LOCAL MEMBER OBJECTION

COMMITTEE DATE: 09/11/2016

APPLICATION No. 16/02038/MNR APPLICATION DATE: 29/09/2016

ED: **PENYLAN**

APP: TYPE: Full Planning Permission

APPLICANT: Mr Boltman

LOCATION: 2 WESTVILLE WALK, ROATH, CARDIFF, CF23 5DD

PROPOSAL: DEMOLITION OF BUNGALOW AND REPLACEMENT WITH 2

STOREY HOUSE WITH NEW OFF-ROAD PARKING

RECOMMENDATION 1: That planning permission be **GRANTED** subject to the following conditions:

1. C01 Statutory Time Limit

- 2. The development shall be carried out in accordance with the following approved plans:
 - 119-A(P)-03 Proposed Site
 - 119-A(P)-04 Ground Floor
 - 119-A(P)-05 First Floor
 - 119-A(P)-06 Proposed Elevations
 - 1631 002/Rev.B Hard and Soft Landscape Plan

Reason: To ensure satisfactory completion of the development and for the avoidance of doubt in line with the aims of Planning Policy Wales to promote an efficient planning system.

- 3. The first floor windows within the side (west facing) elevation of the dwelling hereby approved shall be obscurely glazed and non-opening below a height of 1.7m from internal floor level and so retained. Reason: To protect the privacy of occupiers of neighbouring properties in accordance with Policy KP5 of the Cardiff Local Development Plan 2006-2026.
- 4. All planting, seeding, turf-laying and paving shown on the approved plans shall be carried out in the first planting and seeding season following the occupation of the building or the completion of the development, whichever is the sooner.

Any retained or planted trees or plants which within a period of 5 years from the completion of the development die, are removed, become seriously damaged or diseased, or (in the opinion of the Local Planning Authority) otherwise defective, shall be replaced in the planting season

following their death with others of similar size and species, unless the Local Planning Authority gives written consent to any variation.

Reason: To maintain and improve the appearance of the area and maintain green infrastructure in the interests of visual amenity in accordance with Policies KP5, KP15, KP17, EN8 and EN9 of the Cardiff Local Development Plan 2006-2026.

- 5. The materials to be used in the external finish of the dwelling hereby approved shall accord with the schedule of materials detailed at Page 12. of the Design and Access Statement, dated 18th August 2016. Reason: To ensure a high quality development in the interest of the visual amenity of the area in accordance with Policies KP5, KP17 and EN9 of the Cardiff Local Development Plan 2006-2026.
- 6. The finish of materials to be used in the closing of the existing garage door opening shall match those used in the existing means of enclosure fronting Westville Walk.
 Reason: To ensure a high quality development in the interest of the visual amenity of the area in accordance with Policies KP5, KP17 and EN9 of the Cardiff Local Development Plan 2006-2026.
- 7. Prior to the installation of any gate/door to the existing means of enclosure fronting Westville Walk details of the design, materials and means of opening (which should not obstruct the highway) should be approved by the Local Planning Authority. Thereafter the development should be undertaken in accordance with the approved details. Reason: In the interests of the character of the area and highway safety in accordance with Policy KP5, KP17, EN9 & T5 of the Cardiff Local Development Plan 2006-2026.

RECOMMENDATION 2: In the light of the low risk that bats may be present in the buildings to be demolished, the following precautionary mitigation measures are recommended to the applicant:

- Demolition works should be timed to avoid bats' maternity and hibernation seasons, so demolition in September/October or March/April is advisable;
- Site operatives should be advised to be aware that bats may be present;
- If bats are found during these works, they should stop immediately and Natural Resources Wales contacted for advice – to continue otherwise may result in a criminal offence;
- Features such as soffits, barge-boards, fascias etc, and any other features which bats may use to roost or to access a roost should be 'soft-stripped' in order to reduce the risk of harm to bats;
- A bat-licenced ecologist should be on call in case bats are found during demolition;
- Enhancement measures for bats, such as bat bricks, bat tiles or providing bat access to roof void may be incorporated into the new building;

 If works do not take place within one year of the most recent bat survey, the bat survey should be repeated as bats may colonise the building in this time.

RECOMMENDATION 3: To protect the amenities of occupiers of other premises in the vicinity attention is drawn to the provisions of Section 60 of the Control of Pollution Act 1974 in relation to the control of noise from demolition and construction activities. Further to this the applicant is advised that no noise audible outside the site boundary adjacent to the curtilage of residential property shall be created by construction activities in respect of the implementation of this consent outside the hours of 0800-1800 hours Mondays to Fridays and 0800 - 1300 hours on Saturdays or at any time on Sunday or public holidays. The applicant is also advised to seek approval for any proposed piling operations.

1. DESCRIPTION OF THE SITE

- 1.1 The application site is sited on the periphery of the Roath Mill Gardens Conservation Area and bounds the Roath Park Conservation Area.
- 1.2 The site extends to approximately 550m² and fronts Westville Walk, a street of predominately pre-first world war and Edwardian terraced housing, to the west of the site lies Roath Brook Gardens, to the east terraced properties on Pen Y Lan Road and to the rear the Roath Brook.
- 1.3 A 1950's bungalow sits relatively centrally within the site. The bungalow is a single storey in height with pebble dashed walls, concrete tile roof and uPVC fenestration. The house does not reflect the period, detailing or style of properties within the Conservation Area and is considered to be of little architectural merit.
- 1.4 The site is enclosed to the front and side by high stone and brick walls, which are more characteristic of the Conservation Area setting, and which substantially mitigate the impact of the dwelling which stands behind. The rear boundary separating the site from the Roath Brook is enclosed by vegetation.
- 1.5 The site lies within an area at risk from flooding, as identified by data published by Natural Resources Wales.

2. DESCRIPTION OF PROPOSED DEVELOPMENT

- 2.1 Planning permission is sought for the demolition of the existing bungalow and its replacement with a two storey dwelling.
- 2.2 The proposal is of a contemporary design rather than a pastiche of surrounding properties within the surrounding Conservation Area and will be finished with a flat roof. High quality materials will be utilised incorporating a mix of real stone cladding, dark grey coloured cladding panels, aluminium windows and canopies with large expanses of glass.

- 2.3 The proposed building will extend to a maximum height of 8m and have a footprint extending to 125m² in comparison to the existing 117m². The front of the building will be a minimum of 3m from the boundary with Westville Walk, the existing bungalow in comparison stands 6m from this boundary, and lie behind an existing 2.4m means of enclosure. The side (west) elevation will stand almost 2m from the boundary and a significant distance is retained between the rear and side (east) boundaries.
- 2.4 Alterations are proposed to the existing means of enclosure to the front boundary. Consisting of the creation of a double width vehicular access opening, serving two off street car parking spaces, enclosed by a roller shutter door, the replacement of existing gates with contemporary designed metal gates, and the closing of the existing garage opening in materials to match the existing means of enclosure and a new dark grey colour pedestrian door.
- 2.5 A detailed landscaping plan has been submitted with the proposals in addition to an Arbioricultural Report. The proposals are also supported by an ecological assessment relating to bats and a flood consequences assessment.

3. PLANNING HISTORY

3.1 There is no pertinent planning history relating to the application site.

4. POLICY FRAMEWORK

- 4.1 National Planning Policy
 - Planning Policy Wales (8th Ed, 2015)
 - Technical Advice Note 5: Nature, Conservation and Planning (September 2009)
 - Technical Advice Note 12: Design (July 2014)
 - Technical Advice Note 15: Development & Flood Risk (July 2004)
- 4.2 Cardiff Local Development Plan 2006-2026
 - Policy KP3(B) (Settlement Boundaries)
 - Policy KP5 (Good Quality and Sustainable Design)
 - Policy KP15 (Climate Change)
 - Policy KP16 (Green Infastructure)
 - Policy KP17 (Built Heritage)
 - Policy EN7 (Priority Habitats and Species)
 - Policy EN8 (Trees Woodlands and Hedgerows)
 - Policy EN9 (Conservation of the Historic Environment)
 - Policy EN11 (Protection of Water Resources)
 - Policy EN13 (Air, Noise, Light Pollution and Land Contamination)
 - Policy EN14 (Flood Risk)
 - Policy T5 (Managing Transport Impacts)
 - Policy W2 (Provision for Waste Management Facilities in Development)
- 4.3 Supplementary Planning Guidance
 - Roath Mill Gardens Conservation Area Appraisal (2008)

- Access, Circulation & Parking Standards (January 2010)
- Biodiversity (June 2011)
- Infill Sites Design Guide (April 2011)
- Trees & Development (March 2007)
- Waste Collection & Storage Facilities (March 2007)

NB. The SPGs were approved as supplementary guidance to the City of Cardiff Local Plan (1996). Although the City of Cardiff Local Plan (1996) has recently been superseded by the Cardiff Local Development Plan (2016), the advice contained within the SPGs is pertinent to the assessment of the proposal and remains consistent with the aims of both LDP Policies KP5/T5/EN8/EN13/W2 and guidance in Planning Policy Wales and are afforded significant weight

5. INTERNAL CONSULTEE RESPONSES

- 5.1 The Operational Manager (Shared Regulatory Services) has been consulted, no representations have been received.
- 5.2 The Operational Manager (Traffic and Transportation) raises no objections to the proposal, subject to the proposed access doors not opening over the highway.
- 5.3 The Operational Manager (Waste Management) raises no objections to the proposal.
- 5.4 The Councils Ecologist raises no objection to the proposal, subject to recommendations.
- 5.5 The Councils Planner (Trees) raises no objection to the proposal subject to conditions.

6. EXTERNAL CONSULTEE RESPONSES

6.1 Natural Resources Wales raise no objection to the proposal, advice in respect of flood risk management has been provided.

7. REPRESENTATIONS

- 7.1 Local Ward Members, Cllrs Boyle and Kelloway, object to the proposal on the basis that it does not preserve or enhance the character of the Conservation Area and would have an overbearing impact upon neighbouring properties.
- 7.1 The application was advertised by way of neighbour consultation letters, site and press notice.
- 7.2 Nine letters of representation, seven from neighbouring occupiers and 2 from members of the public that would not be directly affected by the development, have been received objecting to the proposal. A summary of the grounds for objection are detailed below:

- The proposal in terms of its design, materials, height, scale and mass is a dominant feature that is out of character with the Conservation Area;
- The proposed alterations to the existing means of enclosure would be detrimental to the character of the area;
- The proposal would dominate the outlook of neighbouring properties and views from the public domain;
- The proposal would have an overbearing impact upon neighbouring properties causing loss of light and overshadowing;
- The proposal would be detrimental to the privacy of neighbouring occupiers;
- The proposal would result in the loss of off street parking exacerbating existing parking problems within the area;
- The loss of trees would impact upon the character of the area, privacy of neighbouring occupiers and nesting birds;
- The proposed demolition and construction would create noise, dust and vibration;
- The construction phase would be of detriment to the privacy of neighbouring occupiers;
- Reference to the 'Right to light' by provision of the Prescriptions Act 1832.

8 ANALYSIS

8.1 Introduction

- 8.1.1 The application site lies within the defined settlement boundary and within an existing residential area, therefore, the principal of the development is considered acceptable and to accord with Policy KP3(B) of the Cardiff Local Development Plan.
- 8.1.2 The principal matters for consideration are:
 - the effect of the proposal upon the character and appearance of the Conservation Area;
 - the effect of the proposal upon the amenity of neighbouring occupiers;
 - its transport impact;
 - · consequences of flooding;
 - landscaping;
 - its ecological impact.

8.2 Impact Upon the Character of the Conservation Area

8.2.1 The existing bungalow on the application site is set behind a brick and stone wall of approximately 2.4m in height. As such, only the roof and gable ends of the bungalow are evident along Westville Walk and Westville Road. Longer range views of the gable end and roof of the bungalow are visible from Roath Brook and Sandringham Road further afield in the conservation area. The existing bungalow is not therefore prominently located from publicly accessible areas within the Roath Mill Gardens Conservation area and sits quietly within its plot. As such, it is not considered that the bungalow positively contributes to the character or appearance of the conservation area.

- 8.2.2 The existing bungalow, a later 20th century addition to the area, is of a contrasting architecture and finish to the predominant building form in the area. This, coupled with its relatively screened setting, ensures that the building contributes little to the areas character and appearance. As such, the principle of the demolition of the existing bungalow and its replacement with an appropriate replacement would be considered acceptable.
- 8.2.3 With regard to the replacement dwelling proposed, the Roath Mill Gardens Conservation Area Appraisal states that;

Whether a traditional or contemporary design approach is adopted, the success of new developments and extensions to existing buildings in the Conservation Area will require an understanding of its special interest. New development and extensions to existing buildings will be required to preserve or enhance the character and appearance of the Conservation Area by;

- Respecting the distinctive quality of place, which will involve the continuity
 of the existing urban grain and existing vertical and horizontal rhythms in
 the built form.
- Retaining important views and vistas in and out of the Conservation Area.
- Respecting the existing land uses.
- Reinforcing the existing hierarchies of public and private space.

'Using materials and architectural details which are as high in quality as those used in existing buildings' (p.19 - 20)

- 8.2.4 Full details of the replacement dwelling proposed have been provided. The replacement dwelling, while being of a greater scale, represents a high quality, bespoke piece of architecture. While it would therefore be more prominent within the conservation area, it is unashamedly of a different architectural approach and finish. This approach, coupled with the high quality complimentary finishing materials proposed, is consequently favoured over a poor pastiche of the traditional style of buildings found in the area.
- 8.2.5 Consistent with the existing bungalow, the proposed dwelling would be set back from Westville Walk well behind the 2.4m wall. This coupled with the flat roof approach would ensure that the proposed building would recede within the site thereby not trying to compete with the surrounding built form.
- 8.2.6 The proposed alterations to the existing means of enclosure are to be undertaken in high quality materials which complement the design of the building and conservation area.
- 8.2.7 The replacement dwelling proposed would subsequently be considered to preserve the character of the area and is considered acceptable in accordance with Policies KP5, KP17 and EN9 of the LDP and advice contained within the Infill Sites SPG.

8.3 Amenity of Neighbouring Occupiers

- 8.3.1 Policy KP5 of LDP seeks to ensure that 'no undue effect on the amenity of neighbouring occupiers' results from development. Section 4.0 of the Infill sites SPG provides guidance regarding the relationship of new development with neighbouring properties in respect of residential amenity and privacy. Para 4.9 & 4.11 of the guidance states:
 - a minimum of 21m should be maintained between principal windows to habitable rooms:
 - the minimum overlooking distance from a habitable room window to garden area of a separate dwelling should be 10.5m;
 - to safeguard the amenity of existing residents, proposals must not result in unacceptable harm regarding the level of overbearing, overshadowing or overlooking of neighbouring properties.
- 8.3.2 The front elevation of the proposed dwelling predominately faces the side boundary/rear garden and partially the side elevation of the neighbouring property, 1 Harrismith Road, and is set at a distance in excess of 10.5m from that property. It is considered that a two storey building set such a distance from the boundary of this property would have no overbearing impact or cause overshadowing particularly given the orientation of the site in respect to the neighbouring property. A distance of 10.5m is considered adequate to ensure that no loss of privacy would result to the rear amenity space of the neighbouring property and there are no windows directly opposite windows proposed in the new dwelling within the neighbouring property.
- 8.3.3 The side (west) elevation of the proposed dwelling, at two stories in height, faces the rear of properties at 88 & 90 Pen Y Lan Road and is set at a distance in excess of 10.5m and from the rear elevations of those properties and a minimum of 4.5m from the rear boundaries of those properties. It is considered that a two storey building set at such distances would not have an overbearing impact upon neighbouring occupiers or generally impact upon the enjoyment of their home and garden. These properties stand due west of the application site and, therefore, there is potential for overshadowing, however, a sun path survey has been submitted to support the application which details that whilst some overshadowing will occur this would be to the rearmost part of the gardens of the neighbouring properties and for only short durations, therefore, it is not considered that the proposal would result in overshadowing off such detriment that the refusal of planning permission could be justified. Two windows are proposed within the side elevation of the dwelling, however, whilst these have potential to overlook neighbouring properties they serve non-habitable bathrooms and a condition is recommended controlling the means of glazing and opening in order to protect neighbouring privacy.
- 8.3.4 The rear elevation of the proposed dwelling is set in excess of 15m from the boundary and 25m of windows of neighbouring properties across Roath Brook on Sandringham Road. Accordingly given these distances, and for the previously detailed reasons at 8.3.2 and 8.3.3, it is not considered that there

would be any adverse impact upon the residential amenity or privacy of these neighbouring occupiers. The rear boundary of the proposed property stands between approximately 9m and 10.5m from the rear boundaries of properties on Sandringham Road it is not considered that such a relationship would unduly affect the privacy of neighbouring occupiers as standard height means of enclosure would restrict views and, notwithstanding the considerable amount of vegetation proposed for removal, proposed planting would also mitigate any impact.

8.3.5 The proposal is, therefore, considered acceptable in regards to its impact upon the amenity of neighbouring occupiers in accordance with Policy KP5 of the LDP and guidance within the Infill Sites SPG.

8.4 Transport Impact

- 8.4.1 Policy T5 seeks to ensure that all new developments properly address the demand for travel and its impacts, contributes to reducing reliance on the private car and avoids unacceptable harm to safe and efficient operation of the road, public transport and other movement network and routes.
- 8.4.2 The parking standards for all residential development, contained within the Access, Circulation and Parking Standards SPG, requires that a minimum of 1 and maximum of 3 car parking spaces are provided for a 4 bedroom C3 Dwellinghouse.
- 8.4.3 The proposal makes adequate provision for the parking of cars and includes a cycle store, located within the existing garage, which will encourage the use of other modes of transport other than the private car.
- 8.4.4 The proposed car parking spaces would not represent a significant change to the existing parking arrangement, within the existing garage, however, the increased width of the opening of the access, compared to the garage opening, and the relocation of the access away from the nearby junction would likely have a positive impact in highway safety terms.
- 8.4.5 Accordingly it is considered that the proposal accords with the principles of Policy T5 and guidance within the Access Circulation and Parking SPG.

8.5 Landscaping

- 8.5.1 Cardiff has a distinctive natural heritage which provides a network of green infrastructure and Policy KP15 seeks to ensure this infrastructure is protected, enhanced and managed.
- 8.5.2 A comprehensive landscaping proposal has been submitted with the proposal and the Councils Planner (Trees) has been consulted. After discussions with the Arborioculturist employed in respect of the proposal a scheme that is considered to enhance natural heritage, compliments the areas conservation status and mitigates the loss of existing trees has been submitted.

8.5.3 Accordingly it is considered that the proposal accords with the principles of Policies KP5, KP15, KP17, EN8 and EN9.

8.6 Consequences of Flooding

- 8.6.1 The application site is located within an area of floodplain without significant flood defence structure (C2). TAN 15 indicates in such areas only less vulnerable development should be permitted, however, para 6.1 acknowledges that much existing urban development is located within such areas and some flexibility is, therefore, required subject to a justification test.
- 8.6.2 A flood consequences assessment has been submitted detailing that the requirements of the justification test are met, that the development would have no wider impact in terms of flood consequence and mitigation measures are proposed for the benefit of future occupiers.
- 8.6.3 It is not considered that the proposal would have a detrimental impact in this regard and would accord with the principles of TAN 15, Policy EN14 and KP15.

8.7 Ecological Impact

- 8.7.1 Biodiversity conservation and enhancement is an integral part of planning for sustainable development (TAN5) and Policy EN14 details that development proposals that would have significant adverse effect on the continued viability of habitats which are legally protected or which are identified as priorities will only be acceptable in certain circumstances.
- 8.7.2 The Councils Ecologist and NRW were consulted in respect of the application. Concerns were raised solely in respect of the potential for roosting bats within the existing building to be demolished.
- 8.7.3 Accordingly an initial bat survey was requested and subsequently provided which indicated the potential for roosting bats within the existing building was limited.
- 8.7.4 It is not, therefore, considered that there would be any harm to protected species as a result of the proposal which, therefore, accords with the principles of TAN 5 and Policy EN7. Further controls, however, in this regard exist and an advisory note relating to such matters is recommended.

8.8 Additional Matters

8.8.1 Proposed development should be of sustainable design which, as stated within Policy KP15, mitigates the effects of climate change. The design of the proposal incorporates the reuse of an existing brownfield site, including the reuse of materials where possible. The use of sustainable drainage techniques, passive solar gain, measures to prevent solar overheating and a high thermal performance secured through the use of high levels of insulation, airtight construction and efficient heating system. The design of the proposed dwelling has, therefore, been undertaken to ensure that carbon emissions are minimised

and to promote energy efficiency, the resulting building would have a significantly reduced carbon footprint in comparison to the existing 1950's dwelling. Accordingly it is considered the proposal accords with the principles of Policies KP5 and KP15.

- 8.8.2 The proposed development lies within close proximity to the Roath Brook watercourse. Policy EN11 details that *development will not be permitted that would cause unacceptable harm to the* quality of water resources and that planning controls should be utilised to prevent the location of incompatible uses and development. It is not considered that the proposed development would constitute an incompatible use adjacent to the water resource and given a residential use already exits at the application site that any harm would result. It is, therefore, considered that the proposed development accords with Policy EN11.
- 8.8.3 All new development is required, where appropriate, to provide facilities for the storage, recycling and other management of Waste as stated in Policy W2. Sufficient space is provided within the curtilage of the dwellinghouse for the required number of refuse containers and a dedicated undercover storage area has been identified upon the plans. It is, therefore, considered that the development accords with Policy W2 and advice contained within the Waste Storage and Collection SPG.
- 8.8.4 The demolition of the existing building is controlled by a separate application for Conservation Area Consent and conditions are recommended therein controlling the means of demolition. Hours of operation of construction sites are noise nuisance emanating as a result of development are controlled by separate legislation. It is not, therefore, considered that the proposed development, given its scale, would have any detrimental impact that would justify control in planning terms.
- 8.8.5 In regards to comments made by neighbours which are not covered previously, the following should be noted:
 - With regards to the loss of privacy during the construction phase it is not considered that Planning Policy allows for control of such matters. The basis of policy in this regard is to ensure that resulting development does not permanently impact upon the privacy of neighbouring occupiers. It must be appreciated that some loss of amenity, including potential loss of privacy, may occur during temporary construction works;
 - Consideration has been given to the impact of the proposed development in regard to reduction of daylight and overshadowing as detailed in sec. 8.3 of this report. However, the 'Right to Light' is not a material planning consideration and it is advised that legal advice be sought in this regard.

8.9 Conclusion

8.9.1 Having regard to the policy context above, the proposal is considered acceptable and it is recommended planning permission be granted subject to conditions.



first issue RB 19/08/16
rev description by date

DOWNS MERRIFIELD architects

t 02921 672672

2 Westville Walk

Mr & Mrs Boltman

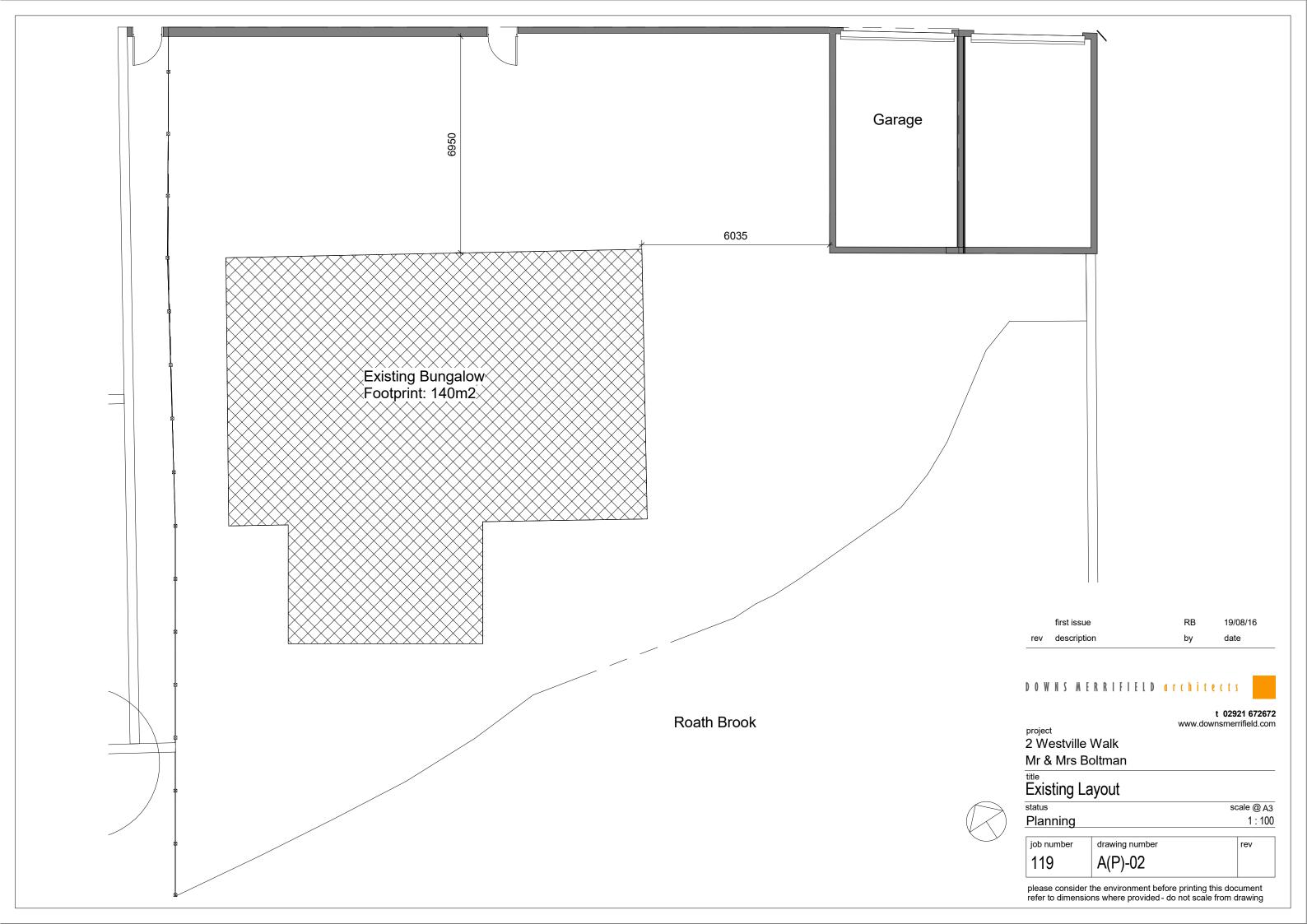
title

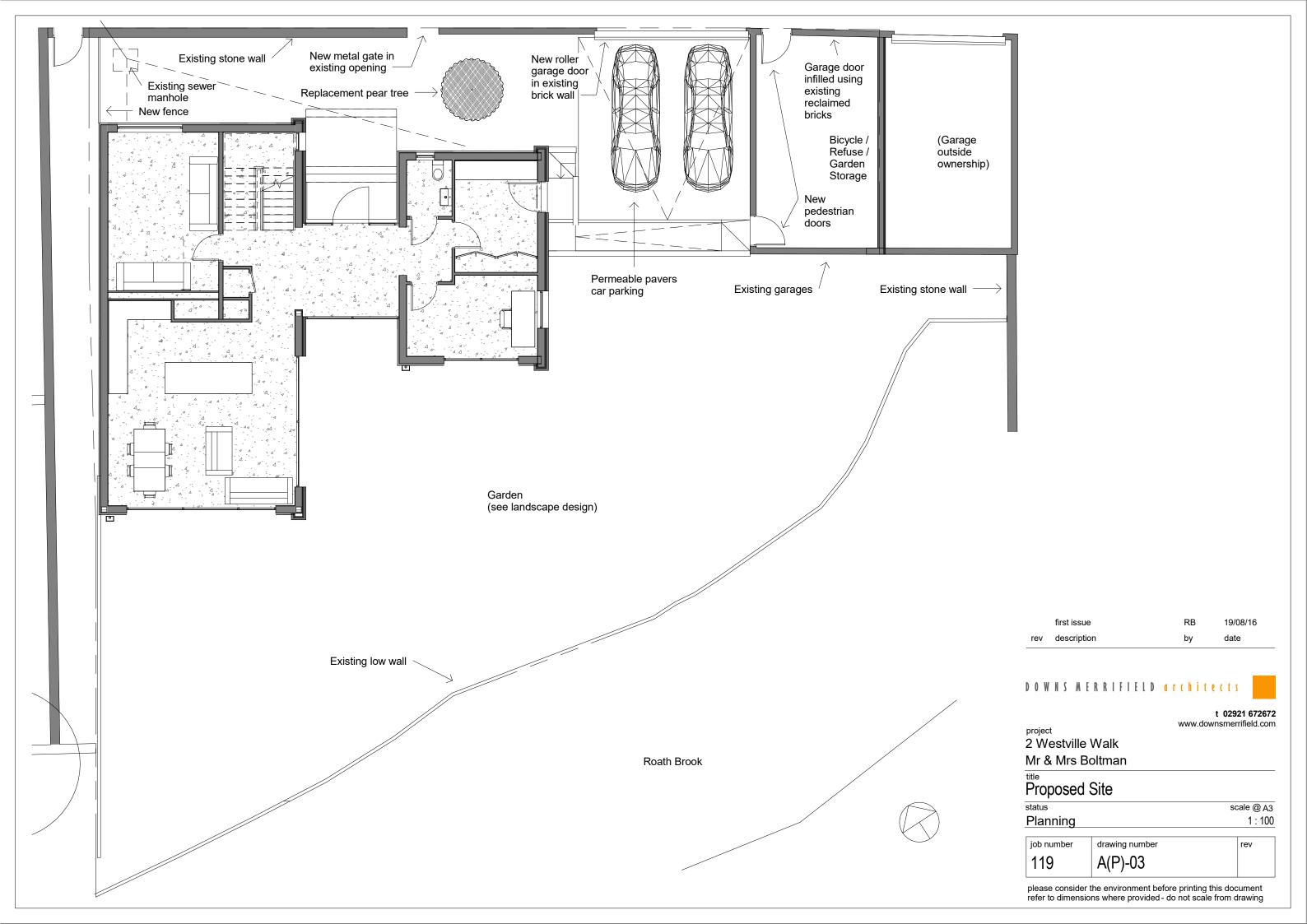
Location Plan

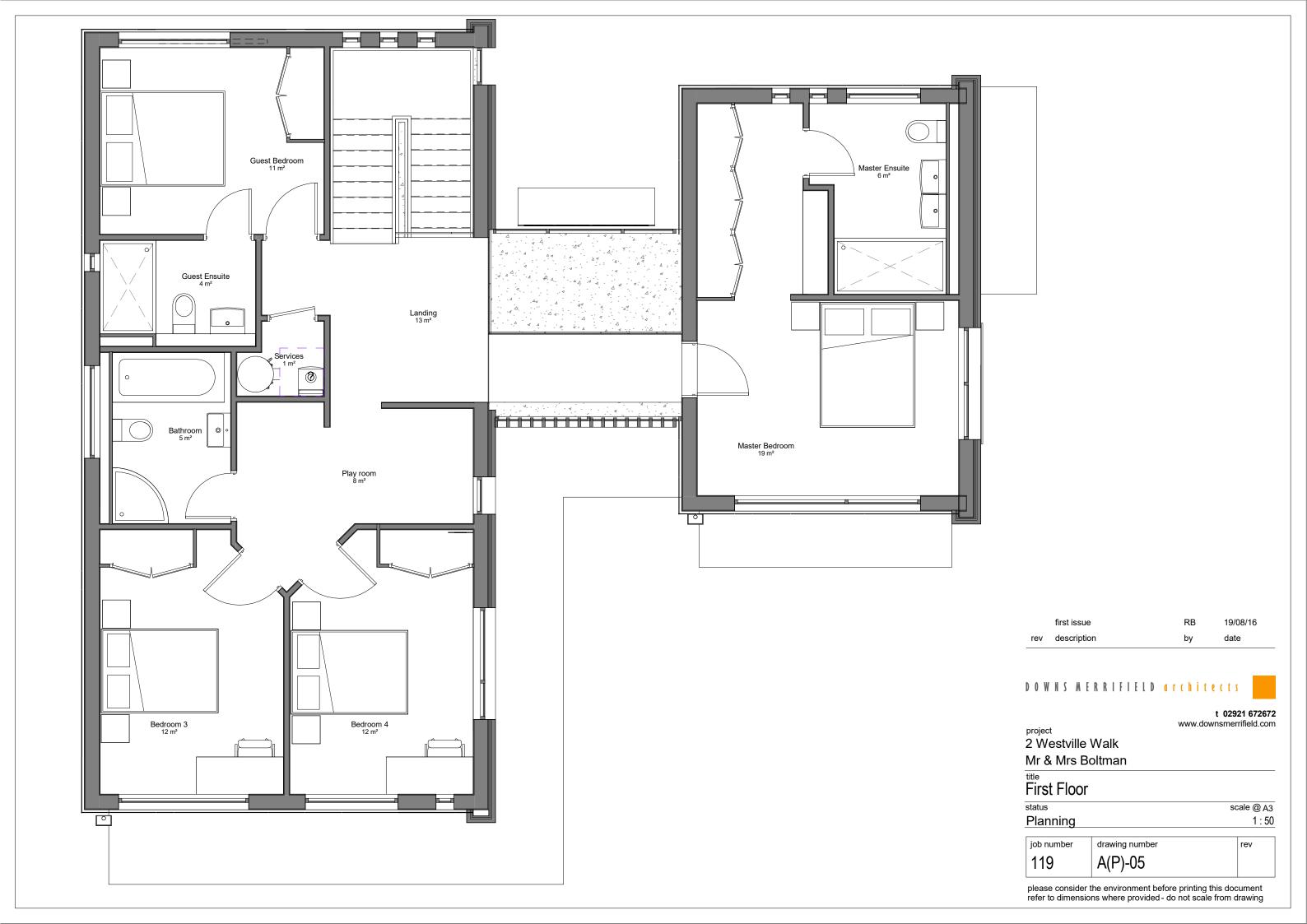
status scale @ A3
Planning 1:1250

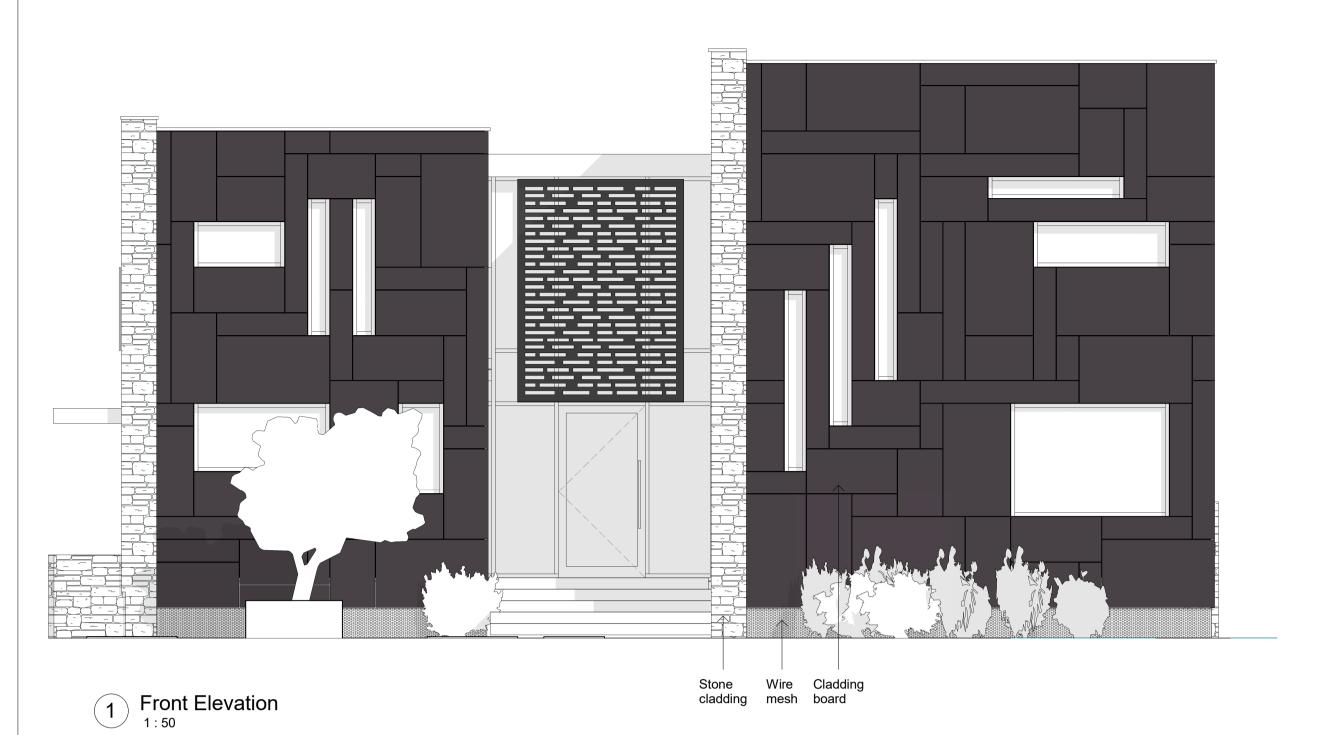
job number drawing number rev

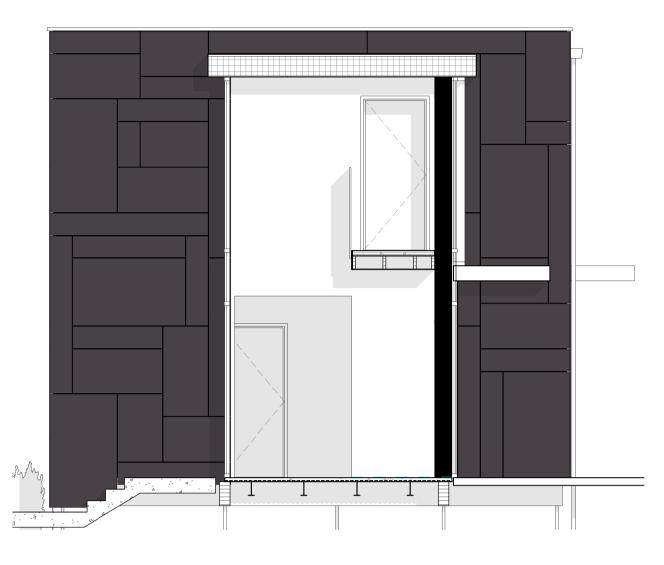
please consider the environment before printing this document refer to dimensions where provided - do not scale from drawing

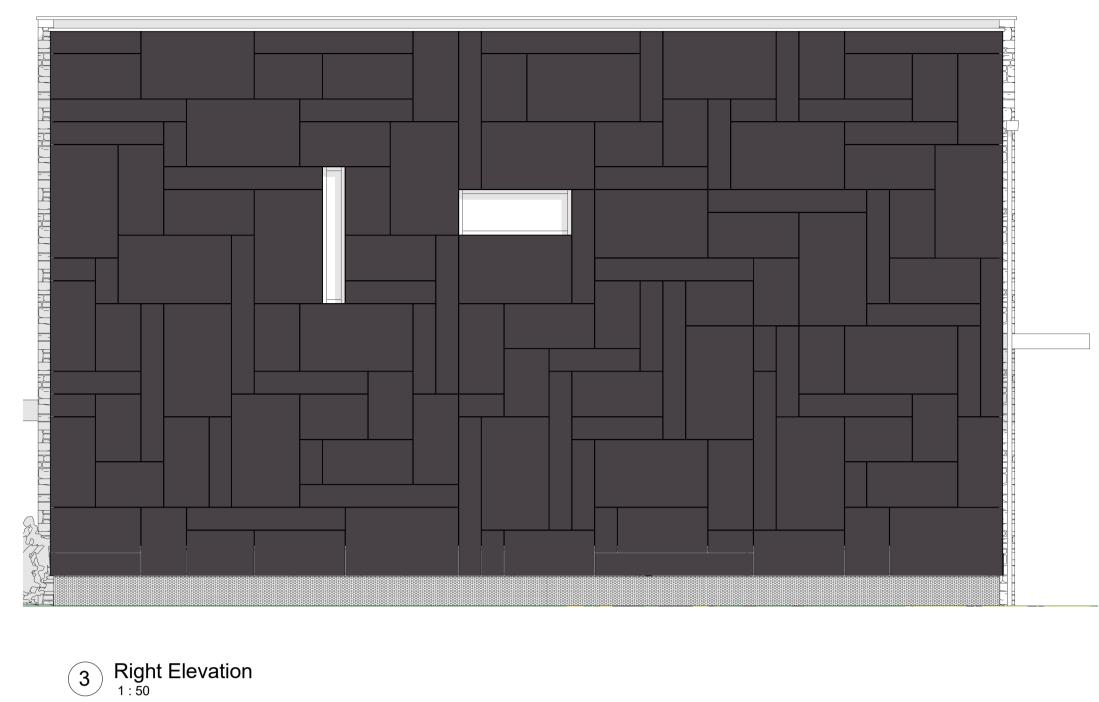






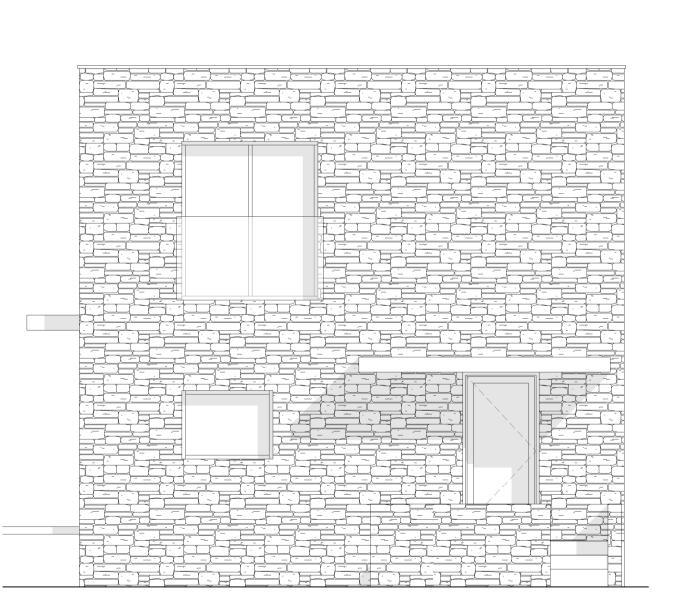


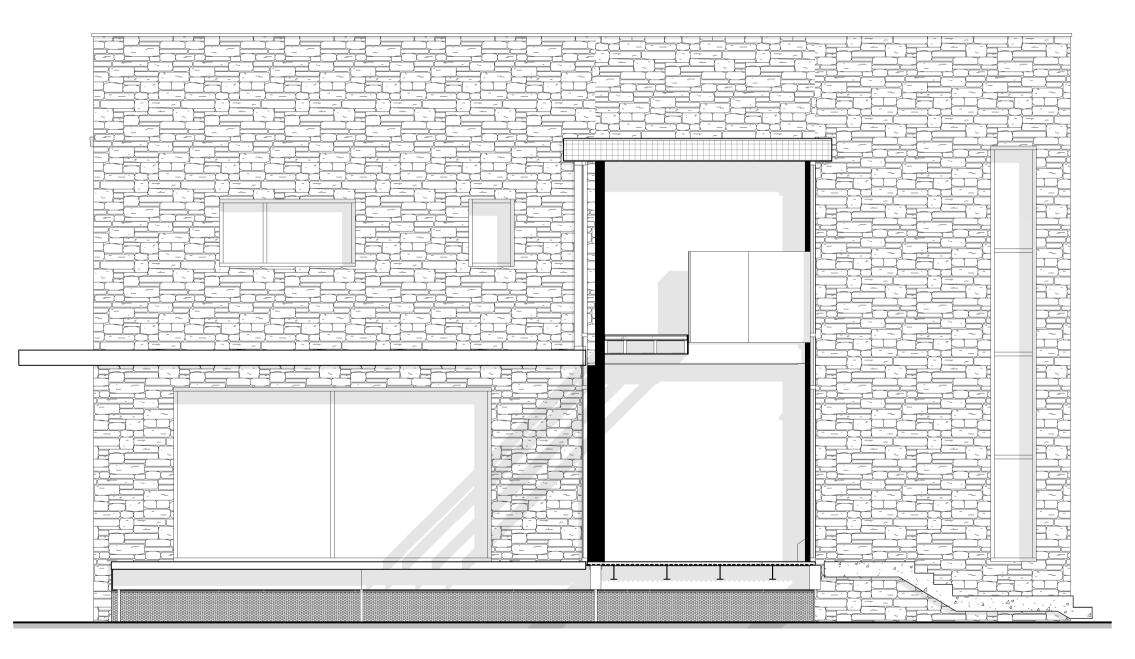




2 Right Elevation (inner)

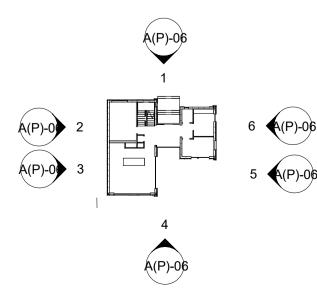






5 Left Elevation

4 Rear Elevation

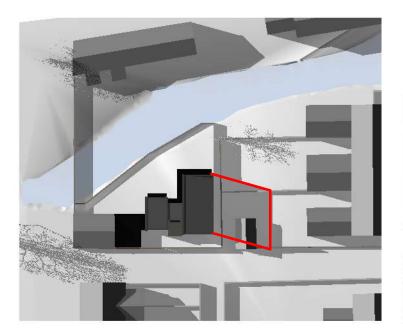


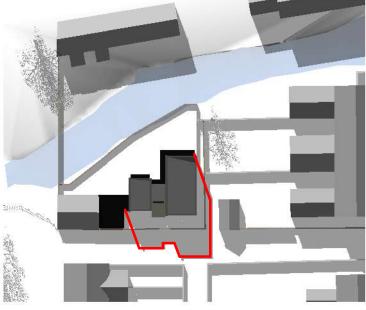
7 Elevation Key

Materials
Stone: Real Stone Cladding - Rustic Gneiss
Cladding: Equitone Tectiva Mineral Black
Windows: Composite ali-clad, RAL 7016
Canopies: PPC Aluminium, RAL 7016

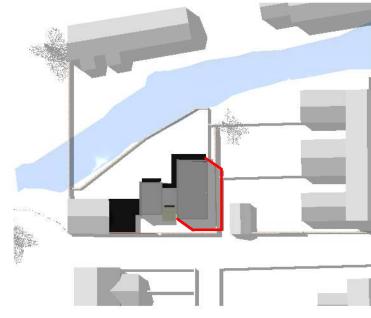
6 Left Elevation (Inner)

ī	first issue		RB	19/08/16
rev o	description	n	by	date
D 0 W N	N S M E	RRIFIELD	archite	cts
araiaat			www.dow	t 02921 6
project 2 Wes	stville \	Valk		
	Mrs Bo			
Propo	osed E	Elevations		
status				scale (
Plann	ning			As indi
job nun	mber	drawing number	r	rev
1		A(P)-06		









2 21st Mar / Oct @ 1000

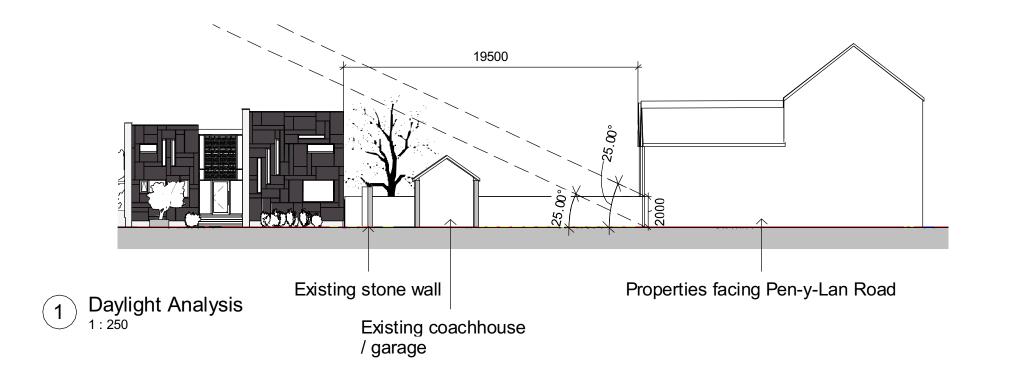
(3) 21st Mar / Oct @ 1300

4 21st June @ 1000

(5) 21st June @ 1130

The studies above show the extent of shadowing of the gardens of Pen-Y-Lan Road. They demonstrate that the shadow has left the gardens entirely by circa 1300 on the equinoxes, and circa 1130 on the summer solstice.

The analysis below shows the 25deg rule (Right to Light) as applied to the rear of the properties on Pen-Y-Lan Road.



first issue RB 22/09/16
rev description by date

DOWNS MERRIFIELD architects

t 02921 672672 www.downsmerrifield.com

project 2 Westville Walk

Mr & Mrs Boltman

Daylight - Shadow Study

status scale @ A3
Planning 1:250

job number drawing number rev

A(P)-07

please consider the environment before printing this document refer to dimensions where provided - do not scale from drawing