Issues Raised	Comments
f) Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation. Reason: To make provision for a programme of archaeological mitigation, so as to record and advance understanding of any heritage assets which will be lost. **SC46 Archaeological Written Scheme of Investigation- Implementation of Approved Scheme** All demolition and development shall take place in accordance with the Written Scheme of Investigation of archaeological remains. This condition shall not be discharged until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under [specify condition number requiring approval of details for the WSI], provision has been made for the analysis, publication and dissemination of results and archive deposition has been secured. Reason: To make provision for a programme of archaeological mitigation, so as to record and advance understanding of any heritage assets which will be lost.	
Environmental Health (Noise) 15th: June 2022	
The submitted noise assessment appears satisfactory. The assessment concludes that noise from the surrounding road network, the nearby public house and the proposed builders merchant can be adequately mitigated with appropriate glazing and ventilation treatments. The noise mitigation recommendations of the assessment relating to glazing and ventilation should be implemented.	Noted. A condition attached to the RM approval that requires compliance with the submitted noise mitigation recommendations could be accepted.
Lead Local Flood Authority: 21st June 2022	
This application refers to the reserved matters for planning consent 21/00490/OUT. That application shoed the site developed in a way that required two attenuation basins with a total capacity for a volume of 432m3 such that surface water could be discharged to the adjacent watercourse at 24 l/s. The plan submitted for this application only provides attenuation storage capacity of 347m3 to discharge surface water to the adjacent watercourse at 24 l/s. It is not clear where the layout offers any ability to reduce the attenuation storage capacity by 22%. No new hydrological models have been submitted to indicate how this is possible.	PJA provided LLFA with a technical note to address their concerns (submitted). The objection has been withdrawn.

Issues Raised	Comments
It seems that the layout/ landscape proposed in this design fails to provide adequate space for surface water attenuation. The LLFA therefore object to this application. Further, the drawing showing surface water flow direction arrows shows (Sht 7 of land-north-of-rudloe-drive-2200533rem-plans-2-of-2.pdf) a point of convergence at the junction of the roads in the eastern half of the development. This would suggest there will be ponding of water at this junction in front of units 38 and 39. It would be useful to have an indication of how deep this pond may get and how far it might spread.	
Environmental Health (Air Quality and Contaminated Land): 21st June 2022	
Air Quality The Energy and Sustainability Statement by AES, dated May 2022, states that "The development will ensure adequate provision of electric vehicle charging points, satisfying condition 19 of the outline permission (Ref: 21/00490/OUT)" and "Further technical details of the charger along with locations will be provided at the appropriate time as preparation for the development progresses." WRS have no adverse comments to make with respect to air quality.	Noted.
Contaminated Land WRS recommended that a Phase 1 Desk Study as a minimum & Phase 2 Site Investigation if required is undertaken in our pre-app enquiry response dated 28/02/2022, this was not in included in the additional information pdf. WRS do not have access to the conditions attached to the outline permission, therefore it is unknown whether a condition requiring a site investigation was included.	Concerns relating to potential contamination were addressed at outline stage with conditions imposed on the outline permission, works in respect of which are underway.
Severn Trent Water: 22nd June 2022	
The drainage plan seems to suggest this is part of a larger development, as the plan states: Outfall manholes to be confirmed as part of wider drainage works. Can the applicant please advise if this section of development of a larger scheme has been discussed with STW please via a Developer Enquiry application?	PJA have been in direct contact with STW to answer their questions.
Quedgeley Town Council: 24th June 2022	
• Insufficient space on the side of the stream has been made available for the recommended maintenance strip.	The trees referred to within the comments (G5, 7, 8) are not subject to a Protection Order and are classified as being of 'low value and

Issues Raised	Comments
• G5, G7 & G8 trees are earmarked for removal and the survey indicates they are not subject to at TPO. TPO's were attached to all trees on the Kingsway site when outline planning permission was granted for the site. Insufficient justification has been proved for their removal. • The POS allocated for this development is insufficient, the area highlighted has already been included in the original POS calculation for site. • The POS has a cricket wicket, and this should be brought back to use and not identified as a football pitch as per the drawings. • There are a number of properties proposed for the corner of the POS therefore reducing the POS further and these should be removed from the proposals.	quality, with retention being optional'. The trees are proposed for removal to facilitate delivery of the scheme in line with their categorisation. The POS requirements are in line with the provisions of the outline permission.
Planning Officer: 5th July 2022	
Parking arrangements and exposed rear boundaries This aspect of the current design is poor and will require significant amendments to the layout before it can be supported. This was raised at the pre app stage and you were advised to review this aspect of the layout prior to submission of the application. The layout of much of the proposed parking is very poor in design terms. The creation of parking courts and rows of parking would result in a high number of exposed rear boundaries throughout the scheme, parking courts would be poorly overlooked thereby presenting concerns in terms of poor urban design, safety and proposed parking arrangements that create awkward arrangements in terms of access to properties from parking spaces. In particular I refer to plots 1 – 12, 44- 46, 63- 65, 98- 124, 134-137 and 141 to 142. The scheme will need to be re designed to address these concerns.	The area of plots 1-29 has been amended to address overbearing impact on rear gardens of all plots and the environment of the street due to the parking provision. The street to the rear of plots 1 to 13 has been reconfigured to provide street frontage on both sides. Two coach houses along with timber car ports have been introduced to contain the parking and provide living space that breaks up the current parking areas. Timber car ports introduced to the central section of the scheme as a solution to the parking provision to the rear of plots 44 to 46 and 63 to 65. The area of plots 111 to 133 has been amended to address any overbearing impact on the rear gardens of all plots and the awkward garden shape of plot 111. The area to the rear of plots 118 to 123 has been improved with enclosures (low railings and screen walling) around the parking court and a clear route through to the Rudloe frontages. Additional windows have been added to improve surveillance along these routes together with further planting. To improve the area further the turning head to the rear of plots 116 to 188 has been reconfigured with a coach house added to

Issues Raised	Comments
	provide a cul-de sac solution with houses fronting onto the space. Parking allocation to plots 4-14 has been revised so the spaces relate better to the plots they serve while maintaining private parking only beneath the private FOG units.
Pedestrian links to the site • Whilst a couple of the pedestrian footpaths to the south linking the site to Rudloe Drive have been improved following pre application comments, there are still a number of poor examples of footpaths which are too narrow, would be squeezed between two 6 foot boundary fences and would be poorly overlooked. Many of the side elevations of dwellings facing onto these paths are blank. (Examples of poor footpath links: path between plot 5 and 6, path between plot 1 and 4, path between plot 12 and 13, path between plot 44 and 40-43, path between 98 and 95-97). • The Eastern part of the site doesn't appear to be well connected to the public footpath at the edge of the site. Footpaths are required to be included to improve permeability to the site • There is a desire line at the north of the site next to plot 138 and north of parking area for residents wishing to access the public open space to the north. A footpath is required to be provided in this location to improve permeability.	There are 4no publicly accessible pedestrian connections from Rudloe Drive into and through the development, which are landscaped and are now surveyed by windows added to the side of properties. The narrower paths are for private access only, secured by gates at either end, linking between parking, gardens and front doors of the plots facing Rudloe Drive. Section of tarmac added to the end of the shared surface turning head adjacent to plot 2 to the legal site boundary for access to the eastern POS. Publicly accessible pedestrian path added adjacent to plot 138 to access POS.
Public Open Space • The S106 agreement relating to Public Open Space required the submission of a detailed specification for the laying out and maintenance of the on site open space (including vehicular and pedestrian accesses to the open space) with the reserved matters application. Details of vehicular and pedestrian access to the public open space do not appear to have been provided and it is currently unclear how pedestrians or maintenance vehicles would access the open space. • The parking and turning area immediately next to the public open space is poor in design and will need to be amended. The current layout would result in poor surroundings for the open space with low levels of surveillance This will need to be amended.	The area adjacent to the LEAP has been re planned to address concerns around POS surveillance (previously plots 134 to 137). Townhouses have been plotted in this location to provide overlooking from the living room at first floor level to the LEAP/POS. The rear garden boundaries will be 1.5m closeboard with 0.3m trellis on top to soften the boundary within the existing tree belt and to allow further surveillance at garden level. Additional windows are provided to the side elevation to provide further surveillance opportunity. A section of the tarmac previously indicated that divided the football pitch and the play area has been removed to provide continuity of the POS. Parking for the POS is contained within the remainder of the existing tarmac area. Pedestrians will access the POS directly from there or from the path running to the north of the sports pitch.

Issues Raised	Comments
	Grounds maintenance vehicles could access the POS between the two parking spaces to the north-west of plot 137.
Dwelling Design • It was advised at the pre application stage that the original design and access statement for the outline planning permission referred to landmark buildings on key frontages being designed to be distinctive from the adjacent form with variations in materials, colour, frontages and architectural style. Whilst I note that prominent corner would generally be constructed from different materials to the rest of the scheme, this aspect requires improvement • The design of the dwellings are standardised house types with limited variety and architectural detailing. The NPPF and the Council's policy seek to achieve high quality design for any new development. The design and architectural appearance is required to be improved in order to provide a high quality attractive residential development. Additional architectural detailing is required particularly on the more prominent plots within the layout. • Materials – the proposed use of materials lack variation and needs to be reviewed. Concern that the limited variation and use of brick throughout the scheme as proposed could look monotonous and lack interest and additional variation is required. • A number of tax windows appear to be proposed on prominent side elevations. More details are required in terms of how these will be constructed/ how they will look. In order to appear effective, these windows would need to be sufficiently recessed back into the building. • Windows should have reveals rather than being flush with external elevations to improve the appearance of the buildings	Key plots identified. Detailing and materials have been enhanced. Brick and roof tiles reviewed introducing more variety including 3no. bricks which complement each other and 3no. roof tile options that complement the brick types. Render and specified anthracite grey windows have been introduced selectively; contrasting brick banding details to ground floor header levels#; brick splayed heads, brick cills and some pre-cast stone heads and cills where suitable introduced into Rudloe Drive frontage to reflect development opposite. House type plans provide full details. Window reveal depths increased to both standard and tax windows, see submitted detail drawing.
Dwelling Layout Comments were made at pre application stage raising some concern in terms of the layout of dwellings creating poor living conditions for future occupants. The following points are of concern and will need to be addressed: • Plot 18 (housetype pembroke) - Overlooks rear gardens of 28 and 29. Outbuildings of 18, 28 and 17 all adjoin plot 18s garden boundary creating poor amenity space for future occupants • Plot 23 (housetype pembroke) - overlooks rear garden of no. 25	Layout and house types have been reviewed to address the points raised here. In addition, plots 95-97 moved south to allow a 1m wide planting strip between the garden wall of plot 95 and the parking court to allow space for a 'spiky' climbing plant. Boundary changed to a 1.8m high screen wall with 0.3m high trellis to enhance security and privacy with planting and screening. There are windows from active living spaces in the side elevation of plot 95 for natural surveillance.

Issues Raised	Comments
• Plot 29 outbuilding of 17 encroaches into garden space of 29 • Plot 31 (housetype Knightley) garden length is only 8m. garden surrounded to side and rear by outbuilding/ parking. Poor amenity for future occupants. • Plot 48 – Side elevation of dwelling at adjacent plot (no. 49) would be overbearing for plot 48 • Plot 77 – Side elevation of dwelling at adjacent plot (78) would be overbearing for plot 77 • Plot 78 - outbuilding of plot 77 encroaches into garden space of 78 • Plot 86 - outbuildings of 86 and 106 encroaching into garden space • Plot 87- (housetype Knightley P) Insufficient amount of garden space provided for 4 bed dwelling. • Plot 88- garden boundaries surrounded by outbuildings – poor amenity provided for future occupants • Plot 98 – both side boundaries surrounded by parking/ parking courts • Plot 112 - (housetype Mylne) overlooking to rear garden of 129 (7.5m garden length). Back to back distance between 112 and 129 not sufficient (16m). Side elevation of adjacent dwelling (113) would overbear 112. • Plot 128 – Side elevation of adjacent dwelling (129) would overbear 128. Poor amount of garden space provided • Plots 141 to 138 – Have a poor relationship with the open space to the north. • Plots 134 to 137 – Have a poor relationship with the open space and an exposed rear boundary.	
Dwellings at prominent corners/ with exposed side or rear elevations The design of dwellings at corner plots/ where side or rear elevations are exposed are important. The below points highlight examples of where improvements are needed. Any changes made will need to take into account any impact new windows would have in terms of overlooking to neighbouring properties etc. • Plot 17 - (housetype Knightley) – Plot 17 is located at a prominent corner plot. Blank rear gable visible from road. Blank gable on left hand side elevation.	Noted and points addressed on revised proposals.

Issues Raised	Comments
• Plot 21- (housetype Knightley)- Plot 21 is located at a prominent corner plot. Blank rear gable visible from road • Plot 53 – (housetype Knightley) – blank gable on rear elevation visible from road • Plot 56 – (housetype Knightley) – blank gable on rear elevation visible from road • Plot 63 – confirmation required. Are windows proposed on the side elevation? • Plot 65 – Introduction of a ground floor side window in this location would improve natural surveillance of path • Plot 94 – blank side elevation facing onto parking courts. Poor design, lack of surveillance for parking court area. • Plot 111- (housetype Becket) – blank left elevation visible from road • Plot 118 - (housetype Cartwright) – blank side elevation facing towards path. Lack of natural surveillance • Plot 119 - (housetype Speirs) – blank side elevation facing towards path. Lack of natural surveillance • Plot 124 - (housetype Asher) – blank side elevation at corner plot • Plot 138 (housetype AF1 Mais) can north facing side elevation be improved as would be looking towards public footpath and open space • Plot 142 - (housetype Knightley) blank rear gable visible from road • Plot 144 - (housetype Alwin) blank side elevation visible from road	
Landscaping At the time of writing I have not had a consultee response from our landscape advisor as yet. As a general point there are a number of dwellings with a very limited amount of space to the front of the dwelling such as plots 119 and 98 for example. This arrangement provides very limited defensible space or any meaningful landscaping. There are a number of areas of the layout with pockets of landscaping/ open space which are not associated with a particular dwelling. The arrangements for the future management of these areas will need to be set out. Our landscape advisor will provide a detailed response which I will forward as soon as I get it.	Amended layout.

Issues Raised	Comments
Tree Officer: 5th July 2022	
Retained Trees The MHP report and proposed plan highlights a number of mature trees to be retained. Specifically, the mature trees to the west of the site on the area of land set aside for POS are proposed for retention. This is welcome and would be considered a requirement. The largest of this grouping of trees are mature Poplars protected by TPO. At the centre of the site, larger mature cherry trees are proposed for retention (namely 2no. at the southern entrance to the site, 1no. to the north of the site. A grouping of mature trees on the eastern boundary of the site also are to be retained. This is welcome and agreeable.	Noted.
Removal of Trees Four trees that are protected by TPO are proposed to be removed. These are: • T9 – a moderate quality, early mature English oak • T10 – a low quality, early mature English oak • T11 – a low quality, early mature common beech • 12 – a moderate quality, early mature common beech. Said trees are relatively insignificant in the wider landscape and are largely category C trees and/or trees with significant defects. The removal of these trees is therefore not objected to; in the context of the large development proposal.	Noted.
Tree Protection New road surfacing will be required in the vicinity of TPO trees at the western end of the site. In anticipation of potential arboricultural impacts controlled excavations have been carried out at key points to analyse the extent of root encroachment beneath the existing roads. The findings of these investigations were that the trees are rooting preferentially into the green spaces and up to and along the kerb edges of the roads. So, provided that fit for purpose tree protection barriers are put in place, this would be satisfactory to ensure that adverse impacts to the trees can be reasonably avoided. The MHP report specifies tree protection measures in line with the above, and more generally for other retained trees on site, commensurate with BS5837:2012. So, a planning condition should be attached ensuring that tree protection measures are carried out in accordance with the report.	

Issues Raised	Comments
The above is with the exception of 1no. tree. The trial survey pit survey identified that there is potential for harm to T44 (a mature grey poplar, category B1, protected by TPO). An additional arboricultural method statement would be required to ensure suitable protection measures are place for this tree.	
Proposed Planting Scheme At the pre application stage, consultee comments from GCC Tree Officers and Landscape Consultant raised concerns regarding the lack of street trees along Rudloe Drive and main access road (which are required under Para 131 of the NPPF). There has been some progress in redressing this issue. But further work is required. For reference: the strategic master plan for the pre- application (61841-MCB -ZZ-ZZ-DR-A-0001-S3-P2) depicted no street tree planting. The proposed Landscape General Plan (LA5530 001) now does propose some street tree planting; but this is still someway off of the level of street tree planting that was depicted at outline stage in plan (309.P.6.1). Additional street tree planting along Rudloe Drive and the main access road should be required, more in line with plan 309.P.6.1.	The applicant's response on the matter of street trees has been explained at pre-application stage and during the post application meeting on 22 July. The introduction of planting into the scheme is considered to be an appropriate response.
Other Issues The Section 106 agreement form outline stage includes a clause whereby the POS will be offered to the Local Authority for adoption. The Local Authority have received subsidence claims within a reasonable locality this site and the site sits on largely clay soil. For this reason, there is potential for future subsidence claims to come forward. There are mature trees to be retained in close proximity to proposed plots 134,135,136 and 137; where this could potentially be a concern. It is recommended that the applicant explore this in more detail and provide details and/or evidence to demonstrate that this would not be an issue.	MHP to respond.
Summary: 1. No significant trees shall be removed to enable the construction of the proposals. 2. Tree protection measures in accordance with the submitted report can be put in place to ensure that construction works do not result in damage to the retained trees. This is with the exception of T44 which requires an additional arboricultural method statement to ensure that the TPO tree is suitably protected.	MHP to respond to 2 and 4.

Issues Raised	Comments
3. New tree planting could be carried out that will enhance the arboricultural qualities of the site into the future. But more tree planting along the Rudloe Drive and main access road are required, more akin to outline plan 309.P.6.1. 4. There is potential for future subsidence claims in one area of the site. It is recommended that further information is provided, to address these concerns. Objection - subject to points 2, 3 and 4 being satisfied.	
Drainage Officer: 7th July 2022 (Additional comments from Planning Case Officer in red)	
Flood Risk At The Site The application site is in flood zone 1 and so I have no concerns over fluvial flooding at the site. Neither do I have any concern about flooding from other sources	Noted.
Impact Of The Development On Flood Risk Elsewhere A site-wide foul sewage and surface water/SuDS drainage strategy was agreed with Gloucester City Council and approved as part of a reserved matters planning consent for the construction of balancing pond (Pond 5) on employment area FP5, planning reference 09/00114/REM, approved 9th December 2010. The proposed discharge rates and attenuation volumes are therefore considered acceptable (adjustment has been made to update the climate change allowance from 20% to 40%). I note that the LLFA has raised a concern that the drainage strategy does not provide the volume of attenuation required. I concur with them here, and will leave the LLFA to review any revised submission in this regard.	LLFA has withdrawn objection.
SuDS Comments on the attenuation basins: • I concurred with Dilly's (landscape architect) observation that the basins were too engineered in appearance (in particular basin 1 was rather rectilinear): 'On the illustrative master plan they appear to have an engineered appearance with little space for planting around them'. These have since been modified and are now ok. • The FRA states that a 3 m wide safety / maintenance bench will be provided. Gloucester City Council requires a 3.5 metre wide strip. This is close enough to be acceptable.	Amended submission addresses these points.

Issues Raised	Comments
• The sections recently provided are acceptable. Previously, sections were provided (see attached) to demonstrate that the above has been satisfied. Sections need to be re-submitted demonstrating suitable side slopes, depths, safety benches (bench and round top and intermediate bench where basins are deep as is the case here) etc. Also, as these basins are to form part of public open space, and do not have permanent water, low flow channels are required to keep the bases dry when storage not mobilised. i.e. information like the attached is required. The basins look more hemmed in than those approved at outline design. They need to sit comfortably within the open space - both for aesthetic and safety reasons. Having basins that drop sharply off immediately adjacent to the highway is not desirable – there is a risk of a 'bomb crater' look. Basin 1 appears to be missing a flow control chamber. The FRA states that a number of other SuDS features (permeable paving / filter strips) may be provided, without providing firm commitment. The extents / detail of these can be provided under the SuDS condition. I seek clarification on the inclusion of the features discussed above. A few further notes on attenuation basins to be considered prior to submitting information for the discharge of the detailed design condition: • Inlets and outlets to be finished in pitched stone rather than RC concrete • Key clamp railings to be avoided I seek details on the inclusion of the features discussed above. The water quality objectives set out in the publication CIRIA C753 are met.	
Watercourses Gloucester City Council requires that an 8 m corridor be kept free of development to each side of watercourses (measured from top of bank). This requirement has been met.	Noted.
Conditions The LLFA has suggested the condition below. The wording of this is ok from my perspective.	Unnecessary. This is already covered by condition 7 and 8 of the outline planning permission.

Issues Raised	Comments
Condition: No building works hereby permitted shall be commenced until detailed plans for surface water drainage works have been submitted to and approved in writing by the local planning authority. The information submitted shall be in accordance with the principles set out in the approved drainage strategy. The submitted details shall: I. provide information about the design storm period and intensity, the method employed to delay and control the surface water discharged from the site and the measures taken to prevent pollution of the receiving groundwater and/or surface waters; II. include a timetable for its implementation Reason: To ensure that the development is provided with a satisfactory means of drainage as well as to reduce the risk of creating or exacerbating a flooding problem and to minimise the risk of pollution for the lifetime of the development.	
Housing Strategy & Project Team: 8th July 2022	
1. Summary The reserved matter application is in line with the Outline consent with regard to Affordable Housing, as such the mix, type and tenure of Affordable Housing is agreed. Subject to clarification on the following issues officer support the application for Reserved Matters Approval: i. That Nationally Described Space Standard is met ii. That the Affordable Housing is suitably located on the development, with a mixture of dwellings, to ensure a mixed and balanced community. Housing project and Strategy recommend ensuring compliance to the M4(3) and M4(2) standards by way of a planning condition.	Noted.
4. Housing Mix and Affordable Housing provision The proposal is in line with the Affordable housing granted at Outline stage is acceptable subject to confirmation that: 1. the M4(3) dwelling complies with the standards and will ready for immediate occupation by a wheelchair user	All matters relating to housing mix and development standards to be applied to dwellings should be imposed at outlie stage when matters of principle such as those that are evinced here should be addressed. The standards that are required to be net by the subsequent submission of details pursuant to an outline planning permission should be contained within the outline planning

<table>
<tr><th>Issues Raised</th><th>Comments</th></tr>
<tr><td>2. That homes are compliant with the Nationally Described Spaces Standard.

Both above issues are now covered by Gloucester City Plan Policies set out above. The City Plan is currently being consulted upon prior to adoption and therefore these policies carry weight in decision making.

Regarding point 2, and the NDSS. The 3 and 4 bed houses are not compliant with minimum NDSS floor space for 6 and 8-person two storey homes respectively. They exceed the minimum size set out in the Section 106 Agreement, at 95 and 106sqm, but fall short of the requirements of NDSS:

<table>
<tr><th>House Type</th><th>Minimum Size (Section 106 Agreement)</th><th>Reserved Matters Units</th><th>NDSS Minimum</th></tr>
<tr><td>3-bedroom 6-person house</td><td>93sqm</td><td>95sqm</td><td>102sqm</td></tr>
<tr><td>4-bedroom 8-person house</td><td>106sqm</td><td>106sqm</td><td>124sqm</td></tr>
</table>
We would need the AH provision to match up to the NDSS minimum gross internal floor areas for their respective number of bedrooms, bedspaces, and for 2-storey dwellings.</td><td>permission itself. The LPA is unable to require adherence to development standards of this type at reserved matters stage, unless specific provision is made within the outline permission, which is not the case in this instance. There is legal precedence that establishes this position.

Under the terms of this planning permission adherence to NDSS standards is discretionary on the part of the applicant</td></tr>
<tr><td>5. Design of Housing and Affordable Housing Requirements

The applicant has stated that the partnership standard shall be applied and that housing association Registered providers have been engaged with. The design and specification of Affordable Housing is critical to the homes being fit for purpose and a Housing Association Registered Provider being willing to contract on the homes provided.</td><td>Noted.</td></tr>
<tr><td>6. Density of Affordable Housing

The Affordable Housing is concentrated along the main trunk road with three out of the four clusters adjacent to Rudloe Drive. Whilst those three clusters are spread out, this limits integration of market housing and Affordable Housing. The applicant is encouraged to consider shifting an additional cluster of Affordable Housing into the interior of the development in order to improve integration of tenures. For example, by shifting the cluster in the South-West corner of the development, plots 119-124, closer to the Sports Pitch/Play area, away from the trunk road.</td><td>The proposed distribution is in accordance with the Section 106 clustering requirement.</td></tr>
</table>

Issues Raised	Comments
There are also potential issues regarding individual clusters and the mixture of dwellings. Specifically, plots 66-70, which are all 'Cooper' house types. The applicant is encouraged to consider a mixture of bed sizes, as opposed to a row of 5 of the same bedroom size and tenure.	
7. Adapted adaptable and specialist housing In addition to meeting minimum space standards, housing proposals will need to demonstrate how accessibility and adaptability have been considered as part of the design. Given the changing demographic of Gloucester and the necessity to address the needs of Gloucester's aging population and increased numbers of households living with disability, it is expected that 25% of all homes on the development should be of a size, configuration and internal layout to meet Building Regulations requirement M4(2) and 4% of affordable housing should meet Building Regulations requirement M4(3), as set out in Policy A6: Accessible and Adaptable Homes in the City Plan. The application is in line with the requirement of the outline Planning consent requirements. It is recommended that : • M4(2) and M4(3) standard homes are "conditioned" thereby requiring Building Control inspection to confirm compliance. • The applicant submit annotated drawings at this stage to show compliance. The significant need for housing to support those with specialist needs will be addressed though lettings arrangements with the Housing Association Registered Provider.	Noted.
8. Liaison with Registered Providers It is indicated engagement has occurred with Registered Providers, and officers are aware of the latter's interest in the site's Affordable housing provision. This is of particular importance with regard to suitability of design and space standards to ensure the developer can contract on the homes once built, ensuring that the units are fit for purse is a key element of ensure the homes will be suitable affordable housing in perpetuity. The council has a list of preferred providers as part of the Joint Core Strategy Affordable Housing partnership and is recommended that the applicant approaches some or all these Housing Associations Registered Providers to discuss the suitability of their proposals.	Noted.
Public Open Space Officer: 13th July 2022 (see attached Plans for reference)	
Hedging species I don't particularly like the hybrid formal/informal hedge mix (25% beech, hornbeam, hazel and blackthorn). I would prefer solely beech	Amended scheme addresses these concerns.

Issues Raised	Comments
or hornbeam where these hedges are in restricted spaces, or tightly adjoining footways. Where there is no space limited, the beech or hornbeam should be omitted for a full native hedge mix (majority hawthorn/blackthorn with a mix of other native species). Having said that, I would not object to a more formal hedge on the western POS boundary (see attached plans for other comments), as this space has a formality due to its previous use and the straight lines of tree planting. The rear gardens of Plots 134-137 face onto the POS area and are quite exposed. I would suggest that the hedging species selected here are amended to include some more spiky hedging plants, to deter access being gained over the fences to rear gardens. The proposed hedging to the eastern boundary of the builder's yard, between Plots 138 and 145 (where I believe there is possibly a 5m high fence?) should be bulked up with native species, in place of the beech/hornbeam. Wild rose and ivy could be included to assist in screening of this high, fenced boundary.	
Bulb planting I would prefer the bulbs to be planted in single-species drifts. I would also like there to be some drifts of Narcissus pseudonarcissus (or similar daffodil variety) included, in addition to the snowdrops and bluebells. There is space around the perimeter of the LEAP area for spring bulb planting.	Amended scheme addresses these concerns.
Access to existing perimeter footpath and open space to the north I have annotated a plan (attached) where I would like to see additional paved footpath connections to this existing and well-used path (by Plots 17 and 30), which leads on to the larger POS areas to the north.	Amended scheme addresses these concerns.
Fencing to POS/green areas I would like to see details of the 1.8m railings (I would prefer PPC black, vertical bar with no ball finials on top) to the western boundary of the POS. There will need to be some gaps included, to allow pedestrians to access the new POS and LEAP from Newhaven Rd (see attached plan). All other POS and green space boundaries, which adjoin a highway or footway will need to be fenced with a kneerail or similar (with suitable gaps for pedestrian access and maintenance) – see additional comments on attached plan.	Amended scheme addresses these concerns.
Street trees I can see that the submitted plan has included additional street trees where the layout allows. There is still a relatively long stretch on the Rudloe Drive frontage where there are few trees, but I acknowledge	Noted.

Issues Raised	Comments
that an effort has been made to include larger street trees where possible.	
Attenuation/SUDS basins I would like to see details of the headwalls/inlets/outfalls for the basins – these should be as minimally intrusive as possible. There should not be any unattractive Keeklamp-style industrial railings around any headwalls. Within these green spaces, the SUDS engineering should be as invisible as possible.	Amended plans address.
Football dugouts I am concerned that the proposed dugouts (Forza Euro team Shelter) are glazed with Perspex/acrylic and they do not look particularly vandal-proof. I would request that a more highly vandal-resistant type is specified (steel construction?). Similarly, the football goalposts should be of a heavy duty construction.	Specification revised to a dugout of steel construction, with a curved design to prevent climbing and anti-tamper fixings. Refer to landscape drawings for detailed specification. Goal post requirement noted. Refer to landscape drawings for detailed specification.
Pitch drainage I am concerned that there is no information on the football pitch drainage. It does not appear that any new, formal pitch drainage is proposed. It would be helpful if the applicant were to have some infiltration/percolation tests done by a sports agronomist, to allow us to establish whether the pitch will be sufficiently well drained to allow regular use in winter. We have experienced other serious issues with football pitch drainage on POS sites in Kingsway.	Percolation tests of the pitch site could be undertaken prior to the development taking place in this part of the site to provide evidence that invasive works/drainage improvements are not required. Please refer to comments above (Archaeology).
Planning Officer (Additional Comments): 15th July 2022	
You have specified that all windows, doors, garage doors etc would be white. I would suggest that you consider introducing some colours into the scheme to enhance the appearance of the development.	Grey windows and associated doors introduced to key plots.
Please could you provide an image of the proposed mortar colour that you refer to within the application	Remix – Natural Yellow. Refer to submitted specification sheet.
You have specified that the proposed boundary walls within the development would be buff or brick. Buff should be avoided. Please provide further details of the type of brick proposed.	Buff removed. Refer to materials plan for alternative bricks proposed.
You have referred to the use of buff slabs for front and rear paths and block paving within your surfaces finishes plan. I will require further details of the type and appearance of these either through image and spec details or a sample to be submitted to allow further assessment	Block paving specification added to Surface Finishes Plan. See images provided of the blocks and paving slabs, with this re-submission.

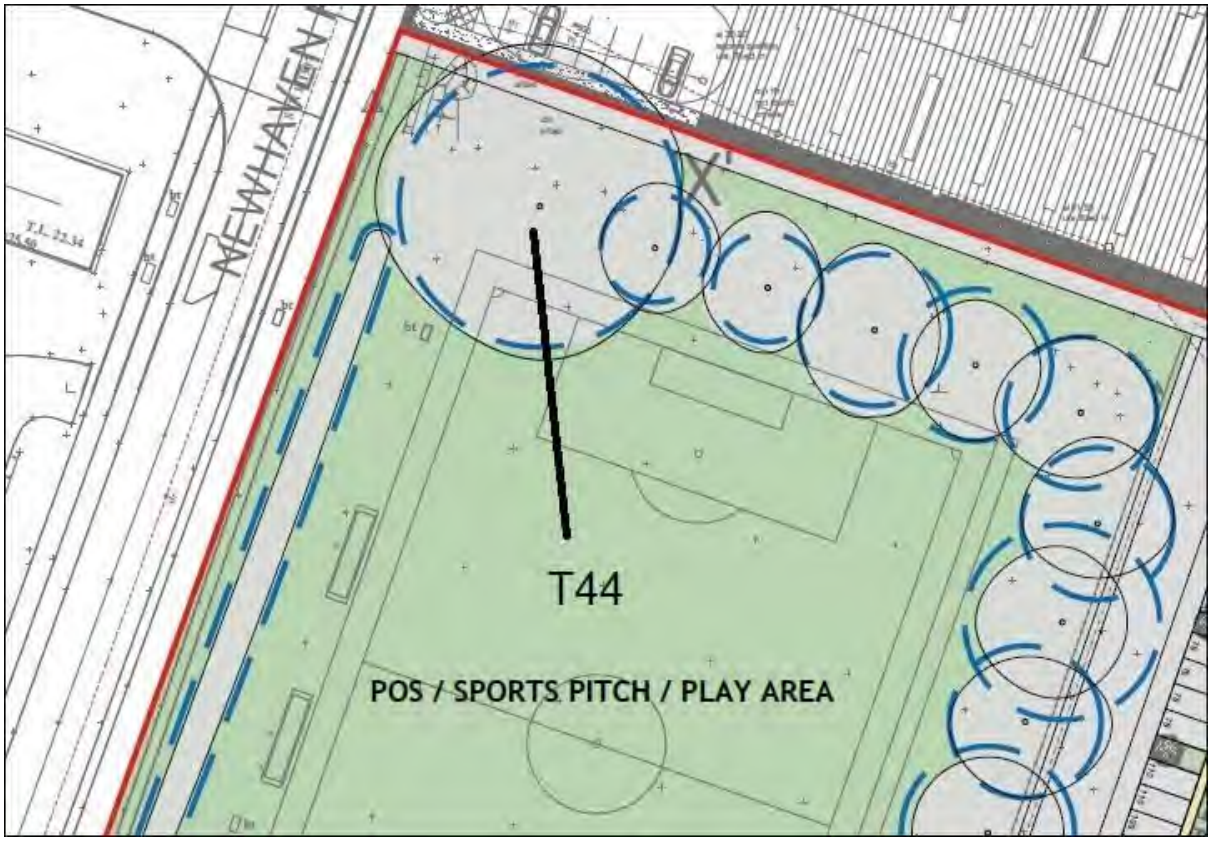
Issues Raised	Comments
I note you have provided three external level details plans for the proposed levels of the site. Could you confirm whether an existing levels plan has been submitted? If not, I would be grateful if one could be provided	Provided.
There appear to be a couple of examples where narrow walkways would allow access to rear properties which appear to be accessed via a gate – example plot 68-70, plots 109 and 110. These gates should be self-closing and lockable for security purposes and any details you are able to provide in regards to this would be useful.	Gates will be lockable and self-closing.

Hope you are well. I am writing in respect of two points raised by the Tree Officer in the attached consultation response. I would be grateful if you could let me know your thoughts.

Comment 1

"The above is with the exception of 1no. tree. The trial survey pit survey identified that there is potential for harm to T44 (a mature grey poplar, category B1, protected by TPO). An additional arboricultural method statement would be required to ensure suitable protection measures are place for this tree."

T44 is the tree to the north-west of the proposed sports pitch (see image below). As you may be aware to the north of the row of trees is a truncated road that that we propose to replace with a footpath (see attached image). As requested Vistry have asked their Tree Consultant to prepare the requested additional method statement. Unfortunately, they are currently away from the office and the timescales for producing the statement are unclear. Please can you advise whether, if it is not possible to provide you with the statement in the near future, you would be willing to accept a condition that requires a statement to be submitted and approved prior to works taking place in respect of the road / footpath.



Comment 2

"There are mature trees to be retained in close proximity to proposed plots 134,135,136 and 137; where this could potentially be a concern. It is recommended that the applicant explore this in more detail and provide details and/or evidence to demonstrate that this would not be an issue."

Vistry's Tree Consultant has advised that the issue of foundation depths for dwellings in close proximity to retained trees will be dealt with at the Building Regs stage, specifically with reference to the requirements of NHBC 4.2 (Building Near Trees). On this basis it is not considered necessary to provide further information as part of the reserved matters submission. Please let me know your thoughts.

Gloucester City Council
Transforming Your City

Tree Consultation Response on Planning Application

Case Officer:	Rhiannon Murphy
From:	Shane Burgess
Date:	05/07/2022
Planning Reference:	22/00553/REM
Location:	Land North of Rudloe Drive
Proposal:	Reserved matters approval (access, appearance, layout, scale and landscaping) for 150 dwellings, public open space and infrastructure.

Relevant Planning Policies and Guidance:

1. **National Planning Policy Framework (2021)**

   'Para 131 - Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.'

2. **Adopted Development Plan - Joint Core Strategy (2017)**
   Policy INF3 (Green Infrastructure)

   'Development proposals should consider and contribute positively towards green infrastructure, including the wider landscape context and strategic corridors between major assets and populations

   Existing green infrastructure will be protected in a manner that reflects its contribution to ecosystem services (including biodiversity, landscape / townscape quality, the historic environment, public access, recreation, and

play) and the connectivity of the green infrastructure network. Development proposals that will have an impact on woodlands, hedges and trees will need to include a justification for why this impact cannot be avoided and should incorporate measures acceptable to the Local Planning Authority to mitigate the loss. Mitigation should be provided on-site or, where this is not possible, in the immediate environs of the site

Where assets are created, retained, or replaced within a scheme, they should be properly integrated into the design and contribute to local character and distinctiveness. Proposals should also make provisions for future maintenance of green infrastructure.'

3. Emerging Development Plan - Gloucester City Plan (Pre-Submission)

The Pre-Submission version of the Gloucester City Plan (City Plan) was approved for publication and submission on 26 September 2019 and has been submitted for examination. On the basis of the stage of preparation that the plan has reached, and the consistency of its policies with the NPPF, the emerging policies of the plan can be afforded moderate weight in accordance with paragraph 48 of the NPPF. Policy E4 (Trees, Woodlands and Hedgerows) states:

'Development proposals should seek to ensure there are no significant adverse impacts on existing trees, woodlands or hedgerows and that every opportunity is taken for appropriate new planting on site. In the case of an unavoidable significant adverse impact on trees, woodlands and hedgerows, the developer must provide for measurable biodiversity net gain on site, or if this is not possible:

I. At nearby Green Infrastructure projects/areas; or

II. In suitable areas of parks, open spaces, verges; or

III. Through the restoration or creation of traditional orchards, prioritising sites identified as opportunities for increasing the connectivity of the ecological network; or

IV. As new or replacement street trees.

Development which would result in the loss of irreplaceable habitats such as Ancient Woodland, Ancient Trees, and veteran trees will not be permitted except in wholly exceptional circumstances.*

On development sites where existing trees to be retained, applicants will be required to demonstrate how these trees will be protected through all phases of development. It is expected that the protection measures will adhere to those contained within BS 5837:2012 Trees in relation to design, demolition and construction – recommendations, or subsequent revisions.

All new planting, either on site or elsewhere in the city as part of biodiversity net gain must be provided to the satisfaction of the City Council.'

Comments:

MHP Arboricultural Survey, Impact Assessment, and Protection Plan have been submitted in support of the application. The proposed planting scheme has been submitted as plan 'Landscape General Arrangement (LA5530 001)'.

Retained Trees

The MHP report and proposed plan highlights a number of mature trees to be retained. Specifically, the mature trees to the west of the site on the area of land set aside for POS are proposed for retention. This is welcome and would be considered a requirement. The largest of this grouping of trees are mature Poplars protected by TPO. At the centre of the site, larger mature cherry trees are proposed for retention (namely 2no. at the southern entrance to the site, 1no. to the north of the site. A grouping of mature trees on the eastern boundary of the site also are to be retained.

This is welcome and agreeable.

Removal of Trees

Four trees that are protected by TPO are proposed to be removed. These are:

- T9 – a moderate quality, early mature English oak
- T10 – a low quality, early mature English oak
- T11 – a low quality, early mature common beech
- 12 – a moderate quality, early mature common beech.

Said trees are relatively insignificant in the wider landscape and are largely category C trees and/or trees with significant defects. The removal of these trees is therefore not objected to; in the context of the large development proposal.

Tree Protection

New road surfacing will be required in the vicinity of TPO trees at the western end of the site. In anticipation of potential arboricultural impacts controlled excavations have been carried out at key points to analyse the extent of root encroachment beneath the existing roads.

The findings of these investigations were that the trees are rooting preferentially into the green spaces and up to and along the kerb edges of the roads. So, provided that fit for purpose tree protection barriers are put in place, this would be satisfactory to ensure that adverse impacts to the trees can be reasonably avoided.

The MHP report specifies tree protection measures in line with the above, and more generally for other retained trees on site, commensurate with BS5837:2012. So, a planning condition should be attached ensuring that tree protection measures are carried out in accordance with the report.

The above is with the exception of 1no. tree. The trial survey pit survey identified that there is potential for harm to T44 (a mature grey poplar, category B1, protected by TPO). An additional arboricultural method statement would be required to ensure suitable protection measures are place for this tree.

Proposed Planting Scheme

At the pre application stage, consultee comments from GCC Tree Officers and Landscape Consultant raised concerns regarding the lack of street trees along Rudloe Drive and main access road (which are required under Para 131 of the NPPF).

There has been some progress in redressing this issue. But further work is required.

For reference: the strategic master plan for the pre- application (61841-MCB -ZZ-ZZ-DR-A-0001-S3-P2) depicted no street tree planting. The proposed Landscape General Plan (LA5530 001) now does propose some street tree planting; but this is still someway off of the level of street tree planting that was depicted at outline stage in plan (309.P.6.1).

Additional street tree planting along Rudloe Drive and the main access road should be required, more in line with plan 309.P.6.1.

Other Issues

The Section106 agreement form outline stage includes a clause whereby the POS will be offered to the Local Authority for adoption.

The Local Authority have received subsidence claims within a reasonable locality this site and the site sits on largely clay soil. For this reason, there is potential for future subsidence claims to come forward.

There are mature trees to be retained in close proximity to proposed plots 134,135,136 and 137; where this could potentially be a concern. It is recommended that the applicant explore this in more detail and provide details and/or evidence to demonstrate that this would not be an issue.

Summary:

1. No significant trees shall be removed to enable the construction of the proposals.
2. Tree protection measures in accordance with the submitted report can be put in place to ensure that construction works do not result in damage to the retained trees. This is with the exception of T44 which requires an additional arboricultural method statement to ensure that the TPO tree is suitably protected.
3. New tree planting could be carried out that will enhance the arboricultural qualities of the site into the future. But more tree planting along the Rudloe Drive and main access road are required, more akin to outline plan 309.P.6.1.
4. There is potential for future subsidence claims in one area of the site. It is recommended that further information is provided, to address these concerns.

Objection - subject to points 2, 3 and 4 being satisfied.

Google

Rudloe Drive Phase 2, Quedgeley

Vistry Homes Ltd, Cotswolds

Energy and Sustainability Statement

AES Sustainability Consultants Ltd

May 2022

	Author	Date	E-mail address
Produced By:	[redacted]	06.05.2022	[redacted]
Reviewed By:		13.05.2022	

Revision	Author	Date	Comment
Initial Issue	[redacted]	13.05.2022	Initial Issue
Revision 1		18.05.2022	Summary of CO_2 saving, proposed approach to condition 19
Revision 2		01.09.2022	Amended site layout, PV & EV charging

This statement has been commissioned by Vistry Homes Ltd, Cotswolds to detail the proposed approach to energy and CO_2 reduction to be employed in the development of Rudloe Drive Phase 2, Quedgeley. It should be noted that the details presented, including the proposed specifications, are subject to change as the detailed design of the dwellings progresses, whilst ensuring that the overall commitments will be achieved.

AES Sustainability Consultants

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1. Introduction

Preface

1.1. This Energy and Sustainability Statement has been prepared on behalf Vistry Homes Ltd, Cotswolds in support of the reserved matters application for development of the site known as Rudloe Drive Phase 2.

Development Description

1.2. The development site is located on the northern edge of Hardwicke, north of Rudloe Drive, a village 7 km south of the city of Gloucester, within the administrative boundary of Gloucester City Council.

1.3. Outline planning permission was granted in July 2021 (ref: 21/00490/OUT) for:

'Residential development (up to 150 dwellings), associated infrastructure, ancillary facilities, open space and landscaping. (Outline Application with all matters Reserved)"

1.4. The proposals for Rudloe Drive Phase 2 would deliver 150 dwellings across a mix of one to four bed detached, semi-detached, and terraced houses. The proposed site layout is shown in Figure 1.

Purpose and Scope of the Statement

1.5. The statement has been prepared to address Condition 18 of the outline planning permission (ref: 21/00490/OUT) as well as relevant national and local policies relating to sustainable development, including relevant policies within the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011-2031.

1.6. Future changes to national guidance affecting the application of these policies have additionally been reviewed, together with an examination of how the proposed strategy aligns with the revised Part L 2021 standards.

Figure 1. Proposed Site Layout

AES Sustainability Consultants

2. Planning Policy and Conditions

Local Planning Policy

2.1. This statement will address relevant policies within the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011-2031 relating to sustainable design and construction, in particular Policy SD3: Sustainable Design and Construction:

Policy SD3: Sustainable Design and Construction

1. Development proposals will demonstrate how they contribute to the aims of sustainability by increasing energy efficiency, minimising waste and avoiding the unnecessary pollution of air, harm to the water environment, and contamination of land or interference in other natural systems. In doing so, proposals (including changes to existing buildings) will be expected to achieve national standards

2. All development will be expected to be adaptable to climate change in respect of the design, layout, siting, orientation and function of both buildings and associated external spaces. Proposals must demonstrate that development is designed to use water efficiently, will not adversely affect water quality, and will not hinder the ability of a water body to meet the requirements of the Water Framework Directive;

3. All development will be expected to incorporate the principles of waste minimisation and re-use. Planning applications for major development must be accompanied by a waste minimisation statement, which demonstrates how any waste arising during the demolition, construction and subsequent occupation of the development will be minimised and sustainably managed

4. To avoid unnecessary sterilisation of identified mineral resources, prior extraction should be undertaken where it is practical, taking into account environmental acceptability and economic viability relating both to extraction of the mineral(s) and subsequent implementation of the non-minerals development of the site

5. Major planning applications must be submitted with an Energy Statement that clearly indicates the methods used to calculate predicted annual energy demand and associated annual Carbon Dioxide (CO2) emissions.

2.2. The statement will also address the proposals for the generation of energy from renewable resources, as outlined in Policy INF5: Renewable Energy/Low Carbon Energy Development:

Policy INF5: Renewable Energy/Low Carbon Energy Development

6. Proposals for the generation of energy from renewable resources, or low carbon energy development (with the exception of wind turbines), will be supported, provided the wider environmental, social or economic benefits of the installation would not be outweighed by a significant adverse impact on the local environment, taking into account the following factors:

    - The impact (or cumulative impact) of the scheme, including any associated transmission lines, buildings and access roads, on landscape character, local amenity, heritage assets or biodiversity.
    - Any effect on a protected area such as The Cotswolds AONB or other designated areas such as the Green Belt.
    - Any unacceptable adverse impacts on users and residents of the local area, including emissions, noise, odour and visual amenity.

7. Proposals are more likely to be supported when they demonstrate:

    - That they have been designed and sited so as to minimise any adverse impacts on the surrounding area.
    - Benefits arising directly from the scheme to the local economy, the community and achievement of national targets.
    - The feasibility and cost-effectiveness of removing any installation and re-instatement of the site in future years.
    - The net gain of carbon savings, taking into account carbon use through manufacturing and installation of the technology.

This policy contributes towards achieving Objectives 1, 3, 4 and 6

2.3. The statement will also address the proposals for dwelling to be fitted with Electric Vehicle Charging Points, as outlined in policy SD4: Design Requirements

Policy SD4: Design Requirements

New development should be designed to integrate, where appropriate, with existing development, and prioritise movement by sustainable transport modes, both through the application of legible connections to the wider movement network, and assessment of the hierarchy of transport modes set out in Table SD4a below. It should:

- Be well integrated with the movement network within and beyond the development itself
- Provide safe and legible connections to the existing walking, cycling and public transport networks;
- Ensure accessibility to local services for pedestrians and cyclists and those using public transport
- Ensure links to green infrastructure;
- Incorporate, where feasible, facilities for charging plug-in and other ultra-low emission vehicles;
- Be fully consistent with guidance, including that relating to parking provision, set out in the Manual for Gloucestershire Streets and other relevant guidance documents in force at the time.

2. Detailed requirements of masterplans and design briefs, should the Local Planning Authority consider they are required to accompany proposals, are set out in Table SD4d. These requirements are not exhaustive.

Planning Conditions

2.4. Outline planning permission for the development was granted in July 2021 under application reference 21/00490/OUT. This statement will address Conditions 18 and 19, extracted below:

Condition 18

Reserved Matters applications shall be accompanied by an Energy Statement that clearly sets out the predicted annual energy demand from the development and associated annual carbon dioxide emissions, and demonstrates how the development contributes to the aims of sustainability by increasing energy efficiency. The application shall include clear details of any proposed measures including detailing any external facilities on the submitted plans and/or associated documents.

Reason: To assess the contribution to sustainable design and construction.

Condition 19

The development hereby permitted shall not be first occupied until the proposed dwellings have been fitted with an electric vehicle charging point. The charging points shall comply with BS EN 62196 Mode 3 or 4 charging and BS EN 61851 and Manual for Gloucestershire Streets. The electric vehicle charging points shall be retained for the lifetime of the development unless they need to be replaced in which case the replacement charging points shall be of the same specification or a higher specification in terms of charging performance.

Reason: To promote sustainable travel and healthy communities.

National Planning Policy Framework

2.5. On the 20th July 2021, the Government published the revised National Planning Policy Framework (NPPF), which sets out the Government's planning policies for England and how these are expected to be applied. At the heart of the NPPF is a presumption in favour of sustainable development

2.6. Chapter 14 of the NPPF outlines its energy and climate change policies. New development should be planned in ways that:

- avoid increased vulnerability to the range of impacts arising from climate change…
- can help to reduce greenhouse emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards.

2.7. In determining planning applications, local planning authorities should expect new developments to:

- comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable
- take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

2.8. This chapter also outlines the requirement of Local Plans to take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. The key focus of the NPPF is to support local and regional planning authorities.

Current and Future National Policy Standards

2.9. Government policy in relation to the energy performance of buildings has been evolving over the past decade, following government commitments to reduce the emission of greenhouse gases – particularly CO_2. This obligation was enshrined in the Climate Change Act 2008, which commits the UK to achieving a mandatory 80% reduction in the UK's CO_2 emissions by 2050, compared with 1990 levels.

2.10. In 2016, the UK government ratified the Paris Agreement, which provides a framework for governments to pursue the target of limiting global warming below 2°C.

2.11. In June 2019, the Government announced it had set a new net zero greenhouse gas emission target for the UK by 2050, compared with the previous target of at least 80% reduction from 1990 levels.

2.12. The built environment has a key role to play in delivering on these international commitments, as it accounts for approximately a third of overall CO_2 emissions. These commitments have been translated into national policies within the built environment driven by, amongst other mechanisms, the EU Energy Performance of Buildings Directive and the 2012 Energy Efficiency Directive.

2.13. Following the introduction of the 2013 edition of Building Regulations Part L, the successive updates now require regulated CO_2 emissions levels from new build domestic buildings to be approximately 30% lower than 2006 levels.

2.14. The Government proposes that the Building Regulations are the appropriate mechanism to drive future standards with respect to energy consumption, with local authorities able to apply the optional requirements of the national technical standards with respect to water consumption and space.

2.15. As an acknowledgement of the challenge to the built environment in meeting future 'net zero' targets, the Government published the next revision to the Building Regulations Approved Document L1A (Part L) in December 2021.

2.16. The uplift to Part L 2021 will incorporate:

Higher Standards for Carbon Dioxide Emissions

2.17. The CO_2 emissions requirement is set at a 31% improvement on Part L 2013, expected to be met through a combination of efficient heating systems, improved fabric standards and on-site renewable energy generation.

Higher Standards for Fabric Energy Efficiency

2.18. The Building Regulations control thermal insulation requirements through setting an upper limit on space heating demand. These requirements will be further improved in Part L 2021, meaning that insulation standards will need to be improved.

Introduction of Primary Energy Demand Compliance Metric

2.19. The regulations will introduce a primary energy demand compliance metric. This is in order to align the regulations with the amended EU Energy Performance of Building Directive (2018), which states:

> "The energy performance of a building shall be expressed by a numeric indicator of primary energy use in kWh/ (m^2.y) for the purpose of both energy performance certification and compliance with minimum energy performance requirements."

2.20. Primary energy is an expression of the energy content available in a fuel / fuel source which has not undergone any conversion or transformation process. Individual factors are assigned to all fuel types to take account of upstream processes and energy use – e.g., mains electricity has a higher factor due to the additional transformation and distribution processes that the energy undergoes before it reaches the home, compared with gas where the fuel is burned directly within the dwelling.

2.21. Dwellings will therefore be assessed based on their primary energy consumption in a similar way to current carbon compliance.

Revised Transitional Arrangements

2.22. Revised transitional arrangements will apply once the new regulatory standards are introduced. Dwellings will now need to be covered by the building notice, initial notice, or full plans before July 2022 and individual plots commenced prior to July 2023 in order to continue under Part L 2013. Registration or commencement falling after these dates means that dwellings will be required to meet Part L 2021 standards.

Proposed Approach

2.23. Due to the development timescales, it is considered that a portion of the development is likely to fall under current Part L 2013 and a portion under Part L 2021.

2.24. In recognition of these variables, this Energy and Sustainability Statement has considered the likely impact of future Building Regulations requirements. With respect to carbon reduction, the dwellings built to meet Part L 2021 will deliver a >31% reduction compared with current regulatory standards, thereby satisfying the requirements as set out in the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011-2031 and Condition 18 of the outline planning permission (ref: 21/00490/OUT).

2.25. The development will achieve these carbon reductions through higher fabric standards and low carbon and renewable energy systems being installed to offset emissions and reduce fuel bills for residents.

2.26. This statement provides an indicative fabric specification and a strategy which would enable the dwellings to meet these higher standards, with the precise strategy to achieve this being subject to change as detailed design of the dwellings is progressed.

2.27. With regard to condition 19, mode 3 charging points will be provided to all dwellings through dedicated wall boxes with control electronics built in. Where possible these will be positioned within garages, where plot parking is provided these will be positioned on the external gable wall adjacent to the driveway. For houses and maisonettes with front parking, where possible, the charging points will be positioned on the front elevation, adjacent to the front door.

2.28. Additional sustainable construction considerations are additionally addressed, including overheating risk, climate resilience, waste and water consumption.

2.29. The image below shows an example EV charging unit. These (or similar) will be provided to all dwellings.

3. Energy and CO_2 Reduction Strategy

3.1. As shown in Table 1, the CO_2 reduction standards contained within Part L were increased in 2010 and 2013, reducing the 'Target Emission Rate' (TER) by approximately 25% and a further 6% (9% for non-residential) respectively, requiring substantial improvements to thermal insulation and heating services, or a significant increase in on-site renewable energy provision.

3.2. The 2021 uplift to the regulations will require a further 31% reduction in emissions, delivering dwellings with emissions levels less than half of homes built to L1A 2006 standards.

Table 1. CO_2 Emissions improvements from successive Part L editions

Building Regulations	CO_2 emissions improvements
L1A 2006	-
L1A 2010	**25%**
L1A 2013	**6%**
L1A 2021	**31%**

Energy Reduction Strategy – Fabric First

3.3. It is proposed that the energy demand reduction strategy for the development incorporates further improvements beyond a Part L compliant specification and initially concentrates finance and efforts on reducing energy demand as the first stage of the Energy Hierarchy (Figure 2).

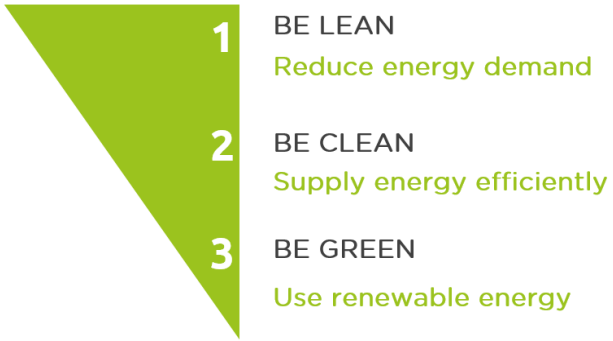

Figure 2. The Energy Hierarchy

Be Lean – reduce energy demand

3.4. The design of a development - from the masterplan to individual building design - will assist in reducing energy demand in a variety of ways, with a focus on minimising heating, cooling and lighting loads. Key considerations include:

- Building orientation – maximise passive solar gain and daylight
- Building placement – control overshading and wind sheltering
- Landscaping – control daylight, glare and mitigate heat island effects
- Building design – minimise energy demand through fabric specification

Be Clean – supply energy efficiently

3.5. The design and specification of building services to utilise energy efficiently is the next stage of the hierarchy, taking into account:

- High efficiency heating and cooling systems
- Ventilation systems (with heat recovery where applicable)
- Low energy lighting
- High efficiency appliances and ancillary equipment

Be Green – use low carbon / renewable energy

3.6. Low carbon and renewable energy systems form the final stage of the energy hierarchy and can be used to directly supply energy to buildings, or offset energy carbon emissions arising from unavoidable demand. This may be in the form of:

- Low carbon fuel sources – e.g., biomass
- Heat pump technologies
- Building scale renewable energy systems
- Small-scale heat networks
- Development-scale heat networks

3.7. As this hierarchy demonstrates, designing out energy use is weighted more highly than the generation of low-carbon or renewable energy to offset unnecessary demand. Applied to the development, this approach is referred to as 'fabric first' and concentrates finance and efforts on improving U-values, reducing thermal bridging, improving airtightness, and installing energy efficient ventilation and heating services.

3.8. This approach has been widely supported by industry and government for some time, particularly in the residential sector, with the Zero Carbon Hub[1] and the Energy Savings Trust[2] having both stressed the importance of prioritising energy demand as a key factor in delivering resilient, low energy buildings.

3.9. The benefits to prospective homeowners of following the Fabric First approach are summarised in Table 2.

Table 2. Benefits of the Fabric First approach

	Fabric energy efficiency measures	Bolt-on renewable energy technologies
Energy/CO_2/fuel bill savings applied to all dwellings	✓	×
Savings built-in for life of dwelling	✓	×
Highly cost-effective	✓	×
Increases thermal comfort	✓	×
Potential to promote energy conservation	✓	✓
Minimal ongoing maintenance / replacement costs	✓	×
Significant disruption to retrofit post occupation	✓	×

Building Regulations Standards – Fabric Energy Efficiency

3.10. In addition to the CO_2 reduction targets, the importance of energy demand reduction was further supported by the introduction of a minimum fabric standard into Part L1A 2013, based on energy use for heating and cooling a dwelling. This is referred to as the 'Target Fabric Energy Efficiency' (TFEE), and expressed in kWh/m²/year.

3.11. This standard enables the decoupling of energy use from CO_2 emissions and serves as an acknowledgement of the importance of reducing demand, rather than simply offsetting CO_2 emissions through low carbon or renewable energy technologies.

3.12. The TFEE is calculated based on the specific dwelling being assessed with reference values for the fabric elements contained within Approved Document L1A. These reference values are described as 'statutory guidance' as opposed to mandatory requirements, allowing full flexibility in design approach and balances between different aspects of dwelling energy performance to be struck so that the ultimate goal of achieving the TFEE is met.

[1] Zero Carbon Hub, Zero Carbon Strategies for tomorrow's new homes, Feb 2013

[2] Energy Savings Trust, Fabric first: Focus on fabric and services improvements to increase energy performance in new homes, 2010

3.13. These standards will be tightened under Part L 2021, The proposed approach and indicative construction specifications are set out in the following sections of this Strategy.

Fabric Standards

3.14. In order to ensure that the energy demand of the development is reduced, the dwellings have been designed to minimise heat loss through the fabric wherever possible. Table 3 details the proposed fabric specification of the major building elements, with the first column in this table setting out the Part L1A 2013 and Part L1A 2021 limiting fabric parameters in order to demonstrate the potential improvements.

Table 3. Proposed Construction Specification – Main Elements

	Part L1a 2013 Limiting Fabric Parameters	Part L1a 2021 Limiting Fabric Parameters	Indicative Specification
External wall – u-value	0.30 W/m²K	0.26 W/m²K	0.20 – 0.23 W/m²K
Party wall – u-value	0.20 W/m²K	0.20 W/m²K	0.00 W/m²K
Plane roof – u-value	0.20 W/m²K	0.16 W/m²K	0.11 W/m²K
Ground floor – u-value	0.25 W/m²K	0.18 W/m²K	0.12 – 0.17 W/m²K
Windows – u-value	2.00 W/m²K	1.60 W/m²K	1.20 – 1.40 W/m²K
Doors – u-value	2.00 W/m²K	1.60 W/m²K	1.1 W/m²K
Air Permeability	10.00 m³/h.m² at 50 Pa	8.00 m³/h.m² at 50 Pa	4.00 – 5.00 m³/h.m² at 50 Pa
Thermal Bridging	Y = 0.150 (default)	Y = 0.150 (default)	Y = ≤ 0.040 (estimated)

Thermal Bridging

3.15. The significance of thermal bridging as a potentially major source of fabric heat losses is increasingly understood. Improving the U-values for the main building fabric without accurately addressing the thermal bridging will not achieve the desired energy and CO_2 reduction targets.

3.16. The specification seeks to minimise unnecessary bridging of the insulation layers, with avoidable heat loss therefore being reduced wherever possible. Accurate calculation of these heat losses forms an integral part of the SAP calculations undertaken to establish energy demand of the dwellings, and as such thermal modelling will be undertaken to assess the performance of all main building junctions.

Energy Efficient Heating and Lighting

3.17. Heat generation and distribution systems will be designed to give the occupants a high level of control over their use, encouraging and allowing energy-efficient behaviour. High efficiency combi boilers should be installed to properties to eliminate the need for hot water cylinders where feasible. Primary pipework should be fully insulated.

3.18. Internal lighting will be low energy wherever possible. External security and space lighting should be low energy and fitted with PIR and daylight sensors where appropriate.

3.19. Where necessary, units will be installed with Waste Water Heat Recovery (WWHR) systems. WWHR retrieves thermal energy from hot water used in a shower before it disappears down the drain. This happens through a heat exchanger, in which cold mains water is passed around a copper waste pipe to gain a temperature rise, before continuing to the boiler 'pre heated'. This in turn relieves the workload of the boiler, reducing energy demand.

3.20. Where necessary, units will be installed with a Flue Gas Heat Recovery (FGHR) system. FGHR recovers waste heat from flue gases. The recovered heat is used to preheat the cold water entering the boiler, decreasing the energy required to warm the water up to the required level.

Passive Design Measures and Overheating Risk Mitigation

3.21. Glazing will be specified with a solar transmittance value (g-value) to strike the balance between useful solar gain in the winter and unwanted solar gain in the summer.

3.22. Where feasible, dwellings will be fitted with high-efficiency combination boilers, removing the need for hot water cylinders which would lose useful heat to the dwelling at the rate of around 1.5kWh/day, or circa 550kWh over the course of a year.

3.23. Due to these measures to reduce internal heat gain, natural ventilation provided through window openings and the opportunity for cross ventilation will allow sufficient air exchange rates to purge any heat build-up. Active cooling systems are therefore not proposed.

3.24. By following these principles, the development will be designed to build in resilience to a potentially changing climate over the lifetime of the buildings and minimise overheating risk,

which can be exacerbated by the drive to build better insulated, more airtight homes if not considered within the design and construction process.

Air Leakage

3.25. After conductive heat losses through building elements are reduced, convective losses through draughts are the next major source of energy wastage. The proposal adopts an airtightness standard of < 4.00 - 5.00m^3/h.m^2 at 50Pa, with pressure testing of all dwellings to be undertaken on completion to confirm that the design figure has been met.

Provisions for Energy-Efficient Operation of the Dwelling

3.26. The occupant of the dwelling should be provided with all necessary literature and guidance relating to the energy efficient operation of fixed building services. Currently it is assumed that all dwellings will be provided with modern gas-fired heating systems.

4. Low Carbon and Renewable Energy

4.1. A range of technologies have been assessed for potential incorporation into the scheme in accordance with Regulation 25A of the Building Regulations and to assess the systems which may be applicable on site to future Regulatory standards.

Combined Heat and Power (CHP) and District Energy Networks

4.2. A CHP unit is capable of generating heat and electricity from a single fuel source. The electricity generated by the CHP unit is used to displace electricity that would otherwise be supplied from the national grid, with the heat generated as effectively a by-product utilised for space and water heating. However, the reduced emissions from the national grid due now means that CHP systems will not deliver CO_2 savings.

4.3. In addition, the economic and technical viability of a CHP system is largely reliant on a consistent demand for heat throughout the day to ensure that it operates for over 5000 hours per year. Heat demand from mainly residential schemes is not conducive to efficient system operation, with a defined heating season and intermittent daily profile, with peaks in the morning and the evening. For this reason, the use of a CHP system is considered unfeasible for this development.

4.4. There are currently no heat networks which extend near the proposed development. High network heat losses associated with distribution to individual houses, as opposed to large high-rise apartment blocks and commercial developments mean that a new heat network to serve the area is not considered viable or an environmentally preferred option.

4.5. The adjacent Countryside development discounts heat network solutions on the same basis, therefore there is no potential for a combined network serving both developments.

Wind Power

4.6. Locating wind turbines adjacent to areas with buildings presents a number of potential obstacles to deployment. These include the area of land onsite required for effective operation, installation and maintenance access, environmental impact from noise and vibration, visual impact on landscape amenity and potential turbulence caused by adjacent obstacles, including the significant amount of woodland on and around the development.

4.7. A preliminary examination of the BERR wind speed database indicates that average wind speeds at 10m above ground level are around 4.50m/s [3]. Wind turbines at this site are therefore unlikely to generate sufficient quantities of electrical energy to be cost effective[4]. For these reasons wind power is not considered feasible.

Building Scale Systems

4.8. The remaining renewable or low carbon energy systems considered potentially feasible are at a building scale. These are as follows;

- Individual biomass heating
- Solar thermal
- Solar photo-voltaic (PV)
- Air Source Heat Pumps (ASHPs)
- Ground Source Heat Pump (GSHPs)

4.9. The advantages and disadvantages of these technologies are evaluated in Tables 4-8.

[3] NOABL Wind Map (http://www.rensmart.com/Weather/BERR)

[4] CIBSE TM38:2006. Renewable energy sources for buildings.

Table 4. Individual biomass heating feasibility appraisal

Potential Advantages	Risks & Disadvantages
• Potential to significantly reduce CO_2 emissions as the majority of space and water heating will be supplied by a renewable fuel • Decreased dependence on fossil fuel supply	• A local fuel supply is required to avoid increased transport emissions • Fuel delivery, management and security of supply are critical • Space is required to store fuel, a thermal store and plant • A maintenance regime would be required even though modern systems are relatively low maintenance • Building users or a management company must be able to ensure fuel is supplied to the boiler as required. • Local environmental impacts potentially include increased NO_x and particulate emissions
Estimated costs and benefits	
• Cost £2,000 upwards for a wood-pellet boiler, not including cost of fuel • Not eligible for RHI payments as new-build properties	
Conclusions	
Biomass heating is considered technically feasible in large dwellings provided sufficient space can be accommodated for fuel supply, delivery and management however air quality concerns mean that it is not considered appropriate.	

Table 5. Solar thermal systems feasibility appraisal

Potential Advantages	Risks & Disadvantages
• Mature and reliable technology offsetting the fuel required for heating water (typically gas) • Solar thermal systems require relatively low maintenance • Typically, ~50% of hot water demand in dwellings can be met annually	• Installation is restricted to favourable orientations on an individual building basis • The benefit of installation is limited to the water heating demand of the building • Safe access must be considered for maintenance and service checks • Buildings need to be able to accommodate a large solar hot water cylinder • Distribution losses can be high if long runs of hot water pipes are required • Visual impact may be a concern in special landscape designations (e.g. AONB)
Estimated costs and benefits	
• Cost £2,000 - 5,000 for standard installation • Not eligible for RHI payments as new-build properties • Ongoing offset of heating fuel, minimal maintenance requirements	
Conclusions	
Solar thermal systems are considered technically feasible on all buildings with suitable roof orientations.	

Table 6. Solar photovoltaic systems feasibility appraisal

Potential Advantages	Risks & Disadvantages
• The technology offsets the high carbon content of grid supplied electricity used for lighting, pumps and fans, appliances and equipment • Mature and well proven technology that is relatively easily integrated into building fabric • Adaptable to future system expansion • Solar resource is not limited by energy loads of the dwelling as any excess generation can be transferred to the national grid • PV systems generally require very little maintenance • Service and maintenance requirement minimal, and 2-3 storey buildings should not require significant additional safety measures (mansafe systems etc) for roof access	• Poor design and installation can lead to lower than expected yields (e.g. from shaded locations) • Installation is restricted to favourable orientations • Feed in Tariff support mechanism has been discontinued • Safe access must be considered for maintenance and service checks • Visual impact may be a concern in special landscape designations (e.g. AONB) or conservation areas • Reflected light may be a concern in some locations
Estimated costs and benefits	
• Cost £1,500 upwards (1kWp+) and scalable • Ongoing offset of electricity fuel costs, minimal maintenance requirements	
Conclusions	
PV panels are considered technically feasible for all buildings with suitable roof orientations. The relatively low cost, carbon saving potential and limited additional impacts mean that PV is considered a feasible option for this development.	

Table 7. Air Source Heat Pump systems feasibility appraisal

Potential Advantages	Risks & Disadvantages
• Heat pumps are relatively mature technology providing heat using the reverse vapor compression refrigeration cycle • Heat pumps are a highly efficient way of providing heat using electricity, with manufacturers reporting efficiencies from 250% • Can be of increased benefit where cooling is also required, therefore particularly relevant to commercial buildings • With grid decarbonisation will be a low carbon heating source in future	• Air source heat pumps are powered by electricity, with a significantly higher unit price than gas, leading to potentially increased running costs • It is critical that heat pump systems are designed and installed correctly to ensure efficient operation can be achieved. Users must be educated in how heat pump systems should be operated for optimal efficiency • Air source heat pump plant should be integrated into the building design to mitigate concerns regarding the visual impact of bolt-on technology • Noise in operation may be an issue particularly when operating at high output
Estimated costs and benefits	
• Cost £5,000 - £7,000 for standard installation • Not eligible for RHI payments as new-build properties	
Conclusions	
Air source heat pumps are technically feasible for the buildings in this scheme. However, the capital and running cost increases in comparison to a gas baseline means that they are not considered a preferred low carbon technology at this stage.	

Table 8. Ground Source Heat Pump systems feasibility appraisal

Potential Advantages	Risks & Disadvantages
• Heat pumps are relatively mature technology providing heat using the reverse vapor compression refrigeration cycle • Heat pumps are a highly efficient way of providing heat using electricity, with manufacturers reporting efficiencies from 320% • Can be of increased benefit where cooling is also required, therefore particularly relevant to commercial buildings • With grid decarbonisation will be a low carbon heating source in future	• Low temperature heating circuits (underfloor heating) would be required to maximise the efficiency of heat pumps • A hot water cylinder would also be required for both space and water heating • Ground source heat pumps are powered by electricity with a significantly higher unit price than gas, leading to potentially increased running costs • It is critical that heat pump systems are designed and installed correctly to ensure efficient operation can be achieved • Ground source heat pumps either require significant land to incorporate a horizontal looped system or significant expense to drill a bore hole for a vertical looped system
Estimated costs and benefits	
• Cost circa £10,000+ • Running cost linked to COP of heat pump, circa 3.0 equates to 66% reduction vs electricity or around 5-6p/kWh (higher than mains gas) • Additional costs to upgrade electricity infrastructure currently unknown	
Conclusions	
Ground source heat pumps are considered technically feasible for buildings in this scheme. However, the cost and difficulty associated with vertical boreholes at this site means that they are not considered a preferred low carbon technology at this stage.	

Summary

4.10. Following this feasibility assessment, it is considered that as biomass heating systems would require significant storage space for fuel as well as regular deliveries at different times to all dwellings, they are not appropriate for this development.

4.11. Roof-mounted systems are therefore likely to be most suited to the development:

- Solar thermal systems to dwellings that have space to incorporate a hot water cylinder and a suitable roof orientation.
- Solar photovoltaic modules to dwellings that have suitable roof orientations.

4.12. It is considered that solar PV systems are most appropriate in meeting a significant proportion of energy demand without introducing additional energy loss through larger hot water cylinders. These will be installed to south and east/west facing roof pitches, with the specific units and system sizes to be assessed when bringing forward designs for each phase of development as required. It is proposed that Solar PV systems will be installed to the 110 units that will fall under Part L 2021. The image below shows an example of the roof integrated Solar PV systems to be installed at the development.

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5. As-Designed Performance

5.1. It is expected that a proportion of the development will be built to current Part L 2013 and a proportion to Part L 2021. It will be ensured as design progresses that revised calculations will be undertaken on a plot-by-plot basis under the relevant Part L to accurately represent the final CO_2 emissions of the development.

5.2. Through following the strategy described, the dwellings built under Part L 2013 Building Regulations will significantly reduce energy demand and consequent CO_2 emissions beyond a Part L compliant level of performance through improvements to the dwelling fabric.

5.3. Table 9 provides an overview of the typical as-designed CO_2 emissions of the sample dwellings assessed under Part L 2013 to with the proposed fabric first strategy applied.

Table 9. Sample dwelling as-designed CO_2 emissions (Part L 2013)

House Type	Part L 2013 Target CO_2 Emissions ($kgCO_2/yr$)	As-Designed CO_2 Emissions ($kgCO_2/yr$)	Reduction %
2 Bed End Terrace	1,560	1,544	1.01
3 Bed End Terrace	1,763	1,714	2.78
4 Bed Detached	2,037	2,022	0.74
2 Bed Mid Terrace	1,364	1,299	4.76
3 Bed End Terrace	1,630	1,608	1.32
3 Bed Semi Detached	1,628	1,581	2.86
4 Bed Detached	2,151	2,142	0.42

5.4. Table 10 demonstrates the site-wide savings over and above the Part L 2013 compliant baseline that will be delivered.

Table 10. Site-wide as-designed energy demand and CO_2 emissions after fabric measures (Part L 2013)

	CO_2 Emissions ($kgCO_2/yr$)	
Part L compliant (Part L 2013)	258,864	
After fabric measures (Part L 2013)	254,721	
	$kgCO_2/yr$	%
Total site-wide savings	4,143	1.60

Future Regulations – Part L 2021

5.5. Through following the strategy described, the dwellings built under Part L 2021 will deliver a >31% reduction compared with current regulatory standards. These carbon reductions will be achieved through higher fabric standards, and the use of Waste Water Heat Recovery systems (WWHR), Flue Gas Heat Recovery systems (FGHR), and the use of solar PV systems.

5.6. Using Beta SAP software (final version still pending release at time of writing), a sample range of dwellings have been assessed under Part L 2021 to establish the baseline CO_2 emissions of the dwellings that will be constructed under Part L 2021, with the proposed fabric strategy applied to provide an overview of the typical as-designed CO_2 emissions. The results of these calculations are shown in Table 11.

Table 11. Sample dwelling as-designed CO^2 emissions (Part L 2021)

House Type	Part L 2021 Target CO_2 Emissions ($kgCO_2/yr$)	As-Designed CO_2 Emissions ($kgCO_2/yr$)	Reduction %
2 Bed End Terrace	963	922	4.23
3 Bed End Terrace	1,129	1,090	3.39
4 Bed Detached	1,199	1,174	2.11
2 Bed Mid Terrace	836	791	5.45
3 Bed End Terrace	985	953	3.27
3 Bed Semi Detached	1,041	1,006	6.28
4 Bed Detached	1,251	1,157	7.55

6. Sustainable Design

6.1. This section sets out details of additional resource efficiency and sustainable design principles to be applied at the development.

Materials

6.2. The impacts of construction materials range from the depletion of natural resources to the greenhouse gas emissions and water use associated with their manufacture and installation.

6.3. Within the development choices will be made in order to reduce the consumption of primary resources and using materials with fewer negative impacts on the environment, including but not limited to the following;

- Use fewer resources and less energy through designing buildings more efficiently
- Specify and select materials and products that strike a responsible balance between social, economic and environmental factors
- Incorporate recycled content, use resource-efficient products and give due consideration to end-of-life uses
- Influence, specify and source increasing amounts of materials which can be reused and consider future deconstruction and recovery
- All insulating materials will have a Global Warming Potential (GWP) of < 5 in manufacture and installation.
- All materials used in construction will be responsibly sourced, with certification obtained wherever possible. Materials with a low environmental impact as per the BRE Green Guide will be preferred.

Waste

6.4. Sending waste to landfill has various environmental impacts, such as the release of local pollution, ecological degradation and methane emissions, in addition to exacerbating resource depletion. Waste in housing comes from two main streams; construction waste and domestic waste during occupation.

Household waste

6.5. In this respect regard has been given to the policy advice contained in the NPPF together with the Council's current guidance to ensure that the new dwellings are provided with adequate storage facilities for both waste and recyclable materials.

6.6. Gloucester City Council currently operates domestic waste collection services through which households are able to recycle materials including paper and cardboard, plastic bottles and food containers, tins, glasses and metal foils, together with garden waste.

Construction waste

6.7. The construction process will be managed to effectively and appropriately monitor and manage construction site waste. Target benchmarks for resource efficiency will be set in accordance with best practice – e.g., m^3 of waste per $100m^2$ / tonnes waste per m^2.

6.8. Wherever possible materials will be diverted from landfill through re-use on site, reclamation for re-use, returned to the supplier where a 'take-back' scheme is in place or recovered and recycled using an approved waste management contractor.

Electrical Vehicle Charging Points

6.9. There is a government ambition for all new cars to be effectively zero emission by 2035. The 'Road to Zero' strategy set out a £1.5b package of support for the transition. A number of initiatives are already in place including grants, as well as road tax and vehicle excise duty exemptions.

6.10. It is recognised that there is a need to ensure that the development is adaptable to accommodate a future shift in personal transportation to electric vehicles, to promote sustainable transport and to minimise air pollution. As Electric Vehicle (EV) ownership increases, developers have an increasing responsibility to provide EV charging points for occupants.

6.11. The development will ensure adequate provision of electric vehicle charging points, satisfying condition 19 of the outline permission (Ref: 21/00490/OUT). It is proposed that EV charging points will be installed to all dwellings.

6.12. Further technical details of the charger along with locations will be provided at the appropriate time as preparation for the development progresses.

Water Conservation

6.13. In line with Policy SD3 and current Building Regulations, water use will be managed effectively throughout the development through the incorporation of appropriate efficiency measures.

6.14. Water efficiency measures including the use of efficient dual flush WCs, low flow showers and taps and appropriately sized baths will be encouraged with the aim to limit the use of water during the operation of the development to limit water use.

6.15. Table 12 shows how the development could achieve a total water consumption of 125 litres/occupier/day for the intended specification, in line with current regulatory standards.

Table 12. Typical Water Demand Calculation

Installation Type	Unit of measure	Capacity/ flow rate	Litres/Person/Day
WC (dual flush)	Full flush (l)	4	5.84
	Part flush (l)	2.6	7.70
Taps (excluding kitchen taps)	flow rate (l/min)	5	9.48
Bath	Capacity to overflow (l)	181	19.91
Shower	Flow rate (l/min)	8	34.96
Kitchen sink taps	Flow rate (l/min)	3.8	12.03
Calculated Use			111.6
Normalisation Factor			0.91
Total Internal Consumption (L)			101.5
External Use			5.0
Building Regulations 17.K			106.5

AES Sustainability Consultants

7. Conclusions

7.1. This Energy and Sustainability Statement has been prepared by AES Sustainability Consultants Ltd on behalf of Vistry Homes Ltd, Cotswolds to detail the proposed approach to sustainable construction to be employed at the development known as Rudloe Drive Phase 2, Quedgeley.

7.2. The development site is located on the northern edge of Hardwicke, north of Rudloe Drive, a village 7 km south of the city of Gloucester, within the administrative boundary of Gloucester City Council. The proposals would deliver 150 dwellings across a mix of one to four bed detached, semi-detached, and terraced houses

7.3. The statement has been prepared to address Condition 18 of the outline planning permission (ref: 21/00490/OUT) as well as relevant national and local policies relating to sustainable development, including 'Policy SD3: Sustainable Design and Construction' and 'Policy SD4: Design Requirements' of the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011-2031.

7.4. Due to the development timescales, it is considered that a portion of the development is likely to fall under current Part L 2013 and a portion under Part L 2021.

7.5. In recognition of these variables, this Energy and Sustainability Statement has considered the likely impact of future Building Regulations requirements. With respect to carbon reduction, the dwellings built to meet Part L 2021 will deliver a >31% reduction compared with current regulatory standards, thereby satisfying the requirements as set out in the Gloucester, Cheltenham and Tewkesbury Joint Core Strategy 2011-2013 and Condition 18 of the outline planning permission (ref: 21/00490/OUT).

7.6. The statement sets out a fabric first approach to sustainable construction, demonstrating that decisions about the built form, orientation and design as well as improvements in insulation specification, a reduction in thermal bridging, unwanted air leakage paths and further passive design measures will reduce energy demand in line with the Energy Hierarchy.

7.7. A range of potentially appropriate technologies have been assessed for feasibility in delivering further reductions as required by future Regulatory standards, concluding that solar PV constitutes both the preferred and viable technology for this site. All 110 dwellings built to Part L 2021 regulatory standards will benefit from Solar PV systems.

7.8. The statement additionally addresses further sustainable construction considerations, including overheating risk, climate resilience, waste and water consumption.

7.9. Part of the scheme will be built under Part L 2013 Building Regulations, providing an estimated overall CO_2 saving of 1.6% above current regulatory standards. The remainder of the development will be built to Part L 2021 Building Regulations and will provide a >31% improvement over Part L 2013. These standards will be achieved through improved fabric standards combined with the use of solar PV.

7.10. To accommodate the future shift to electric vehicle transportation, all dwellings will be provided with Electric Vehicle Charging Points.

NEWHAVEN ROAD
WYCOMBE ROAD
FEUCHARS CLOSE
Shelter
Shelter
Rose Tree Farm
PH1
PLAY AREA
Birch
Birch
Birch

PLAY ITEMS LIST

Equipment (Proludic Ltd)

1. Kenoje Multiplay Unit	Ref: J5614A
2. Metal Pod Swing	Ref: J441A
3. Combination Swings Metal	Ref: J473A
4. Spinning Bowl	Ref: J2411A
5. Low Platform Roundabout	Ref: J2404A
6. Duo Springer	Ref: J827A

Natural Play Elements (Proludic Ltd)

A. Fallen Log
B. Play Boulder
C. Play Mounds - Grass mounds to 1:3 slopes, max height of 0.5m

Ancillaries

7. Chaumont Bench	Ref: RBA8
8. Derby Standard Bin 120 ltr black	Ref: UKBX452560-s
9. A2 Sign 2x posts & Plate	Ref: UKA2PP-2P
10. 62LM 1m high Bowtop Fence Powdercoated Green	Ref: UKN1002
11. Prosafe Gate 1m high ppc yellow	Ref: UKN1101
12 Prosafe Combination Gate 1m high ppc yellow	Ref: UKN1104

Safety Surfacing
Area to be surfaced with 151m² grassmat as shown beneath each play item.

Miscellaneous
Subject to full site survey from the supplier/manufacturer

Based on a flat fully established grass site.

Proposed Grassmat Safer surfacing is based on a fully established grass site (including a minimum of 150mm of good quality soil and turf).

Fencing will be made up from standard straight lengths and installed faceted.

PLAY AREAS AND EQUIPMENT

1.1. **Play surfaces**
1.1.1. Regular checking of rubber safety matting to ensure that it is fixed securely with no humps or trip hazards. Provide extra pegs if necessary.
1.1.2. Where required, replace any displaced matting and top up with new soil and seed to match existing as necessary.
1.1.3. Remove leaves, litter, debris and other objects from the play area.

1.2. **Play equipment**
1.2.1. Regular visual checking of all specialised play equipment and non-prescriptive play elements (including natural features such as boulders and logs etc).
1.2.2. If required, RoSPA should provide inspections to ensure approved safety of play equipment and spaces in line with recommended guidance for the prevention of accidents.

1.3. **Defects**
1.3.1. Where defects occur, areas are to be cordoned off immediately to ensure safety, with repairs / replacement undertaken at the earliest opportunity using materials to match those originally specified. Manufacturer's guidance should be followed for specific equipment.

GENERAL NOTES

1. Following completion a RoSPA inspection will be carried out to ensure safety of the scheme in accordance with recommended guidance for the prevention of accidents.

2. Weekly visual checking of all play equipment and tightening/adjustments to fixings and fittings in accordance with manufacturer's instructions. Where defects occur, areas are to be immediately fenced off and repairs are to be made at the earliest opportunity.

FOOTBALL PITCH

Equipment

13. Bespoke fabricated steel dugout

Miscellaneous
Subject to full site survey from the supplier/manufacturer

Dugout to be bolted insitu to concrete base in line with manufacturers recommendations

Pitch markings shown to U11-U12 (9v9) dimensions in accordance with The FA Guide to Pitch and Goalpost Dimensions

POS 7 SPORTS PITCH / PLAY AREA

FOOTBALL PITCH

NEWHOUSE FARM

Rose Tree Farm

(PH)

139 No. Car bet

330 No. Bar bet

1 No. Ame lam

1 No. Ame arb R H

1 No. Ame arb L H

1 No. Bet uti J

1 No. Sor hup

1 No. Bet pen

2 No. Bet pen

2 No. Ame arb R H

2 No. Ame arb L H

3 No. Pot fru A
4 No. Car ela A

5 No. Euo for B 30%
5 No. Heu mic P 30%
7 No. Ski jap R 40%

6 No. Euo for B 30%
6 No. Heu mic P 30%
7 No. Ski jap R 40%

9 No. Car ela A

11 No. Car ela A

8 No. Euo for B 30%
8 No. Heu mic P 30%
10 No. Ski jap R 40%

14 No. Pru lau O L 40%
14 No. Ski con K 40%
7 No. Tia cor 20%

4 No. Euo for B 30%
4 No. Heu mic P 30%
6 No. Ski jap R 40%

6 No. Pru lau O L 40%
7 No. Ski con K G 40%
4 No. Tia cor 20%

7 No. Pru lau O L 40%
7 No. Ski con K G 40%
4 No. Tia cor 20%

14 No. Pho fra L R R
10 No. Euo for B 30%
3 No. Heu mic P 30%
6 No. Ski jap R 40%

10 No. Heb alb 'R E'

6 No. Pru lau O L 40%
8 No. Ski con K G 40%
9 No. Tia cor 20%

Ornamental flowering shrub mix
6 No. Cor ser F 20%
10 No. Euo ass 20%
5 No. Eug lem R 10%
6 No. Mis sin F O 20%
5 No. Ros P F C 15%
9 No. Sal off P 15%

Ornamental flowering shrub mix
12 No. Cor ser F 20%
12 No. Euo ass 20%
10 No. Mis sin F O 10%
12 No. Mis sin F O 20%
8 No. Ros P F C 15%
9 No. Sal off P 15%

Ornamental flowering shrub mix
10 No. Cor ser F 20%
10 No. Euo ass 20%
10 No. Mis sin F O 10%
10 No. Mis sin F O 20%
8 No. Ros P F C 15%
9 No. Sal off P 15%
1 No. Phy ser T
39 No. Pot fru A

Ornamental flowering shrub mix
6 No. Cor ser F 20%
10 No. Euo ass 20%
5 No. Eug lem R 10%
6 No. Mis sin F O 20%
5 No. Ros P F C 15%
5 No. Sal off P 15%

Grass & Perennial Mix
8 No. Aca mol 15%
13 No. Cal acu K F 25%
11 No. Cor sef P 20%
8 No. Leu sup W S 15%
3 No. Mon C S 15%
6 No. Rud ful sul G 10%

Grass & Perennial Mix
8 No. Aca mol 15%
5 No. Cal acu K F 25%
5 No. Cor sef P 20%
5 No. Leu sup W S 15%
4 No. Mon C S 15%
3 No. Rud ful sul G 10%

Grass & Perennial Mix
4 No. Aca mol 15%
5 No. Cal acu K F 25%
5 No. Cor sef P 20%
4 No. Leu sup W S 15%
4 No. Mon C S 15%
3 No. Rud ful sul G 10%

Grass & Perennial Mix
3 No. Aca mol 15%
5 No. Cal acu K F 25%
4 No. Cor sef P 20%
3 No. Leu sup W S 15%
3 No. Mon C S 15%
2 No. Rud ful sul G 10%

Grass & Perennial Mix
8 No. Aca mol 15%
13 No. Cal acu K F 25%
11 No. Cor sef P 20%
8 No. Leu sup W S 15%
3 No. Mon C S 15%
6 No. Rud ful sul G 10%

Grass & Perennial Mix
8 No. Aca mol 15%
5 No. Cal acu K F 25%
5 No. Cor sef P 20%
4 No. Leu sup W S 15%
4 No. Mon C S 15%
3 No. Rud ful sul G 10%

Grass & Perennial Mix
4 No. Aca mol 15%
5 No. Cal acu K F 25%
5 No. Cor sef P 20%
4 No. Leu sup W S 15%
4 No. Mon C S 15%
3 No. Rud ful sul G 10%

Grass & Perennial Mix
8 No. Aca mol 15%
11 No. Cal acu K F 25%
11 No. Cor sef P 20%
8 No. Leu sup W S 15%
3 No. Mon C S 15%
6 No. Rud ful sul G 10%

Grass & Perennial Mix
8 No. Aca mol 15%
13

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all dimensions to be checked on site and landscape architect notified of any discrepancies prior to commencement.
do not scale.

Notes:

1. This drawing is based on Hopkins Homes external works layout ref External Works Layout V 12 and should be read in conjunction with all other relevant drawings and specification submitted as part of this application.
2. For details of hard surface construction and boundary treatments refer to External Works Layout V 12
3. For details of existing and proposed external levels and drainage refer to Xref Drainage dwg. Do not scale from this drawing.
4. Any discrepancies noted on this drawing are to be reported to **IDP** for clarification prior to construction.
5. The contractor shall be aware of proximity to underground services, overhead cables, buildings and boundaries prior to planting operations.
6. All landscape proposals are to be referred to a structural engineer during foundation design.

- Ornamental shrubs 450mm;
- native shrubs 300mm;
- seeded grass 150mm;
- wildflower grass 50mm, or directly into existing ground;
- tree pits to be excavated to at least twice the diameter of the root spread and 1.5 times the depth of the roots to be planted.

Cultivation

8. Planting outside the usual October-March dormant season shall be pursued by approval only. If agreed all bare root plants shall be substituted with container grown stock, with additional establishment watering
9. Plants shall be bedded in random fashion to avoid formal regimented lines at densities indicated in the schedule, except for specimens, which are to planted in locations shown on the drawing. For mixes: shrubs should be planted in blocks, perennials & grasses should be planted in groups of 4 to 6. Please note: taller plant species to be planted to the rear with lower species to the front.
10. All planting should be watered in to field capacity immediately after planting and mulched with minimum of 50mm depth of medium grade crushed mulch. Where necessary, plants to be protected with rabbit fence and/or individual rabbit guard securely fixed to timber stakes.

Trees & Foundations

11. All trees to be supplied, planted and established in accordance with BS 8545. Trees adjacent to buildings and services shall include root barriers where necessary and should be planted in positions as indicated on the drawings.
12. All foundation designs provided by the architect/engineer must consider the effect of existing trees, and the proposed landscape scheme in accordance with the NHBC Standards. Every effort has been made within the design to follow advice in Chapter 4.2 of the Standards, however landscape proposals should be checked by a structural engineer for checks and any conflicts made known to the Landscape Architect for necessary changes.
13. The contractor is responsible for checking locations of all existing and proposed services, and shall advise the Landscape Architect if there are any conflicts.
14. Trees within hardstanding or highways visibility splays shall be clear stem to 2m high unless specified otherwise.

Maintenance

15. Management operations for the site shall be carried out as detailed in the agreed maintenance schedules at regular intervals, in accordance with any agreed Landscape Management Plan.
16. Any tree or plant which, within a period of 5 years from the implementation, dies, is removed or becomes seriously damaged or diseased, shall be replaced in the next planting season with another of a similar size and species unless otherwise agreed with the Local Planning Authority.
17. Please refer to LA5530-001for Full Plant Schedule.Refer to LA5530-002 for play area details

- Site Boundary
- Existing grass retained
- Existing trees/vegetation to be retained & protected during construction (in accordance with BS5837:2012)
- Proposed specimen tree
- Proposed specimen shrubs
- Proposed hedgerows
- Proposed ornamental shrubs
- Marginal planting
- Bulbs planting within lawn areas
- Amenity turf grass to house frontages (Rolawn Meadow turf or similar approved)
- Strong lawn mix: Emorsgate EG2DC strong lawn grass mixture with 5mm/ sowing rate 25g m2
- Proposed grass & wildflower mix: Emorsgate EM10 Tussock mixture, sowing rate 4g m2.
- Proposed wetland edge mix: Emorsgate EP1 Pond edge mixture, sowing rate 4g m2.
- Areas of gravel
- Hoggin path: with timber edging or similar approved.
- Park Railings: 1.8m high vertical bar metal railings with round finials (Hunsbar by Alpha Rail or similar approved)
- Knee Railings: 0.8m high timber diamond rails with uprights at 2m centres (Jacksons fencing or similar approved) 3m wide maintenance access gates to each space

rev.	date:	comment(s):	drawn:	check:
	00.00.00		XX	XX
	00.00.00		XX	XX
A	02.09.22	Updated to latest layout, drainage and LPA comments	EC	KC

ARCHITECTS
URBAN DESIGNERS
PROJECT MANAGERS
LANDSCAPE ARCHITECTS
WE ARE IDP.

IDP LANDSCAPE

client: Vistry Group

job: Rudloe Drive, Quedgeley

title: Soft Landscape Proposals 2 of 3

drawn: EC date: May 2022

checked: KC scale @ a0: 1:250

job no: LA5530 drg no: 003 A

IDP GROUP 27 SPON STREET COVENTRY CV1 3BA
www.weareidp.com

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all dimensions to be checked on site and landscape architect notified of any discrepancies prior to commencement.
do not scale.

Notes:

1. This drawing is based on McBains external works layout ref 61841-MCB-ZZ-ZZ-DR-A-SK16-53-P1 and should be read in conjunction with all other relevant drawings and specification submitted as part of this application.
2. For details of hard surface construction and boundary treatments refer to McBains External Works Layout 61841-MCB-ZZ-ZZ-DR-A-SK16-53-P1
3. For details of existing and proposed external levels and drainage refer to engineers drawings. Do not scale from this drawing.
4. Any existing services noted on this drawing are to be reported to **IDP** for clarification prior to construction.
5. The contractor shall be aware of proximity to underground services, overhead cables, buildings and boundaries prior to planting operations.
6. All landscape proposals are to be referred to a structural engineer during foundation design.

- Ornamental shrubs 450mm;
- native shrubs 300mm;
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- wildflower grass 50mm, or directly into existing ground;
- tree pits to be excavated to at least twice the diameter of the root spread and 1.5 times the depth of the roots to be planted.

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17. Please refer to LA5530-001 for Full Plant Schedule. Refer to LA5530 for details of play area.

- Site Boundary
- Existing grass retained
- Existing trees/vegetation to be retained & protected during construction in accordance with BS5837:2012
- Proposed specimen tree
- Proposed specimen shrubs
- Proposed hedgerows
- Proposed ornamental shrubs
- Marginal planting
- Bulbs planting within lawn areas
- Amenity turf grass to house frontages Rowen Nicanthus turf or similar
- Strong lawn mix: Emorsgate EG22C strong lawn grass mixture with clover, sowing rate 25g /m2
- Proposed grass & wildflower mix: Emorsgate EM10 Tussock mixture, sowing rate 4g /m2
- Proposed wetland edge mix: Emorsgate EP1 Pond edge mixture, sowing rate 4g /m2
- Areas of gravel
- Hoggin path: with timber edging or similar approved
- Park Railings: 1.8m high vertical bar metal railings with round finials (Humber by Alpha Rail or similar approved)
- Knee Railings: 0.6m high timber diamond rails with uprights at 2m centres (Jacksons fencing or similar approved) 3m wide maintenance access gates to each space.

	00.00.00		XX	XX
	00.00.00		XX	XX
A	02.09.22	Updated to latest layout, drainage and LPA comments	EC	KC
rev.	date:	comment(s):	drawn:	check:

IDP
ARCHITECTS
URBAN DESIGNERS
PROJECT MANAGERS
LANDSCAPE ARCHITECTS
WE ARE IDP.

IDP LANDSCAPE

client: Vistry Group

job: Greshems Holt

title: Soft Landscape Proposals 3 of 3

drawn: EC date: May 2022

checked: KC scale @ a0: 1:250

job no: LA5530 drg no: 004 A

IDP GROUP 27 SPON STREET COVENTRY CV1 3BA
[redacted]
www.weareidp.com

scale 1:250 — 0 5 10 15 20 metres

N

Lead Local Flood Authority
Shire Hall
Gloucester
GL1 2TH

Rhiannon Murphy
Gloucester City Council
Planning
Shire Hall
Westgate Street
Gloucester
GL1 5TG

email: [redacted]

Please ask for: [redacted] Phone: 01452 427438

Our Ref: G/2022/050576

Your Ref: 22/00553/REM Date: 26th August 2022

Dear Rhiannon,

TOWN AND COUNTRY PLANNING ACT 1990 LEAD LOCAL FLOOD AUTHORITY RECOMMENDATION

LOCATION: Land North of Rudloe Drive Kingsway Gloucester

PROPOSED: Application for approval of reserved matters (access, appearance, layout, scale and landscaping) for the construction of 150 dwellings including public open space and infrastructure

Further information, a Technical Note dated 15/07/2022 has been submitted responding to the issues raised in my objection letter of 21st June.

The issues addressed are all suitably answered explaining the relationship of the drainage of this development to the overall drainage strategy for the development permitted under 09/00114/REM.

The LLFA has no further objection to this proposal.

Yours sincerely,

[redacted]

Sustainable Drainage Engineer

Notes:
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KEY:

Areas with major amendments when compared Site Layout P2 with Site Layout P1

FOR INFORMATION ONLY

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

WORKS

NURSERY

AVIONICS HOUSE

Drain

WYCOMBE ROAD

LEUCHARS CLOSE

ST MANGAN STREET

FERSFIELD GARDENS

DANCE STUDIO

AIR CADETS

Rose Tree Farm

Revision	Amendment	Date
SC/VS	VS	VS
Drawn by	Reviewed by	Approved by
61841	SEPT 2022	1:500 @ A0
MCB Number	Date Created	Scale

McBains

McBains Ltd
[redacted]

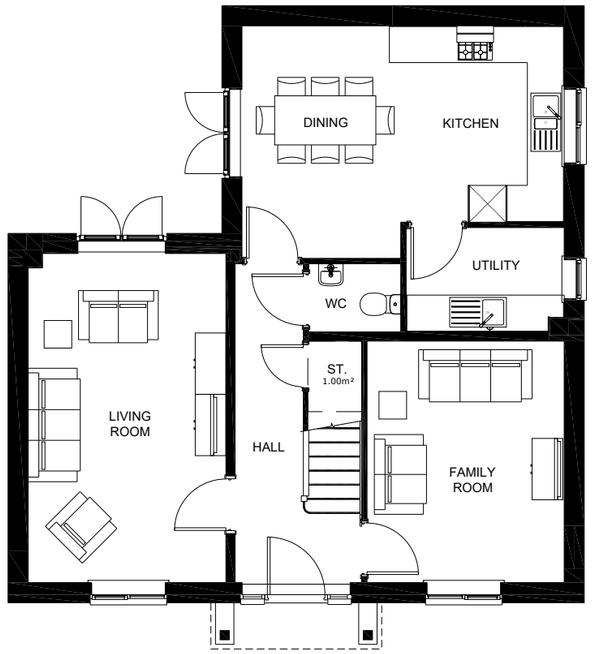
Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

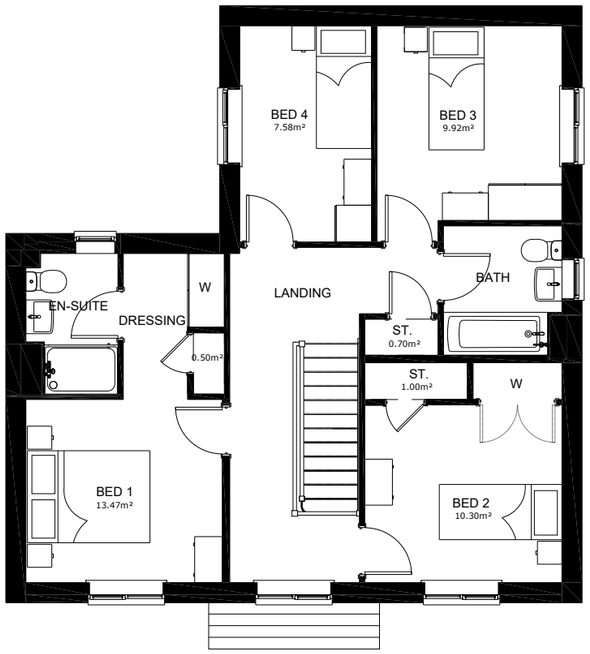
Drawing Title
SITE LAYOUT PLAN P2
COMPARISON/AMENDMENTS HIGHLIGHTED REGARDING SITE LAYOUT P1

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	00000		D5 - P0
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability Revision



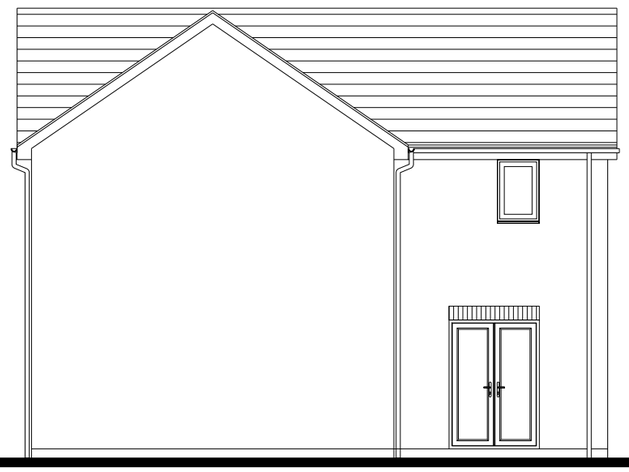
GROUND FLOOR PLAN



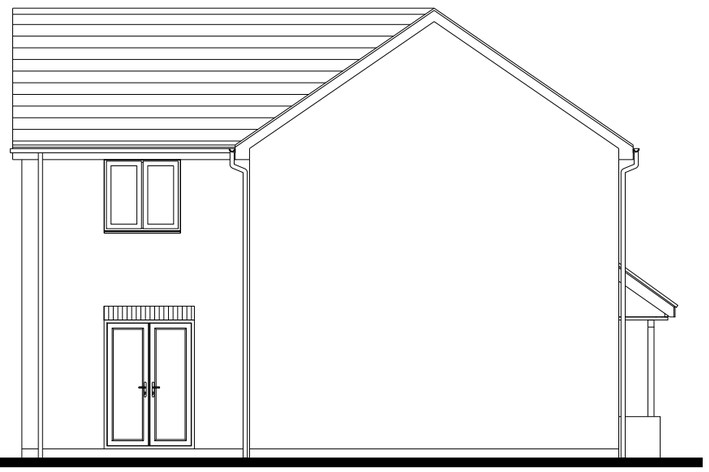
FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION

0 2M 10M
1M 5M

Notes:
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NOTE:
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* FOR WINDOWS DETAILS, REFER TO DRAWING:
RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains Ltd

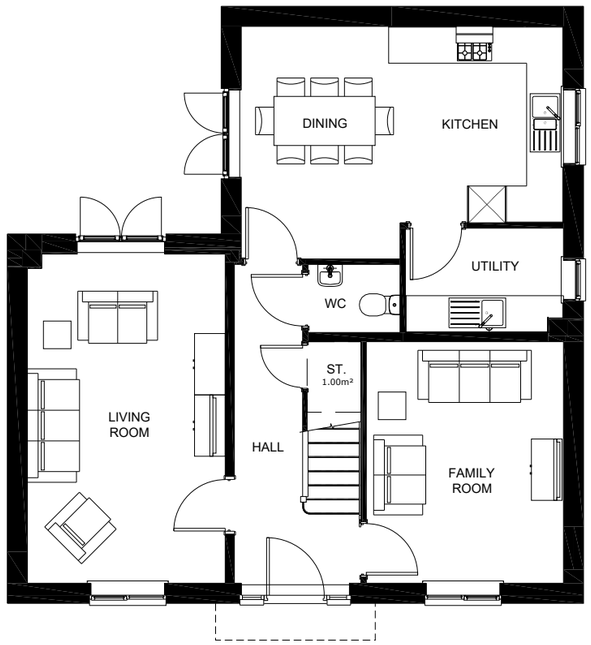
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

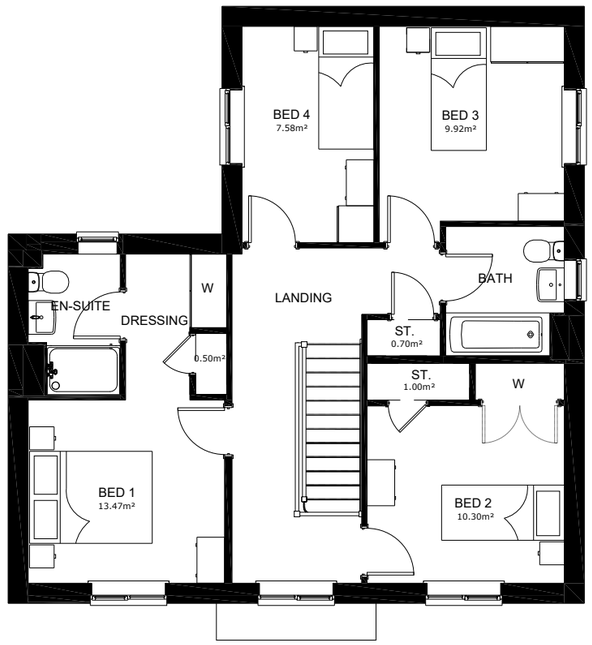
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
KNIGHTLEY
PLOTS --- as shown
PLOTS 105 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0105		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION

REAR ELEVATION

LEFT ELEVATION

0 2M 10M
1M 5M

Notes:
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Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains
McBains Ltd
[redacted]

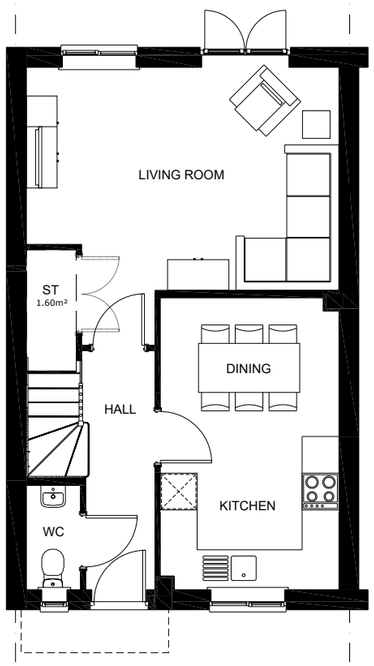
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

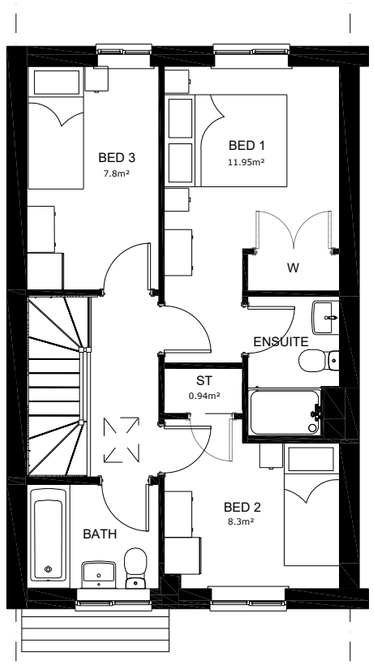
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
KNIGHTLEY
PLOTS 140 as shown
PLOTS --- handed

ARCHITECTURE

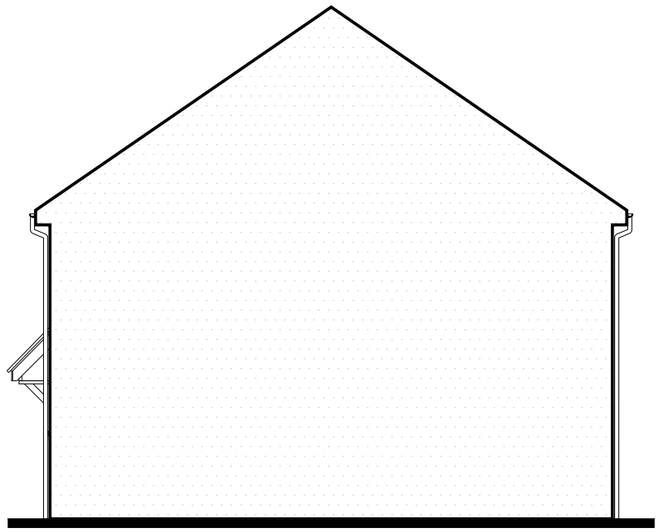
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0106		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN
(Mid terrace for plots 34,37,42,79,109,111,129)

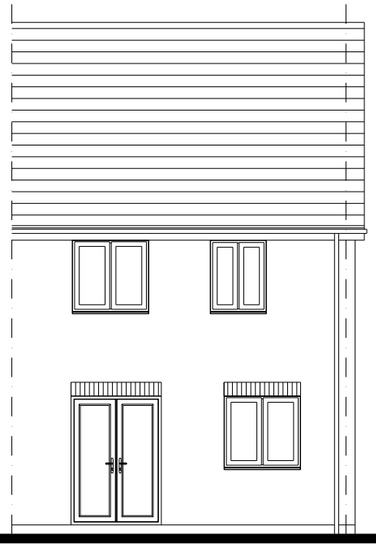


FIRST FLOOR PLAN

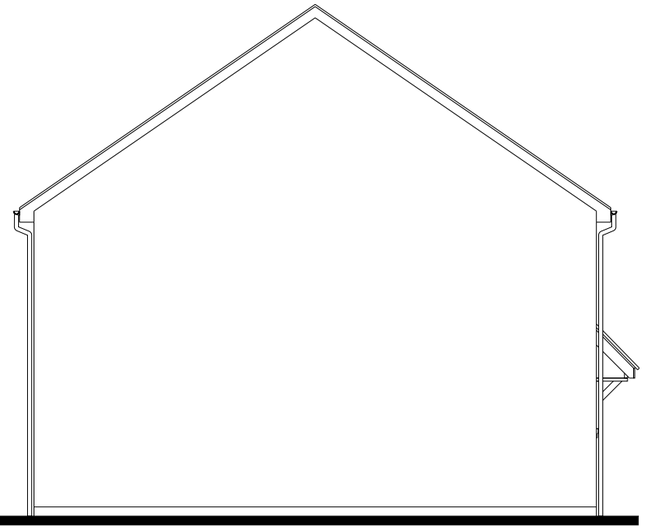


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS
REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains
McBains Ltd
[redacted]

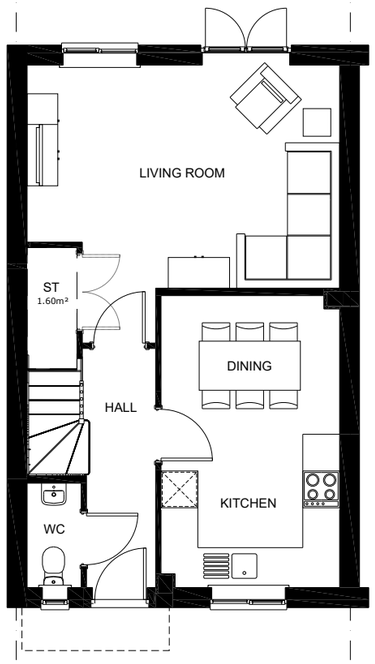
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

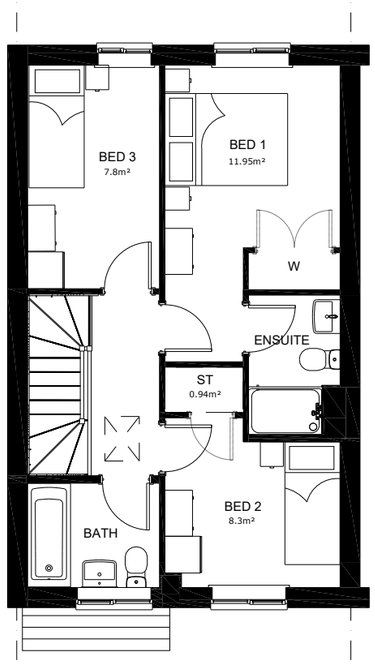
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ELMSLIE
PLOTS 34,35,36,37,38,41,42,43,49,79,80 as shown
PLOTS 62,109,111,129 handed

ARCHITECTURE

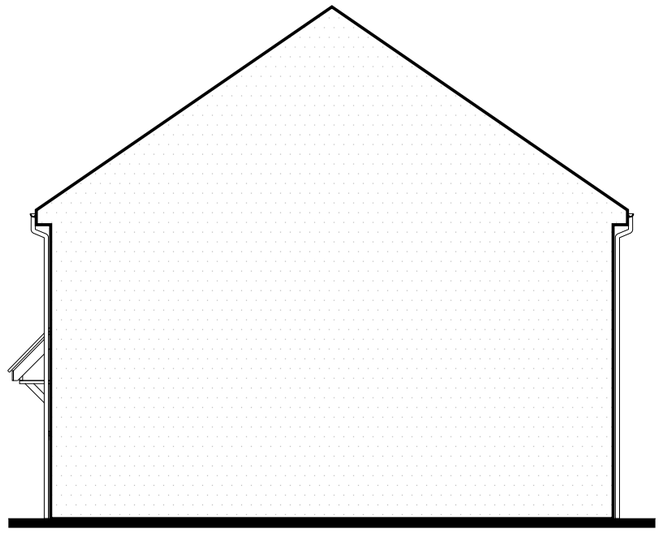
Drawing / Document Reference							Status
RDQUE	MCB	ZZ	ZZ	DR	A	0107	D5 - P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number	Suitability Revision



GROUND FLOOR PLAN
(Mid terrace for plots 46,93)

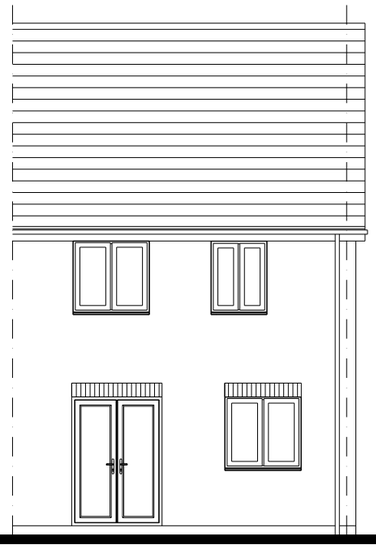


FIRST FLOOR PLAN

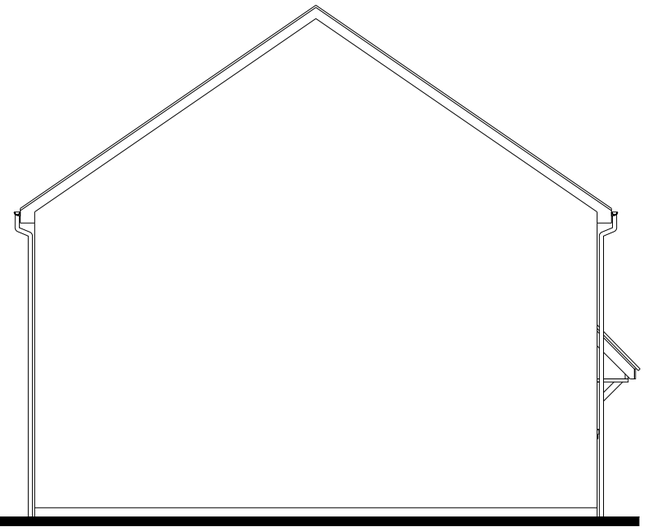


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS
REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains
McBains Ltd
[redacted]

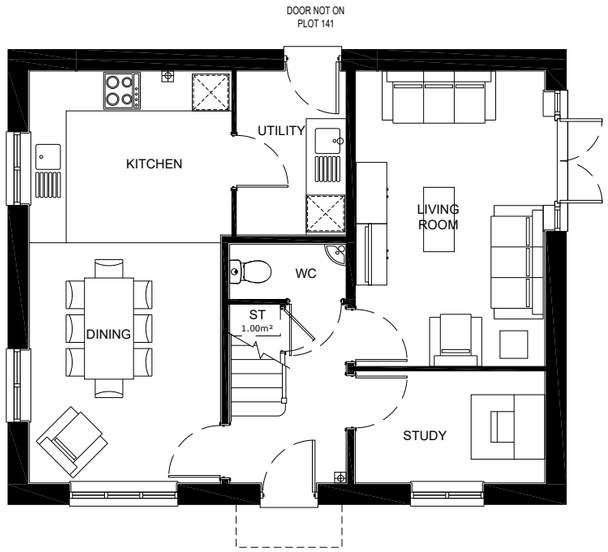
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

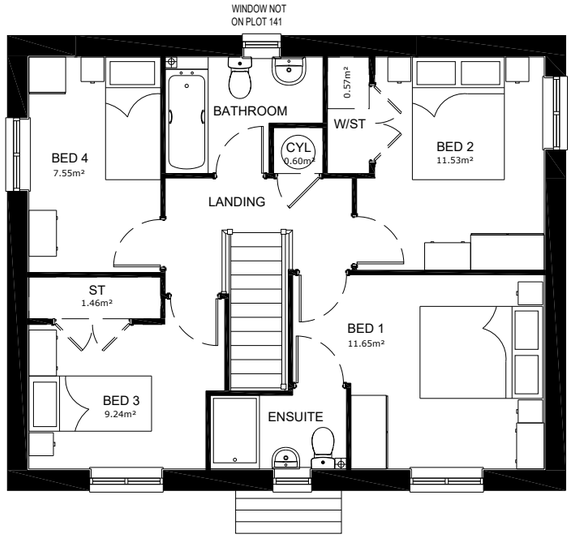
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ELMSLIE
PLOTS 46 as shown
PLOTS 45,93 handed

ARCHITECTURE

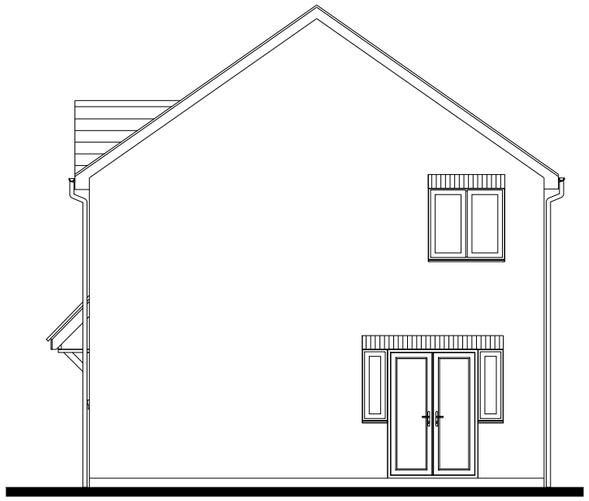
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0108		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

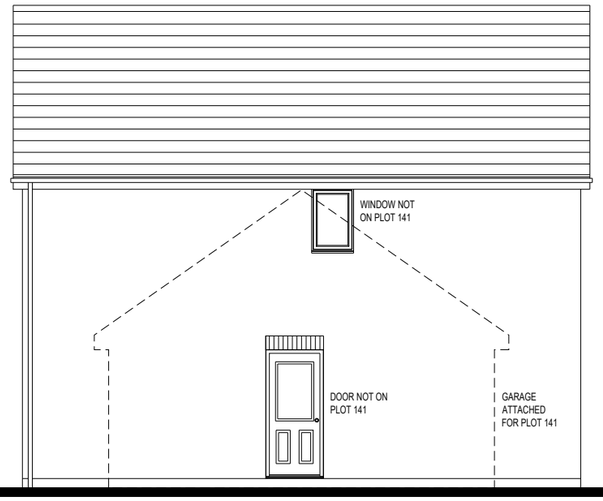


FIRST FLOOR PLAN



RIGHT ELEVATION

FRONT ELEVATION



REAR ELEVATION

LEFT ELEVATION

0 2M 10M
1M 5M

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Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains
McBains Ltd
[redacted]

Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
LEVERTON
PLOTS --- as shown
PLOTS 31,141 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0109		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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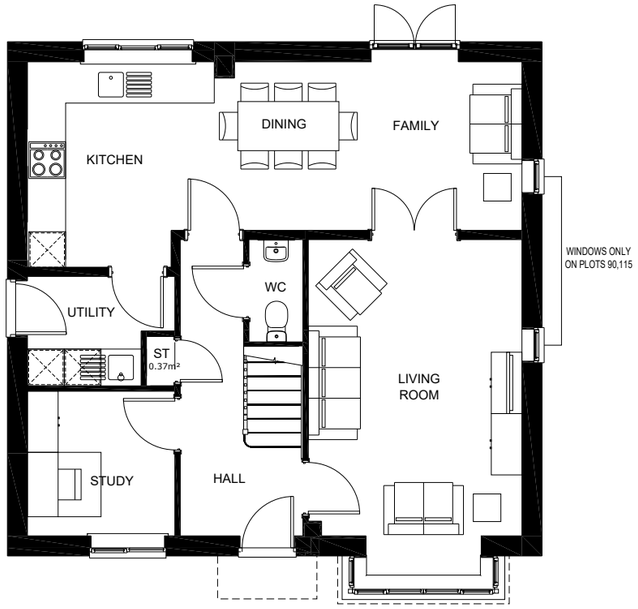
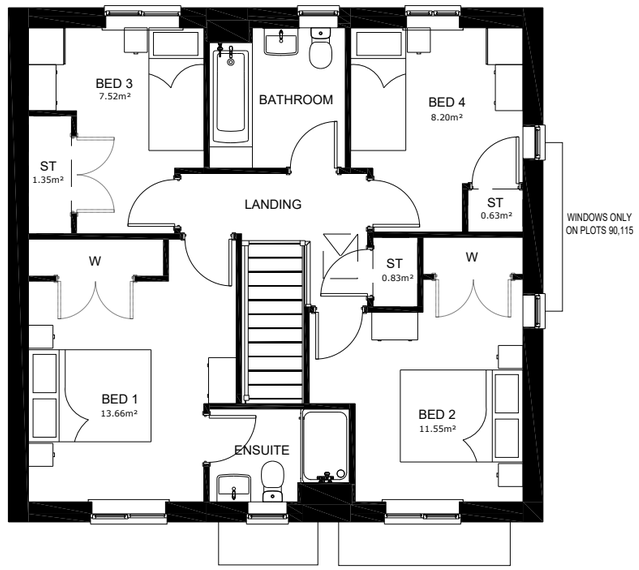
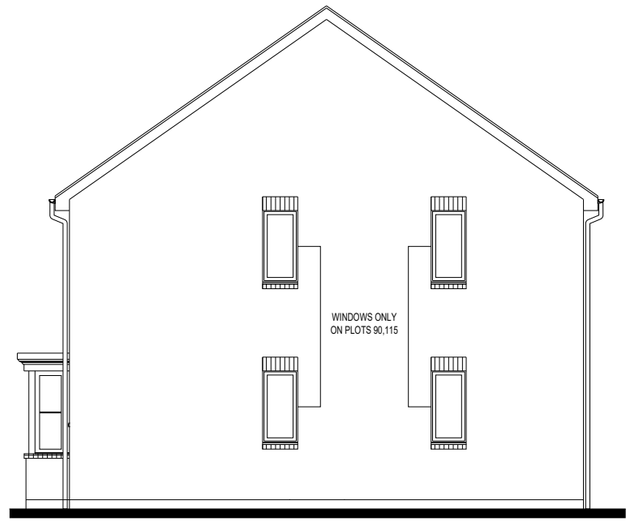


GROUND FLOOR PLAN

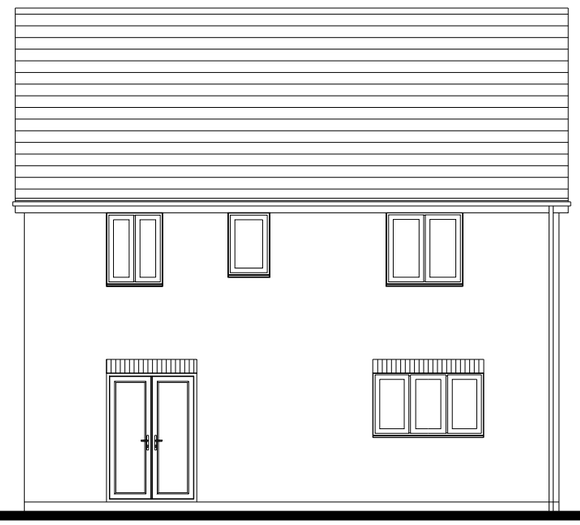


FIRST FLOOR PLAN

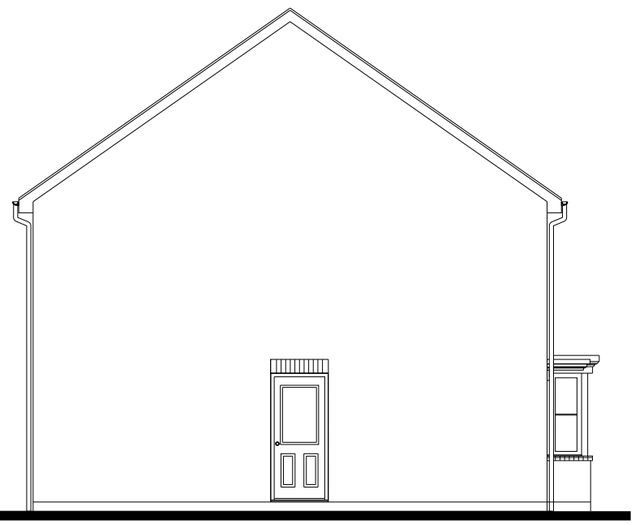


RIGHT ELEVATION

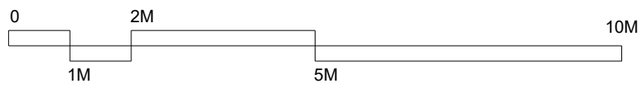
FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION



P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Revision	Amendment	Date
VS	EC/SC	P'OR
Drawn by	Reviewed by	Approved by
61841	MAY '22	1:100 @ A3
MCB Number	Date created	Scale @ A3

McBains

McBains Ltd
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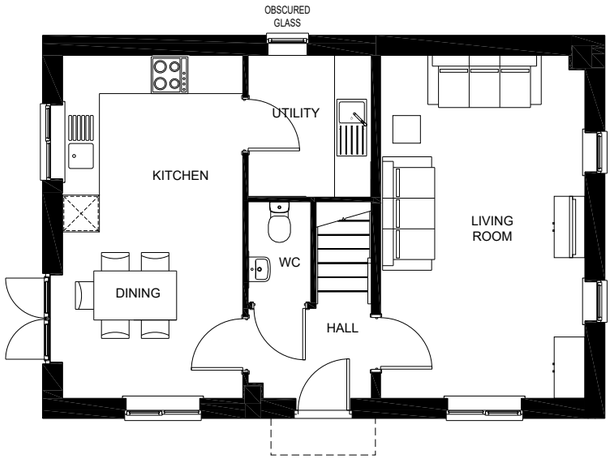
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

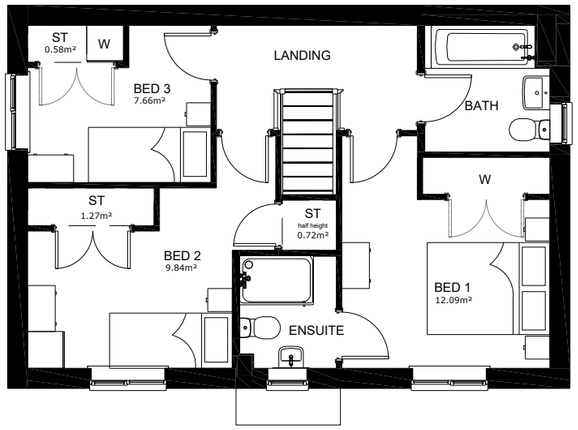
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
PEMBROKE
PLOTS 25,29,30,55,56,89,90,115 as shown
PLOTS 26,73,126,127 handed

ARCHITECTURE

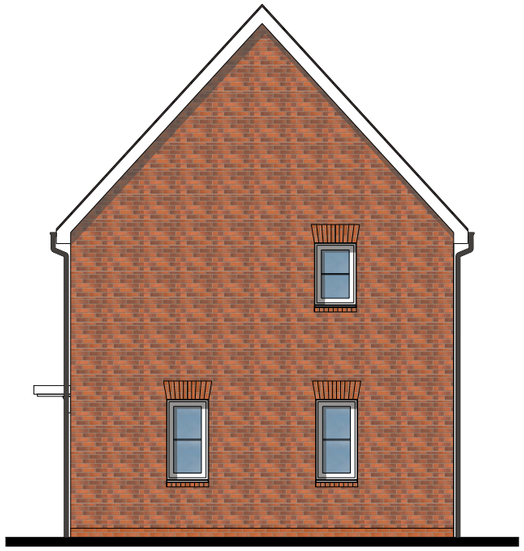
Drawing / Document Reference							Status
RDQUE	MCB	ZZ	ZZ	DR	A	0110	D5 - P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number	Suitability Revision



GROUND FLOOR PLAN

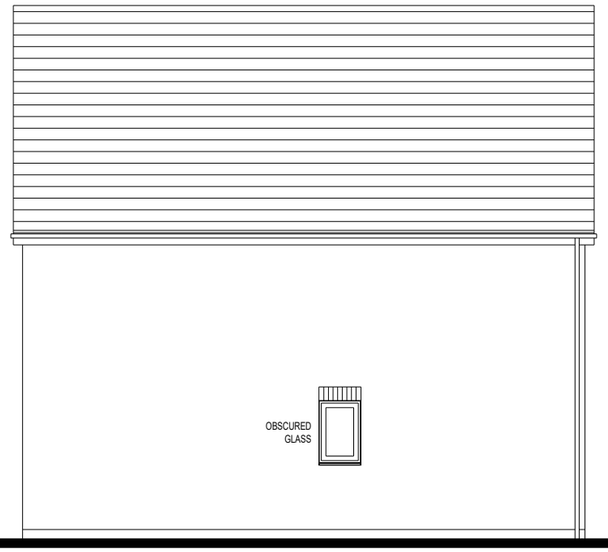


FIRST FLOOR PLAN

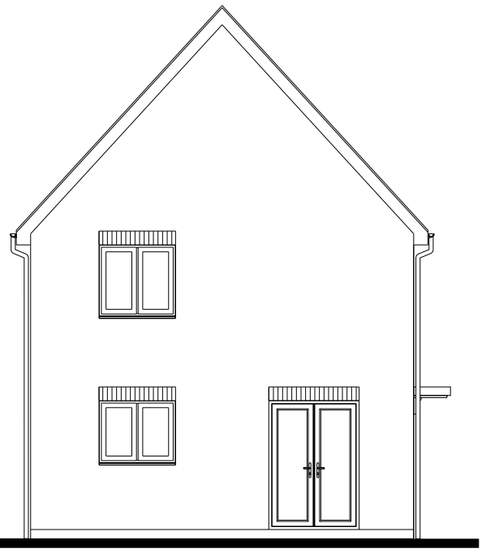


RIGHT ELEVATION

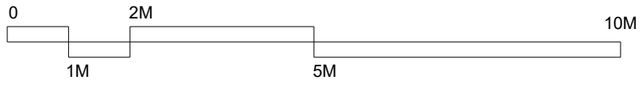
FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION



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Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains Ltd

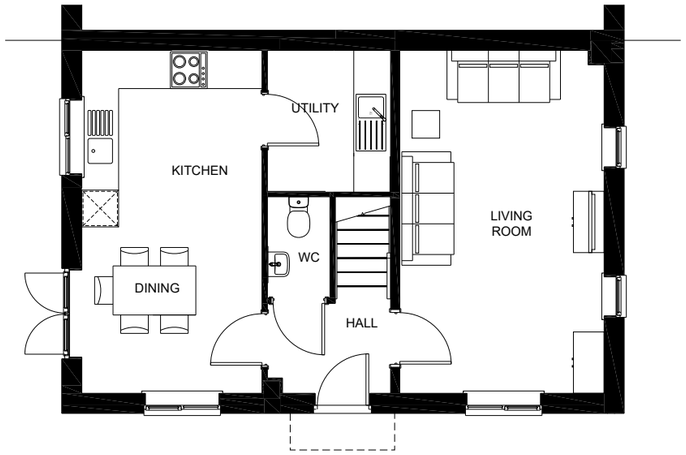
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

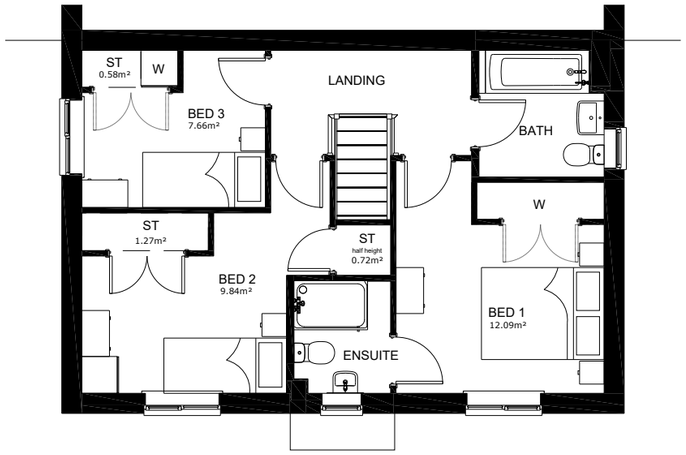
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
BECKET
PLOTS --- as shown
PLOTS 99 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0112		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



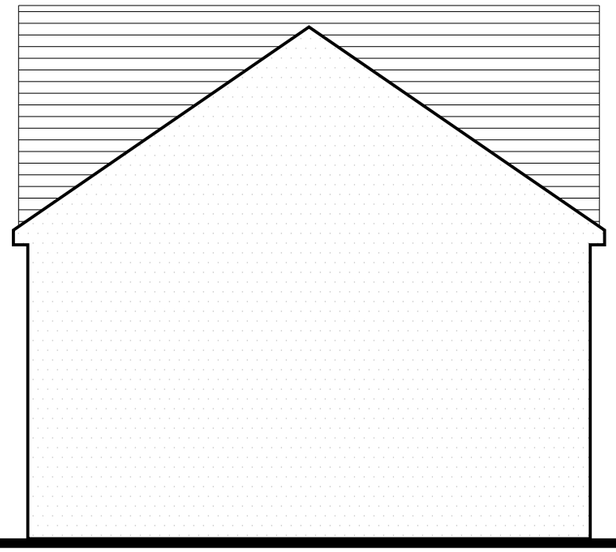
GROUND FLOOR PLAN



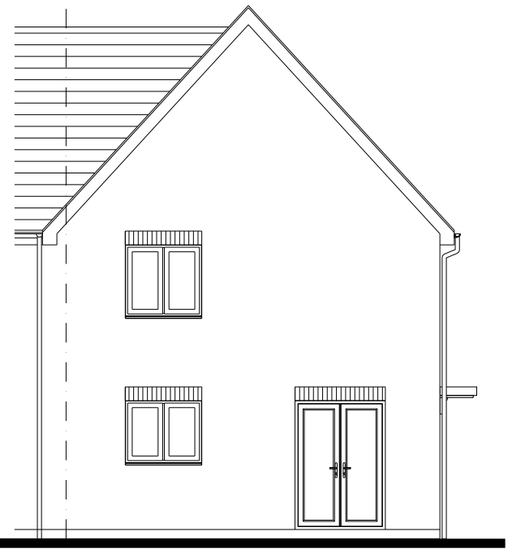
FIRST FLOOR PLAN

RIGHT ELEVATION

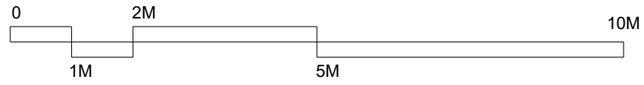
FRONT ELEVATION



SECTION/ REAR ELEVATION



LEFT ELEVATION



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Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains Ltd

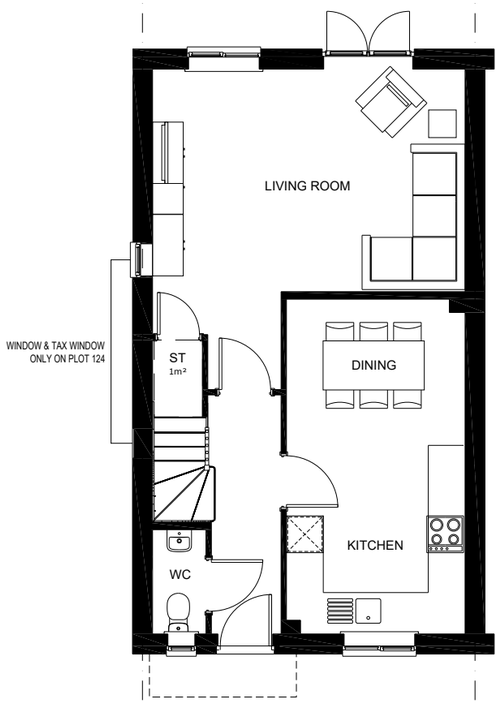
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

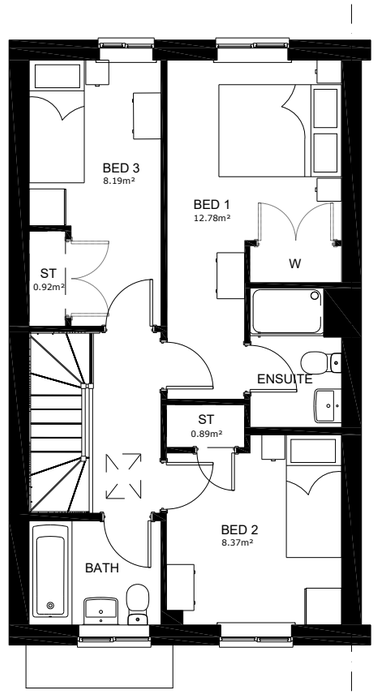
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
BECKET
PLOTS 63,112 as shown
PLOTS 48,108,128,143 handed

ARCHITECTURE

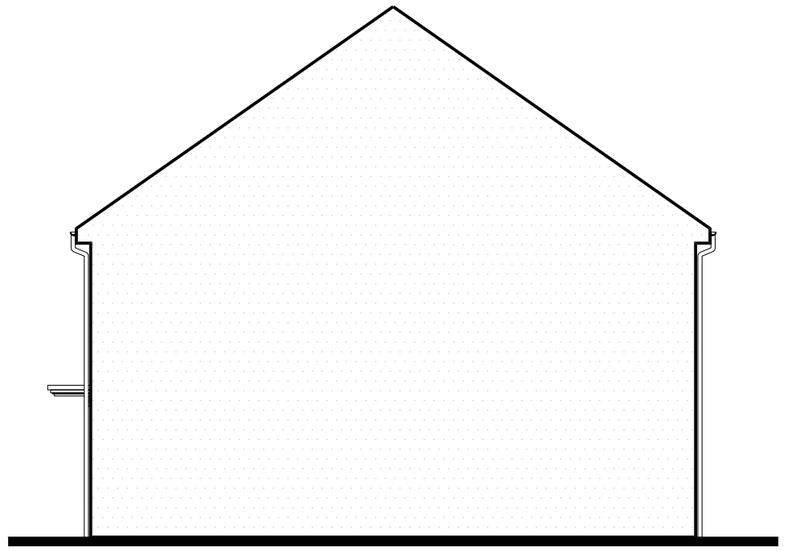
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0114		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

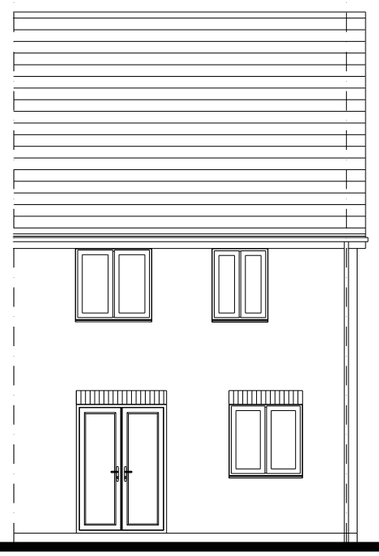


FIRST FLOOR PLAN

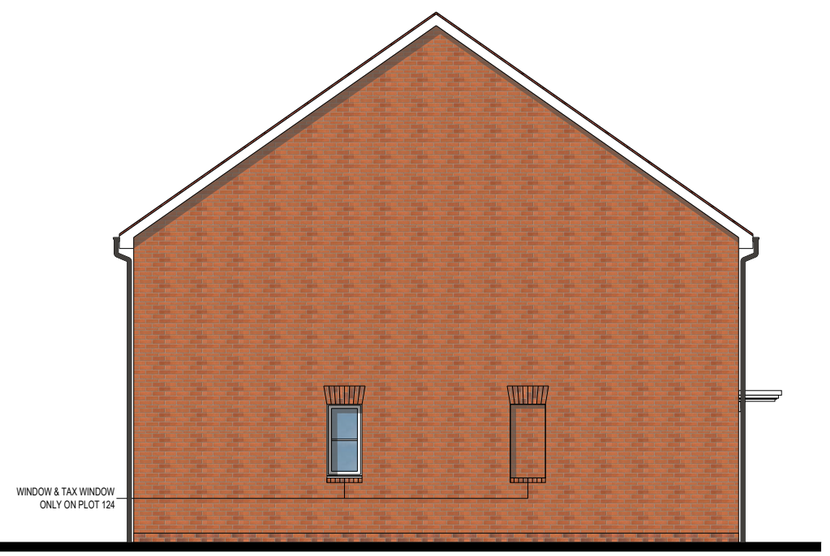


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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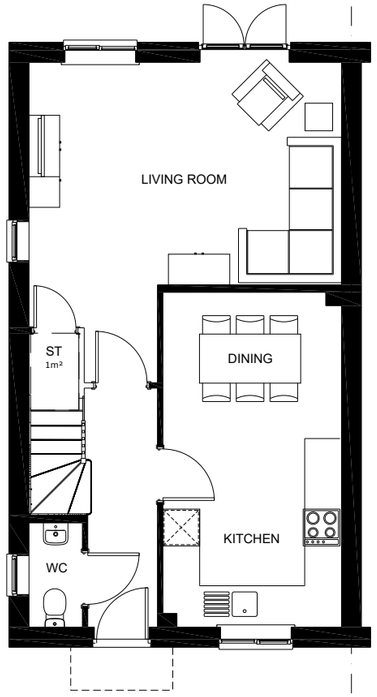
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

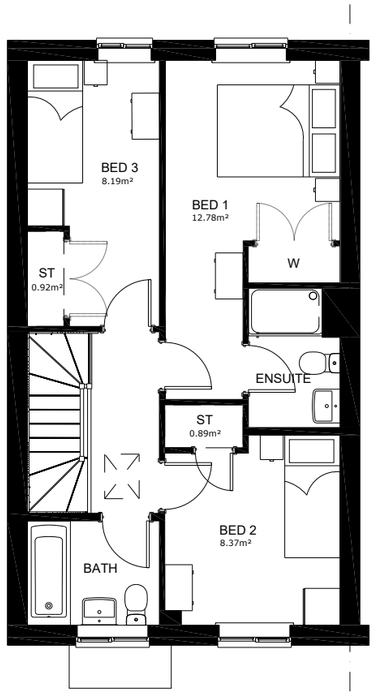
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALWIN
PLOTS 22,53,59,87,104,125,144 as shown
PLOTS 21,52,58,86,103,124 handed

ARCHITECTURE

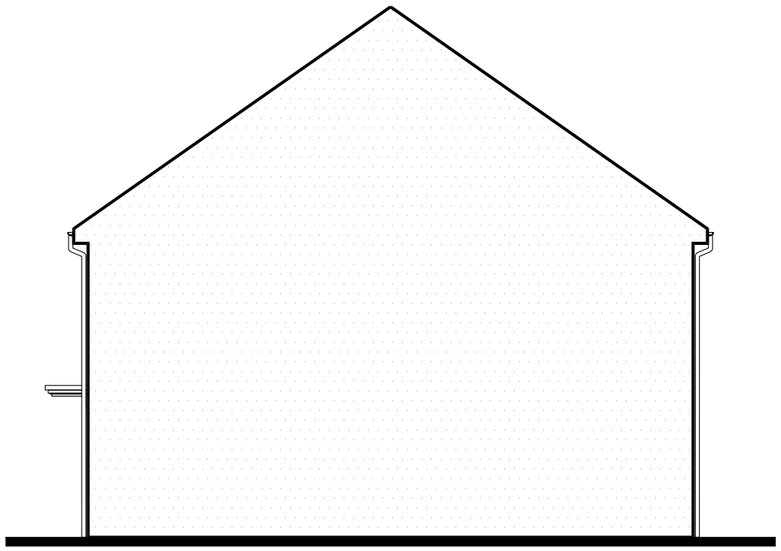
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0116		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

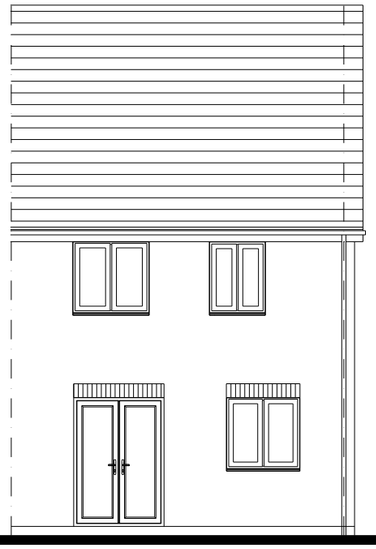


FIRST FLOOR PLAN

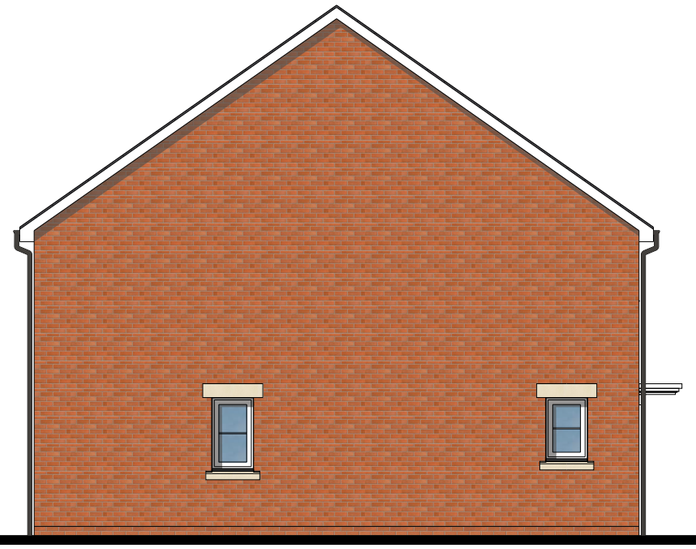


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains Ltd

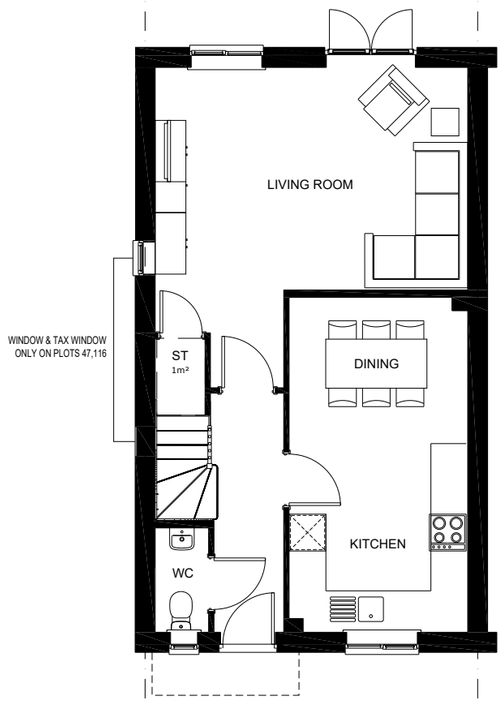
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

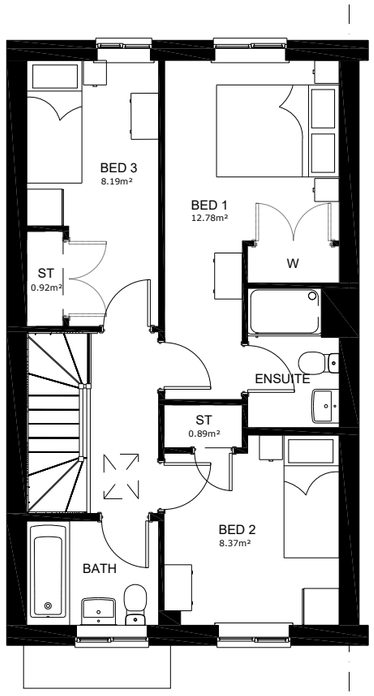
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALWIN
PLOTS 4,94,117 as shown
PLOTS --- handed

ARCHITECTURE

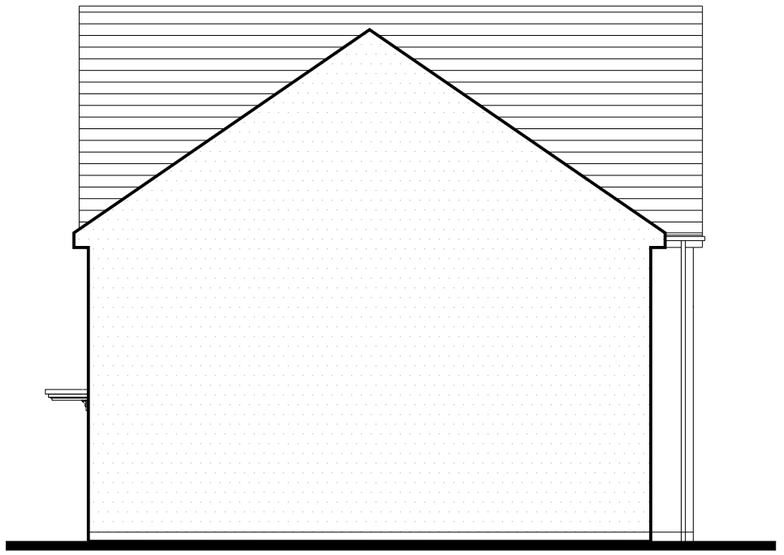
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0117		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECTION

FRONT ELEVATION

REAR ELEVATION

SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	02-09-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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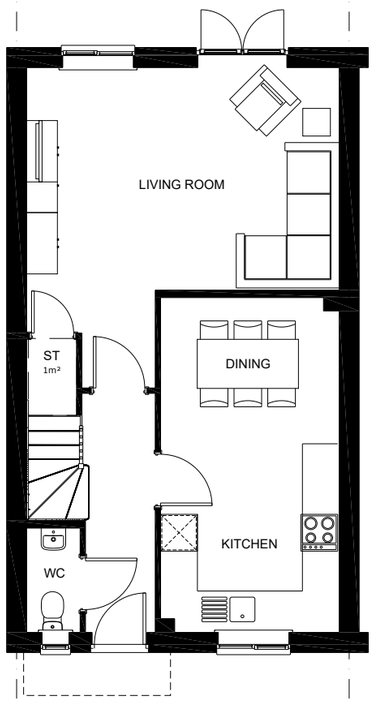
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

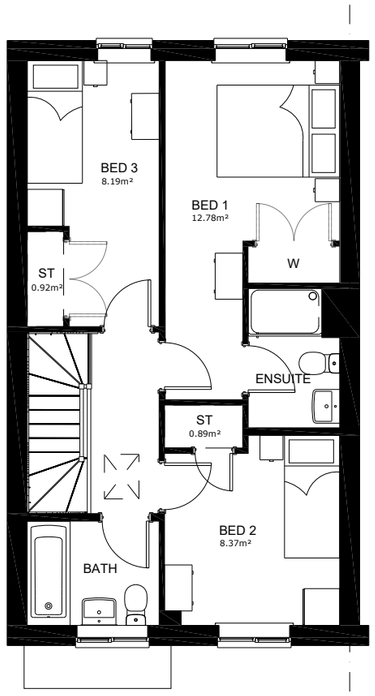
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALWIN
PLOTS 47 as shown
PLOTS 3,116 handed

ARCHITECTURE

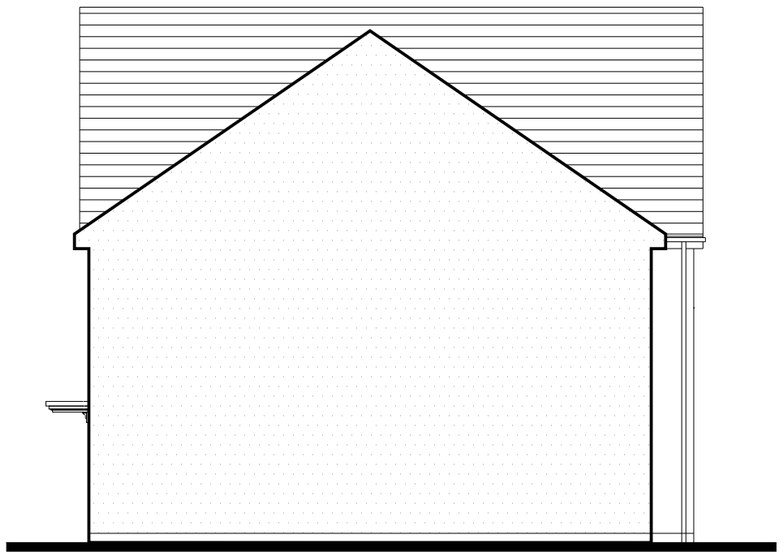
Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0118		D5 - P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability Revision



GROUND FLOOR PLAN

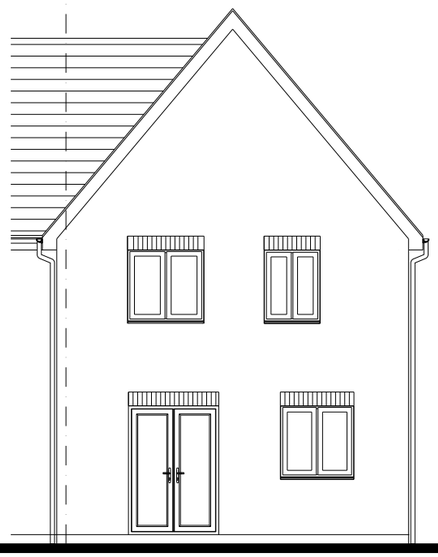


FIRST FLOOR PLAN

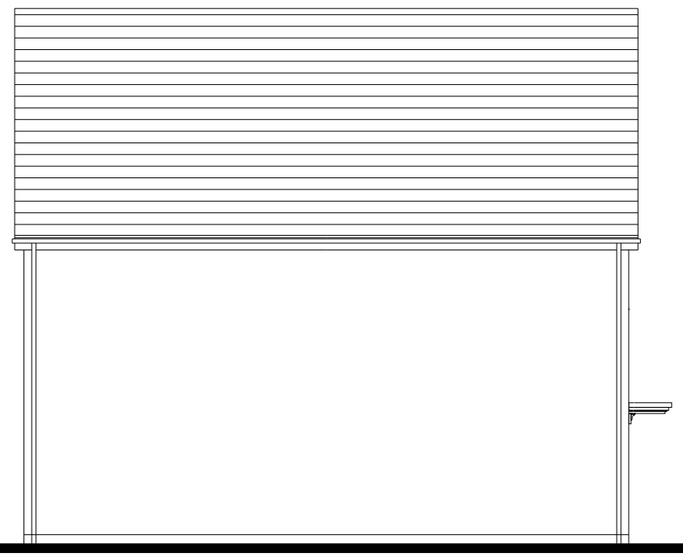


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALWIN
PLOTS 33,78,110,130,131 as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference	Status
RDQUE - MCB - ZZ - ZZ - DR - A - 0119	D5 - P2
Project Iden Originator Zone Level Type Discipline Number	Suitability Revision

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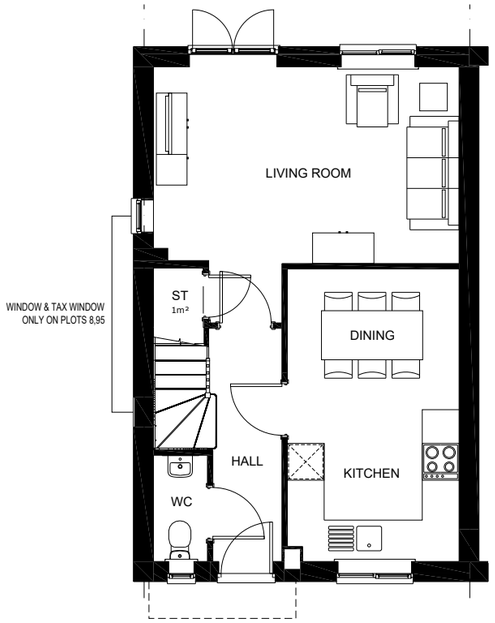
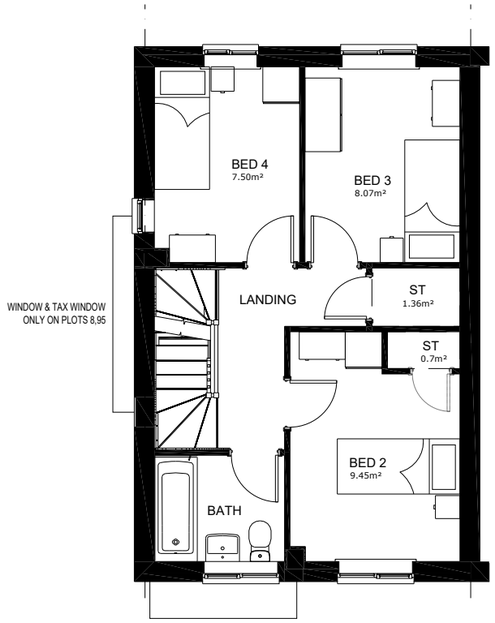
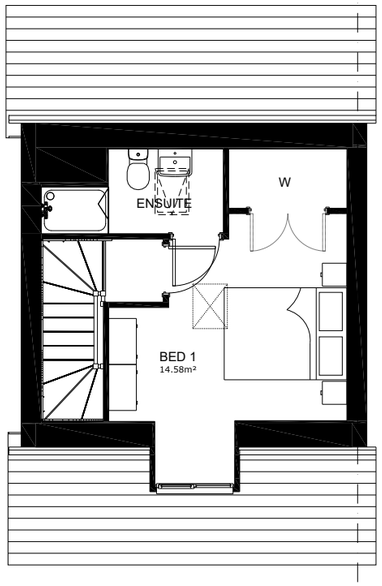


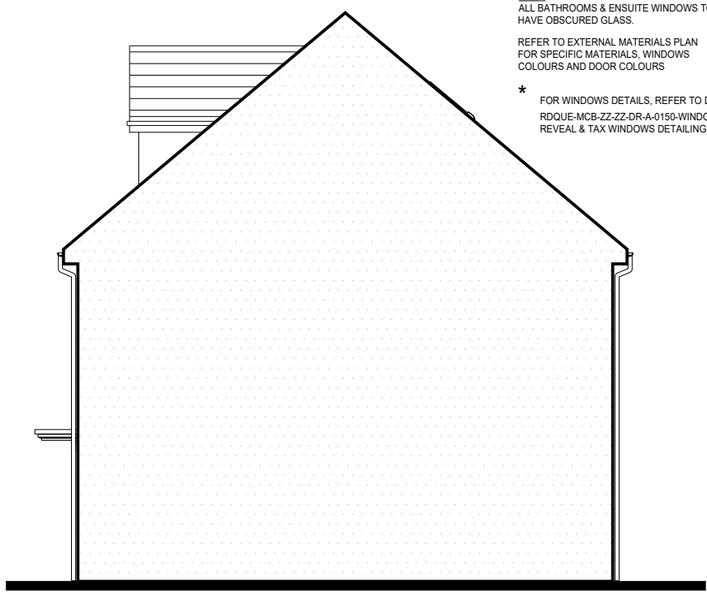
GROUND FLOOR PLAN
(Mid terrace for plots 7,101)



FIRST FLOOR PLAN

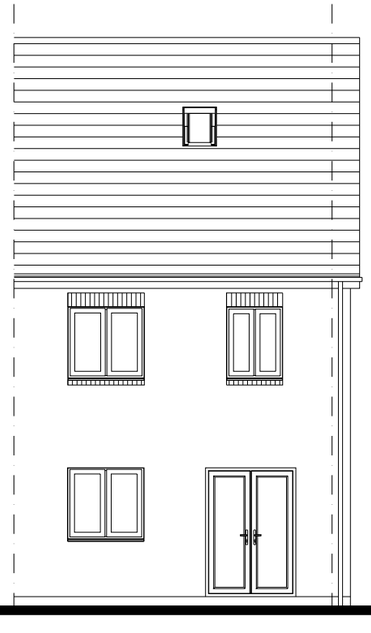


SECOND FLOOR PLAN

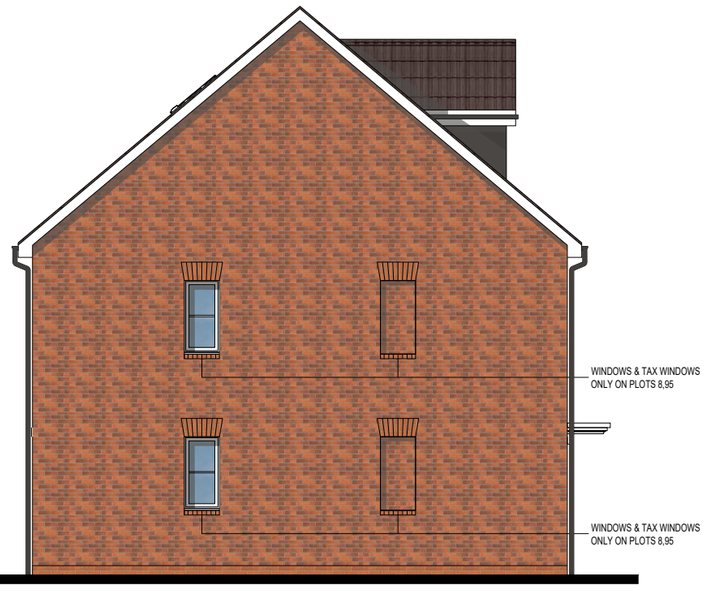


SECTION

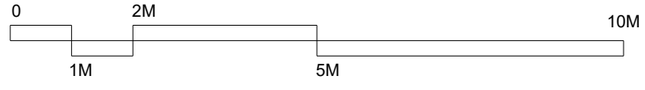
FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION



Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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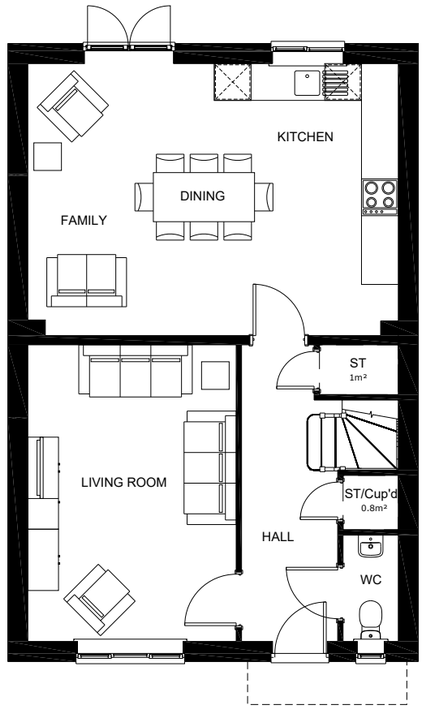
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

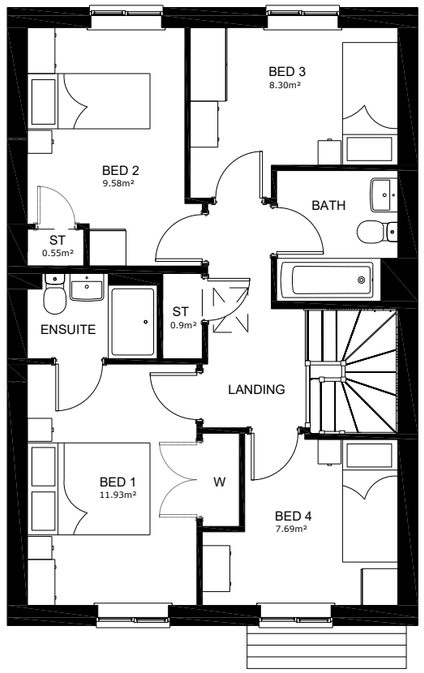
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALDRIDGE
PLOTS 6,7,8,19,40,51,61,83,85,96,100,101,102 as shown
PLOTS 18,39,50,60,82,84,95 handed

ARCHITECTURE

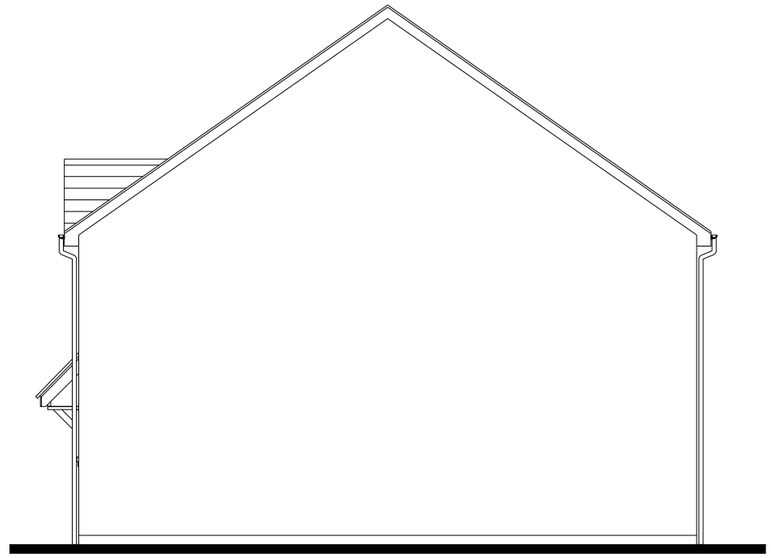
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0120		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

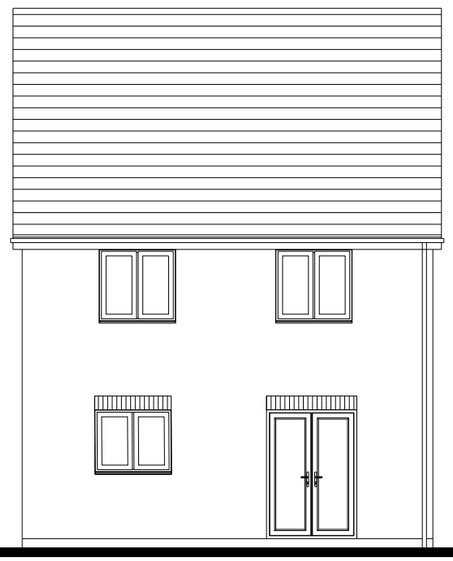


FIRST FLOOR PLAN

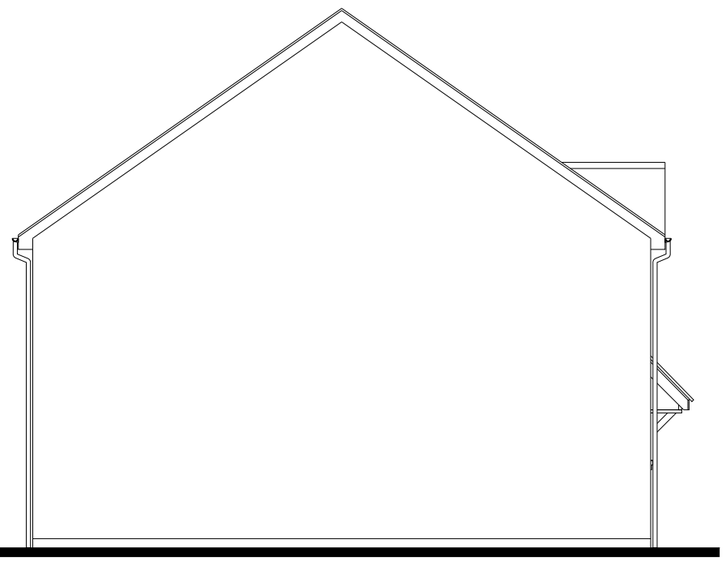


RIGHT SIDE ELEVATION

FRONT ELEVATION



REAR ELEVATION



LEFT SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS
REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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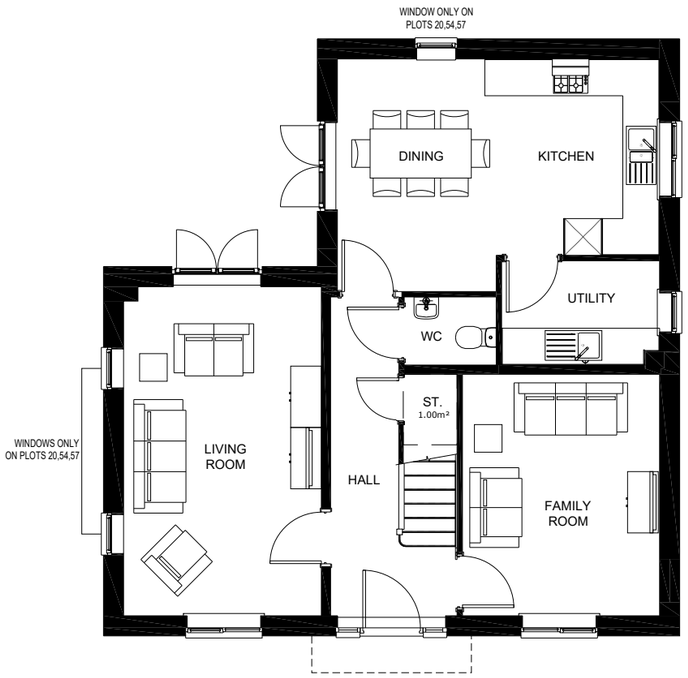
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

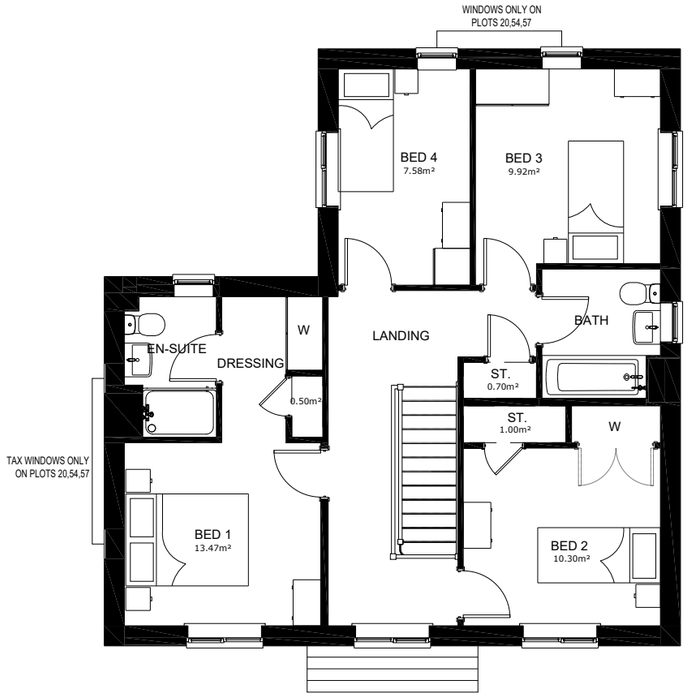
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
HARFORD
PLOTS 23,72,74,77 as shown
PLOTS 91 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0121		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



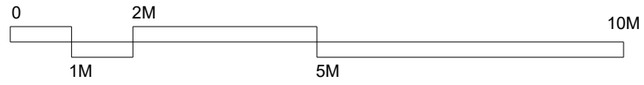
FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION

REAR ELEVATION

LEFT ELEVATION



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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P1	Issued for planning	22-05-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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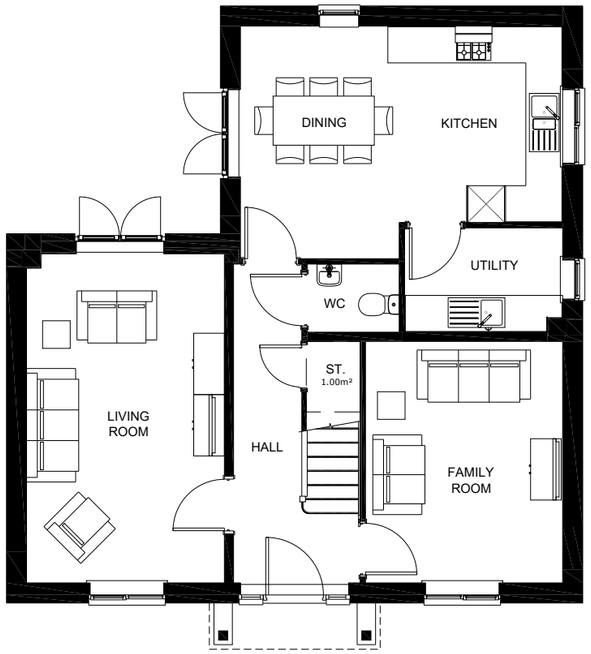
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

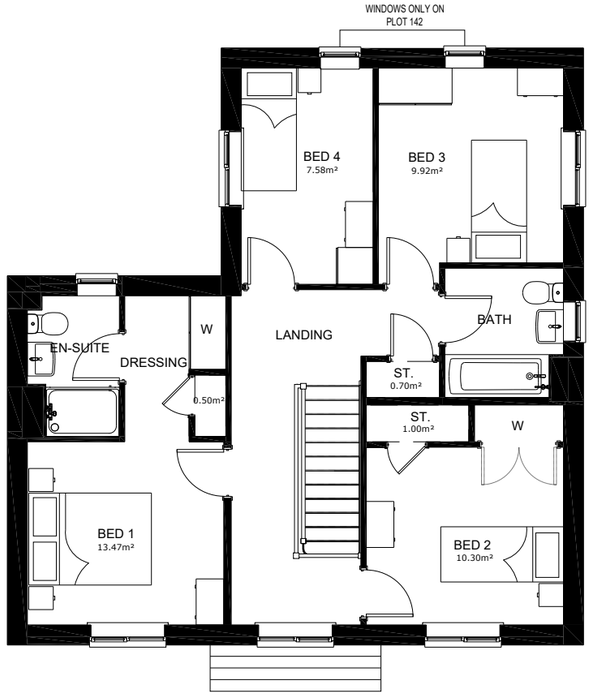
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
KNIGHTLEY
PLOTS 28,54 as shown
PLOTS 20,27,32,57 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0122		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



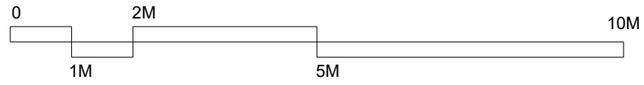
FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION

REAR ELEVATION

LEFT ELEVATION



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Revision	Amendment	Date
P1	Issued for planning	22-05-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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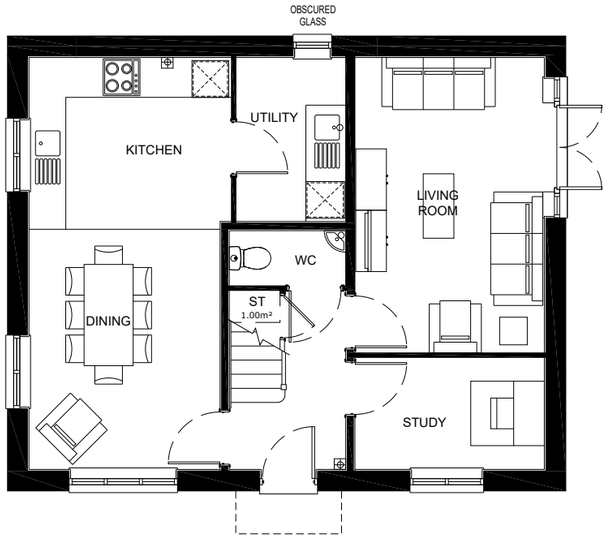
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

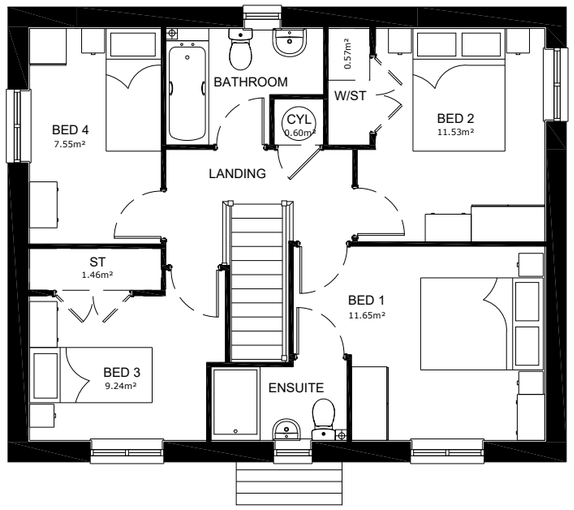
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
KNIGHTLEY
PLOTS --- as shown
PLOTS 88,142 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0123		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



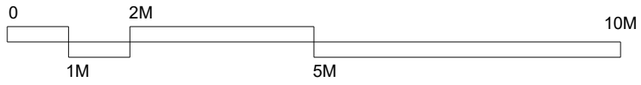
FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION

REAR ELEVATION

LEFT ELEVATION



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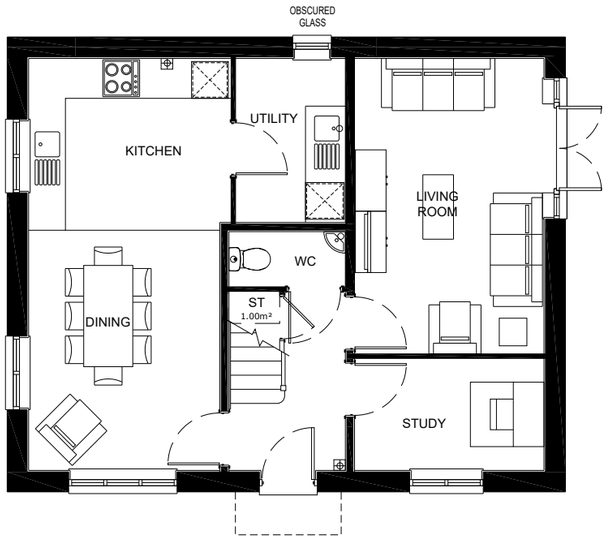
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

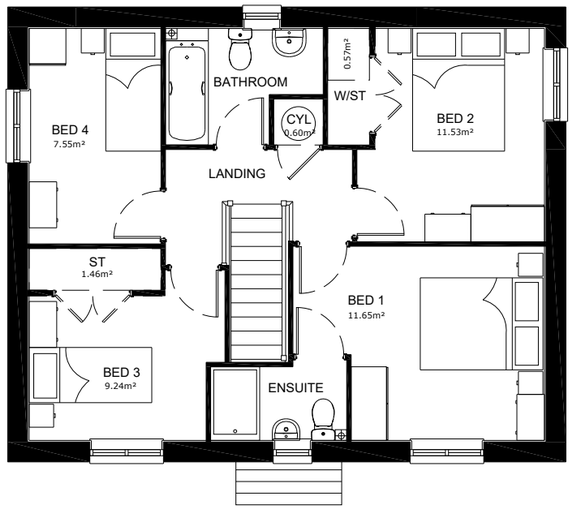
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
LEVERTON
PLOTS 1 as shown
PLOTS 24 handed

ARCHITECTURE

Drawing / Document Reference	Status
RDQUE - MCB - ZZ - ZZ - DR - A - 0124	D5 - P1
Project Iden Originator Zone Level Type Discipline Number	Suitability Revision



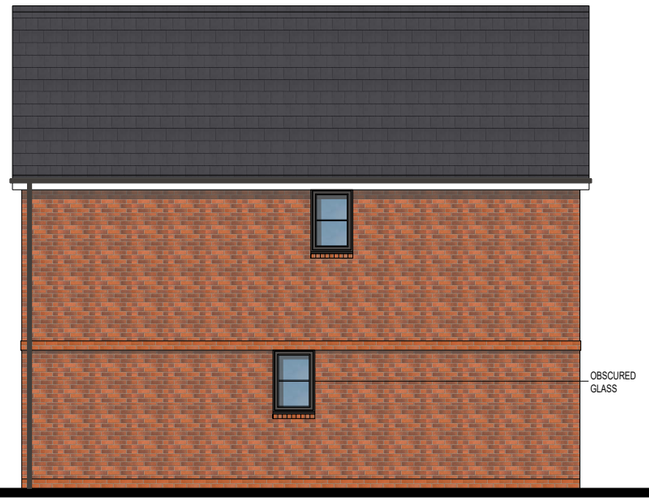
GROUND FLOOR PLAN



FIRST FLOOR PLAN

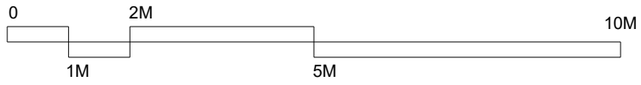
RIGHT ELEVATION

FRONT ELEVATION



REAR ELEVATION

LEFT ELEVATION



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Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
LEVERTON
PLOTS 2 as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0125		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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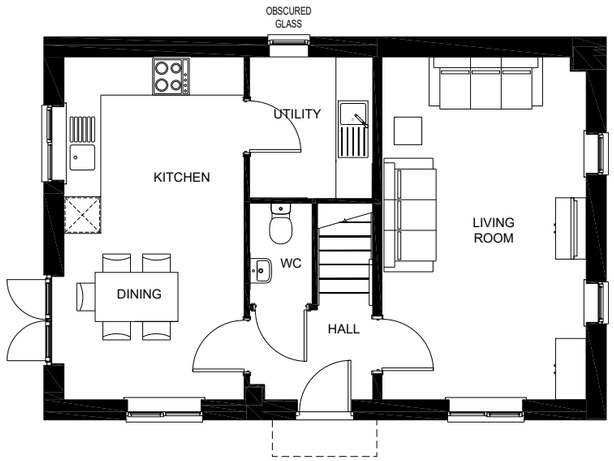
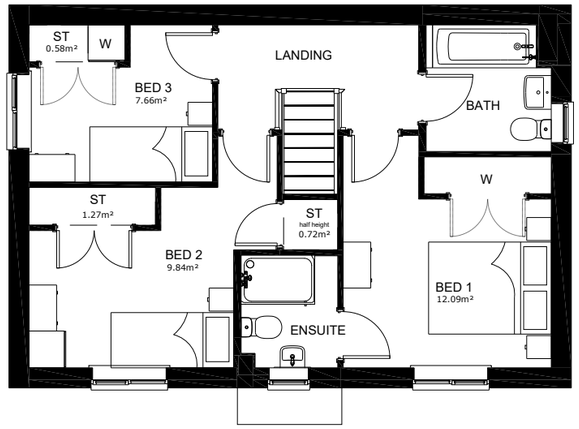


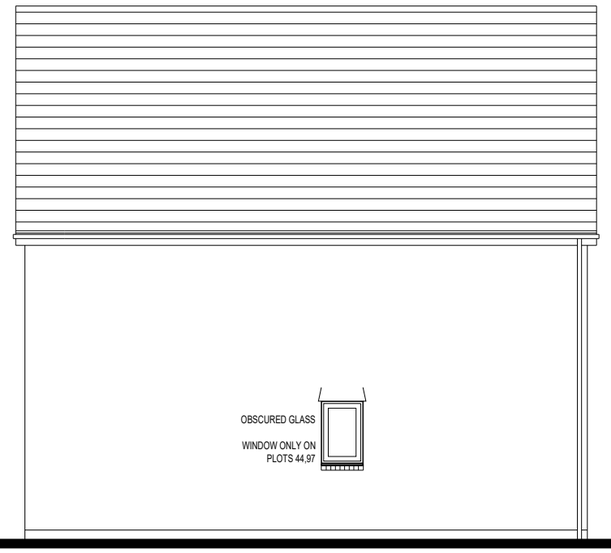
GROUND FLOOR PLAN



FIRST FLOOR PLAN

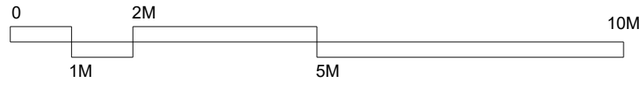
RIGHT ELEVATION

FRONT ELEVATION



REAR ELEVATION

LEFT ELEVATION



Revision	Amendment	Date
P1	Issued for planning	22-08-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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+44 (0)20 7786 7900 mcbains.co.uk

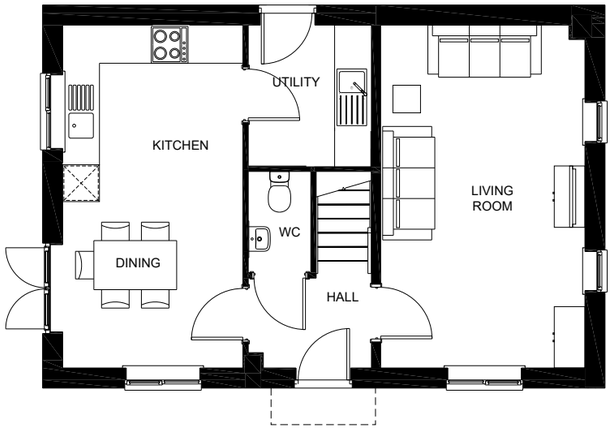
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

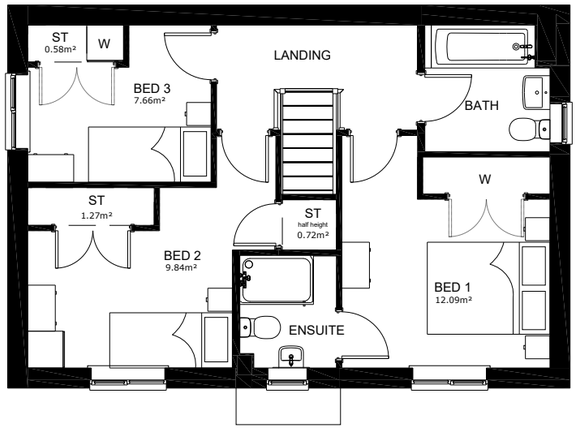
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
BECKET
PLOTS 44,81,97 as shown
PLOTS --- handed

ARCHITECTURE

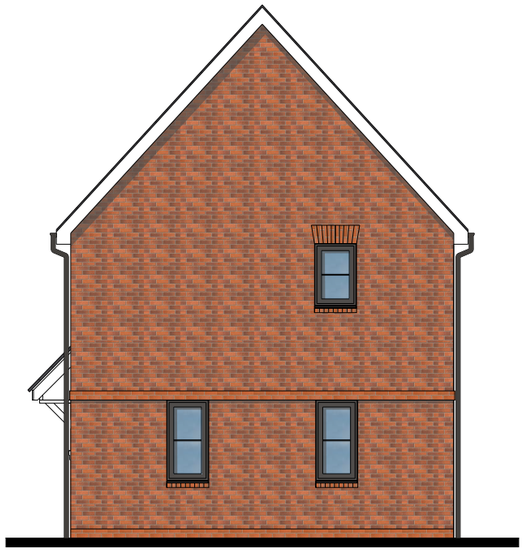
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0126		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

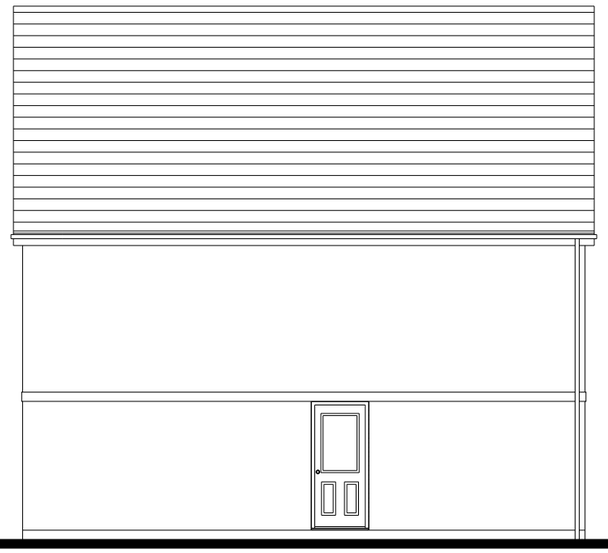


FIRST FLOOR PLAN



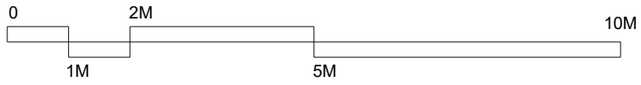
RIGHT ELEVATION

FRONT ELEVATION



REAR ELEVATION

LEFT ELEVATION



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Revision	Amendment	Date
P1	Issued for planning	02-09-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
BECKET
PLOTS 75 as shown
PLOTS 76 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0127		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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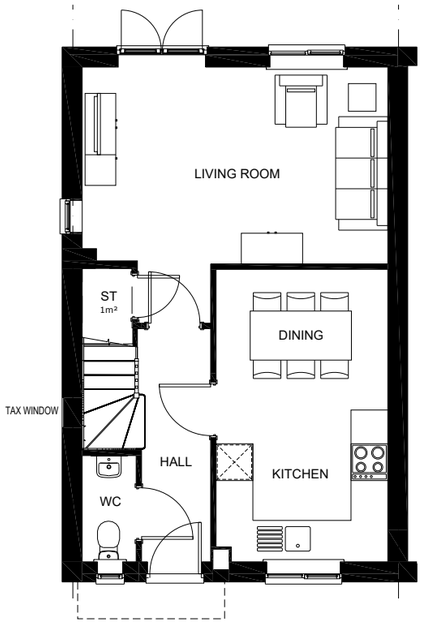
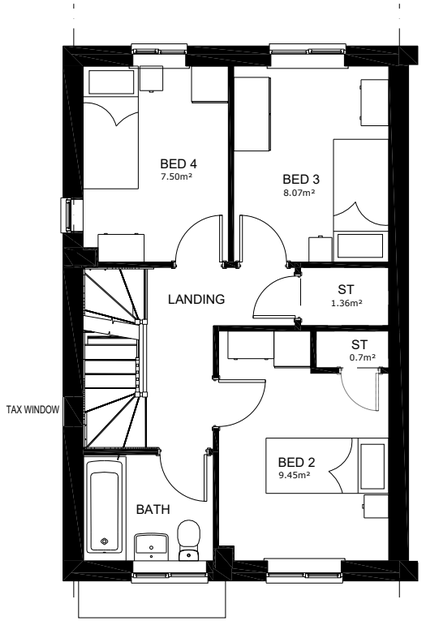
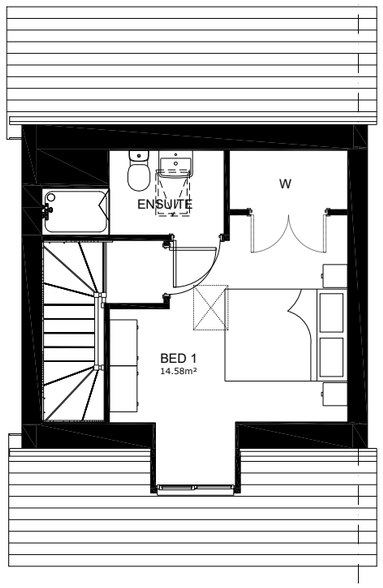
REVEAL & TAX WINDOWS DETAILING



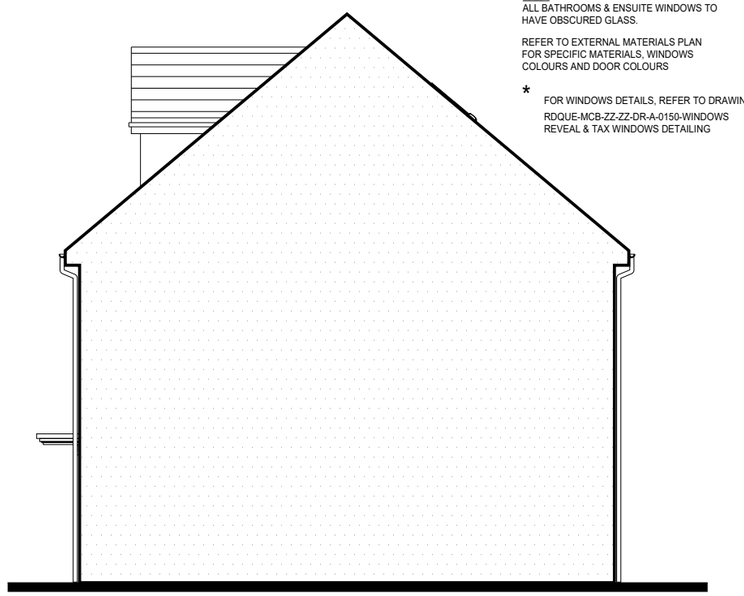
GROUND FLOOR PLAN



FIRST FLOOR PLAN

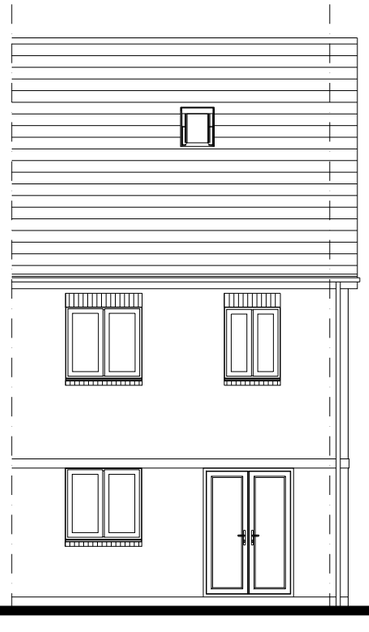


SECOND FLOOR PLAN

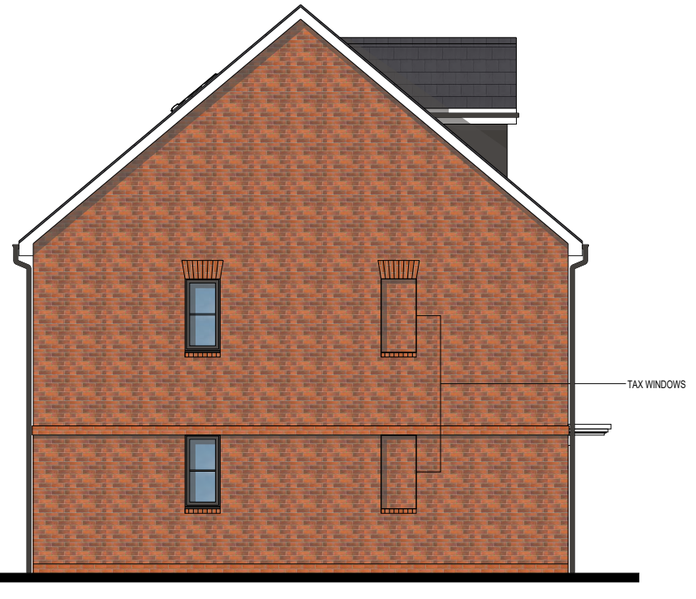


SECTION

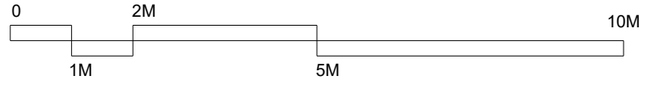
FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION



Revision	Amendment	Date
P1	Issued for planning	22-08-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	Date created	Scale @ A3
61841	AUG '22	1:100 @ A3

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Client

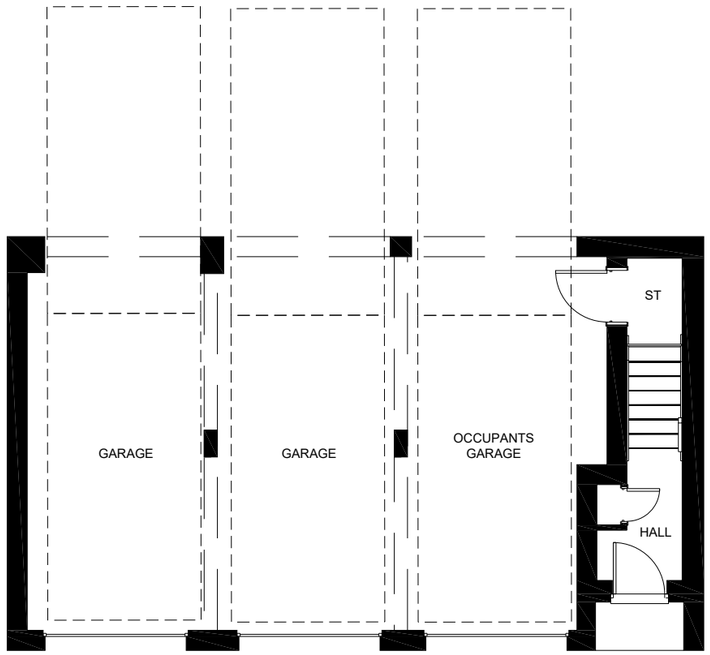
Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ALDRIDGE
PLOTS 107 as shown
PLOTS 106 handed

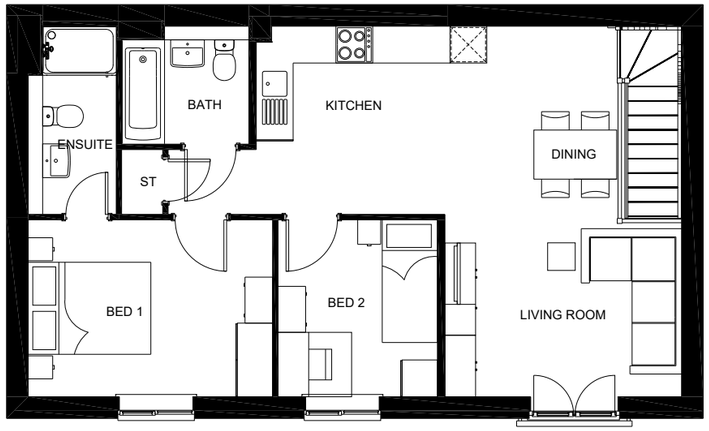
ARCHITECTURE

Drawing / Document Reference	Status
RDQUE - MCB - ZZ - ZZ - DR - A - 0128	D5 - P1

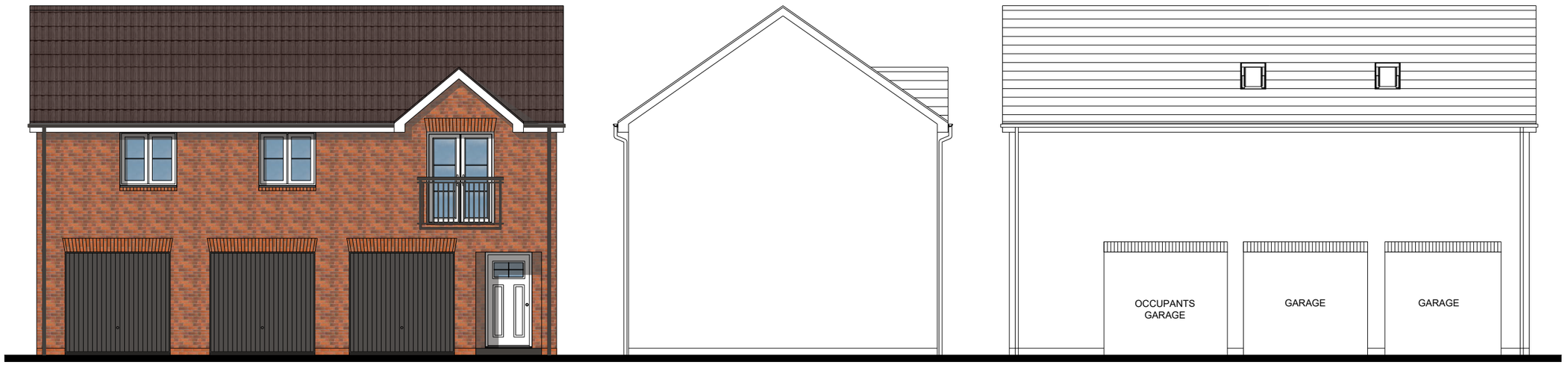
Project Iden | Originator | Zone | Level | Type | Discipline | Number | Suitability | Revision



GROUND FLOOR PLAN



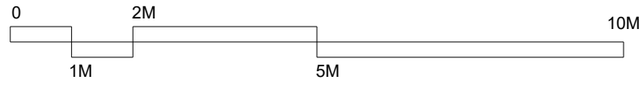
FIRST FLOOR PLAN



FRONT ELEVATION

SIDE ELEVATION

REAR ELEVATION



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Revision	Amendment	Date
P1	Issued for planning	22-08-2022

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MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHBEE
PLOTS 5,11 as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0129		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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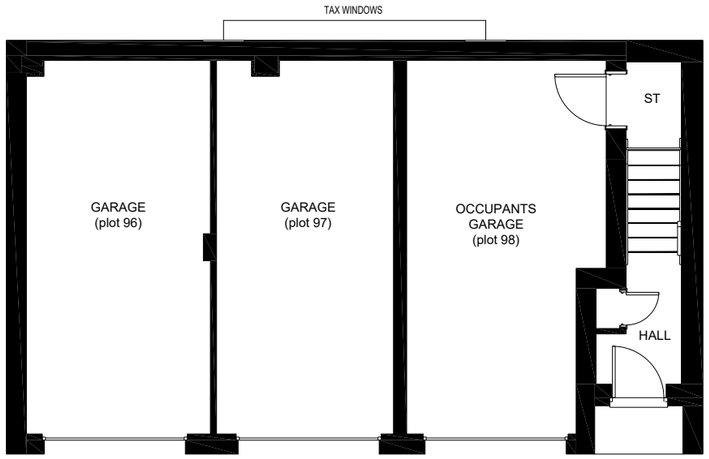
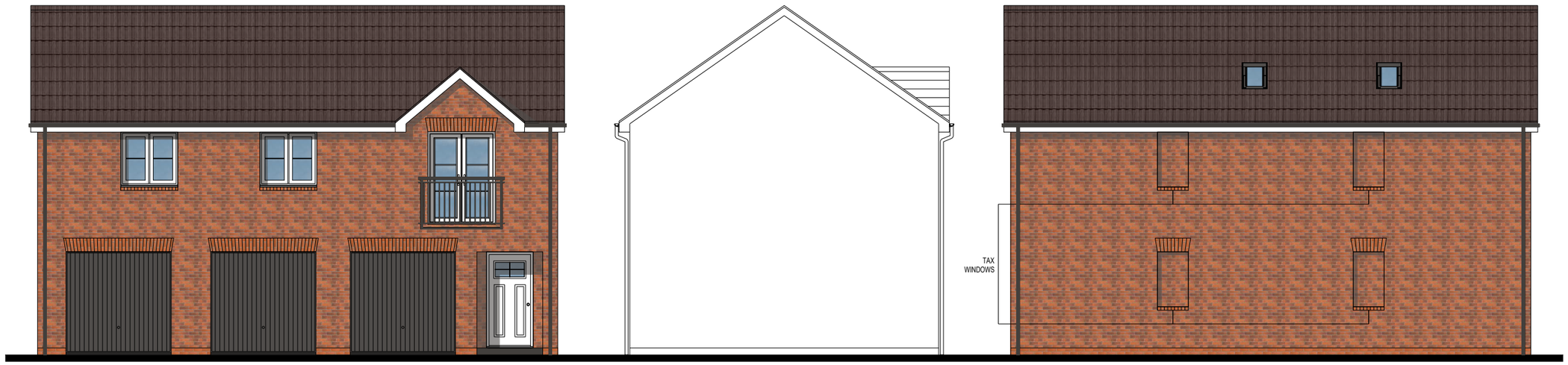


GROUND FLOOR PLAN

FIRST FLOOR PLAN



FRONT ELEVATION

SIDE ELEVATION

REAR ELEVATION

0 2M 10M
1M 5M

Revision	Amendment	Date
P1	Issued for planning	22-08-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	Date created	Scale @ A3
61841	AUG '22	1:100 @ A3

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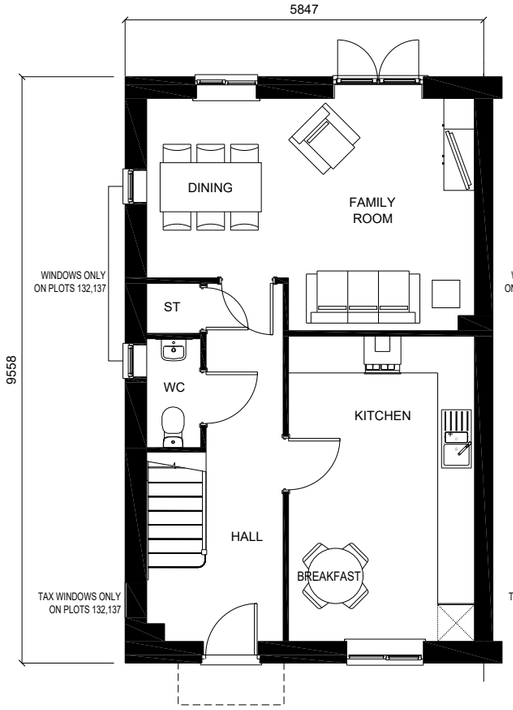
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

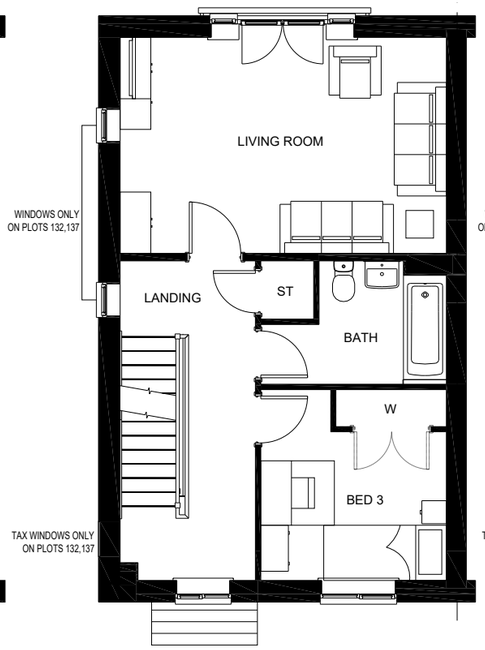
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHBEE
PLOTS 98 as shown
PLOTS --- handed

ARCHITECTURE

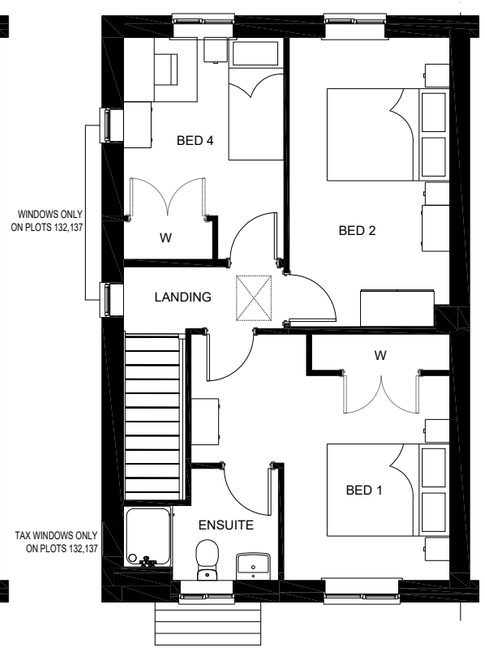
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0130		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



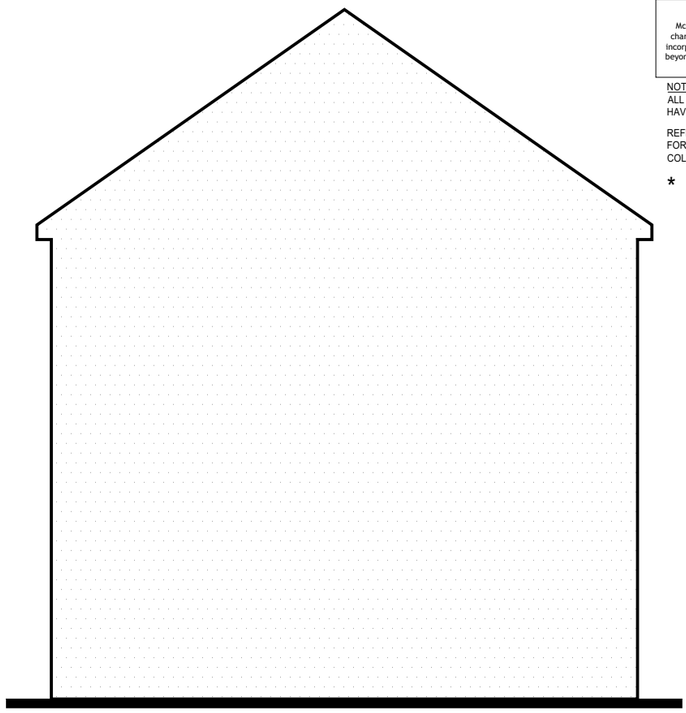
GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN



SECTION

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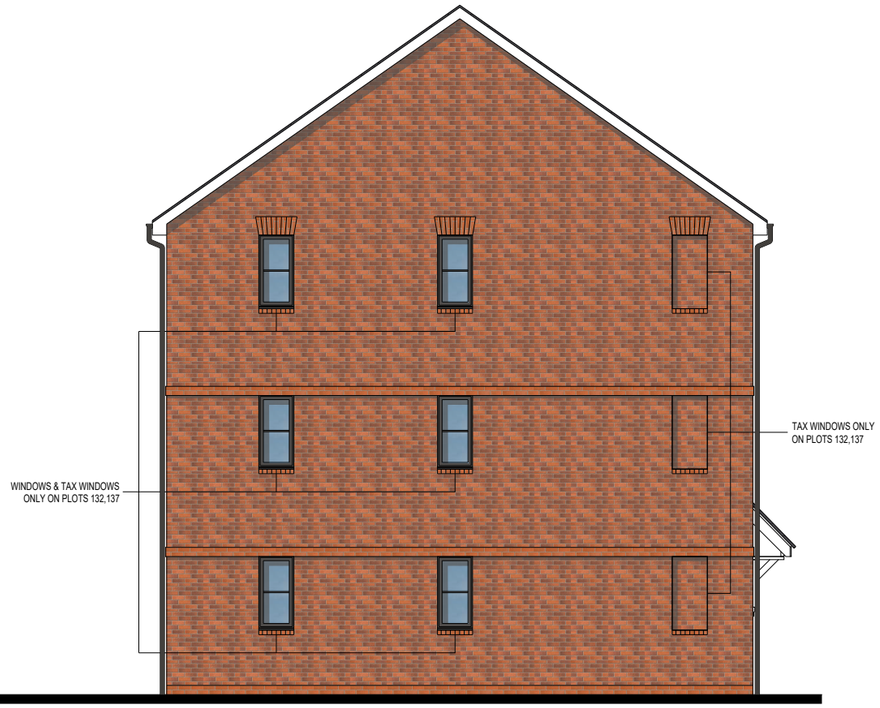
FRONT ELEVATION

REAR ELEVATION



LEFT SIDE ELEVATION

0 2M 10M
1M 5M

Revision	Amendment	Date
P1	Issued for planning	02-09-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	Date created	Scale @ A3
61841	AUG '22	1:100 @ A3

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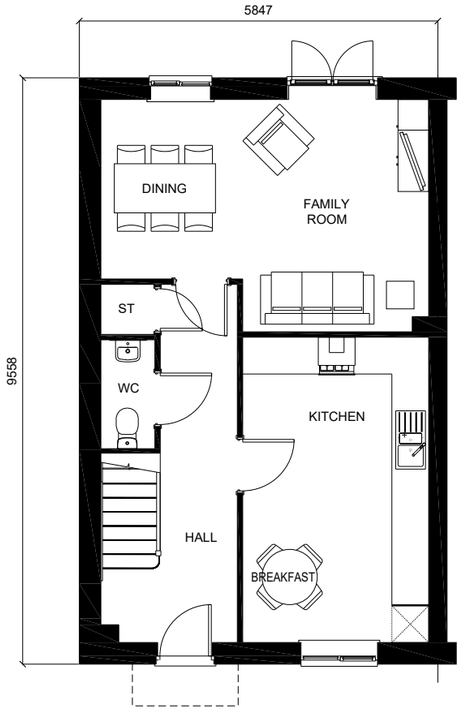
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

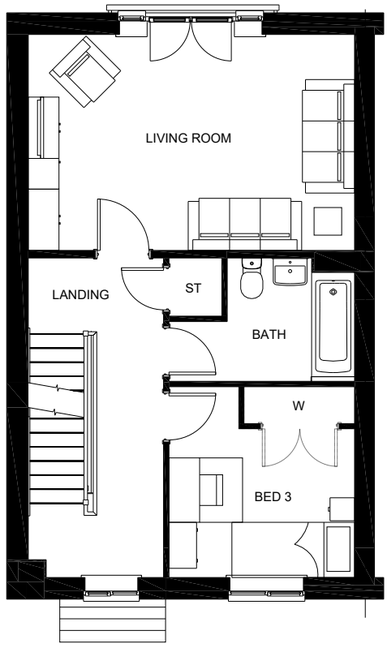
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
FOULSTON
PLOTS 132,134,136 as shown
PLOTS 133,135,137 handed

ARCHITECTURE

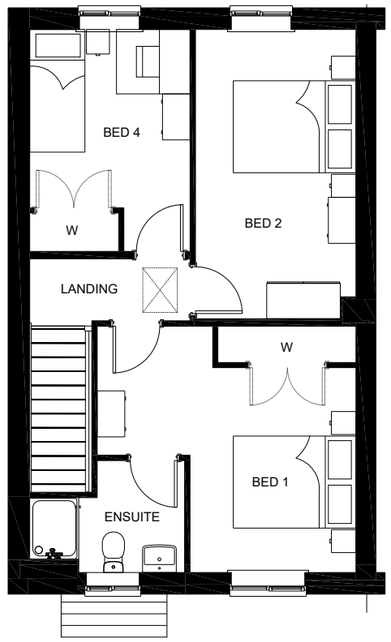
Drawing / Document Reference	Status
RDQUE - MCB - ZZ - ZZ - DR - A - 0131	D5 - P1
Project Iden Originator Zone Level Type Discipline Number	Suitability Revision



GROUND FLOOR PLAN



FIRST FLOOR PLAN



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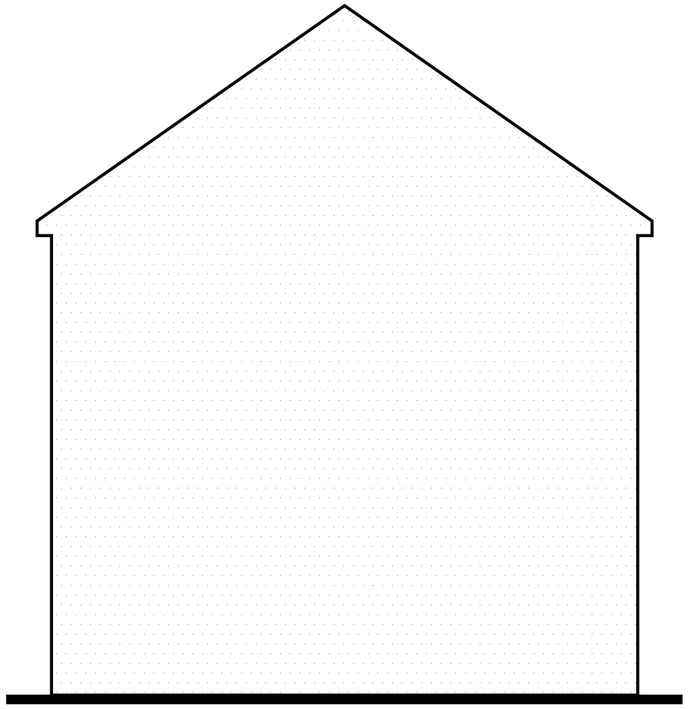
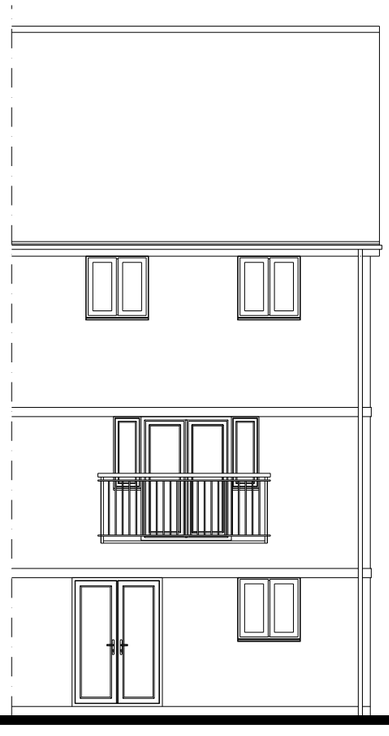
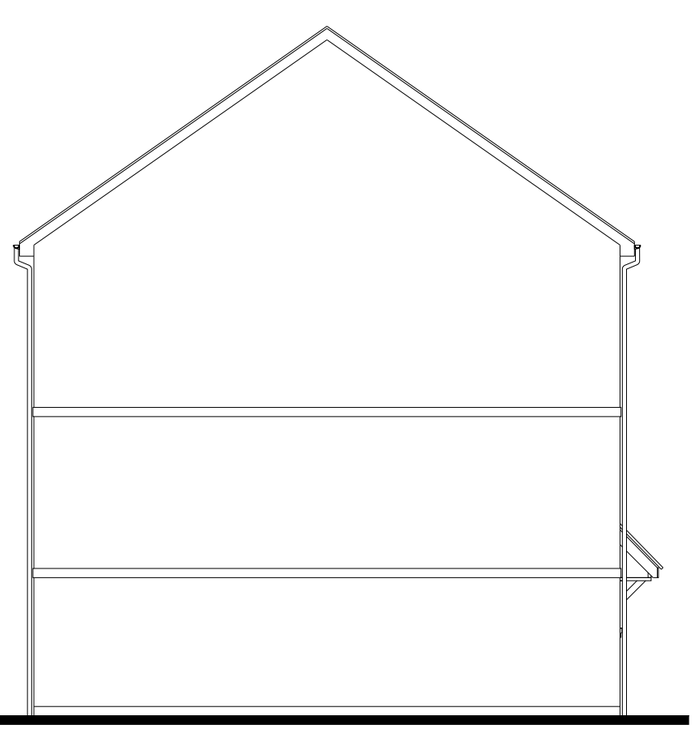


SECTION

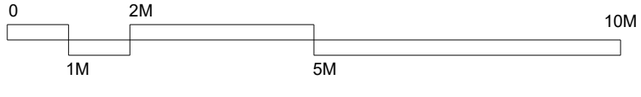
FRONT ELEVATION



REAR ELEVATION



LEFT SIDE ELEVATION



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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P1	Issued for planning	02-09-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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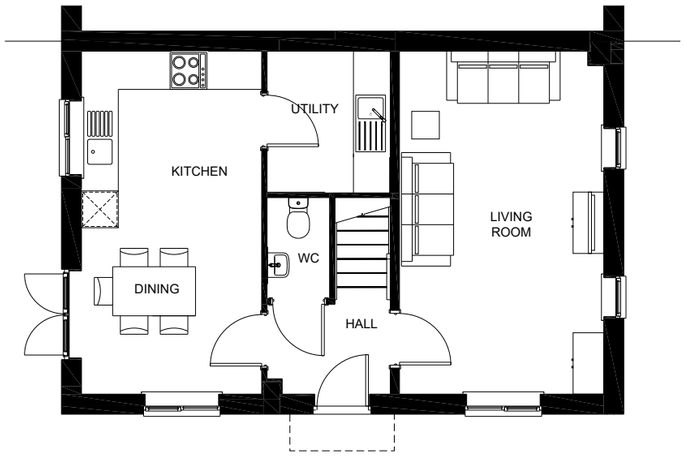
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

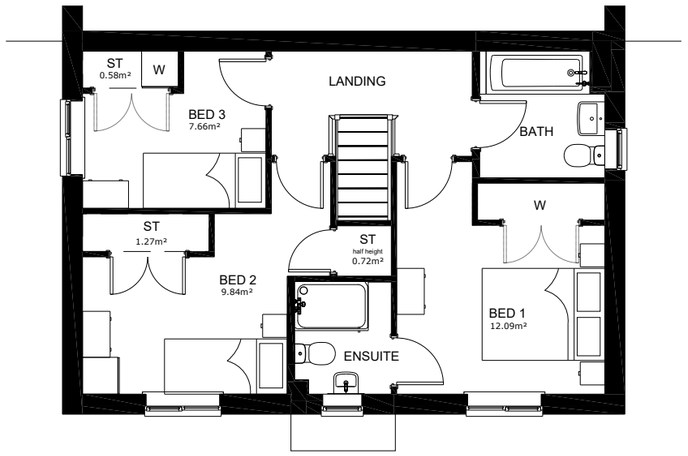
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
FOULSTON
PLOTS 114 as shown
PLOTS 113 handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0132		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



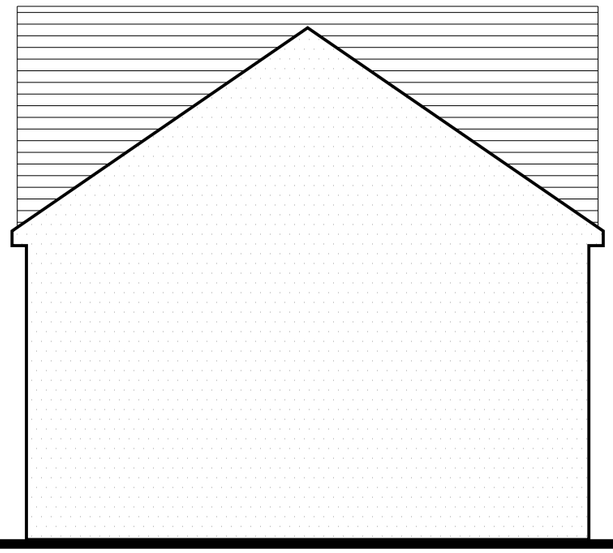
GROUND FLOOR PLAN



FIRST FLOOR PLAN

RIGHT ELEVATION

FRONT ELEVATION



SECTION/ REAR ELEVATION

LEFT ELEVATION

0 2M 10M
1M 5M

Notes:
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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P1	Issued for planning	02-09-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	AUG '22	1:100 @ A3

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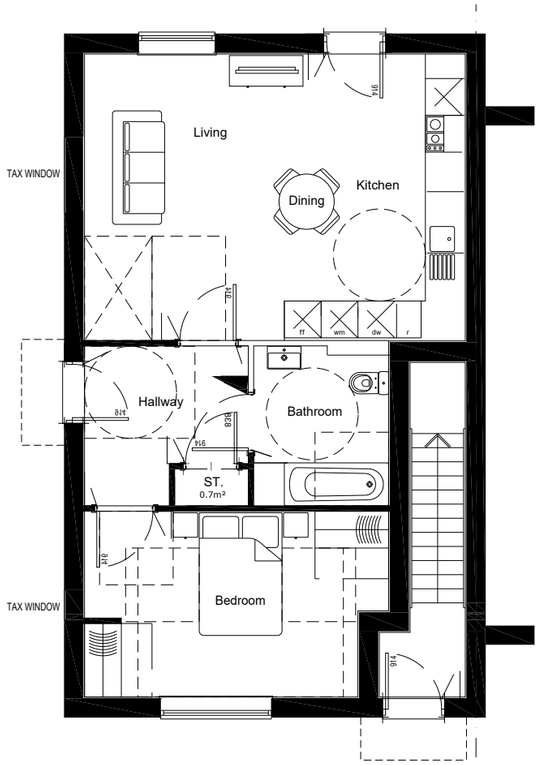
Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

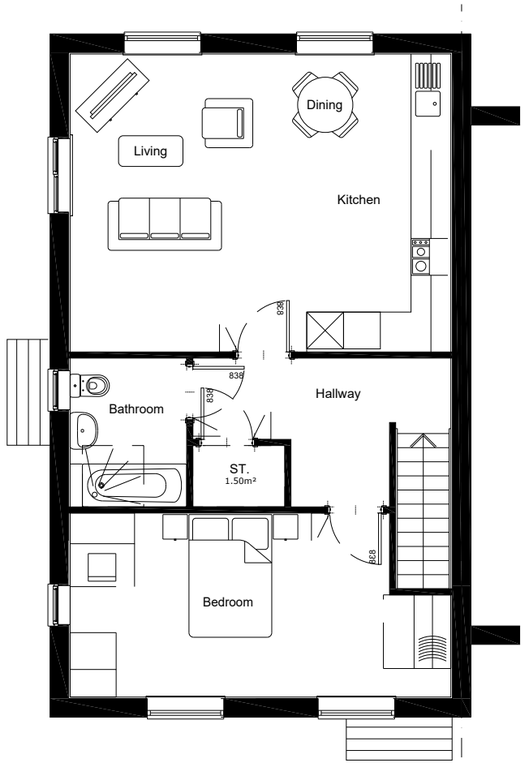
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
BECKET
PLOTS --- as shown
PLOTS 92 handed

ARCHITECTURE

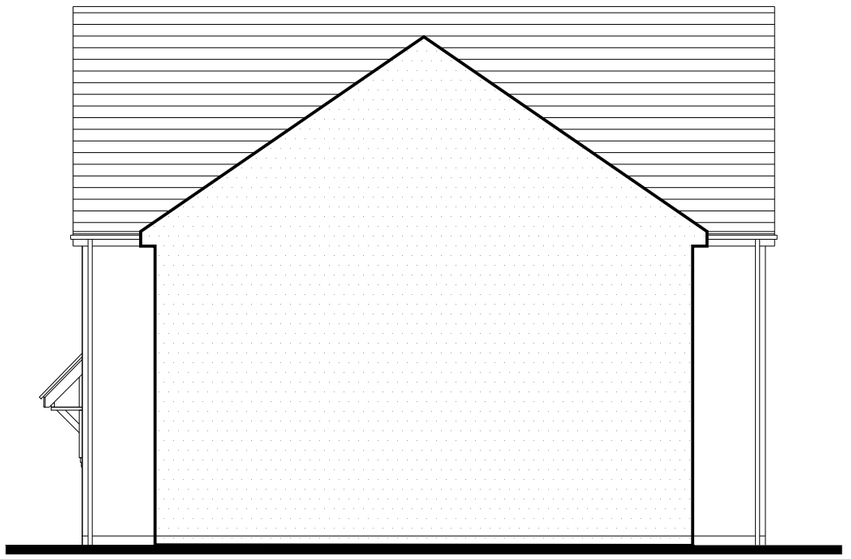
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0133		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECTION

FRONT ELEVATION

SIDE ELEVATION

REAR ELEVATION

0 2M 10M

1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS
REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
61841	MAY '22	1:100 @ A3
MCB Number	Date created	Scale @ A3

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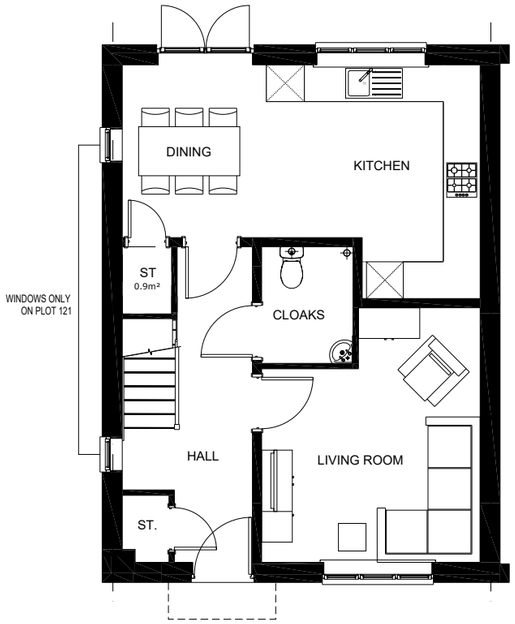
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

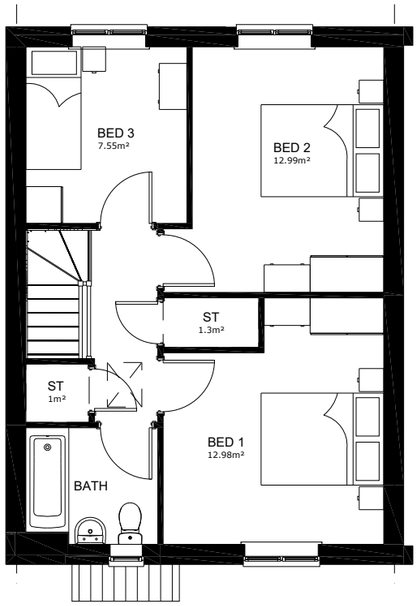
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
AF1 MAIS
PLOTS 138-139 as shown
PLOTS --- handed

ARCHITECTURE

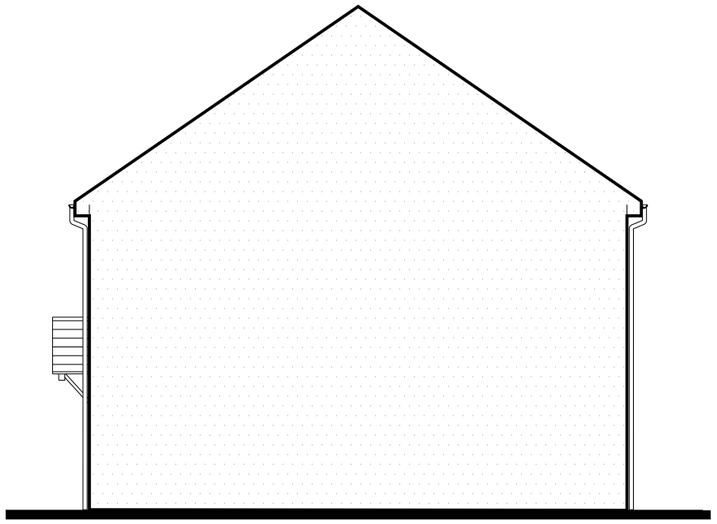
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0140		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN
(Mid terrace for plots 10,12)

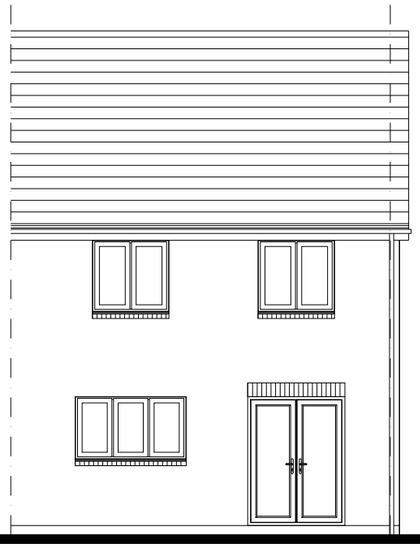


FIRST FLOOR PLAN

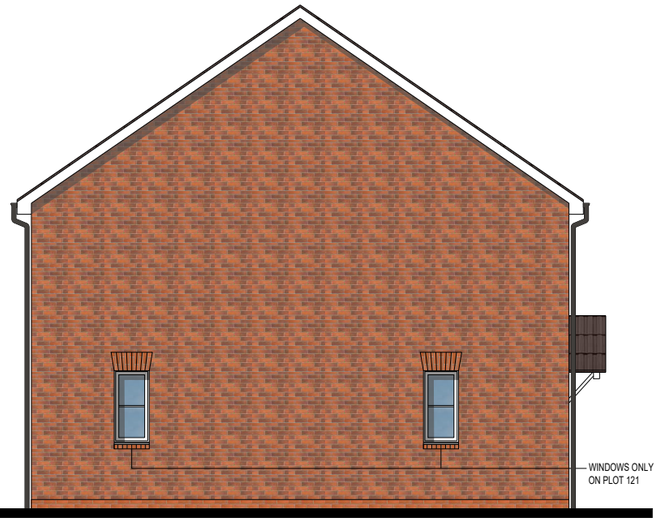


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
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MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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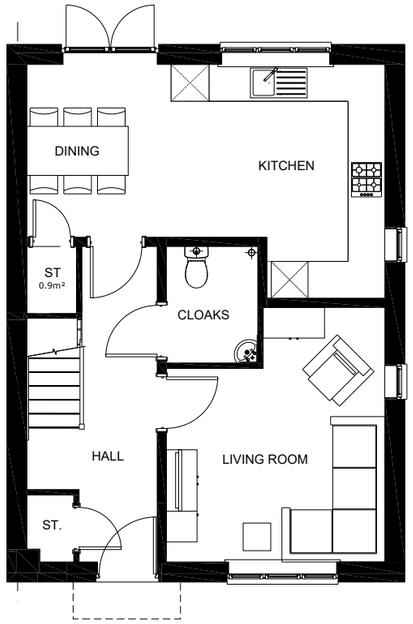
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

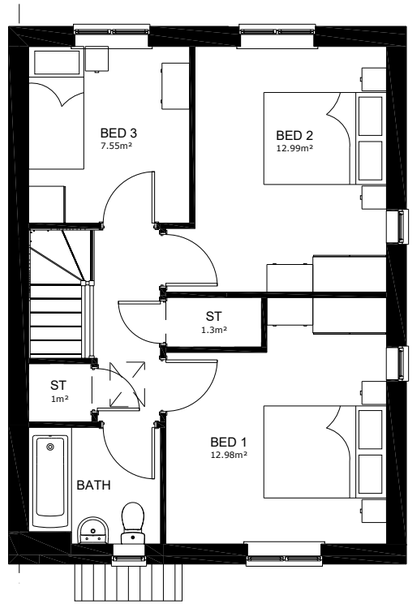
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHER
PLOTS 121 as shown
PLOTS 10,12,13 handed

ARCHITECTURE

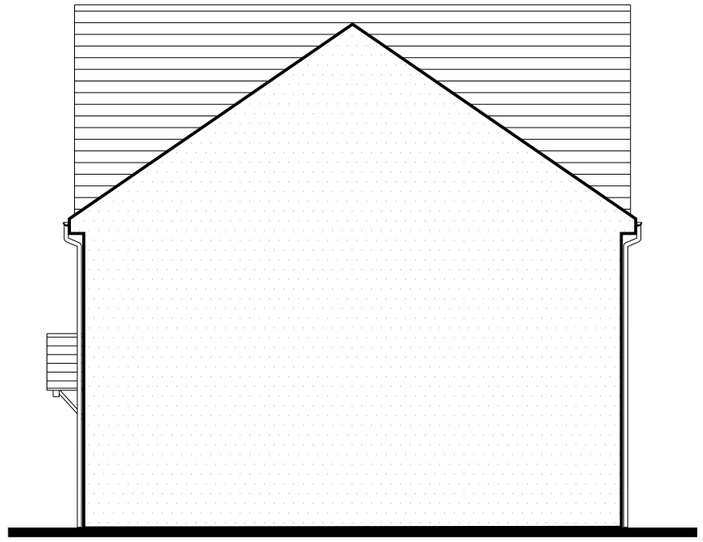
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0141		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



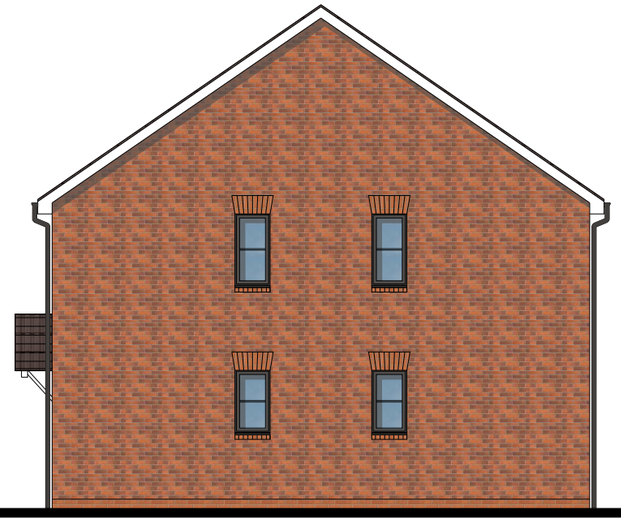
FIRST FLOOR PLAN



SECTION

FRONT ELEVATION

REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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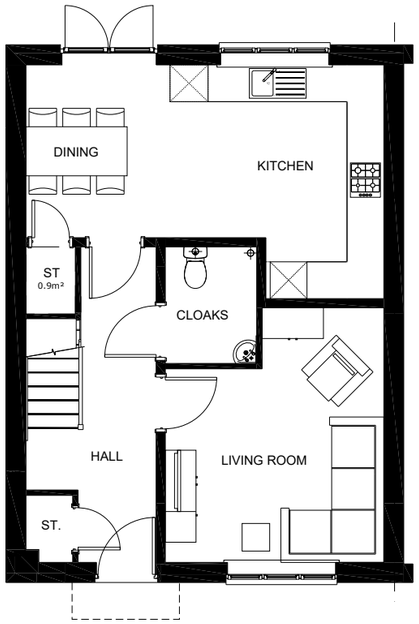
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

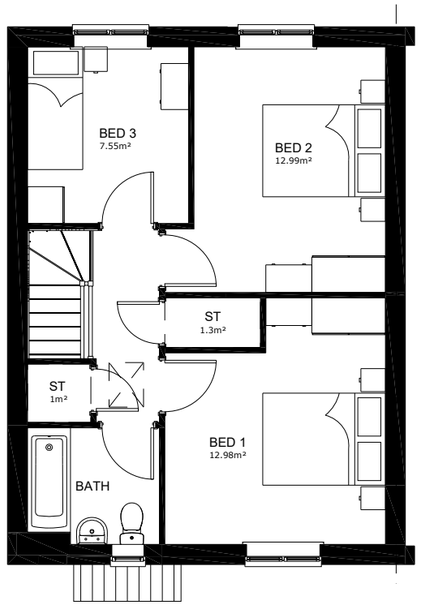
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHER
PLOTS 122 as shown
PLOTS --- handed

ARCHITECTURE

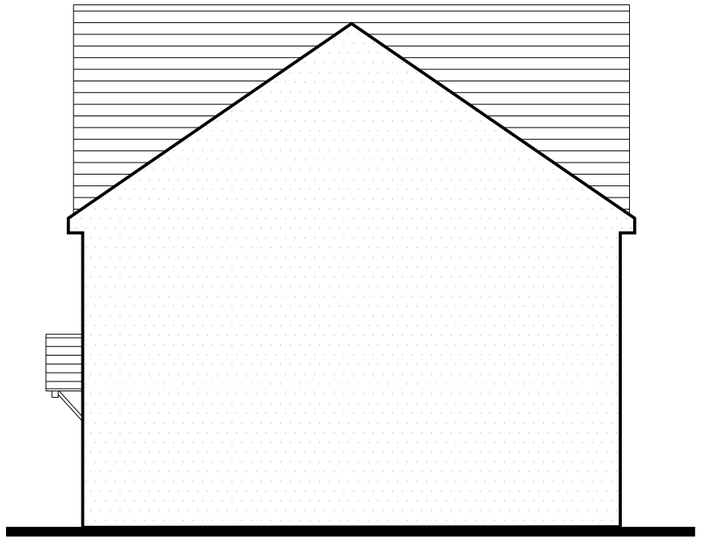
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0142		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



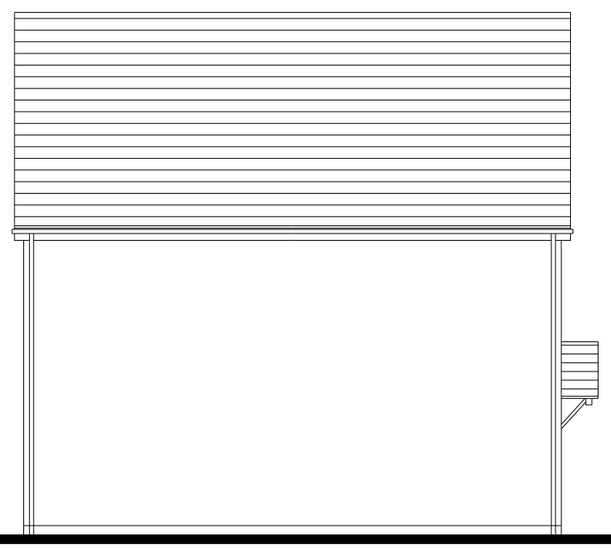
FIRST FLOOR PLAN



SECTION

FRONT ELEVATION

REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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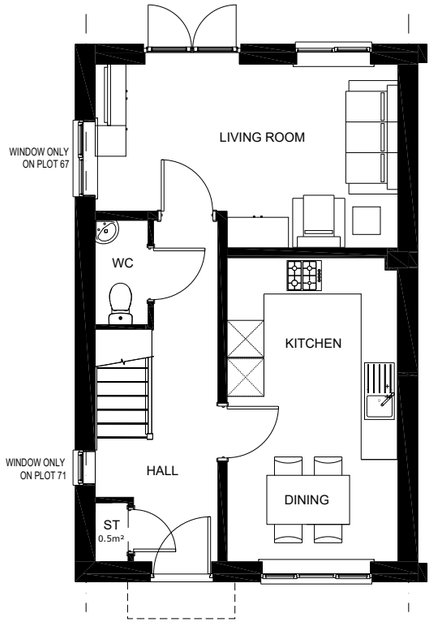
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

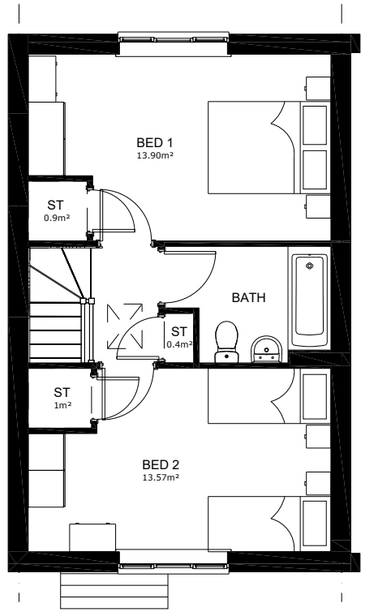
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHER
PLOTS 14 as shown
PLOTS --- handed

ARCHITECTURE

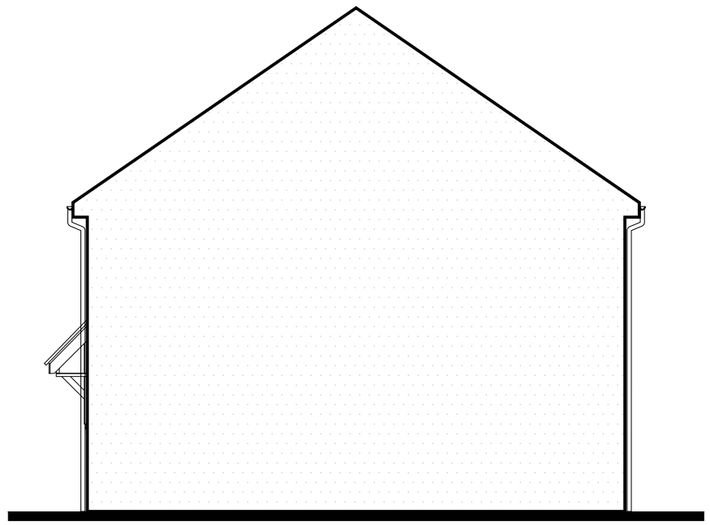
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0143		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN
(Mid terrace for plots 15,16,65,68,69,70,119,120,146)



FIRST FLOOR PLAN

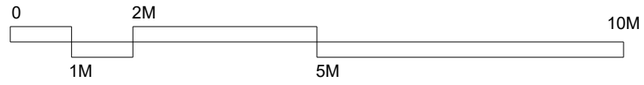


SECTION

FRONT ELEVATION

REAR ELEVATION

SIDE ELEVATION



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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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McBains Ltd

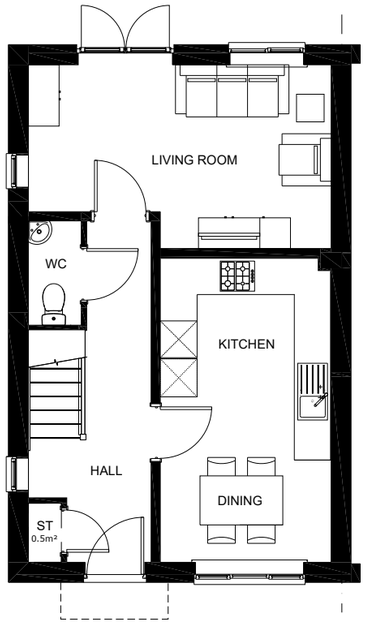
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

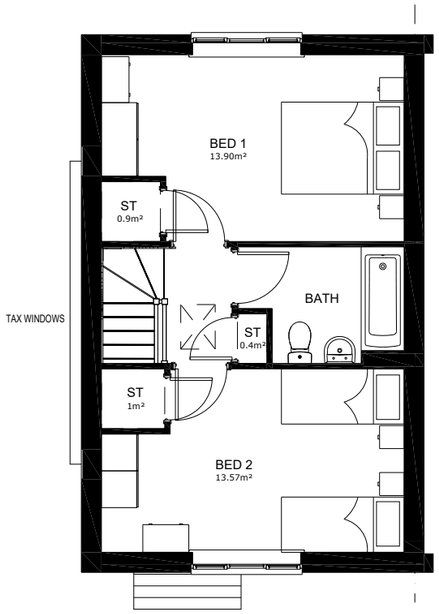
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
COOPER
PLOTS 15,16,66,120 as shown
PLOTS 65,67,68,69,70,71,119,146,147 handed

ARCHITECTURE

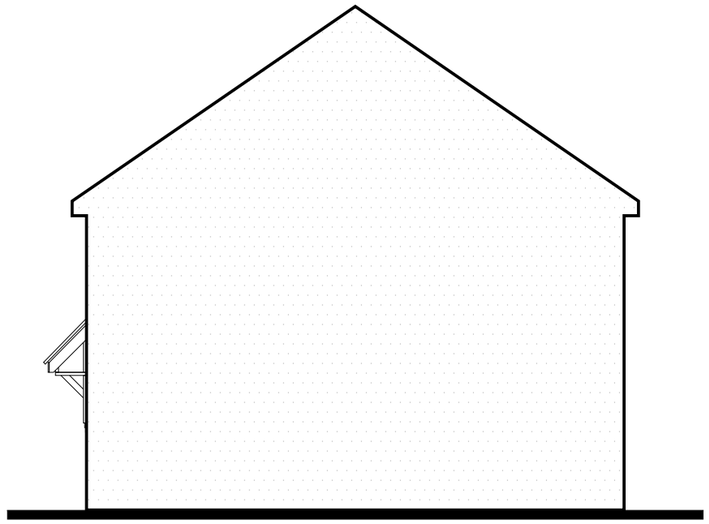
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0144		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



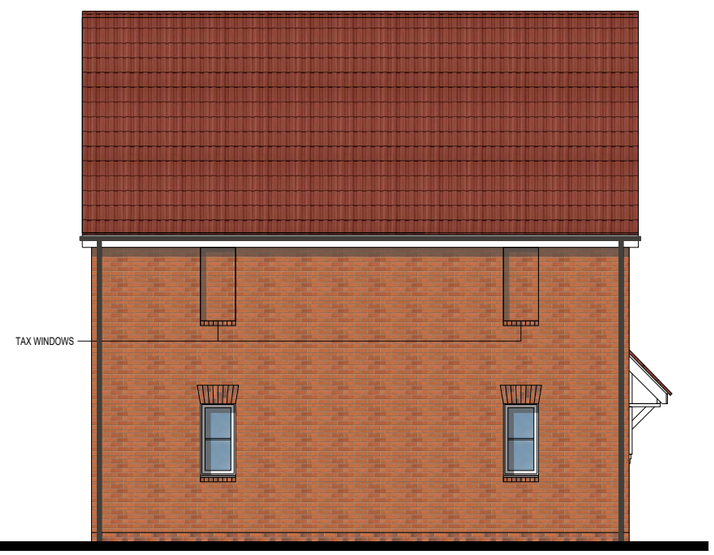
FIRST FLOOR PLAN



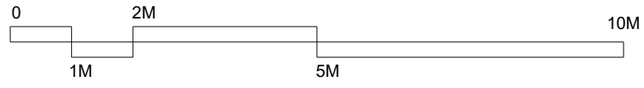
SECTION

FRONT ELEVATION

REAR ELEVATION



SIDE ELEVATION



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REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

McBains

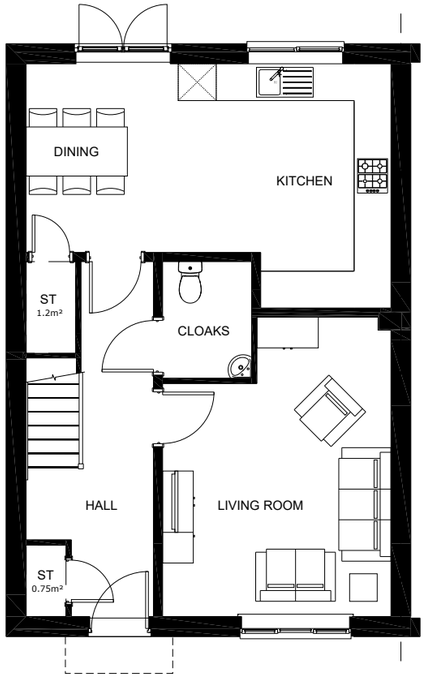
Client

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

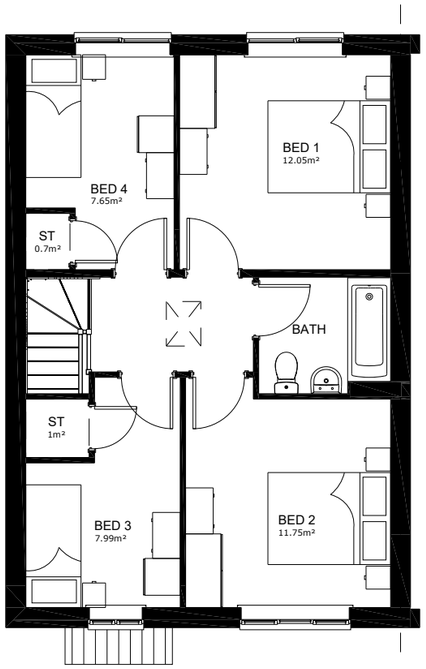
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
COOPER
PLOTS 17 as shown
PLOTS 145 handed

ARCHITECTURE

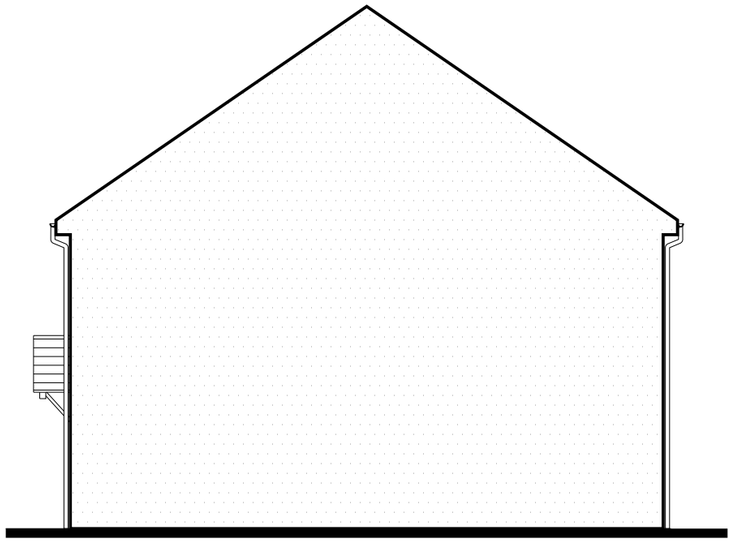
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0145		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

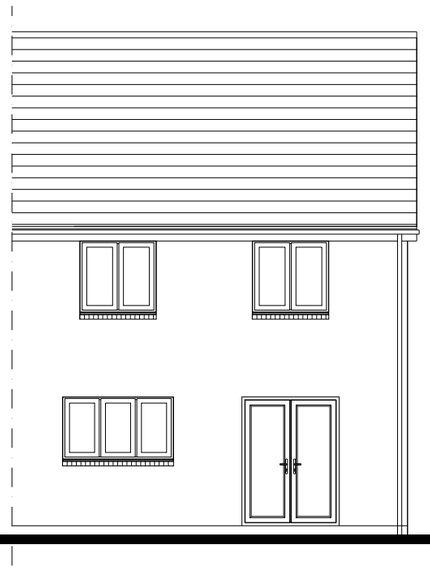


FIRST FLOOR PLAN

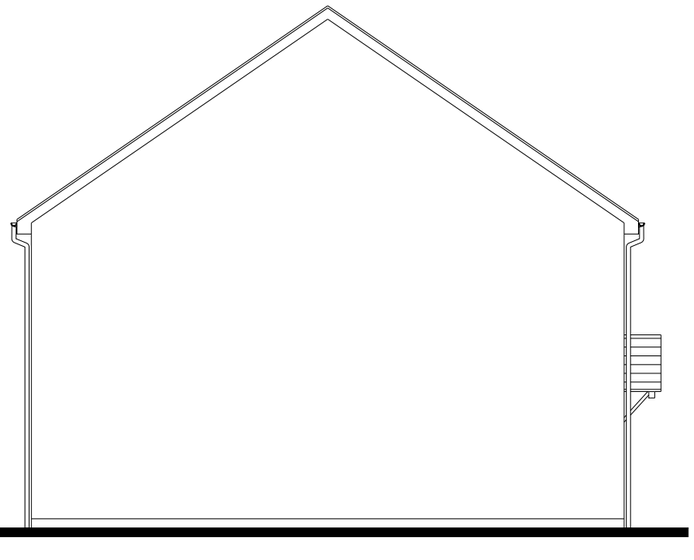


SECTION

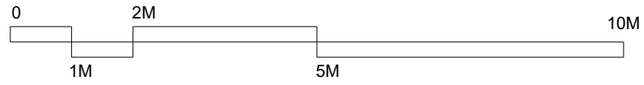
FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION



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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	**Date created**	**Scale @ A3**
61841	MAY '22	1:100 @ A3

McBains Ltd
[redacted]

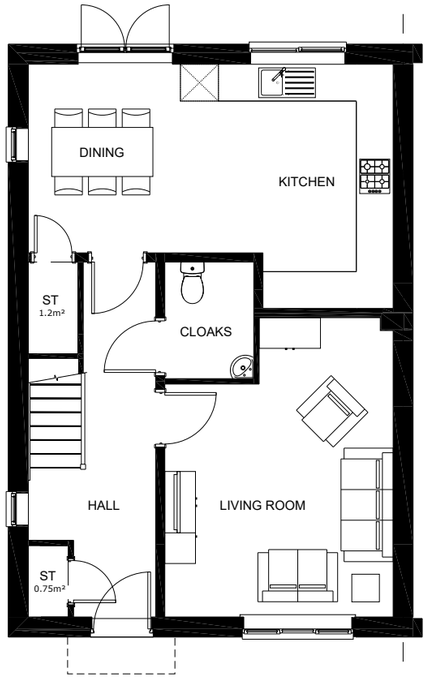
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

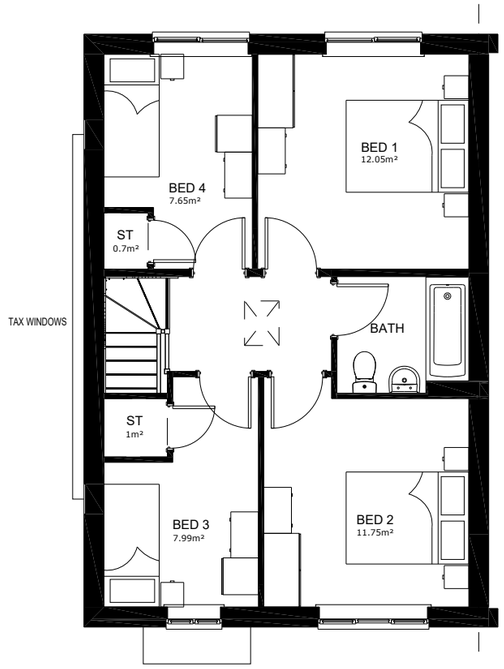
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
SPEIRS
PLOTS --- as shown
PLOTS 118 handed

ARCHITECTURE

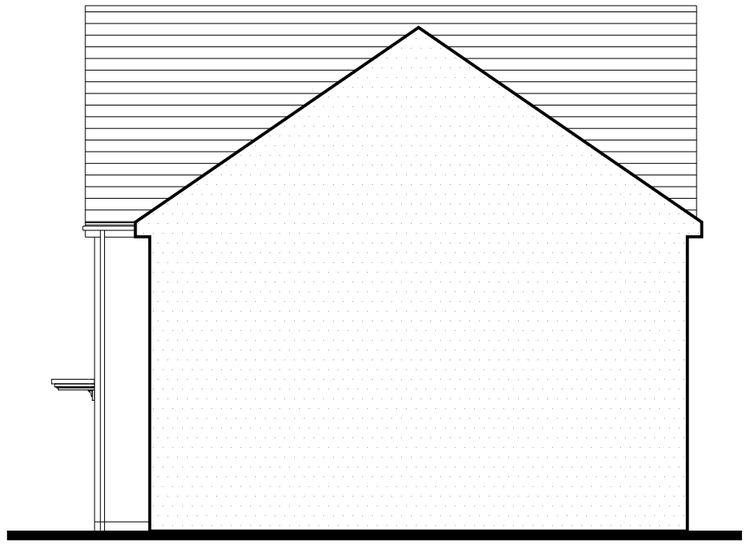
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0146		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN

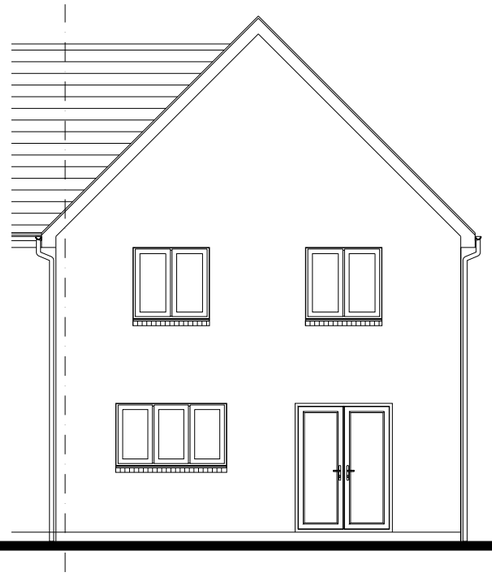


FIRST FLOOR PLAN

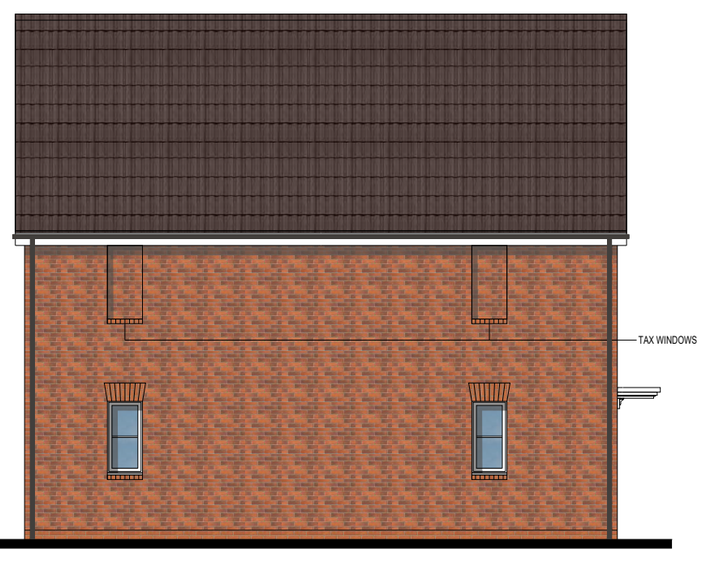


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS
REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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McBains Ltd
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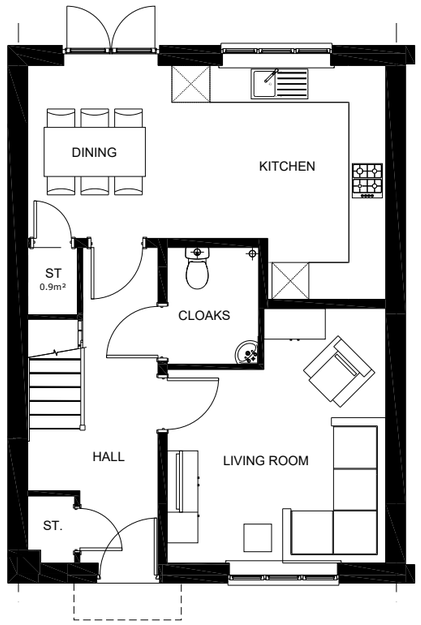
Client
[redacted]

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

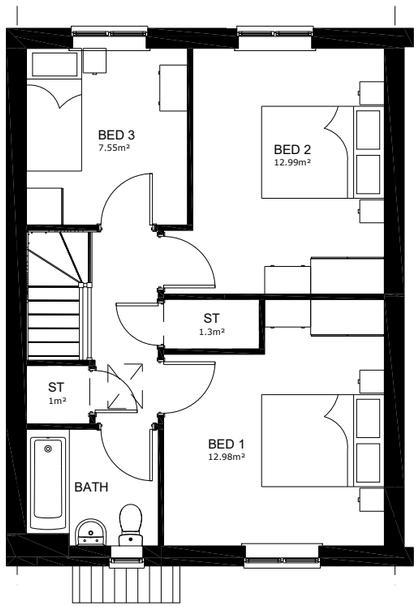
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
SPEIRS
PLOTS --- as shown
PLOTS 9,64 handed

ARCHITECTURE

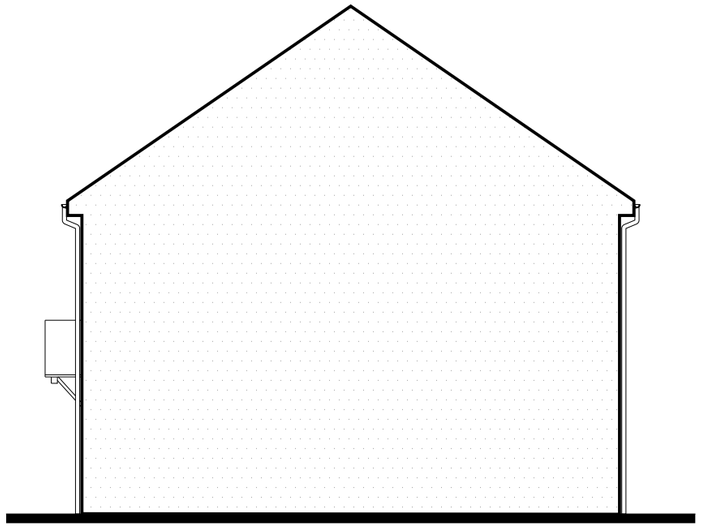
Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0147		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN
(Mid terrace for plots 149,150)

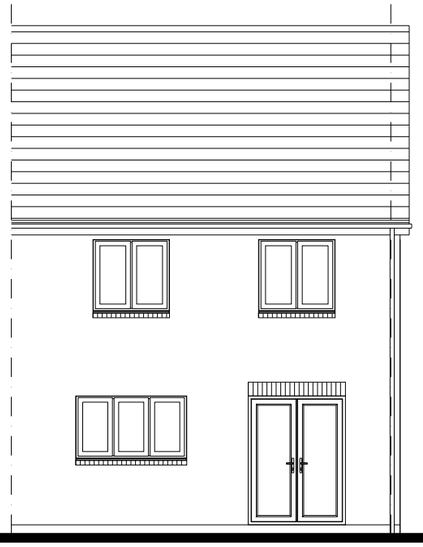


FIRST FLOOR PLAN

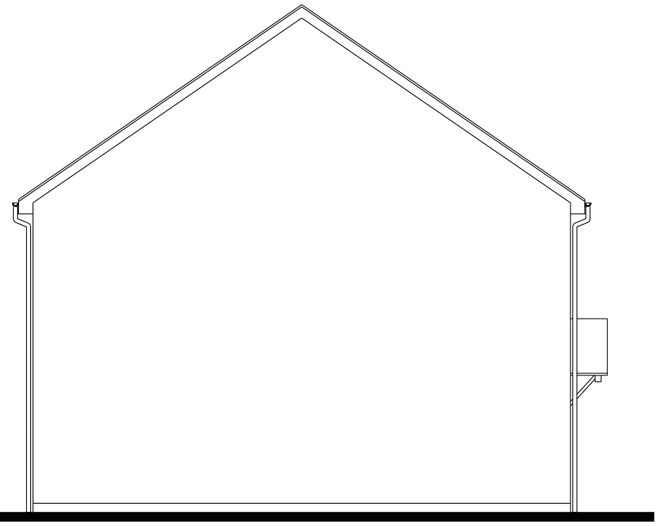


SECTION

FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

0 2M 10M
1M 5M

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Revision	Amendment	Date
P2	Amended to suit comments	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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McBains Ltd
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Client
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Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHER
PLOTS --- as shown
PLOTS 148,149,150 handed

ARCHITECTURE

Drawing / Document Reference								Status	
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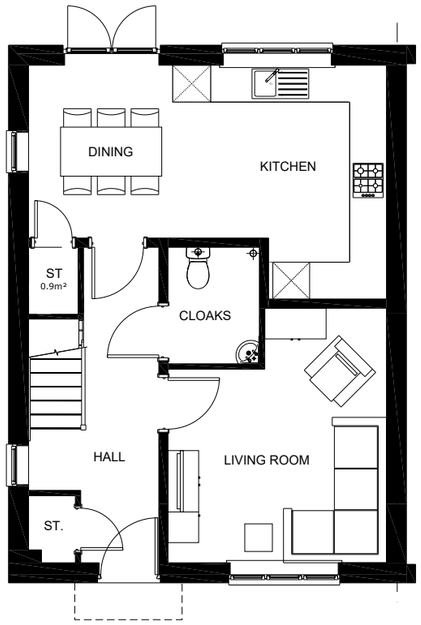
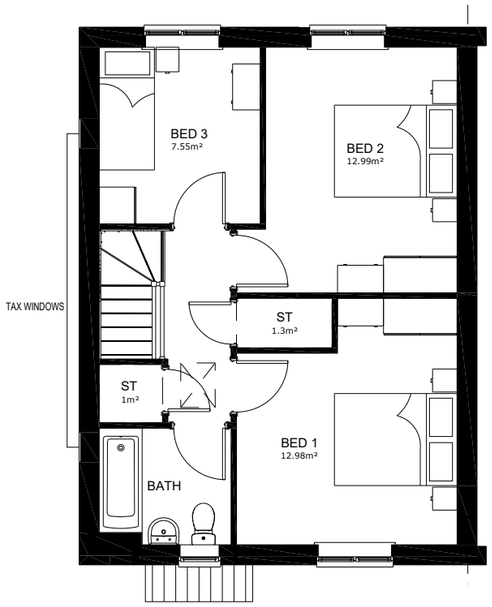
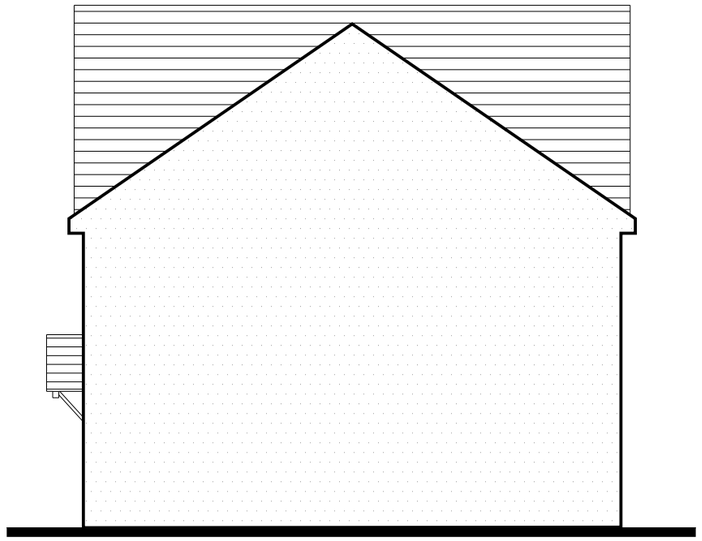
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision



GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECTION

FRONT ELEVATION

REAR ELEVATION

SIDE ELEVATION

0 2M 10M
1M 5M

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RDQUE-MCB-ZZ-ZZ-DR-A-0150-WINDOWS REVEAL & TAX WINDOWS DETAILING

Revision	Amendment	Date
P1	Issued for planning	22-08-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	Date created	Scale @ A3
61841	AUG '22	1:100 @ A3

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Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

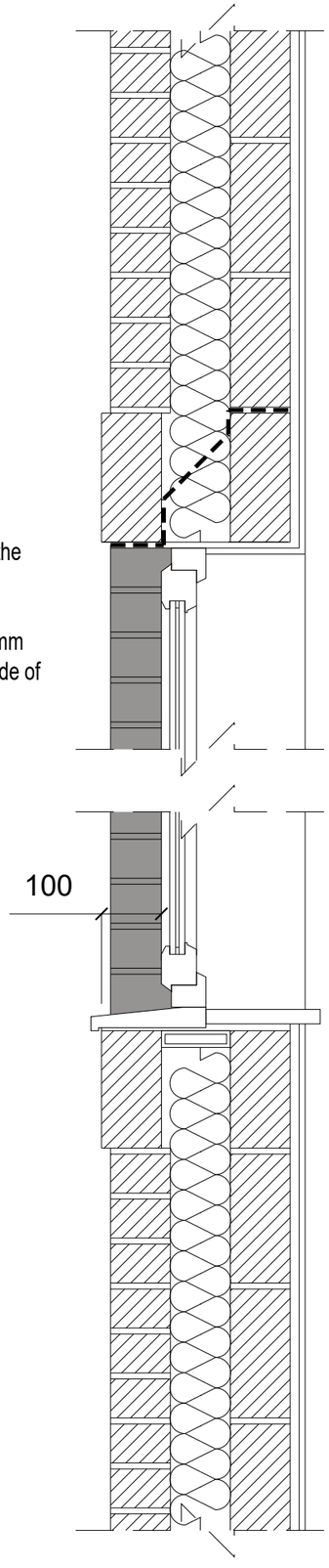
Drawing Title
HOUSETYPE PLANS & ELEVATIONS
ASHER
PLOTS 123 as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0149		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

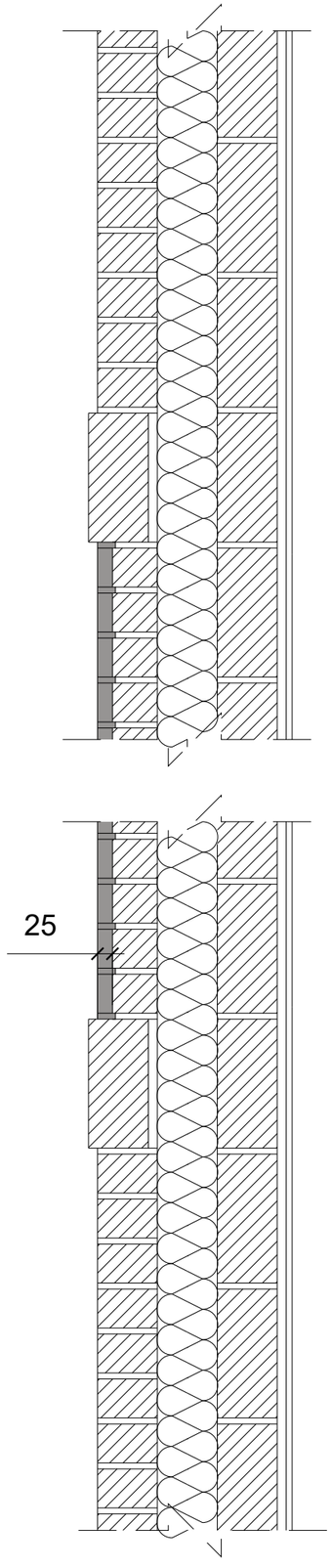
PVC-u window with through the casement ventilator

Window frame set back 135mm from face of brickwork to inside of frame to provide min 30mm overlap of frame to closer

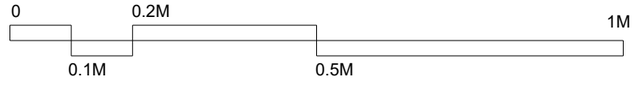


DETAIL 1
WINDOWS REVEAL 100mm

(Based on detail provided by the client)



DETAIL 2
TAX WINDOWS RECESS 25mm



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Revision	Amendment	Date
P1	Issued for planning	22-08-2022

Drawn by	Reviewed by	Approved by
VS	EC	P'OR
MCB Number	Date created	Scale @ A3
61841	AUG' 22	1:10 @ A3

McBains Ltd

Client
Vistry Group

Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
WINDOWS REVEAL & TAX WINDOWS RECESS DETAILS

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0150		D5	P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revison

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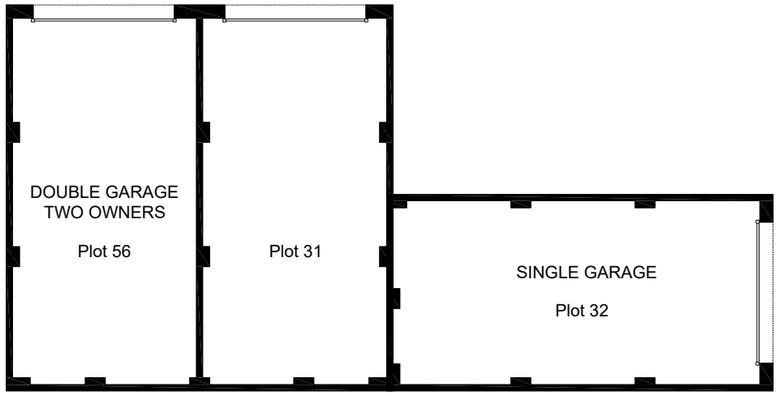
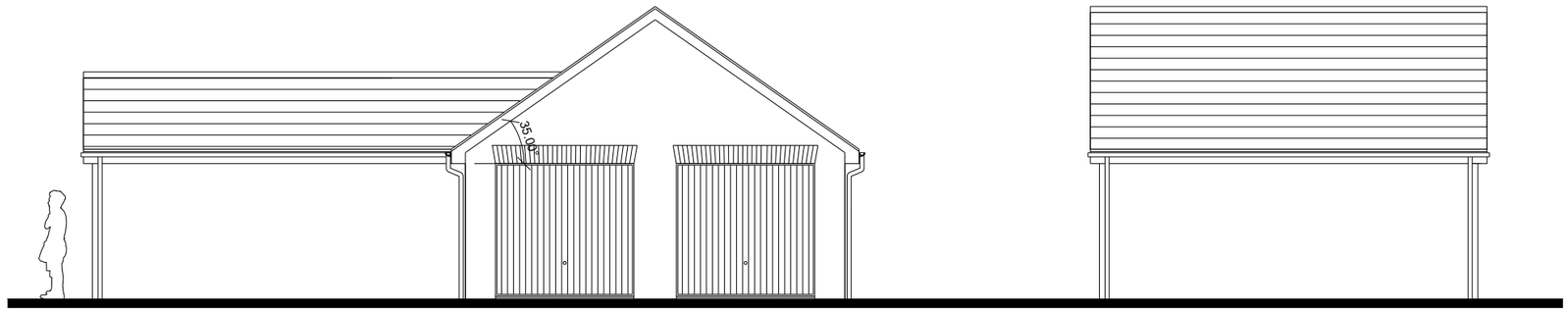
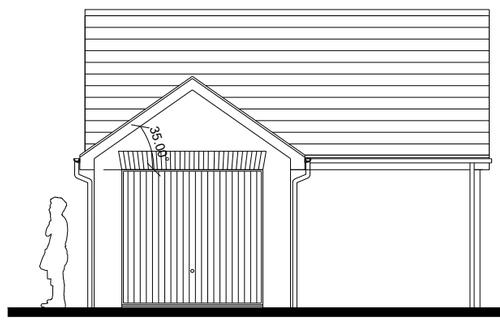


FLOOR PLAN

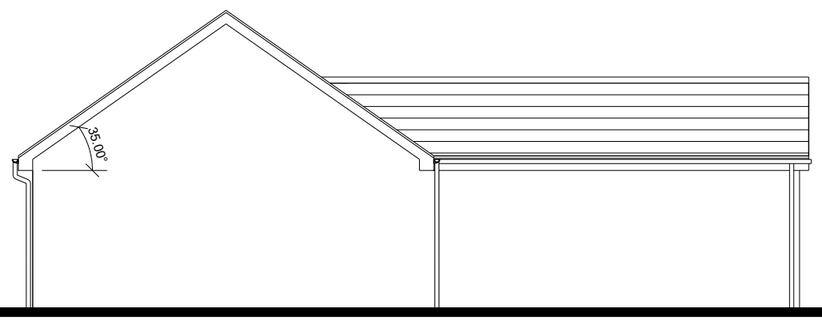


FRONT ELEVATION

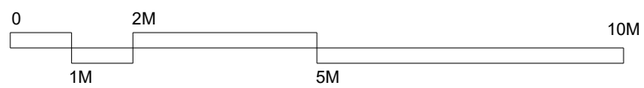
SIDE ELEVATION



SIDE ELEVATION



REAR ELEVATION



Revision	Amendment	Date
P2	Amended plot numbers	22-08-2022
P1	Issued for planning	23-05-2022

Drawn by	Reviewed by	Approved by
VS	EC/SC	P'OR
MCB Number	Date created	Scale @ A3
61841	MAY '22	1:100 @ A3

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McBains Ltd
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Client
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Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
SINGLE & DOUBLE GARAGE
PLOTS 31,32,56 as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE -	MCB -	ZZ -	ZZ -	DR -	A -	0161		D5 -	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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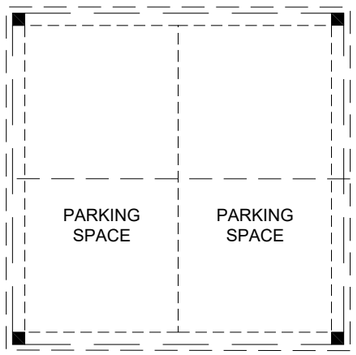
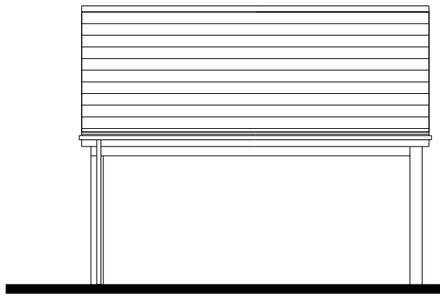
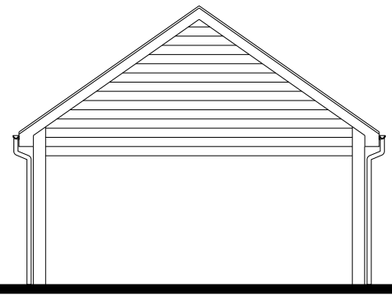


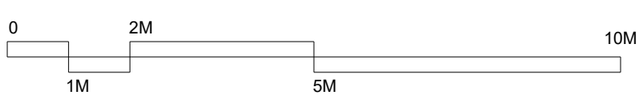
FLOOR PLAN
CARPORT FOR PLOTS
16,17,44,45,46,47,64,65,66,70



FRONT/ REAR ELEVATIONS



SIDE ELEVATION



P1 Issued for planning 22-08-2022

Revision	Amendment	Date
VS	EC	P'OR
Drawn by	Reviewed by	Approved by
61841	AUG '22	1:100 @ A3
MCB Number	Date created	Scale @ A3

McBains Ltd
[redacted]

Client
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Project
LAND NORTH OF RUDLOE DRIVE
QUEDGELEY

Drawing Title
HOUSETYPE PLANS & ELEVATIONS
CARPORT
PLOTS --- as shown
PLOTS --- handed

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0162		D5 - P1
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability Revision

NORTH OF RUDLOE DRIVE - QUEDGELEY
Accommodation Schedule
18.08.2022 RDQUE-MCB-ZZ-ZZ-DR-A-0220-D5-P2_8-Site Layout

Net Developable Area (approx): 3.78 Ha/9.34 Acres TBC
Approx Coverage (Sqft/net developable acre) 17384 TBC

Vistry Group
McBains

Open Market Sale				
Type	Description	No.	Sq.ft.*	Total Sq.ft.
Ashtree	2 bed FOG (detached) + garage & garden	1	753	2256
Elmslie	3 bed house (mid terrace) + parking space	9	933	8397
Elmslie	3 bed house (end terrace) + parking space	9	933	8397
Alwin	3 bed house (end terrace) Area TBC (Gen1) + parking space (1 of 24 garage under FOG)	24	1010	24240
Becket	3 bed house (semi detached) + parking space	5	1024	5120
Becket	3 bed house (semi detached) + single garage	2	1024	2048
Becket	3 bed house (detached) + parking space	3	1024	3072
Becket	3 bed house (detached) + single garage	2	1024	2048
Becket	3 bed house (detached) + garage under FOG	1	1024	1024
Aldridge	3 bed Townhouse (mid terrace) + 1 parking space + 1 garage under FOG	2	1111	2222
Aldridge	3 bed Townhouse (end terrace) + parking space	15	1111	16665
Aldridge	3 bed Townhouse (end terrace) + single garage (3 of 5 under FOG)	5	1111	5555
Alpine	4 bed house (detached) + single garage	0	1136	0
Harford	4 bed house (detached) Area TBC (Mid+) + single garage	5	1225	6125
Leverton	4 bed house (detached) + single garage	5	1214	6070
Foxton	4 bed Townhouse (semi detached) Integ garage	8	1312	10496
Pemberke	4 bed house (detached) + single garage	12	1372	16464
Knightley	4 bed house (detached) + single garage	10	1429	14290
Total:		**120**		**134489**

Affordable Housing				
Type	Description	No.	Sq.ft.*	Total Sq.ft.
AF1 MAIS GF	1 Bed 2 Person Maisonette M4(3) + parking space (Area tbc)	1	624	624
AF1 MAIS FF	1 Bed 2 Person Maisonette + parking space (Area tbc)	1	731	731
Cooper	2 Bed 4 Person House + parking space	15	861	12915
Asher	3 Bed 6 Person House + parking space - Plan to be amended to 6 person	10	1018	10180
Speirs	4 Bed 8 Person House + parking space - Plan to be amended to 8 person	3	1141	3423
Total:		**30**		**27873**

Total Number of Units:		
Total:	**150**	**162362**

Notes:

The schedule is based on site plan information supplied by others, the accuracy of which we cannot guarantee. No consultations have taken place with the planning authority and as such the above proposals should not be used as a basis for financial or commercial transactions.

Notes:
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NOTES:
Each dwelling shall be provided provided with an Electrical Vehicle charger, mode 3.
Or an outside electrical socket to enable ease of installation of an electric vehicle charging point and shall be provided with an lockable weatherproof cover if located externally to the building

- Cycle sheds to be provided in the rear gardens of all houses without a garage, large enough to accommodate
1 cycle space = 1 bed, 2 cycle spaces thereafter

-Each property to be provided with a slabbed area within the garden for the storage of refuse/recycling/food bins

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

WYCOMBE ROAD

LEUCHARS CLOSE

ST MANGAN STREET

FERSFIELD GARDENS

Drain

DW

DW

El Sub Sta

WORKS

NURSERY

AVIONICS HOUSE

DANCE STUDIO

AIR CADETS

Rose Tree Farm

Kinloss

Revision	Amendment	Date
P2	Amended to suit comments	02.09.2022
P1	Issued for planning	23.05.2022
KK/VS	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

McBains
McBains Ltd
[redacted]

Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
SITE LAYOUT PLAN

ARCHITECTURE

Drawing / Document Reference									Status
RDQUE	MCB	ZZ	ZZ	DR	A	0230	D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number	Suitability	Revision

0 5 10 20 50m

NORTH OF RUDLOE DRIVE - QUEDGELEY
Accommodation Schedule
02.09.2022 RDQUE-MCB-ZZ-ZZ-DR-A-0220-D5-P2-Site Layout

Net Developable Area (approx): 3.78 Ha/9.34 Acres TBC
Approx Coverage (Sqft/net developable acre) 17557

Vistry Group
McBains

Open Market Sale

Type	Description	No.	Sq.ft.*	Total Sq.ft.
Ashtree	2 bed FOG (detached) + garage & garden	3	753	2256
Elmslie	3 bed house (mid terrace) + parking space	9	933	8397
Elmslie	3 bed house (end terrace) + parking space	9	933	8397
Alwin	3 bed house (end terrace) Area TBC (Gnn+) + parking space (1 of 24 garage under FOG)	24	1010	24240
Becket	3 bed house (semi detached) + parking space	5	1024	5120
Becket	3 bed house (semi detached) + single garage	2	1024	2048
Becket	3 bed house (detached) + parking space	3	1024	3072
Becket	3 bed house (detached) + single garage	2	1024	2048
Becket	3 bed house (detached) + garage under FOG	1	1024	1024
Aldridge	3 bed Townhouse (mid terrace) + 1 parking space + 1 garage under FOG	2	1111	2222
Aldridge	3 bed Townhouse (end terrace) + parking space	15	1111	16665
Aldridge	3 bed Townhouse (end terrace) + single garage (2 of 5 under FOG)	5	1111	5555
Skytree	4 bed house (detached) + single garage	0	1136	0
Fairford	4 bed house (detached) Area TBC (Hn4+) + single garage	5	1225	6125
Leverton	4 bed house (detached) + single garage	5	1214	6070
Foxliston	4 bed Townhouse (semi detached)	8	1515	12120
Pembroke	4 bed house (detached) + single garage	12	1372	16464
Knightley	4 bed house (detached) + single garage	10	1429	14290
Total:		**120**		**136113**

Affordable Housing

Type	Description	No.	Sq.ft.*	Total Sq.ft.
AF1 MAIS GF	1 Bed 2 Person Maisonette M4(3) + parking space (Area tbc)	1	624	624
AF1 MAIS FF	1 Bed 2 Person Maisonette + parking space (Area tbc)	1	731	731
Cooper	2 Bed 4 Person House + parking space	15	861	12915
Asher	3 Bed 6 Person House + parking space - Plan to be amended to 6 person	10	1018	10180
Speirs	4 Bed 8 Person House + parking space - Plan to be amended to 8 person	1	1141	1421
Total:		**30**		**27031**

Total Number of Units:		
Total:	**150**	**163936**

Notes:

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Notes:
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NOTES:
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-Each property to be provided with a slabbed area within the garden for the storage of refuse/recycling/food bins

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

WYCOMBE ROAD

LEUCHARS CLOSE

ST MANGAN STREET

FERSFIELD GARDENS

Drain

DW

El Sub Sta

WORKS

NURSERY

AVIONICS HOUSE

DANCE STUDIO

AIR CADETS HUT

Rose Tree Farm

Kinloss

Revision	Amendment	Date
P2	Amended to suit comments	02.09.2022
P1	Issued for planning	23.05.2022
KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
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MCB Number	Date Created	Scale

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Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
SITE LAYOUT PLAN

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0230	D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number	Suitability	Revision

0 5 10 20 50m

Notes:
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KEY:

Walling types:

- Ⓡ Ibstock Grampian Red or similar
- Ibstock Alderley Orange or similar
- Ⓜ Ibstock Mercia Orange Multi or similar

Roof Tiles:

- Russell Terracotta Double Roman or similar
- Russell Peat Brown Double Roman or similar
- Russell Galloway Slate Grey or similar

Boundary treatments:

- 1.8 m high close boarded fencing
- 1.8 m high panel fencing
- 1.8 m high masonry wall
- 1.5m high closeboard fence with 0.3m high trellis
- 1.8m high screen wall with 0.3m high trellis on top

Detailing:

- Plots to have grey windows
- Weberpral M Chalk Render or similar (with base of Ibstock Mercia Orange Multi)
- Brick banding, head and cill details in ibstock Alderley Orange or similar (main facing brick in Ibstock Mercia Orange Multi or similar)
- Timber carport

NOTE:

- Anthracite Grey uPVC windows to all 'key' plots
- White uPVC windows to all remaining plots
- All windows to have deep reveals
- Black uPVC rainwater goods
- Mortar - Remix Natural Yellow

NEWHAVEN ROAD

POS / SPORTS PITCH / PLAY AREA

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

DW

DW

El Sub Sta

Rose Tree Farm

Kinloss

P2 Amended to suit comments 01.09.2022
P1 Issued for planning 23.05.2022

Revision	Amendment	Date
KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

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Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
MATERIALS AND BOUNDARIES PLAN

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0231		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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KEY:

- Tarmac
- 450X450 mm Buff Slabs to Front and Rear Paths
- Marshalls Standard Concrete Block Paving - Natural (or equivalent manufacturer)

NEWHAVEN ROAD

POS / SPORTS PITCH / PLAY AREA

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

DW

DW

El Sub Sta

Rose Tree Farm

Kinloss

Revision	Amendment	Date
P2	Amended to suit comments	01.09.2022
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KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

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Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
SURFACE FINISHES PLAN

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0232		D5 - P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability Revision

0 5 10 20 50m

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KEY:

- Allocated Parking Space/Carport
- Garage
- Parking Court
- Visitor Parking Space

NEWHAVEN ROAD

POS / SPORTS PITCH / PLAY AREA

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

DW

DW

El Sub Sta

Rose Tree Farm

Kinloss

0 5 10 20 50m

Revision	Amendment	Date
P2	Amended to suit comments	01.09.2022
P1	Issued for planning	23.05.2022

KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

McBains

Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
PARKING STRATEGY PLAN

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0233		D5	P2
Project Idem	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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KEY:

- Affordable Rent
- Shared ownership

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

Rose Tree Farm

Kinloss

Revision	Amendment	Date
P2	Amended to suit comments	01.09.2022
P1	Issued for planning	23.05.2022
KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

McBains Ltd

Client: Vistry Group

Project:
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title:
AFFORDABLE TENURE PLAN

ARCHITECTURE

Drawing / Document Reference								Status	
RDQUE	MCB	ZZ	ZZ	DR	A	0234		D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability	Revision

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KEY:

- Adoptable
- Management Company

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

Rose Tree Farm

Kinloss

DW

El Sub Sta

Revision	Amendment	Date
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KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

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McBains Ltd

[redacted]

Client

Vistry Group

Project

LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title

ADOPTABLE MANAGEMENT PLAN

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0235	D5	P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number	Suitability	Revision

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KEY:

- Bin Collection Point to be hard paved (Indicative)
- Operator Drag Distance
- Resident Drag Distance

POS / SPORTS PITCH / PLAY AREA

NEWHAVEN ROAD

Drain

LEUCHARS CLOSE

WYCOMBE ROAD

ST MANGAN STREET

FERSFIELD GARDENS

Kinloss

Rose Tree Farm

20m

16m

22m

25m

15m

P2	Amended to suit comments	01.09.2022
P1	Issued for planning	23.05.2022

Revision	Amendment	Date
KK/VS/PV	EC/FC	EC
Drawn by	Reviewed by	Approved by
61841	MAY 2022	1:500 @ A0
MCB Number	Date Created	Scale

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Client
Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
REFUSE STRATEGY PLAN

ARCHITECTURE

Drawing / Document Reference								Status
RDQUE	MCB	ZZ	ZZ	DR	A	0236		D5 - P2
Project Iden	Originator	Zone	Level	Type	Discipline	Number		Suitability Revision

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STREET SCENE A-A'

Scale: 1:200

STREET SCENE B-B'

Scale: 1:200

STREET SCENE C-C'

Scale: 1:200

STREET SCENE D-D'

Scale: 1:200

0 2 4 8 20m

KEY

NTS

Revision	Amendment	Date
P2	Amended to suit comments	02.09.2022
P1	Issued for planning	23.05.2022

Drawn by	Reviewed by	Approved by
VS	SC/EC	EC
MCB Number	Date Created	Scale
61841	MAY 2022	1:200 @ A0

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Client

Vistry Group

Project
LAND NORTH RUDLOE DRIVE
QUEDGELEY

Drawing Title
ILLUSTRATIVE STREETSCENES AA' BB' CC' DD'

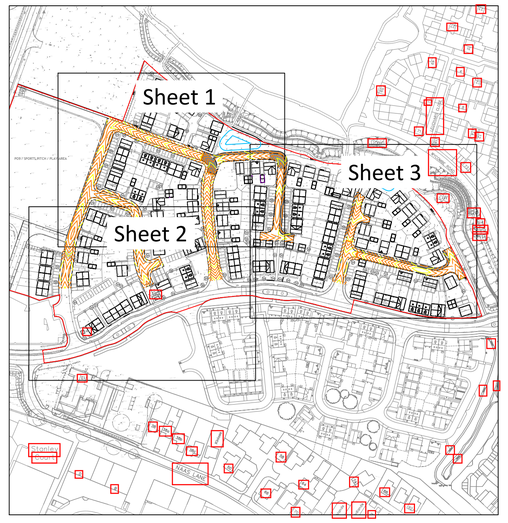
ARCHITECTURE

Drawing / Document Reference									Status
RDQUE	MCB	ZZ	ZZ	DR	A	0250			D5 P2
Project Ident	Originator	Zone	Level	Type	Discipline	Number			Suitability Revision

1:250 4 6 8 10 12 14 16 18

N

AREA



These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

GENERAL NOTES:

1. This drawing is to be read in conjunction with all other relevant Engineering and Architect's details.
2. The design details presented must be reviewed in conjunction with the wider site information and site constraints which may not be evident on drawing and must be requested if not already provided. This includes, but not limited to, ground conditions (geotechnical and geo-environmental), groundwater levels, buried services, remnant obstructions, ecology, tree protection and topography.
3. The Engineer shall be notified immediately, in writing, should any errors or discrepancies be found prior to the commencement or continuation of any works.
4. All work is to be carried out in accordance with current British Standards, Building Regulations and NHBC Standards.
5. It is the responsibility of the Contractor to execute the works at all times in strict accordance with the requirements of the Health and Safety at Work Act 1974, and the C.D.M. Regulations 2015. The Contractor will be deemed to have allowed for full compliance, including full liaison with the CDM Co-ordinator, within his rates.
6. Any existing details which are shown on this drawing are for guidance only and are to be checked on site by the contractor. Any variations are to be recorded and reported to the engineer immediately.
7. Before work commences contractor should consult the engineer and the SI report regarding any contamination issues. All necessary Health and Safety measures to be taken

EXTERNAL LEVEL NOTES:

1. All levels to comply with Building Regulations Part M – Part 1. Architect to confirm plots where Part M - Part 2 or Part 3 apply.
2. The approach route to any dwelling should be level, gently sloping or, where necessary ramped. On steeply sloping sites a stepped approach can be used.
3. Part M provisions to be generally provided to the principal entrance, however if this is not feasible an alternative entrance is reasonable.
4. The approach route should be a minimum 900m wide and have a maximum crossfall of 1:40.
5. A 1200x1200mm threshold to be provided at the principal access. Maximum crossfall 1:40
6. A ramped approach is acceptable with the following criteria
   a. Individual flights are:
   i. For gradients up to 1:15 - not more than 10m long
   ii. For gradients up to 1:12 - not more than 5m long
   b. Every flight has a minimum clear width of 900m
   c. Every flight has a top and bottom landing.
   d. An intermediate flight is provided between individual flights and any change in direction.
   e. Every landing is a minimum of 1200mm long, clear of the swing of any doors or gate.
7. An external stepped approach is acceptable with the following criteria
   a. Steps are uniform with a rise of 75-150mm and a minimum going of 280mm.
   b. Steps have suitable tread nosings.
   c. No individual flight has a rise of more than 1800mm between landings.
   d. Every flight has a minimum clear width of 900mm
   e. Top, bottom and intermediate landings has a minimum length of 900mm.
   f. Every flight with three or more risers has a suitable handrail to one side.
8. Should any departure from the proposed slab or external levels be considered, agreement shall be sought from the Engineer immediately and prior to the commencement or continuation of any works.
9. Threshold drainage is required where levels fall towards a flush entrance. Architect to confirm if not required.
10. Where tanking of double DPC is proposed, this should be suitably detailed and designed by the structural engineer as part of the foundations.
11. Any soft spots discovered after proof rolling shall be removed and replaced with suitable engineering fill.
12. New road levels to tie in smoothly with existing road. Levels to be confirmed prior to construction and reported to the Engineer

PRELIMINARY SCHEME
For comment and review only.
Design is based upon information available at the time.
Design is subject to full review as additional information becomes available.
Design is subject to full review upon receipt of comments from

- Development Control
- LA Planning Authority
- Environment Agency
- LA Highways Department
- Sewerage Undertaker

Surface levels to tie in smoothly with existing (Section 50 licence required)

KEY

- Site Boundary
- +45.00 Proposed Level
- FFL 45.250 Proposed Finished Floor Level
- Brickwork Tanking
- Brickwork Exposed
- Double DPC
- RW Retaining Feature
- GB Gravel Board Retention
- Minor Contour
- Major Contour

P1	01:09:22	Amended to suit revised layout.	SWJ

Seven House - High Street
Longbridge - Birmingham
B31 2UQ - Tel: [redacted]
- Bristol
Exeter - London - Reading
pja.co.uk

CLIENT
Linden HOMES

PROJECT

DRAWING TITLE

DRAWING ISSUE STATUS
PLANNING

PJA JOB No. SUB-CODE DRAWING NO. REVISION

BIM DRAWING REFERENCE

SCALE DRAWN REVIEWED DATE