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Document History and Status

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F1	September 2016	Planning	FDfd-12336- 48-300916- 29A Howitt Road-F1.doc	F Drammeh	E Brown	E Brown

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Document Details

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Project Partner	E M Brown, BSc MSc CGeol FGS
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Structural u Civil u Environmental u Geotechnical u Transportation

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29A Howitt Road, NW3 4LT BIA – Audit



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Date: September 2016



1.0 NON-TECHNICAL SUMMARY

- 1.1. CampbellReith was instructed by London Borough of Camden, (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 29A Howitt Road, NW3 4LT (planning reference 2015/5452/P). The basement is considered to fall within Category A as defined by the Terms of Reference.
- 1.2. The Audit reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development in accordance with LBC's policies and technical procedures.
- 1.3. CampbellReith was able to access LBC's Planning Portal and gain access to the latest revision of submitted documentation and reviewed it against an agreed audit check list.
- 1.4. Following the initial audit, the Planning Officer indicated the basement proposals had previously been approved therefore the audit is to only consider the lightwell which was not part of the approved scheme.
- 1.5. The qualifications of the author of the BIA have now been confirmed and although they do not meet CPG4 requirements, the proposals are modest and the impacts of the proposed construction have now largely been appropriately assessed.
- 1.6. The BIA indicated that the proposed lightwell will be founded within the London Clay. It was stated that a ground investigation was undertaken, however, no ground investigation report has been presented despite being requested. The proposed foundations should be taken through to the competent London Clay stratum. Perched water may exist in the Made Ground and this should be considered in the design of the temporary and permanent works.
- 1.7. It has been confirmed both immediate neighbouring properties comprise subterranean spaces.
- 1.8. Details on the proposed construction methodology and sketches to indicate the sequence and temporary propping were requested. These have now been provided.
- 1.9. The screening exercise did not identify that the site is in an area at risk of internal sewer flooding. This issue has now been appropriately addressed as requested.
- 1.10. The anticipated ground movements have been reassessed following a request to provide mitigation measures as required by CPG4. 'Negligible' (Category 0) damage is now predicted and, it is accepted that due to the modest proposals and assuming good workmanship, it is reasonable to anticipate the damage to the neighbouring properties will fall within acceptable limits.

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- 1.11. A works programme was not provided and this was requested. A basic works duration is now included with details to be provided by the appointed Contractor at a later date.
- 1.12. Outline monitoring proposals have now been provided as requested. Details and trigger levels should be agreed as part of the party wall award.
- 1.13. It is accepted there are no slope stability issues, wider hydrogeological concerns or any other flooding issues as a result of the proposed development.
- 1.14. Despite some omissions in the BIA, it is acknowledged that the scale of the proposal is modest and no adverse effects to the water environment or stability from the proposals have been identified. It is accepted that the information provided for the BIA reflects this.

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2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 18 April 2016 to carry out a Category A Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 29A Howitt Road, London, NW3 4LT (Camden Planning Reference 2015/5452/P.
- 2.2. The Audit was carried out in accordance with the Terms of Reference set by LBC. It reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development.
- 2.3. A BIA is required for all planning applications with basements in Camden in general accordance with policies and technical procedures contained within
 - Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.
 - Camden Planning Guidance (CPG) 4: Basements and Lightwells.
 - Camden Development Policy (DP) 27: Basements and Lightwells.
 - Camden Development Policy (DP) 23: Water
- 2.4. The BIA should demonstrate that schemes:
 - a) maintain the structural stability of the building and neighbouring properties;
 - avoid adversely affecting drainage and run off or causing other damage to the water environment; and,
 - c) avoid cumulative impacts upon structural stability or the water environment in the local area.

and evaluate the impacts of the proposed basement considering the issues of hydrology, hydrogeology and land stability via the process described by the GSD and to make recommendations for the detailed design.

- 2.5. LBC's Audit Instruction described the planning proposal as "Erection of a basement with front and rear lightwells". It has since been clarified the basement already has planning approval and the audit should only relate to the lightwell.
- 2.6. The Audit Instruction also confirmed 29A Howittt Road is not listed nor is a neighbour to listed buildings.

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- 2.7. The Environmental Assessment and Construction Method Statement by Amirilan Management Limited, dated May 2013, which comprises the BIA, was sent by email to CampbellReith on 25 February 2016.
- 2.8. CampbellReith accessed LBC's Planning Portal on 28 April 2016 and gained access to the following relevant documents for audit purposes:
 - Design and Access Statement, undated
 - Planning Application Drawings consisting of:
 Existing and Proposed plans and elevations (Drawing No ST_D_29 HOW_001)
- 2.9. Following the initial audit, supplementary information was provided by email on 30 July 2016 and the documents provided were as follows:
 - Environmental Assessment and Construction Method Statement by Amirilan Management Limited (Rev A), dated July 2016.
 - Existing and Proposed plans and elevations (Drawing No ST_D_29 HOW_001 Rev A)
- 2.10. Further queries were raised on the revised documents and responses were sent by email between 23 August and 19 September 2016. These responses are included in Appendix 3.

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3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	No	See Audit paragraph 4.2.
Is data required by CI.233 of the GSD presented?	Yes	Information provided is proportional to the scale of the BIA. Basic outline duration provided.
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	Some details lacking but acknowledged proposals are modest.
Are suitable plan/maps included?	No	A single scheme drawing is provided and not all of the relevant ARUP GSD maps are included (see Audit paragraphs 4.4 and 4.11). However, it is acknowledged that the proposals are modest.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	No	As above.
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	It appears the appropriate sources have been consulted, although the relevant Arup GSD maps are not referenced.
Hydrogeology Screening Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	Environmental Assessment and Construction Method Statement (EA&CMS) Section 5 although it is noted that the response to Q1b references nearby boreholes and not the site specific investigation (see Audit paragraph 4.8).
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	No	A 'No' response was given to Q6 which relates to flood risk, however, the site is an area at risk from sewer flooding. This issue has now been appropriately addressed (see Audit paragraph 4.7).
Is a conceptual model presented?	No	Ground Investigation data not presented (see Audit paragraph 4.6). However, as noted above the proposals are modest.



Item	Yes/No/NA	Comment
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	EA & CMS Section 6.
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	N/A	No issues identified.
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	No	No issues identified although Q6 from the screening issue which relates to flooding should have been carried forward. This issue has now been appropriately addressed.
Is factual ground investigation data provided?	No	Section 6 of the EA & CMS references a ground investigation undertaken by Structural Soils Limited, however, this was not presented (see Audit paragraph 4.6).
Is monitoring data presented?	No	Ground Investigation Report (GIR) not provided.
Is the ground investigation informed by a desk study?	N/A	Desk study information provided, however, GIR not presented.
Has a site walkover been undertaken?	No	Not stated.
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	States in email response that both immediate neighbouring properties comprise subterranean spaces.
Is a geotechnical interpretation presented?	No	
Does the geotechnical interpretation include information on retaining wall design?	N/A	
Are reports on other investigations required by screening and scoping presented?	No	GIR not presented.
Are the baseline conditions described, based on the GSD?	No	Ground investigation not presented although presence of neighbouring basements now confirmed.



Item	Yes/No/NA	Comment
Do the base line conditions consider adjacent or nearby basements?	No	Not considered in the BIA but confirmed in supplementary information provided (see Audit paragraph 4.5).
Is an Impact Assessment provided?	No	Not provided.
Are estimates of ground movement and structural impact presented?	Yes	No justification is provided (see Audit paragraph 4.14), however, it is accepted that any movements should be small.
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	N/A	Impact assessment not undertaken.
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	Yes	Mitigation proportional to the scale of the proposal provided in supplementary information.
Has the need for monitoring during construction been considered?	Yes	Outline proposals provided with supplementary information.
Have the residual (after mitigation) impacts been clearly identified?	N/A	None identified.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure will be maintained?	No	No details provided, however, acknowledged proposals are modest (see Audit paragraph 4.14).
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	BIA and supplementary information.
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	No	Structural stability not demonstrated but acknowledged proposals are modest.
Does report state that damage to surrounding buildings will be no worse than Burland Category 2?	Yes	Category 0 predicted in supplementary information (see Audit paragraph 4.14).
Are non-technical summaries provided?	No	Not provided.



4.0 DISCUSSION

- 4.1. The initial audit was undertaken on the basis of a proposed basement with a lightwell. Following the initial audit, the Planning Officer indicated that the audit is to only consider the proposed lightwell as the basement proposals had previously been approved. Despite this, most of the gueries raised on the initial audit still applied, albeit with reduced significance.
- 4.2. The Basement Impact Assessment (BIA) was undertaken by Amirilan Management Limited. The author/reviewer's details or qualifications were not provided and these were requested. The author of the BIA is now identified and the individual is indicated have a CEng MICE qualification. The production of a BIA also requires the input of an individual with a CGeol qualification and whilst this is not the case, the proposals are modest and it is considered hydrogeological matters have now largely been appropriately addressed.
- 4.3. The site is indicated to comprise a terraced property over 4 storeys including an existing cellar space which comprises a bathroom and utility space, although the depth to which this extends to was not stated.
- 4.4. Although it is evident that a thorough screening process was largely undertaken with some of the Arup GSD maps included, it would be beneficial if the requirements of CPG4 were followed accurately by referencing and including all the relevant map extracts from the Arup GSD, Environment Agency and the LBC Flood Risk Management Strategy identifying the site location on each map. These extracts would help to support statements made in the BIA screening process.
- 4.5. The presence or absence of basements beneath the neighbouring properties was not been established in the BIA. Clarification was requested on whether or not the neighbouring properties comprise basements and their extents, if present. It is stated in an email response from the applicant's engineers that both No 27 and 31 Howitt Road contain cellars.
- 4.6. Although the BIA identified the site is underlain by London Clay from nearby historic boreholes, no ground investigation was presented. Section 6 of the BIA refers to a ground investigation undertaken in September 2008, however, the ground investigation report was not presented and is not on Camden's planning portal. The report was requested from the Planning Officer, however, it was not received at the time of writing this report. It is assumed the ground investigation report has been reviewed as part of the approvals process for the main basement proposal.
- 4.7. A 'No' response was given to Question 6 of the Surface Flow and Flooding screening which relates to flood risk, however, reference to Camden's Strategic Flood Risk Assessment (SFRA) indicates that the property lies in an area at risk of internal sewer flooding. The initial audit



requested that this item be reviewed and taken forward to scoping/assessment as necessary. It has since been stated in the email response that 'the basement will be tanked with a Delta membrane and will have a sum pump'.

- 4.8. With respect to subterranean flow, the screening stated the basement will not extend below the water table. The justification provided for this statement was that groundwater was not encountered in any of the borehole data records for nearby boreholes. There was no reference to whether or not groundwater was encountered in the site specific investigation which is indicated to have been undertaken in September 2008 or groundwater monitoring. It should be noted that although the London Clay is a non-aquifer, there is the potential for a perched water table to be present in any overlying Made Ground which could affect stability. The exclusion of water must be considered in the design of the temporary and permanent works. Section 8.2.3 of the BIA states that it would be prudent to undertake a number of trial pits to close to the basement depth to confirm the presence of groundwater and the potential for perched water. The need for basement waterproofing was mentioned in Section 8.3 of the BIA.
- 4.9. It was stated in the BIA that 'the basement is to be formed of a series of 1.20m wide underpins that are joined together to form a reinforced concrete box' with no further details provided. A single drawing was provided to indicate the proposals. Structural Drawings by S R Brunswick Ltd were referenced on Section 1.4 of the BIA, however, these were not presented.
- 4.10. It was stated in the scoping that 'the proposed construction method of underpinning to form the basement structure will take into account of the neighbouring property foundations and any potential issues with undermining or altering of the current ground stabilisation and equilibrium'. Further details on the construction methodology with sketches to indicate each stage of the basement excavation and construction showing any temporary propping and an underpinning bay sequence were requested.
- 4.11. The proposed construction methodology has been revised and the supplementary information provided comprises a basic construction sequence. This indicates the lightwell is to be formed by reinforced concrete (RC) walls to be constructed in three sequential sections with the central section to be constructed first followed by the two side wings. Trench sheeting is to be utilised to provide temporary support.
- 4.12. It was noted that the calculations provided in the BIA to justify the RC wall stability differed from the section drawing. It was requested that the methodology be amended to that shown in the calculations to maintain stability. Further clarification on how the lightwell would be built was subsequently provided on the temporary works drawing.
- 4.13. It was stated in Section 7.0 of the BIA that 'by installing adequate propping and new permanent works, the anticipated movements caused by the development are to be limited to not exceed

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5mm at any location within the host or adjacent properties'. It was not stated if these are horizontal or vertical movements. The anticipated damage was indicated to be 'Slight' (Category 2) as defined as Burland, however, no justification or supporting calculations were provided. Clarification of the anticipated horizontal and vertical movements as a result of the excavation and construction was requested together with justification and mitigation measures as required by CPG4.

- 4.14. The anticipated movements have been reassessed and it is stated in the supplementary information that these are not expected to exceed 1mm and the resulting damage is indicated to be 'Negligible' (Category 0). The predicted movement is considered to be an underestimate and no supporting analysis is provided. However, on the basis of the modest proposals and with good workmanship it is accepted damage could be limited to within acceptable limits.
- 4.15. It was stated in Section 8.2.3 of the BIA that 'further investigation works will be required in order that heave movements may be checked for further analysis based on final loadings and levels'. Anticipated heave movements were requested on the basis of the excavation for the extent of the entire basement, however, as the lightwell proposals are relatively modest, this is considered to be of little consequence.
- 4.16. The BIA identified that the site is within 5m of a highway and it is stated that all temporary works will be designed to limit any local movements that may impact it. It was further stated that all works will be monitored for movement and this was accepted.
- 4.17. The need for movement monitoring was briefly mentioned in the BIA, however, no outline proposals were presented. A basic monitoring proposal is provided in the supplementary documents and it is accepted that details and trigger levels may be agreed as part of the party wall award.
- 4.18. A works programme was not submitted as required by CI.233 of the GSD and this was requested. A basic works duration is included in the email responses.
- 4.19. It is accepted that the proposals are unlikely to affect the wider hydrogeology of the area and there are no slope stability or any other flooding concerns regarding the proposed development.

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5.0 CONCLUSIONS

- 5.1. Following the initial audit, the Planning Officer indicated the basement proposals had previously been approved therefore the audit is to only consider the lightwell which was not part of the approved scheme.
- 5.2. The qualifications of the author of the BIA have now been confirmed and although they do not meet CPG4 requirements, the proposals are modest and the impacts of the proposed construction have now largely been appropriately assessed.
- 5.3. The BIA indicated that the proposed lightwell will be founded within the London Clay. It was indicated that a ground investigation was undertaken, however, no ground investigation report is presented despite being requested. It is assumed this report was reviewed as part of the approved basement application process. The proposed foundations should be taken through to the competent London Clay stratum. Perched water may exist in the Made Ground and this should be considered in the design of the temporary and permanent works.
- 5.4. The presence or absence of surrounding basements was not indicated to allow the impacts to surrounding foundations/properties to be confirmed. It is now stated both immediate neighbouring properties comprise subterranean spaces.
- 5.5. Details on the proposed construction methodology and sketches to indicate the sequence and temporary propping were requested. These have now been provided.
- 5.6. The initial screening exercise did not identify that the site is in an area at risk of internal sewer flooding. This issue has now been appropriately addressed as requested.
- 5.7. The anticipated ground movements have been reassessed following a request to provide mitigation measures as required by CPG4 due to the 'Slight' (Category 2) damage to the neighbouring properties indicated in the BIA. 'Negligible' (Category 0) damage is now predicted and although no supporting analysis is provided and the predicted movement (1mm) is considered an underestimate, it is accepted that due to the modest proposals and assuming good workmanship, it is reasonable to anticipate damage to be neighbouring properties will fall within acceptable limits.
- 5.8. A works programme was not provided and this was requested. A basic works duration is now included with details to be provided by the appointed Contractor at a later date.
- 5.9. Outline monitoring proposals have now been provided as requested. Details and trigger levels should be agreed as part of the party wall award.

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29A Howitt Road, NW3 4LT BIA – Audit



- 5.10. It is accepted there are no slope stability issues, wider hydrogeological concerns or any other flooding issues as a result of the proposed development.
- 5.11. Despite some omissions in the BIA, it is acknowledged that the scale of the proposal is modest and no adverse effects to the water environment or stability from the proposals have been identified. It is accepted that the information provided for the BIA reflects this.

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Appendix 1: Residents' Consultation Comments

None

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Appendices



Appendix 2: Audit Query Tracker

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Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	BIA format	Author(s) qualifications not provided.	Closed – Provided (see Audit paragraph 4.2).	30/09/2016
2	BIA format	Works programme not included.	Closed – Basic works duration provided.	30/09/2016
3	Surface flow and flooding	Site potentially at risk of sewer flooding (screening Q6).	Closed – assessed and appropriately addressed as requested.	30/09/2016
3	BIA format/stability	Drawings with sufficient detail, construction and underpinning sequence not provided.	Closed – basic sketches provided.	30/09/2016
4	BIA format/ Stability	No site specific ground investigation to confirm sequence of strata and groundwater level.	Closed – Not provided. Assumed this was reviewed as part of the approved basement application process.	30/09/2016
5	Stability	No confirmation of whether basements are present beneath the neighbouring properties or not.	Closed – confirmation in email (Appendix 3).	30/09/2016
6	Stability	Neighbouring property foundations not determined.	Closed - acknowledged proposals are modest.	30/09/2016
7	Stability	Movement monitoring proposal not provided.	Closed – Outline proposal provided in supplementary information. Details and trigger levels to be agreed as part of Party Wall awards.	30/09/2016 N/A



Appendix 3: Supplementary Supporting Documents

Email responses from Applicant's Engineer
Drawing showing proposals
Construction sequence and outline monitoring proposal

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Appendices



FW: 29A Howitt Road Ref 2016/3900/P

Sergios Sergiou to: FatimaDrammeh@campbellreith.com Cc: "Tessa.Craig@camden.gov.uk"

History:

This message has been replied to.

2 attachments





1619_Rev_A_calc_sheet_29_A_Howitt_Road.pdf1619 Rev A calc sheet -29 A Howitt Road.xlsx

Dear Fatima

See attached pdf and our engineers comments below

kind regards

Sergios Sergiou BA(hons)dip arch RIBA

on behalf of Studio 136 Architects Ltd

6 The Broadway, Wembley, Middlesex, HA9 8JT

Tel/Fax : 020 8 907 7131 Direct tel 020 3418 0991 Email : info@studio136.co.uk

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----Original Message----

From: Steven [mailto:srb@srbrunswick.com]

Sent: 17 September 2016 18:23

To: Sergios Sergiou <sergios@studio136.co.uk>; 'Ilan' <Ilan@amirilan.com>

Subject: RE: 29A Howitt Road Ref 2016/3900/P

Hi Serge, Ilan

Attached are my revised notes which I believe answers the outstanding queries re temporary works, extent of base and anticipated movement.

I add a comment on the e mail below to explain what I have done.

Hopefully this now covers all that is required.

Regards,

19/09/2016 11:01

Steven Brunswick

138 Woodcock Hill Kenton Middx HA3 0JN

Mobile 07803 262 009

----Original Message----

From: FatimaDrammeh@campbellreith.com [mailto:]

Sent: 15 September 2016 14:38

To: Sergios Sergiou <sergios@studio136.co.uk>

Cc: Clark, James <James.Clark@camden.gov.uk>; Craig, Tessa < >;

camdenaudit@campbellreith.com

Subject: RE: 29A Howitt Road Ref 2016/3900/P

Hi Sergios,

Together with the information provided in your email on 23 August the queries on bullet points 4,5 and 6 are closed. Queries 1, 2, 3 and 7 are still not addressed.

Section 1 of the BIA makes reference to structural drawings by S R Brunswick Ltd, however these drawings are not included. Could you please send these across including sketches to illustrate the sequence indicated in Section 8 and an underpinning bay sequence? Open - see below.

For the Architectural drawings proposed sections are included however it would be helpful if you've got existing sections. Not addressed but no further info requested.

Section 6 indicates a ground investigation was undertaken by Structural Soils in 2008, could you please send this report across? Open - does this report exist?

Please confirm if the neighbouring properties have cellars/basements. Closed - addressed in email on 23/08/16

The response to Question 6 of the surface flow screening is incorrect as the site is indicated to be located in an area at risk from sewer flooding (ref. Fig 5a of the Camden SFRA by URS). Please address this potential risk. Closed - addressed in email on 23/08/16 and 15/09/16. Please give us an indication of the anticipated works duration.Closed - provided in email on 23/08/16.

Category 2 (Slight) damage is predicted for the neighbouring properties. CPG4 requires mitigation measures for damage higher than Category 0 (see CPG4 2015 Section 3.30) Open - see below

Is movement monitoring proposed? Please provide outline proposals if so. Open - provided however trigger level may need revising following reconsideration of the ground movements.

Have rewritten this on basis of keeping movement negligible based on Temp works solution and robustness of the properties. SRB

1) The further information confirms the lightwell walls will be formed in sequential sections with the central section formed first, followed by the two side wings. CPG4 guidance notes that "it must be demonstrated that the stability of existing buildings and the adjacent highway will be maintained at all times". It remains unclear from the information given how these sections of retaining wall will be formed without causing instability to the highway

and the adjoining property's bay windows. It is anticipated that some form of temporary retention would be required. An illustration, ideally containing a plan and section, illustrating the method of construction should be provided.

The calculations in the BIA indicate that in the permanent case the side returns of the new lightwell structure will be subject to broadly balanced loading. The central section will be subject to load from the highway side only and the calculations provided indicate that to justify the cantilever RC wall stability, a back span leg of 3m is required. The calculations differ to the section drawing provided. It is requested that the new retaining wall base will be formed to the geometry shown in the calculations such that stability is maintained as required.

I have added a section on the temporary works to show how this will be built and providing a slab of the required dimension by extending into the property and tying into the basement slab. This will inevitably happen as we don't want a joint at this point. SRB

7) The BIA notes in Section 7.0 that the propping arrangement will result in movements no worse than 5mm and that this will ensure damage is no worse than 'slight'. A damage assessment category of 'slight' is equivalent to Burland Category 2 and in accordance with CPG4, mitigation measures should be proposed. It is noted that no GMA has been carried out and given the scale of the excavation, it is suggested that the damage assessment is reviewed. If it can be demonstrated / justified that movements below category 1 are anticipated, it would be acceptable to avoid provision of mitigation measures.

I have added a section within the monitoring part to say movement reassessed on the back of construction sequence so movement of the buildings are less than 1mm and so slight. Also stated that the adjacent buildings also have basements, SRB

Can I also request that the supplementary information required to close out the queries to this BIA be provided in one document/email please? At the moment the information is fragmented over a number of emails which makes it difficult to review and include as an appendix to our final report.

Thank you.

Kind regards
Fatima Drammeh
Geotechnical Engineer

(Embedded image moved to file: pic20244.jpg)

Friars Bridge Court, 41-45 Blackfriars Road, London SE1 8NZ

Tel +44 (0)20 7340 1700 www.campbellreith.com (Embedded image moved to file: pic41449.gif)

From:Sergios Sergiou <sergios@studio136.co.uk> To:"Clark, James" <James.Clark@camden.gov.uk> Cc:"FatimaDrammeh@campbellreith.com"

<FatimaDrammeh@campbellreith.com>, "Craig, Tessa"
<Tessa.Craig@camden.gov.uk>

Date:15/09/2016 10:17

Subject:RE: 29A Howitt Road Ref 2016/3900/P

Dear Fatima,

Please find attached the information from our structural engineer to cover the points raised in your recent email .

I can also confirm that we will be installing a non return valve to deal with the sewer discharge query.

Please let me know if this satisfies your queries

kind regards

Sergios Sergiou BA(hons)dip arch RIBA

on behalf of Studio 136 Architects Ltd

6 The Broadway, Wembley, Middlesex, HA9 8JT

Tel/Fax : 020 8 907 7131 Direct tel 020 3418 0991 Email : info@studio136.co.uk

Website: [Suspicious URL detected]

Office Hours : Monday - Friday 9.30am - 6.00pm

From: Clark, James [mailto:James.Clark@camden.gov.uk]

Sent: 14 September 2016 11:54

To: Sergios Sergiou <sergios@studio136.co.uk>

Cc: FatimaDrammeh@campbellreith.com; Craig, Tessa <Tessa.Craig@camden.gov.uk>

Subject: 29A Howitt Road Ref 2016/3900/P

Dear Sergious,

I hope your well,

I have attached the emailed correspondence from the Fatima Drammeh regarding the requirement for the BIA audit to be acceptable, as yet you have made no response. I feel I have been extremely patient on this application received almost a year ago! A BIA is required for the front lightwell (regardless that a basement has already been approved in 2008), especially considering there was no pre-existing BIA for the 2008 approved basement.

I am Leaving the Council on Friday and Tessa Craig (CC'd) will be taking on the planning application. I think we should agree a timescale for when the outstanding BIA information should be submitted to Campbell Reith so the impacts to the neighbouring properties can be mitigated. There is no other requirement at this stage before planning approval can be given for the lightwell.

I am happy to discuss the application before I leave on Friday.

Kind Regards

James Clark
Planning Officer
Regeneration and Planning
Supporting Communities
London Borough of Camden

Telephone: 02079742050

Web: camden.gov.uk

2nd Floor

5 Pancras Square London N1C 4AG

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- by signing up to planning e-alerts
- · in the planning section of the Camden Account
- \cdot through adverts in the Camden New Journal and Ham & High

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FW: 29A Howitt Road Sergios Sergiou

to:

FatimaDrammeh@campbellreith.com 23/08/2016 14:51

Hide Details

From: Sergios Sergiou < sergios@studio136.co.uk>

To: "FatimaDrammeh@campbellreith.com" <FatimaDrammeh@campbellreith.com>

kind regards

Sergios Sergiou BA(hons)dip arch RIBA

on behalf of Studio 136 Architects Ltd

6 The Broadway, Wembley, Middlesex, HA9 8JT

Tel/Fax: 020 8 907 7131 Direct tel 020 3418 0991 Email: info@studio136.co.uk

Website: [Suspicious URL detected]

Office Hours: Monday - Friday 9.30am - 6.00pm

From: Ilan [mailto:llan@amirilan.com]

Sent: 23 August 2016 13:24

To: Sergios Sergiou <sergios@studio136.co.uk>

Cc: srb@srbrunswick.com (srb@srbrunswick.com) <srb@srbrunswick.com>

Subject: RE: 29A Howitt Road

Dear Sergio

Please find my answers below, Please let me know if you require more information.

As I mentioned on our telephone conversation earlier, we have just started looking through the information for 29A Howitt Road with the aim of issuing our report on Friday however there is still outstanding information. Whilst we acknowledge that the proposal only involves the extension of an existing lightwell, most of the queries on our initial audit document still apply. I would be grateful if you could address the following queries:

Section 1 of the BIA makes reference to structural drawings by SR

Brunswick Ltd, however these drawings are not included. Could you please

send these across including sketches to illustrate the sequence

indicated in Section 8 and an underpinning bay sequence?

For the Architectural drawings proposed sections are included however it

would be helpful if you've got existing sections.

Section 6 indicates a ground investigation was undertaken by Structural

Soils in 2008, could you please send this report across?

Please confirm if the neighbouring properties have cellars/basements. No 27 has a cellar, No 31 used to have one the house was re build after the war.

The response to Question 6 of the surface flow screening is incorrect as

the site is indicated to be located in an area at risk from sewer flooding (ref. Fig 5a of the Camden SFRA by URS). Please address this potential risk. The basement will be tanked with Delta membrane and will have a Sum Pump. The basement floor will be above the existing drainage. The manhole is 3 meter deep.

Please give us an indication of the anticipated works duration. For the front light well 1 week. For the wholes basement structural work 3 months.

Category 2 (Slight) damage is predicted for the neighbouring properties. CPG4 requires mitigation measures for damage higher than Category 0 (see CPG4 2015 Section 3.30)

Is movement monitoring proposed? Please provide outline proposals if so.

If you have any questions please give me a ring so we can close out the queries and finalise the report.

Thank you.

Kind regards Fatima Drammeh Geotechnical Engineer

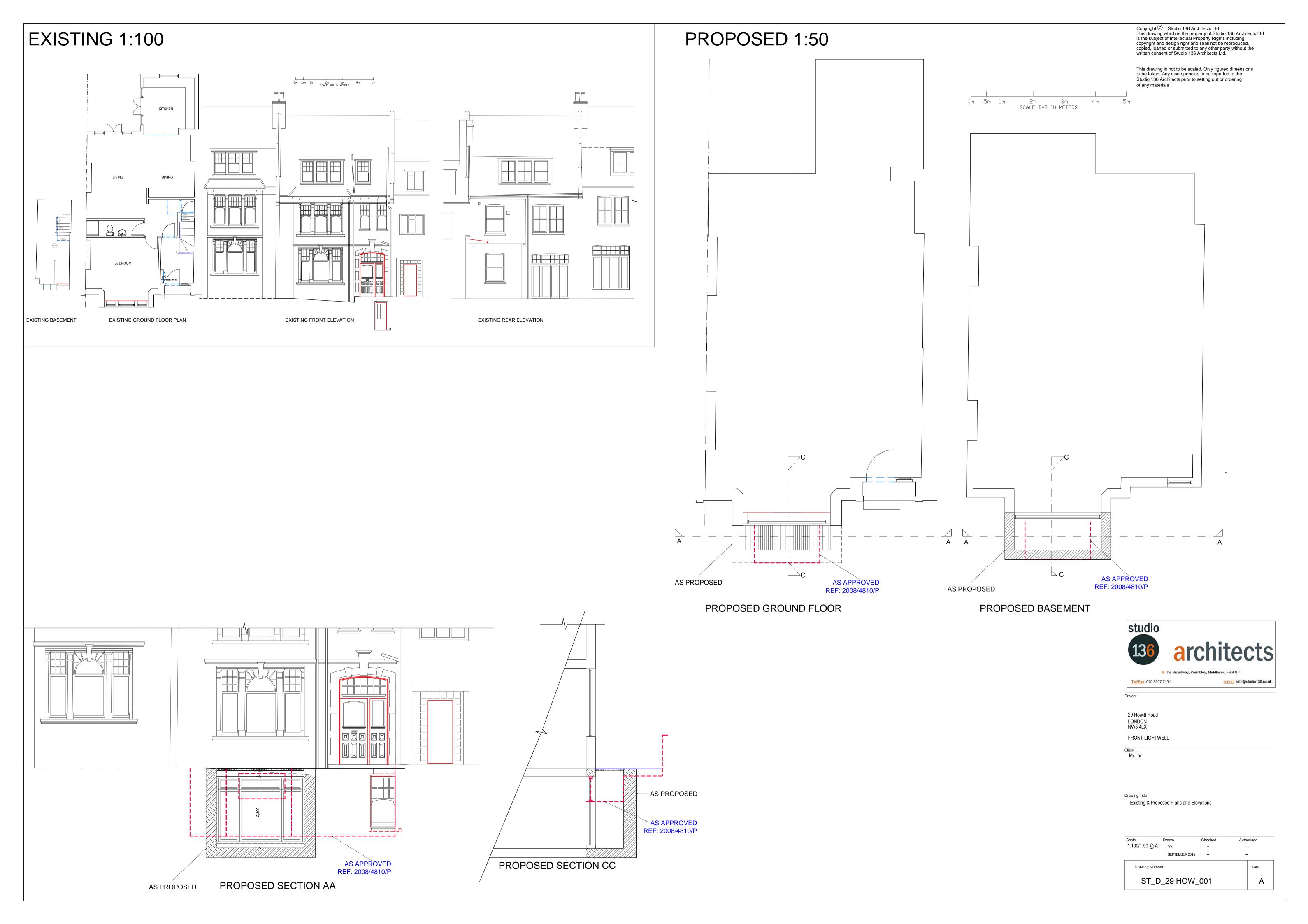
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Prepared by: Sheet: **S R BRUNSWICK CEng FICE** SRB 1619 - 1 138 Woodcock Hill, Kenton, Middlesex HA3 0JN Checked by: Fax: 020 8930 8146 Mob: 07803 262 009 June '16 E Mail: srb@srbrunswick.com 29A Howitt Road Rev A Proposed enlarged lightwell to front elevation Base to extend and lap with Basement slab for stability of lightwell, minimum 3m New lightwell to be formed 350mm concrete walls with T16 @ 150 ctrs verticall on each face and T12 at 150 ctrs each face as distribution. Base to be 350mm and reinforced with T16 @ 150 ctrs each way top and bottom concrete to achieve a minimum strength of 35N/mm2 at 28 days. **Basement Plan** Sequence of construction 1500 The lightwell is to be constructed in 3 sections including the base utilising bent up bars at the construction joints whch are to be provided water bars. The middle section (1) is to be constructed first with the base and on completion the concrete wall is to be propped allowing pins 2 and 3 to be excavated and concreted, these two sections can be undertaken at the same time.

Prepared by: Sheet: S R BRUNSWICK CEng FICE **SRB** 1619 - 2 Date: Checked by: 138 Woodcock Hill, Kenton, Middlesex HA3 0JN June '16 Fax: 020 8930 8146 Mob: 07803 262 009 E Mail: srb@srbrunswick.com 29A Howitt Road **Monitoring** Prior to the start of the lightwell construction a set of survey points are to be established and these are to be located at 3m centres at the back of the foot path and extend for 20m beyond the property in each direction. In addition survey points will be attached to the building at ground floor level at 1m centres for the width of the property including on the party wall. Ideally following discussion with the adjacent property owners the line of monitoring points would extend at ground level for the width of their properties. following the base survey an edm will be used to establish vertical and horizontal movements at weekly intervals during the course of the work and on completion on a monthly basis for 3 months. The results of the surveys are to be shared with the Engineer and reviewed with additional propping provided if movement of the building is detected. From guidance in CPG4 and on reassesing the potential for building movement from the works the anticipated movement of the building has been assessed as not to exceed 1mm, this is applicable to the building and the adajacent properties as both properties also have basements. Movement of the properties is Category 0, (Negligible - Burland) less than 0.1mm due to the controlled method of construction and condition of the properties. As such no further mitigation measures are proposed.

Sheet: Prepared by: **S R BRUNSWICK CEng FICE SRB** 1619 - 3 138 Woodcock Hill, Kenton, Middlesex HA3 0JN Checked by: Fax: 020 8930 8146 Mob: 07803 262 009 June '16 E Mail: srb@srbrunswick.com 29A Howitt Road **Temporary works** Line of trench sheets to support ground. Sheets to be toed into the ground to resist ground forces. Hydraulic manhole brace to be provided at low and hoigh level, with low level frame removed after base has been cast. the upper frame to be removed after first section of wall is cast and back propped to the slab. On completion of Pin 1, the same sequence is to be used for the other pins utilising the completed pin 1 with diagonal horizontal bracing. Section through lightwell showing base and first lift of wall completed. Base extended into building and combined with basement slab for stability

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