

INDEPENDENT REVIEW OF BASEMENT IMPACT ASSESSMENT (UPDATED)

DOCUMENT CONTROL				
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FOREWORD

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1. INTRODUCTION

It is proposed to construct a deep basement extending rearwards from the existing house to house a private underground gym and swimming pool.

LBHGEO have been commissioned to provide an independent assessment of the Basement Impact Assessment (BIA) information submitted against the requirements of

- Haringey Development Management DPD July 2017 - Policy DM18 Residential Basement Development and Light Wells.

This report commences with a description of the relevant planning requirements, and then considers the submission and details concerns in regards to the technical sufficiency of the BIA submission, the proposed

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construction methodology, the structural stability of the host building and the neighbouring properties, worsening flood risk and adversely affecting the water environment in the local area.

This report has been updated following the review of additional and revised information recently submitted to Haringey by the applicant.

The information studied includes the following:

1. Basement Impact Assessment by Symmetrys , Ref: 21066-SYM-XX-XX-RP-S-0001-Rev E, dated 9th August 2023
2. Flood Risk Assessment and SUDS Report by Symmetrys , Ref: 21066-SYM-XX-XX-RP-C-0001-Rev B, dated 9th August 2023
3. Design and Access Statement by Crawford Partnership, dated March 2023

2. PLANNING POLICY

The Haringey Local Plan Policy DM18 reads as follows:

A *Householder extensions to existing basements, and the construction of new basements, including in existing dwellings will only be permitted where it can be demonstrated that the proposal:*

- a** *Will not adversely affect the structural stability of the application building, neighbouring buildings and other infrastructure, including the adjoining highway, having regard to local geological conditions;*
- b** *Does not increase flood risk to the property and nearby properties from any source (see Policy DM24);*
- c** *Avoids harm to the appearance or setting of the property or the established character of the surrounding area;*
- d** *Will not adversely impact the amenity of adjoining properties by reason of noise or increased levels of internal or external activity;*
- e** *Will not adversely impact the local natural and historic environment;*

And, where the proposed basement extends beneath the garden area:

- f** *Will not cause loss, damage or long-term threat to trees of townscape or amenity value;*
- g** *Maintains adequate soil depth satisfactory for preservation of landscaping consistent with neighbouring properties;*

And during the construction phase:

- h** *Will not cause harm to pedestrian, cycle, vehicular and road safety, adversely affect bus or other transport operations, significantly increase traffic congestion, nor place unreasonable*

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inconvenience on the day to day life of those living, working or visiting nearby; and

i Will minimise construction impacts such as noise, vibration and dust for the duration of the works.

B *Proposals for basements must not include habitable rooms or other sensitive uses in areas prone to flooding where there is no reasonable means of escape.*

C *In determining applications for light wells, the Council will consider whether:*

a *The architectural character of the building is protected;*

b *The character and appearance of the surrounding area is harmed; and*

c *The development results in the loss of more than 50% of the front garden or amenity area.*

The accompanying guidance states that it is important that basement development is carried out in a way that does not:

- harm the amenity of neighbours
- compromise the structural stability of adjoining properties
- increase flood risk or
- damage the character of the area or natural environments.

The applicants need to submit specific information to demonstrate that the above issues can and have been addressed. This information should be contained in a Basement Impact Assessment (BIA) to be submitted as part of the planning application. The requirements and stages of the BIA will be set out in full detail in the Council's guidance note on Basement Impact Assessments.

The various stages of a BIA should be carried out by qualified and recognised independent assessors and will be paid for by the applicant.

3. DESK STUDY

Desk Study screening is used to identify which matters of potential concern should be addressed using a BIA:

- Hydrogeology: subterranean (groundwater) flow
- Ground stability
- Hydrology: surface flow and flooding

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The desk study has in this case identified potential hydrological and hydrogeological risks to the extent that a site-specific flood risk assessment was deemed to have been required. The Environment Agency considers the site to be at medium risk of up to 300mm depth of flooding. Past comments to the council from the neighbouring Cricket Club would appear to confirm the presence of a serious overland surface water flood route, indicated below, through this and the neighbouring properties and there are past attestations from long term nearby residents of Cranley Gardens to worsening flooding and garden drainage issues in the location.



However, the BIA includes the following non-sequitur statement: *“Haringey Council Strategic Flood Risk Assessment (Figure 6) shows that the site is in the vicinity of a watercourse, the Moselle Brook now culverted. However, it is unlikely that the proposed development will have a detrimental impact on this asset.”*

The site lies within a critical drainage area and the above BIA statement suggests a worrying lack of understanding by the applicant of hydrological matters. Even a cursory study of the surface water flood risk plan above shows that the flood risk along Cranley Gardens is ameliorated by means of the flow down through the gardens of this and the adjacent properties. Stopping up this flow will drive the flood water eastwards further down Cranley Gardens towards the already high flood risk area around Park Road and will only exacerbate the flood risk in that area.

No information on the adjacent properties seems to have been presented despite their proximity to the proposed excavation. The submission does not include any topographical survey detail for these properties and there are no sections drawn to show the relationship between the proposed excavation and the high-level adjacent foundations to either the host property or the neighbouring properties. On reflection this is perhaps not surprising as, in the absence of relevant site investigation information on the configuration of the existing foundations, this would indeed be a difficult task.

Appendix A of the revised BIA submission now includes three drawings labelled *“structural scheme for planning”* as follows:

- 21066-SYM-XX-XX-SK-S-0900-REV P1 dated 28th July 2023
- 21066-SYM-XX-XX-SK-S-1000-REV P1 dated 28th July 2023

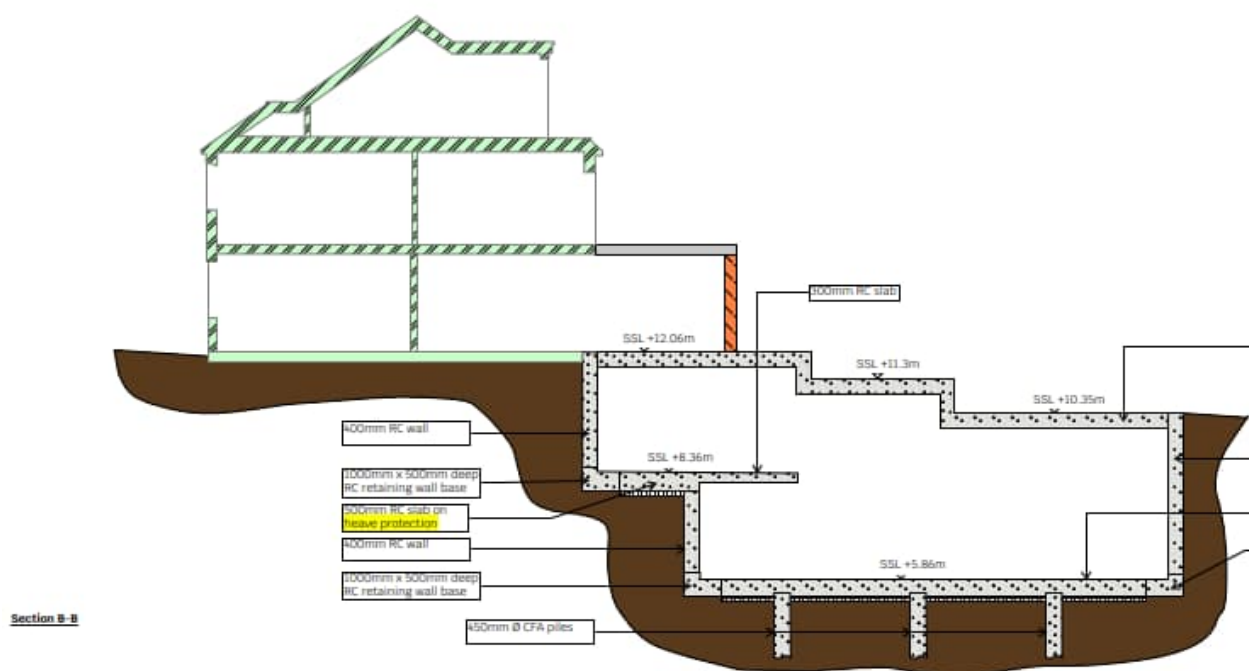
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- 21066-SYM-XX-XX-SK-S-2000-REV P1 dated 28th July 2023

and three temporary works drawings as follows:

- 21066-SYM-XX-XX-SK-S-0200 REV P3 (3 drawings) dated 28th July 2023

However, perhaps as a result of the lack of site investigation information indicated above and addressed further in Section 4 of this review, the one section drawn through the existing building (see below) contains no detail.



4. SITE INVESTIGATION

Site investigation is undertaken to establish the baseline ground conditions and the existing foundation details.

The site investigation submitted comprised a single borehole extended to 12m depth. Information regarding the configuration of the existing foundations to the host and to the neighbouring properties is a key input to any assessment of their stability and of the ground movements that will be associated with the proposed deep basement excavation. However, the scheduled hand-dug structural trial pits to expose the foundations do not appear to have ever been dug.

The analysis / modelling included in appendix D of the revised BIA submission¹ has apparently been based upon assumptions drawn from working at No. 112 Cranley Gardens, which is a significantly older building

¹ Ground Movement Analysis & Building Damage Assessment. GEA. August 2023. J23175 Rev 1.

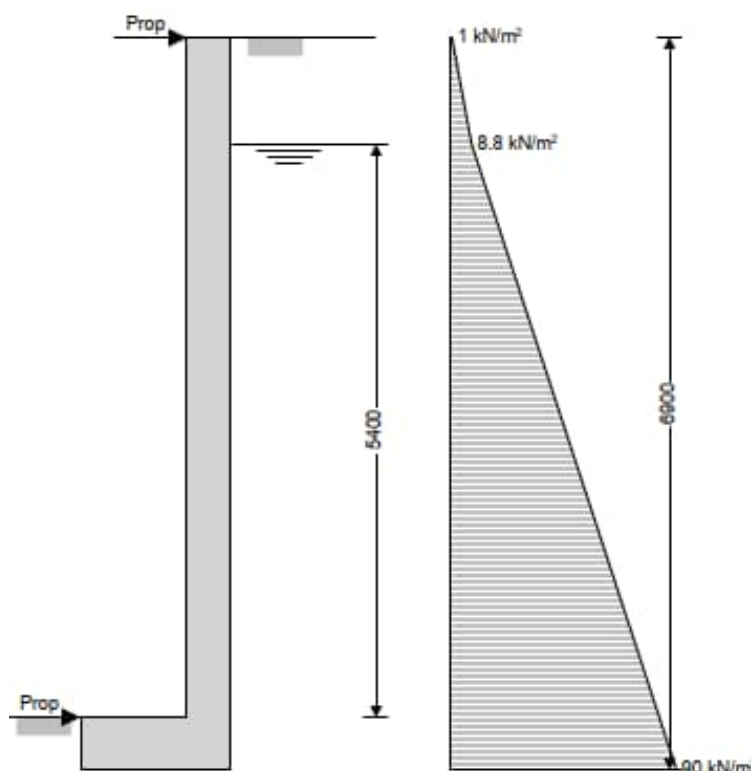
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than No. 139 and with potentially very little in common.

The borehole recorded silty and sandy clay containing partings of sand. Only one measurement of groundwater has been taken, on 13th May 2021 when water was recorded at 0.85m depth and the following warning was given *"It should be noted that the comments on groundwater conditions are based on observations made at the time of the investigation (April and May 2021) and that changes in the groundwater level could occur due to seasonal effects and also changes in drainage conditions."*

The BIA has not undertaken groundwater monitoring and has discarded this evidence of water noted in the borehole at 0.85m depth.

It is relevant to note that the water monitoring standpipe installed by SAS to a maximum depth of 5m will be of limited usefulness in assessing the risk of groundwater ingress to an excavation that is planned to extend to almost 7m depth. (see BIA applicants submitted retaining wall section below). If, as suggested, the applicant is intending to refer to the results of a better ground investigation carried out nearby, that information should be submitted.



5. BIA SCOPE

The updated BIA document still appears to rely heavily upon comments made by the initial site investigation contractor on the basis of a single borehole constructed in May 2021. It should be noted that the engineering observations and recommendations provided in the submitted SAS report were not made by someone who is professionally chartered and to be fair it is also noted that they were not appointed to prepare a basement impact assessment.

Although the SAS brief included "Interpretative reporting on foundation options for the proposed building

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and infrastructure” the SAS report does not even mention, let alone discuss or assess, the potential hydrological and geotechnical impacts of the proposed basement. The SAS report does not provide any basement impact assessment or basement construction advice. The advice provided in the SAS report refers generically to foundations and retaining walls but does not take account of the BIA requirements or indeed even register the need to take any account of presence of the existing building or neighbouring structures.

The SAS report, prepared in 2021, stated *“It is recommended that the water levels in the monitoring borehole be periodically measured immediately prior to and during, the development. Should groundwater levels rise to within the excavation volume, or should significant groundwater inflow be observed during excavation, professional advice should be sought.”* Alas there does not seem to have been any recognition by the design team of the need to follow even this advice. Two years have passed without any water level monitoring.

Interestingly, it seems that the GEA investigations at No.112 Cranley Gardens, which is situated approximately 1m higher than No.139, reported water as high as 1.82m depth, corresponding well to the 0.85m depth to water reported here.

The SAS report provided some standard design parameters for retaining walls that would arguably be suitable for a standard situation not affected by any existing structures and where it is safe to allow sufficient wall yielding for an “active” pressure distribution to develop behind the retaining wall. Of course, where the wall is required to prevent movement of any nearby high-level foundations then the amount of soil movement associated with this design approach cannot be tolerated.

To be fair the SAS report does state *“The designer should use these parameters to derive the active and passive earth pressure coefficients k_a and k_p . The determination of appropriate earth pressure coefficients, together with factors such as the pattern of the earth pressure distribution, will depend upon the type/geometry of the wall and overall design factors.”*

It is not essential for the site investigation contractor to provide the specialist hydrogeological or geotechnical input required for these assessments as long as the engineering consultant is qualified and competent to fulfil this role.

In this case the structural engineer has seemingly compiled the basement impact assessment without any additional geotechnical input and has referred to SAS as being *“specialist geotechnical engineers”* who they understood to have been appointed to provide *“specialist assessment of the ground conditions.”*

The original retaining wall calculations provided by the structural engineer did not appear to have recognised the need to design for other than “active” conditions. Following our initial review new calculations have now been included in Appendix B of the revised BIA and these have been duly amended to use a K_0 “at rest” pressure distribution rather than the previously analysed *“active pressure distribution”*.

However, perhaps owing to a lack of geotechnical expertise, the new calculations have mistakenly used the K_0 for a normally consolidated material rather than that which is appropriate for the heavily over-consolidated London Clay such as that which is present at this site. The effect of this error is that the modelled at rest horizontal earth pressures will have unfortunately been underestimated by a factor of 3 or more, with obvious implications regarding the reliability of the retaining wall design calculations that have been offered to support the applicant’s submission and the amount of propping resistance required to

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prevent deleterious movements of the basement walls and the surrounding ground towards the excavation.

Where the desk study identifies potential impact issues, these matters should be carried forward for specific assessment. In this case, the applicant BIA has failed to properly investigate both the potential stability impacts and the potential hydrological impacts that have been acknowledged by the desk study screening section that is now included in the revised BIA. These potential impacts are addressed in Sections 6 and 7 of this review.

6. STABILITY

The submitted Stage 2 drawings (REV P1) include the following two conflicting basement construction sequences (both dated 26.04.2023).

Proposed sequence of works(**)

- 1 - *Temporary prop boundary wall of existing outbuilding.*
- 2 - *Demolish existing outbuilding except propped boundary wall.*
- 3 - *Install CFA piles*
- 4 - *Install transitional underpinning below 139 Cranley Gardens gable wall and 137/139 Cranley Gardens party wall to prevent the occurrence of differential settlements.*
- 5 - *Underpin in hit/miss sequence existing building walls where located above the proposed basement footprint, and install retaining walls in underpinning (hit/miss) sequence down to proposed mezzanine / existing outbuilding basement level (*).*
- 6 - *Install temporary struts and walers to allow soil level to be reduced (*).*
- 7 - *Excavate proposed basement area down to proposed mezzanine / existing outbuilding basement level.*
- 8 - *Cut piles to proposed mezzanine / existing outbuilding basement slab cut-off level.*
- 9 - *Demolish existing outbuilding walls at basement level.*
- 10 - *Cast second stage underpinning to reach pool side formation level and swimming pool formation level*
- 11 - *Excavate to proposed poolside and swimming pool level.*
- 12 - *Cut piles to proposed poolside formation level and swimming pool slab cut-off levels.*
- 13 - *Cast RC slab above heave protection at basement mezzanine (including suspended slab above swimming pool), at pool side formation level and at swimming pool structure formation level.*
- 14 - *Cast RC slab at ground floor level.*
- 15 - *Dismantle temporary works and proceed with installation of superstructure, which steps are not covered in this section.*

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() Sequence of works to be read in conjunction with typical multi-stage underpinning sequence highlighted in drawing 21066-SYM-XX-XX-SK-S-0201/0202/0203-REV P1*

*(**) Sequence of works to be considered indicative. Temporary works design and method statement to be produced by temporary works designer and contractor post planning.*

Proposed method statement/ suggested sequence of works

- 1 - Locally underpin walls at positions marked to be used to support temporary works*
- 2 - Install trench sheets*
- 3 - Excavate to existing foundation soffit*
- 4 - Prop from existing wall to trench sheet*
- 5 - Excavate to half depth*
- 6 - Install cement board to back of excavation*
- 7 - Install mid height prop*
- 8 - Excavate to underside of first-stage basement slab level*
- 9 - Install toe of rc underpin with mass concrete. Cordec to rear to match existing foundation arrangement*
- 10 - Leave 150mm kicker with starter bars for upstand (min.lap 40 dia.)*
- 11 - Prop underside of existing foundation back onto new rc toe*
- 12 - Install water bar at construction joint*
- 13 - Install underpin*
- 14 - Dry pack to underside of existing foundation*
- 15 - Insert horizontal prop from wall to wall at ground level*
- 16 - Excavate centre berm, introducing additional horizontal prop from wall to wall at mid height*
- 17 - Proceed with sequence 1 to 16 for second stage underpinning*
- 18 - **Cast basement slab***

Given that there are piles shown on the drawings it is presumed that the second version is in error and the following discussion therefore relates to the first version. To be fair the second version is labelled as “*typical multistage underpinning sequence*” and is clearly a generic drawing and hence not specific to the particular requirements of this project. It is noted that this version states that it should be read in conjunction with drawings 21066-SYM-XX-XX-SK-S-0201/0202/0203-REV P1. Given that this version is shown on drawings

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21066-SYM-XX-XX-DR-S-0201/0202/0203-REV P1 this cross reference is presumed to also be in error.

However, if this first version is to be taken as any indication or assurance of the proposed basement construction methodology sequence then it must be rejected as it refers to the provision of temporary support propping only at Stage 6, prior to excavation of the basement at Stages 7 and 11.

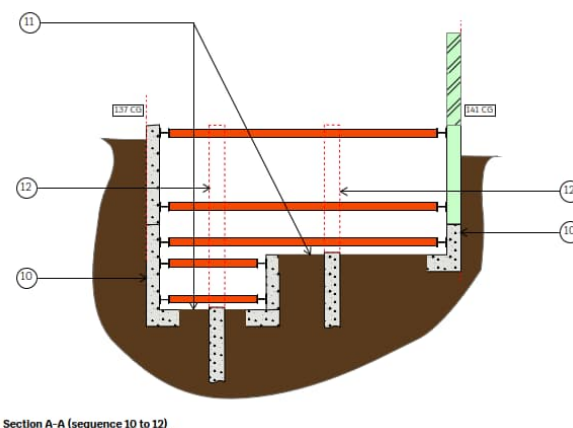
The revised drawings suggest additional deeper levels of propping but there is no mention of this within the sequence.

A note has been added to the drawing to the effect that the sequence of works provided here is in any case not to be considered as the actual sequence that will be followed.

Of course, in the event that the applicant does not commit to any particular temporary works construction methodology and sequence then the present basement impact assessment, which depends upon a particular temporary works proposal, ceases to be valid.

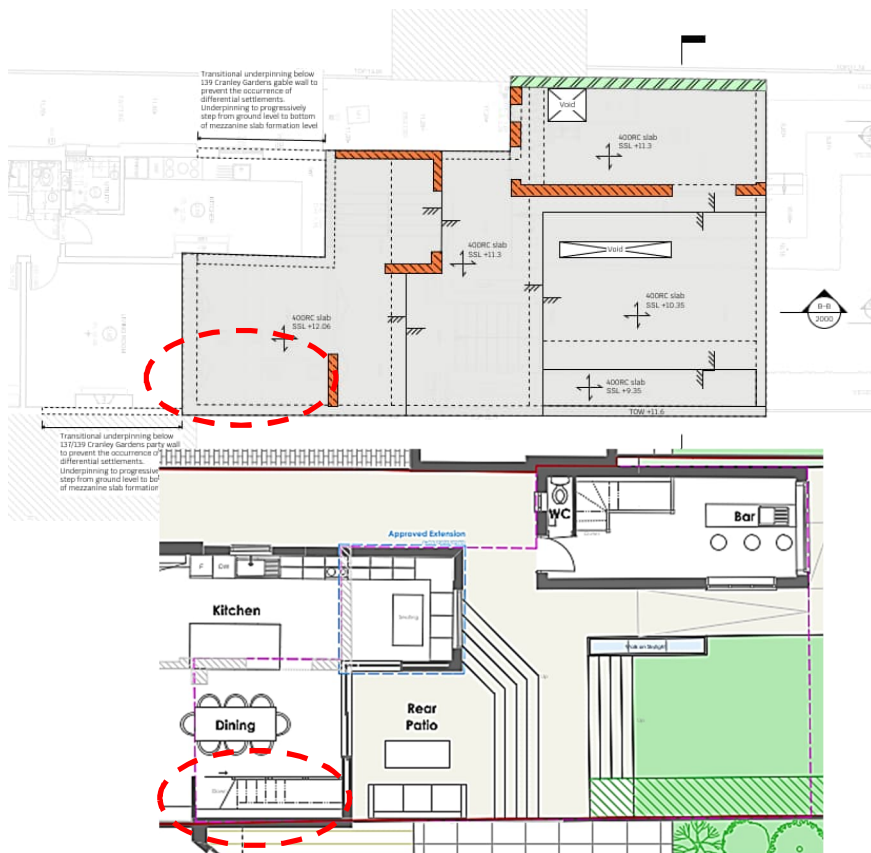
This begs the question of what evidence the applicant intends to provide that the contractor will meet the very first policy requirement A(a) of the Haringey Basement Policy DM18 that the works:

“Will not adversely affect the structural stability of the application building, neighbouring buildings and other infrastructure, including the adjoining highway, having regard to local geological conditions”.



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There has, as of yet, still not been much care or attention to detail put into the design of this project and one example of this is that the engineer's 400mm thick ground floor slab will obviously block the stairs shown on the architect's ground floor plan shown here.



The original drawings sequence indicated two-stage underpinning beneath the party wall and adjacent excavation of the basement, which did not correlate with the plans, which in turn suggested that the basement will not extend beneath the existing house. A note has now been added these drawing confirming that this indication should be ignored.

Transitional underpinning of the existing flank wall and of the party wall to No. 137 is shown on the proposals, but this mitigation detail appears to be an arbitrary design and to not have any analytical basis or supporting calculation.

It was held as a testament to the applicant's apparent lack of understanding of the need for temporary works design that the original BIA stated *"The structure will have adequate stiffness to ensure that the lateral deflections do not exceed the appropriate limits recommended by British Standards Codes of Practice in order to ensure that potential ground movements be kept to acceptable limits."*

The above statement entirely missed the point that it is the actual construction period that risks movement or collapse of the nearby structures. The stiffness of the final reinforced concrete building structure will have positively no bearing upon the amount of damage occurring during its construction.

The offending statement has now been removed from the revised BIA and a new statement has been added that *"A detailed construction method statement and temporary works design must be provided by contractor and temporary works designer post planning and prior to any construction"*.

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It is of no comfort to the neighbours or to the council for the applicant to state that the appointed contractor will be required to submit proposals for whatever temporary works are required to safely install the new building without causing any loss of stability to the nearby structures.

The architect has (March 2023) prepared a design and access statement that states:

"On request we will be able to provide a full method statement for the structural design and the impact of building works on the neighbouring properties. The structural stability of the neighbouring properties will be maintained at all times."

This statement simply cannot be made without the proper support of a geotechnical consultant.

Following criticism of the previous submission, a ground movement analysis and associated quantified damage assessment has since been commissioned. However, it would have been better if a geotechnical consultant had been engaged to review the whole basement proposal, for this movement and damage assessment has been no more than a purely theoretical exercise exploring what might happen if it is imagined, firstly:

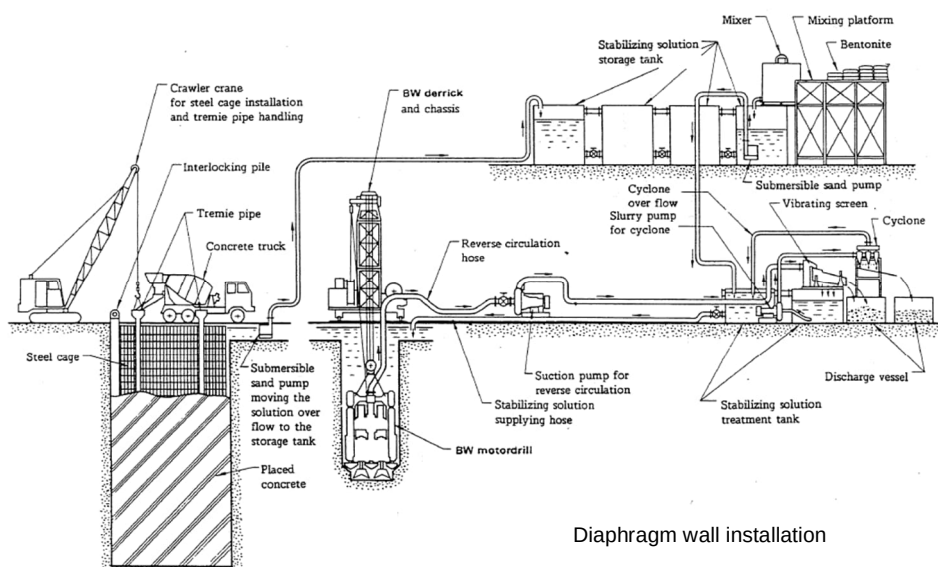
- that the underpinning is constructed using diaphragm walling techniques rather than traditional open excavation methods

and secondly:

- that the resultant underpinning will act as if it were a very stiff embedded retaining wall.

The validity of both of these assumptions is open to debate and question.

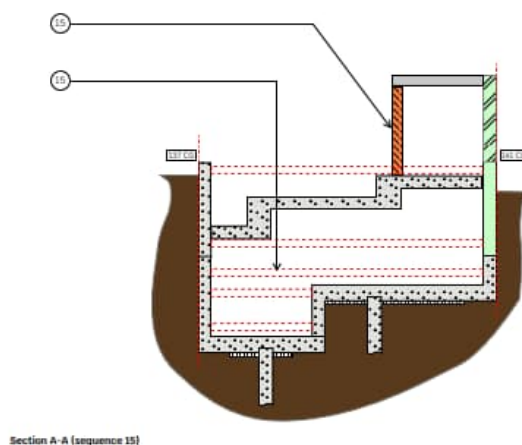
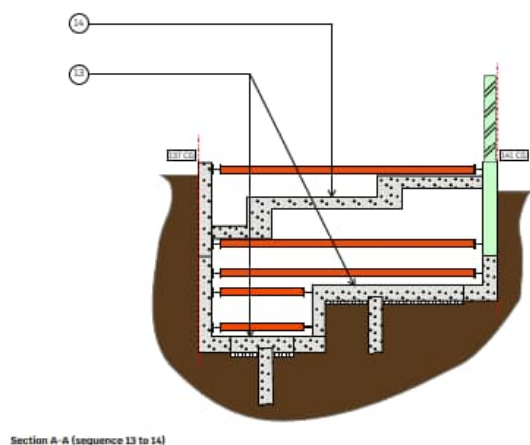
In the case of the former it should be understood that diaphragm walls are not installed in open excavations but in fluid-filled excavations where the supporting fluid density is deliberately raised to maintain continuous lateral pressure to the excavation walls at all times. There can be little argument that the limited 20% relaxation of the in-situ horizontal earth pressures associated with diaphragm wall installation in over-consolidated clays is a far cry from the near-complete relaxation that may be expected in an open underpin excavation.



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In the case of the latter the application of design methods intended for walls that are actually embedded into the ground at its base and obtain support from this ground may not be very relevant to a retaining wall that is designed to be more or less entirely supported by propping. High support stiffness can be assumed for top-down construction, where the permanent ground level flooring is cast to act as a permanent prop during the subsequent basement excavation. It is accepted that flexible walls with many level of propping (including high level propping) can produce similarly small displacements to those observed in stiff walls with fewer props.

In this case the submitted retaining wall design suggests indicates that there will only be two levels of propping, one at the top of the wall and one at the base of the wall. However, there must be some questioning of the design in the light of the sections below that appear to show only a relatively low-level permanent prop that might allow increased deflection of the wall where it is cantilevered above this.



In order to pass the planning test of demonstrating that the construction proposal will not adversely affect the stability of the application building and neighbouring buildings, a viable scheme of temporary works must be proposed, designed and analysed in sufficient detail to show that it will prevent any unacceptable movements and damage.

Unfortunately, there has evidently been ongoing misunderstanding of the proposed construction sequence and the GEA assessment reports that the basement is to be constructed as a top-down exercise, stating:

"The proposed RC floor slabs, which will act as permanent props, will be constructed at the highest level first and when each floor has achieved adequate strength, the temporary props will be removed; the next level of underpinning and excavation will take place and the process repeated until the structure is complete."

This is clearly not the case and conflicts with the numbered sequence that follows, where the highest level RC floor slab is only to be cast at stage 14, following all excavation works and casting of the lower slabs.

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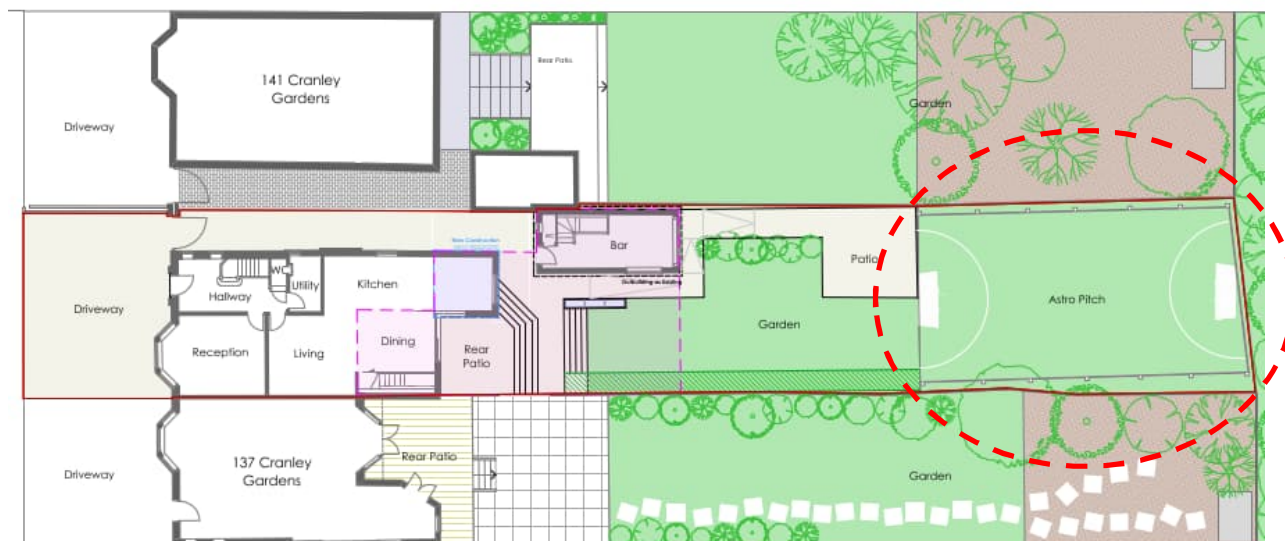
7. FLOODING AND DRAINAGE

The BIA has not undertaken any assessment of the impacts on the local environment and neighbouring properties associated with potentially obstructing water flow.

The Haringey Local Plan states that back gardens are an important ecological resource and play a significant role in drainage and flood mitigation. The Council therefore considers back garden development to be inappropriate.

There are no trees in the garden and the rearmost part of the garden of this property has already been converted to a 0.2 Hectare games court with an artificial surface leaving no space for any natural soil or planting. The proposed development will lead to a further loss of infiltration potential so that what would have been some 250m² of rear garden when the house was originally built will have been reduced to some 60m² of natural permeable soil following this development. The development is hence contributing to increased run-off rather than reducing run-off.

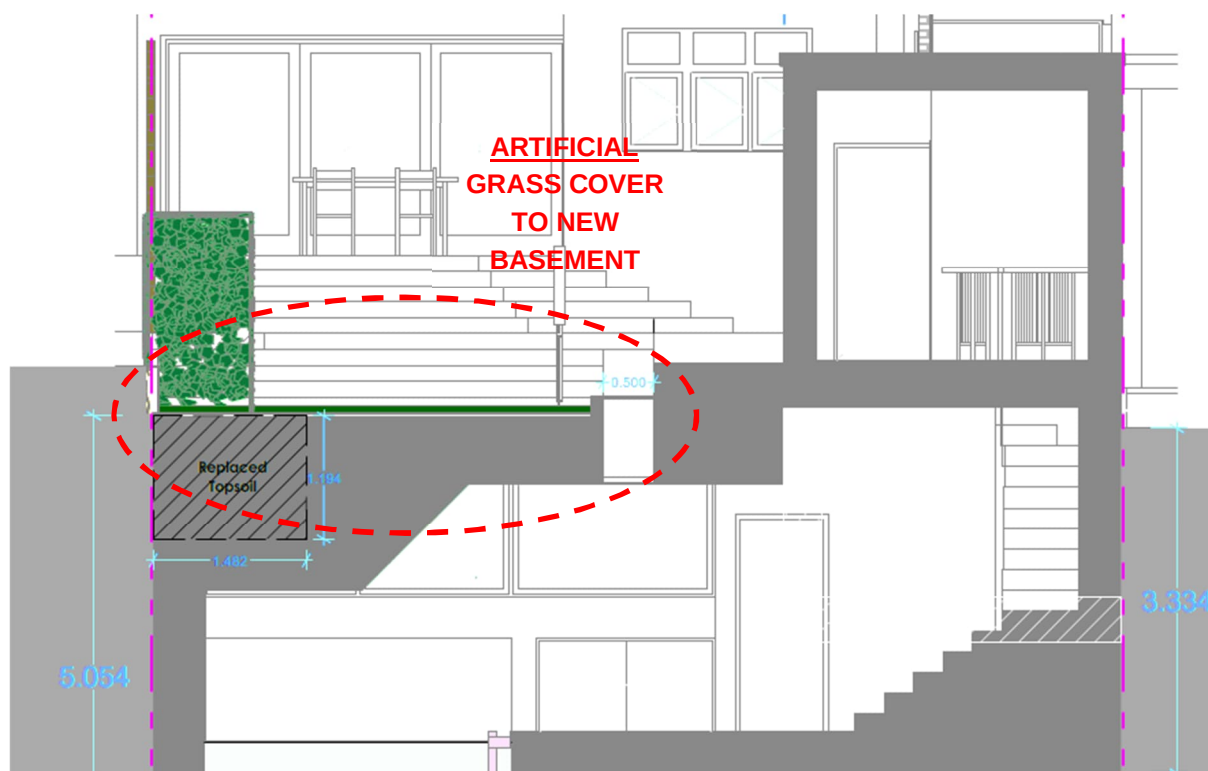
The architects design and access statement states that *"the existing garden will be fully planted and landscaped in order to provide an enhanced garden aspect to be enjoyed by the owners of No.139 Cranley Gardens alongside their neighbours."* However, the proposed plans clearly show the existing Astro turf pitch being retained and there being only a strip of topsoil positioned to support a hedge along the boundary with No. 137.



Proposed plan

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If the above drawing is incorrect and the basement is to be set 1m deeper in order to allow space for a restored garden above as required by the planning policy then this will require a rethink and re-design of the scheme.

The section above clearly shows that the full width of the property is to be excavated and replaced by the new basement. This will in effect cause the development to act as an impermeable dam to any water travelling from Cranley Road to the Cricket Ground, forcing it instead to travel down the road to the junction with Park Road, where it is understood street flooding occurred in 2021.

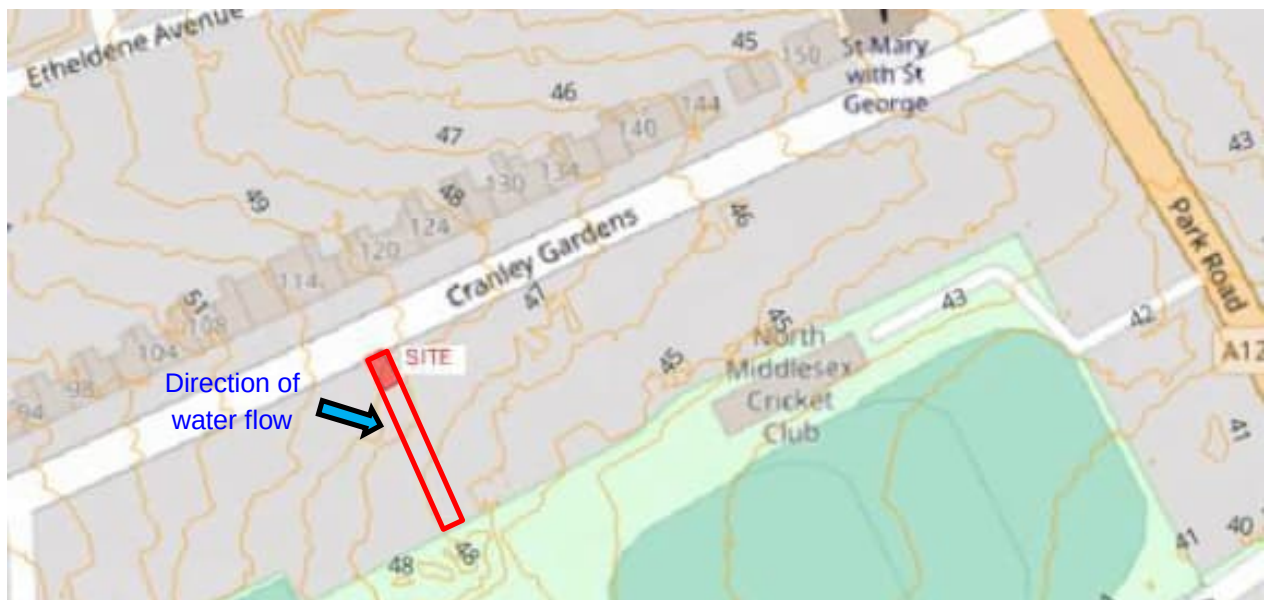
The applicant has revised the submitted Flood Risk Assessment to state that the *“The surface water risk is associated with overland flows from impermeable areas from the road following the slope of the ground. Considering the basement works are proposed in an existing impermeable area, it is assumed there is not increased on the surface water flows.”* The intended meaning of this statement is not entirely clear but it certainly does not seem to demonstrate an understanding of the need to preserve the important identified existing overland surface water flow route across the property.

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The SuDS report suggests the site to be a negligibly small area in the context of the problem area of overland flooding slope whereas the site is larger and may play a more important role in terms of hydrological impact.



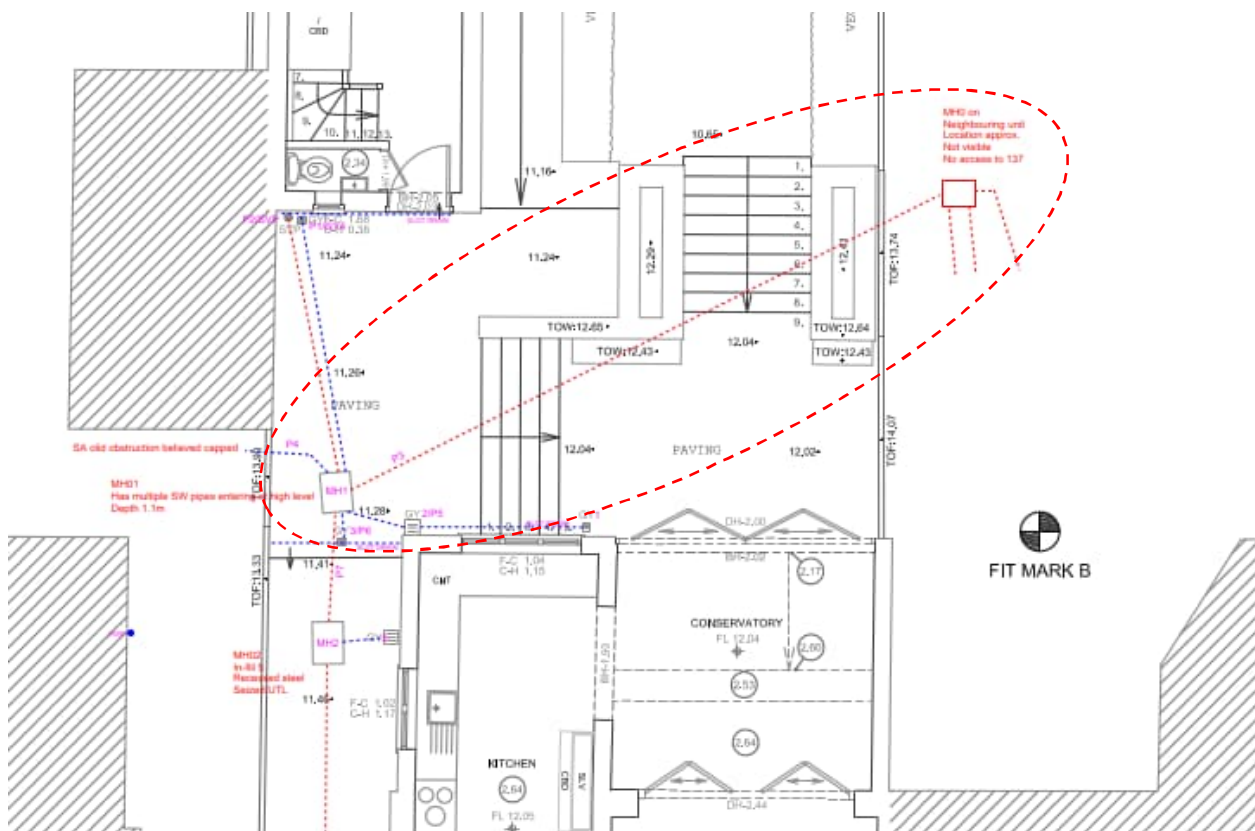
The site as presented in the submitted Lidar assessment (above) and as it actually is (below)



It is apparent the basement will interrupt or interfere with the downslope flow of surface or near surface flow of water passing under the adjacent properties. This would inevitably affect the availability of water to the trees in the neighbouring garden to the east (No. 141) and would be expected to increase the risk of waterlogging to the rear garden of the property immediately to the west (No. 137).

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A drainage survey has been completed that reports that the property has been “built on top of an existing shared public drainage system, which is connected to at least two neighboring [sic] properties on each side.”



The pipe labelled P3 in plan above is an existing 100mm vitrified clay shared public combined drain that is the responsibility of Thames Water to maintain. This is an important public asset apparently serving multiple properties that, if preserved, would run mid-air directly through the proposed basement void.

It is questionable whether Thames Water would allow any diversion or replacement to occur for the sake of a house extension. They may require the extension to be substantially relocated or reconfigured in order to avoid the pipe. This issue will merit consultation with Thames Water and should be resolved before any grant of planning permission for the present scheme. There will likely also be a need for an assessment to address the potential impact of the proposed excavations and ground movements on the public sewers on either side of the new basement where these are in the vicinity of the works.

It is also noted that the design and access statement (21.2) refers to the incorporation of an existing pond in the rear garden into the SuDS proposals. The location of this feature has not yet been indicated.

8. CONCLUSIONS

Despite the applicant being permitted the opportunity to reconsider and revise the technical submissions, there remains erroneous and conflicting information between the design and access statement, the design

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drawings, the structural engineers BIA report and the structural engineers calculations and drawings.

In all, the various analyses that have been provided within the BIA have been demonstrated by this review to still range from questionable to wholly inappropriate.

The design and access statement refers to the superceded Haringey 2010 DM8 policy on Basements and Lightwells rather than to current policy requirements.

The now-revised BIA still fails on at least five Haringey (current) Policy DM18 issues. The BIA does not demonstrate that the development:

***a** Will not adversely affect the structural stability of the application building, neighbouring buildings and other infrastructure, including the adjoining highway, having regard to local geological conditions;*

A damage assessment has been provided. This new document unfortunately itself contains some errors and contradictions but fundamentally this new assessment cannot be relied upon if the underlying assumptions upon which it is based are not valid.

The GEA assessment caveats that “*careful control and monitoring will be required to ensure that no excessive movements occur that would lead to damage in excess of these limits.*”

The report goes on to advise that it should be reviewed and the situation reassessed prior to the excavation taking place..

***b** Does not increase flood risk to the property and nearby properties from any source (see Policy DM24);*

The FRA and SuDS assessments do not properly identify and inadequately address the flooding and drainage impacts associated with the proposal.

***e** Will not adversely impact the local natural and historic environment;*

There will clearly be an impact upon the near surface water regime but the arboricultural impacts in terms of soil moisture availability have still not even been assessed. An appropriate arboricultural assessment should be provided.

***f** Will not cause loss, damage or long-term threat to trees of townscape or amenity value;*

The potential hydrological impacts of the development upon the neighbouring cricket club do not appear to have even been analysed. How will the existing pattern of drainage and waterlogging be affected by the development?

***g** Maintains adequate soil depth satisfactory for preservation of landscaping consistent with neighbouring properties;*

This requirement appears to have been entirely ignored.

The issues detailed above regarding movement of the building and neighbouring properties and regarding worsening the flood risk are considered sufficient by themselves to require outright refusal of the application

INDEPENDENT REVIEW OF BASEMENT IMPACT ASSESSMENT (UPDATED)

for being in contravention of planning policy.

Additionally, the recent drainage survey has revealed that the proposed development would clash with the public drain serving several neighbouring properties and would require relocation or reconfiguration in order to avoid compromising this asset. Consultation with Thames Water to conclude a viable scheme proposal would therefore seem to be a necessary pre-cursor to any determination of a planning application at this location.