement monitoring strategy/plan presented in the Basement Construction Plan. Construction is yet to commence so monitoring data is not yet available
Is the ground investigation informed by a desk study?	NA		NA

Has a site walkover been undertaken?	No	Not described.	Lendlease, the main contractor is currently on site and undertaken strip out and investigation works. Several site walkovers by the contractor and the design team have been undertaken
Is the presence/absence of adjacent or nearby basements confirmed?	No	But it is accepted that all surrounding structures are outside the zone of influence of the proposed basement alterations.	Closed based CR acceptance
Is a geotechnical interpretation presented?	No		The ground investigation was undertaken following the submission of the BIA and CR's audit comments. A copy of the SI report has been provided as part of the Basement Construction
Does the geotechnical interpretation include information on retaining wall design?	NA		NA
Are reports on other investigations required by screening and scoping presented?	No	Ground movement and building damage assessment for host building not presented.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level. All other localised excavations are not deemed to be significant in relation to ground movement. Refer to the Basement Construction Plan the contractor's proposed method of construction
Are the baseline conditions described, based on the GSD?	No		We assume closed on the basis of CR's acceptance that there is no impact on land stability, hydrogeology, hydrology and neighbouring properties
Do the base line conditions consider adjacent or nearby basements?	NA		NA
Is an Impact Assessment provided?	Yes	Qualitative stability assessment provided for surrounding structures (no impact).	Closed
Are estimates of ground movement and structural impact presented?	Yes	For surrounding structures but not for host property.	Closed for surrounding structures and please refer to the attached technical note for an assessment of impact on the host property
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	Yes	However, potential impacts to host property not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level. All other localised excavations are not deemed to be significant in relation to ground movement. Refer to the Basement Construction Plan the contractor's proposed method of construction
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	No	Potential impacts to host property not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level. All other localised excavations are not deemed to be significant in relation to ground movement. Refer to the Basement Construction Plan the contractor's proposed method of construction,

Has the need for monitoring during construction been considered?	No		Refer to the outline structural movement monitoring strategy/plan presented in the Basement Construction Plan. Construction is yet to commence so monitoring data is not yet available
Have the residual (after mitigation) impacts been clearly identified?	No	Potential impacts to host property not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	No	Potential impacts to host property not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level.
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes		Closed
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	No	Potential impacts to host building not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level. Impact on ground water closed based on CR acceptance in their audit report - Ref CL 5.7. that there is no impact to hydrogeological and hydrological environment
Does report state that damage to surrounding buildings will be no worse than Burland Category 1?	Yes	However, potential impacts to host property not identified or assessed.	Please refer to the attached Technical Note where AKTII's assessment of the predicted ground movements and associated damage assessment for a pad foundation that is proposed to be underpinned as part of the works. An assessment is also presented where adjacent supported excavations are near/below nearby existing footing formation level. Impact on neighbouring properties closed based on CR's acceptance of no impact to slope stability and neighbouring properties being outside the zone of influence of the main works - Ref Cl 4.6 & 5.2
Are non-technical summaries provided?	No	However, the key points of the BIA are clearly stated.	Closed