

Appendix 1 - Financial Summary for Grants Close

Homes Prudential Borrowing Period	HRA June 2023			Comment
	2	0	2	
	50	50	50	
	Affordable Rent £000s	Shared Ownership £000s	TOTAL £000s	
Scheme Costs				
Works	451		451	
Fees	36		36	
Other costs (Contingency at x%)	45		45	
Interest (during Build Phase)	5		5	
Land Acquisition costs	60			
Total Scheme Cost	597	0	537	
Scheme Funding				
Homes England Grant - TBC Affordable Housing Grant			0	
Homes England Grant - Accelerated Construction			0	
Affordable Housing s106 Contributions	(130)		(130)	
Sales - Shared Ownership			0	
Housing Revenue Account			0	
- Capital Funding - 1 for 1 Right to Buy Receipts	(178)		(178)	30% of TSC (excluding land)
- Capital Funding - Reserve allocation			0	
Prudential Borrowing - additional borrowing	(289)		(289)	
OPE funding			0	
Total Scheme Funding (as Cabinet and Council Approved)	(597)	0	(597)	
Net Cost shown as Shortfall if +'ve	0	0	0	
Total scheme value	0	0	0	

Key Data	Target Cost	Borrowing Term	Loan Interest	Inflation	Annual Borrowing Costs	Annual Operational Costs (Year 1)	Annual Income Requirement	Expected income (Year 1)	Variance
	£	Years	%	%	£	£	£	£	£
	PWLB borrowing element	284,000	50	5.50%	2.00%	(15,520)	(2,520)	(18,040)	18,252

10 year detailed summary		Year -3	Year -2	Year -1	Construction Phase Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11-20	Year 21-30	Year 31-40	Year 41-50
Construction Phase cost		0	0	284,000	284,000														
Sales income						0													
Gross Residential Rent	2%				0	(18,252)	(18,618)	(18,990)	(19,370)	(19,757)	(20,152)	(20,555)	(20,966)	(21,386)	(21,814)	(243,630)	(296,981)	(362,019)	(441,300)
Service charge					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Voids	2% of Gross residential rent				0	365	372	380	387	395	403	411	419	428	436	4,872	5,939	7,241	8,825
Gross Rent after allowance for Voids					0	(17,887)	(18,246)	(18,610)	(18,983)	(19,362)	(19,749)	(20,144)	(20,547)	(20,958)	(21,378)	(238,758)	(291,042)	(354,778)	(432,475)
RSL Management	2.0% CPI				0	954	973	993	1,012	1,033	1,053	1,074	1,096	1,118	1,140	12,735	15,521	18,922	23,065
Maintenance	2.0% CPI				0	1,566	1,597	1,629	1,662	1,695	1,729	1,764	1,799	1,835	1,872	20,903	25,480	31,059	37,861
Major Repairs	2.0% CPI				0	0	0	0	0	0	0	0	0	0	4,316	48,206	58,765	71,632	87,321
Service cost	2.0% CPI				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual operational spend					0	2,520	2,570	2,622	2,674	2,728	2,782	2,838	2,895	2,953	7,328	81,844	99,766	121,613	148,247
Net Income before debt repayment					0	(15,367)	(15,676)	(15,988)	(16,309)	(16,634)	(16,967)	(17,306)	(17,652)	(18,005)	(14,050)	(156,914)	(191,276)	(233,165)	(284,228)
Repayment of Borrowing (interest)		0	0	11093	11,093	14,950	15,520	15,520	15,520	15,520	15,520	15,520	15,520	15,520	15,520	155,200	155,200	155,200	155,200
Repayment of Borrowing (principal)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(Surplus) / Deficit		-	-	295,093	295,093	(417)	(156)	(468)	(789)	(1,114)	(1,447)	(1,786)	(2,132)	(2,485)	1,470	(1,714)	(36,076)	(77,965)	(129,028)
Cumulative (Surplus) / Deficit		-	-	295,093	295,093	(417)	(573)	(1,041)	(1,830)	(2,944)	(4,391)	(6,177)	(8,309)	(10,794)	(9,324)	(11,038)	(47,114)	(125,079)	(254,107)

[illegible]

Appendix 3 - Appraisal Assumptions for0

Accommodation Schedule				Rent Levels per wk									
Unit size m2	Unit type	Number of units	Tenure	LHA rent level		Affordable rent		Social rent		S/O rent		Market rent	
	1b2p	2	Affordable Rent	£	137.74	£	202.38	£	111.41	N/A	£	252.97	
	2b3p			£	174.90								
	3b4p			£	218.63								
	4b6p			£	287.67								
TOTAL		2											

Service Charges	Nil
Build costs (rate £m2)	£3,200
Contingency	10%
Voids and bad debts	2%
Management	£477unit/pa Based on historic variable costs per unit
Maintenance	£783 unit/pa Based on historic variable costs per unit
Major Repairs	0.8% of build cost deferred to Yr10 As agreed with Principal Surveying Manager
Loan interest rate %	5.5% Short term; 5.5% Long term










Loan term and type	50 year interest only	50 year interest only	50 year interest only	50 year Maturity, MRP allowance
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On costs/Fees element	Amount		Amount	Amount	Amount
Planning Application fees	£	924.00			
Valuation Fee	£	495.00			
Architect	£	4,200.00			
Employers Agent & QS	£	4,000.00			
Legal - Acqisition	£	500.00			
Ground Investigation	£	7,000.00			
Topographical Survey	£	285.00			
Arborcultural Survey	£	385.00			
Principle Designer (Precontract)	£	450.00			
CIL and s106 payments	£	-			
HLS Staff cost (Dev income)	£	10,000.00			
Homeloss Payments	£	-			
Disturbance Costs	£	-			
Heathland Mitigation HOUSES	£	788.00			
ASbestos removal	£	5,000.00			
Rent loss	£	-			
Party wall	£	-			
Carbon reduction report	£	995.00			
Principle Designer (Post Contract)	£	500.00			
Pre app fee	£	180.00			
Total	£	35,702.00			


Note: On costs/fees are split by number of units to each financial appraisal

Proposal Title: Housing scheme at Grants Close, Bournemouth

Impact Summary

Climate Change & Energy	Amber - Minor negative impacts identified / unknown impacts	
Communities & Culture	Green - Only positive impacts identified	
Waste & Resource Use	Amber - Minor negative impacts identified / unknown impacts	
Economy	Amber - Minor negative impacts identified / unknown impacts	
Health & Wellbeing	Green - Only positive impacts identified	
Learning & Skills	No positive or negative impacts identified	
Natural Environment		
Sustainable Procurement	Amber - Minor negative impacts identified / unknown impacts	
Transport & Accessibility	Amber - Minor negative impacts identified / unknown impacts	

Answers provided indicate that the score for the carbon footprint of the proposal is: **2**

Answers provided indicate that the carbon footprint of the proposal is:	Low	
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Proposal Title: Housing scheme at Grants Close, Bournemouth

Proposal ID: **504**

Proposal Title: **Housing scheme at Grants Close, Bournemouth**

Type of Proposal: **Project**

Brief description:

Demolition of 12 garages and redevelopment of 2 x 2 bed houses for affordable housing. BCP (HRA) owned and managed properties.

Proposer's Name: **Lindsay Shearer**

Proposer's Directorate: **Environment & Community**

Proposer's Service Unit: **Housing**

Estimated cost (£): **Between £25K and PCR15 threshold**

If known, the cost amount (£): **£597K (estimated total scheme cost)**

Ward(s) Affected (if applicable):

East Cliff & Springbourne

Sustainable Development Goals (SDGs) supported by the proposal:

1. No Poverty 3. Good Health and Well Being 7. Affordable and Clean Energy 8. Decent Work and Economic Growth 9. Industry, Innovation and Infrastructure 10. Reduced Inequalities 11. Sustainable Cities and Communities 12. Responsible Consumption and Production

Proposal Title: Housing scheme at Grants Close, Bournemouth

Climate Change & Energy

Is the proposal likely to have any impacts (positive or negative) on addressing the causes and effects of climate change? **Yes**

If the answer was No, then the explanation is below (in this case there are no answers to subsequent questions in this section):

- 1) Has the proposal accounted for the potential impacts of climate change, e.g. flooding, storms or heatwaves? **Yes**
- 2) Does it assist reducing CO2 and other Green House Gas (GHG) emissions? E.g. reduction in energy or transport use, or waste produced. **Yes**
- 3) Will it increase energy efficiency (e.g. increased efficiency standards / better design / improved construction technologies / choice of materials) and/or reduce energy consumption? **Yes**
- 4) Will it increase the amount of energy obtained from renewable and low carbon sources? **Yes**

How was the overall impact of the proposal on its ability to positively address the cause and effects of climate change rated?

Amber - Minor negative impacts identified / unknown impacts



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

The development will provide highly efficient homes. It will help address the 2019 BCP Council declared Climate and Ecological Emergency and future proof the new homes against the 2025 Future Homes Standard for housing. The development will contribute to the Council's commitment to achieving a net zero carbon emission targets. Short-term emissions will be generated through the demolition of the existing building, materials supply chain and construction process. The successful contractors will be encouraged to minimise their environmental impact by the use of sustainable procedures and processes.

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

We intend to build the scheme to the principles of Passivhaus standard. This standard offers the benefit of very low carbon heating requirements and world leading levels of energy efficiency by not relying on fossil fuel heating systems. Further environmental assessments will be undertaken in later stages of procurement.

Proposal Title: Housing scheme at Grants Close, Bournemouth

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Communities & Culture

Is the proposal likely to impact (positively or negatively) on the development of safe, vibrant, inclusive and engaged communities? **Yes**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

- 1) Will it help maintain and expand vibrant voluntary and community organisations? **Yes**
- 2) Will it promote a safe community environment? **Yes**
- 3) Will it promote and develop cultural activities? **Don't know even though may be relevant**

How would the overall impact of the proposal on the development of safe, vibrant, inclusive and engaged communities be rated?

Green - Only positive impacts identified



Reasoning for the answer (details of impacts including evidence and knowledge gaps):

100% of the new homes will be affordable housing. The housing scheme will provide accommodation for those who are on the Housing Register and in housing need. As such, many households will have protected characteristics and vulnerabilities. The housing scheme will bring many benefits to the residents and the wider community through the provision of private amenity space for prospective residents to help create an attractive area which improves the local community.

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

Input on the scheme will be sought from Neighbourhood Management, Housing Delivery Enabling and Housing Options and Partnerships teams, as well as from Ward Councillors.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Waste & Resource Use

Is the proposal likely to have any impacts (positive or negative) on waste resource use or production and consumption? **Yes**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

- 1) Will it prevent waste or promote the reduction, re-use, recycling or recovery of materials? **Yes**
- 2) Will it use sustainable production methods or reduce the need for resources? **Yes**
- 3) Will it manage the extraction and use of raw materials in ways that minimise depletion and cause no serious environmental damage? **Don't know even though may be relevant**
- 4) Will it help to reduce the amount of water abstracted and / or used? **Yes**

How would the overall impact of the proposal on the sustainable production and consumption of natural resources be rated?

Amber - Minor negative impacts identified / unknown impacts



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

Resources will be used and waste generated in the demolition of the existing garages and construction of the new homes. However, the high sustainability standards of the new housing will reduce the resource use over the lifespan of the building, especially in regards to fossil fuels

Details of proposed mitigation/remedial action and monitoring
(inc. timescales, responsible officers, related business plans etc):

The high sustainability standards of the new housing will reduce the resource use over the lifespan of the building, especially in regards to fossil fuels

Proposal Title: Housing scheme at Grants Close, Bournemouth

Economy

Is the proposal likely to impact (positively or negatively) on the area's ability to support, maintain and grow a sustainable, diverse and thriving economy? **Yes**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

- 1) Will the proposal encourage local business creation and / or growth?
Don't know even though may be relevant
- 2) Will the proposal enable local jobs to be created or retained?
Don't know even though may be relevant
- 3) Will the proposal promote sustainable business practices?
Don't know even though may be relevant

=How would the overall impact of the proposal on it's potential to support and maintain a sustainable, diverse and thriving economy be rated?

Amber - Minor negative impacts identified / unknown impacts



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

Exact local impacts are unknown at this stage. There will be an economic benefit to the suppliers/ contractors involved in this scheme and use of local suppliers will be encouraged. Local retailers may benefit from site personnel shopping in their establishments during the construction phase. Residents will benefit financially from low energy bills as a result of highly efficient building standards.

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

We will work with the Council's Strategic Procurement Team regarding the letting of contracts.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Health & Wellbeing

Is the proposal likely to impact (positively or negatively) on the creation of a inclusive and healthy social and physical environmental for all? **Yes**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

- 1) Will the proposal contribute to improving the health and wellbeing of residents or staff?
Yes
- 2) Will the proposal contribute to reducing inequalities?
Yes
- 3) Will the proposal contribute to a healthier and more sustainable physical environment for residents or staff?
Yes

How would the overall impact of the proposal on the creation of a fair and healthy social and physical environmental for all be rated?

Green - Only positive impacts identified



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

The scheme will provide much needed affordable housing, allowing at least 2 families to come off the Housing register or for people to downsize freeing up larger accommodation. The high energy efficiency of the proposed new homes will help alleviate the financial and mental stresses of fuel poverty. The proposed scheme gives careful consideration to wider issues, it will provide private amenity space for prospective residents to help create an attractive area which would have a positive impact on health and wellbeing.

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

Potential to undertake resident surveys to evidence improvements in health and wellbeing.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Learning & Skills

Is the proposal likely to impact (positively or negatively) on a culture of ongoing engagement and excellence in learning and skills? **No**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

No provision at this stage to support community learning and development or skill based learning. Opportunities to include provisions such as apprenticeships through the supply chain can be explored with the Strategic Procurement Team.

- 1) Will it provide and/or improve opportunities for formal learning?
- 2) Will it provide and/or improve community learning and development?
- 3) Will it provide and/or improve opportunities for apprenticeships and other skill based learning?

How would the overall impact of the proposal on the encouragement of learning and skills be rated?

No positive or negative impacts identified



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

Proposal Title: Housing scheme at Grants Close, Bournemouth

Natural Environment

Is the proposal likely to impact (positively or negatively) on the protection or enhancement of local biodiversity or the access to and quality of natural environments?

Yes

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

No provision at this stage to support community learning and development or skill based learning. Opportunities to include provisions such as apprenticeships through the supply chain can be explored with the Strategic Procurement Team.

- 1) Will it help protect and improve biodiversity i.e. habitats or species (including designated and non-designated)? **Yes**
- 2) Will it improve access to and connectivity of local green spaces whilst protecting and enhancing them? **Partially**
- 3) Will it help protect and enhance the landscape quality and character?
Yes
- 4) Will it help to protect and enhance the quality of the area's air, water and land?
Partially

How would the overall impact of your proposal on the protection and enhancement of natural environments be rated?



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

As per recommendations in Environmental Impact Assessment.

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

As per recommendations in Environmental Impact Assessment.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Sustainable Procurement

Does your proposal involve the procurement of goods, services or works? **Yes**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

Has or is it intended that the Strategic Procurement team be consulted?

Yes – planning to discuss

If the Strategic Procurement team was not consulted, then the explanation for this is:

- 1) Do the Government Buying Standards (GBS) apply to goods and/or services that are planned to be bought?
Yes
- 2) Has sustainable resource use (e.g. energy & water consumption, waste streams, minerals use) been considered for whole life-cycle of the product/service/work?
Yes
- 3) Has the issue of carbon reduction (e.g. energy sources, transport issues) and adaptation (e.g. resilience against extreme weather events) been considered in the supply chain?
Yes
- 4) Is the product/service fairly traded i.e. ensures good working conditions, social benefits e.g. Fairtrade or similar standards?
Not Relevant
- 5) Has the lotting strategy been optimised to improve prospects for local suppliers and SMEs?
Don't know even though may be relevant
- 6) If aspects of the requirement are unsustainable then is continued improvement factored into your contract with KPIs, and will this be monitored?
Don't know even though may be relevant

How is the overall impact of your proposal on procurement which supports sustainable resource use, environmental protection and progressive labour standards been rated?

Amber - Minor negative impacts identified / unknown impacts



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

Procurement exercises for the supply of goods and services yet to be undertaken - impacts unknown at this stage.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Details of proposed mitigation/remedial action and monitoring (inc. timescales, responsible officers, related business plans etc):

Ongoing liaison with the Strategic Procurement Team.

Proposal Title: Housing scheme at Grants Close, Bournemouth

Transport & Accessibility

Is the proposal likely to have any impacts (positive or negative) on the provision of sustainable, accessible, affordable and safe transport services - improving links to jobs, schools, health and other services? **Don't Know**

If the answer was No, then the explanation is below (there are no answers to subsequent questions in this section):

- 1) Will it support and encourage the provision of sustainable and accessible modes of transport (including walking, cycling, bus, trains and low emission vehicles)?

Yes

- 2) Will it reduce the distances needed to travel to access work, leisure and other services? **Don't know even though may be relevant**

- 3) Will it encourage affordable and safe transport options?

Yes

How would the overall impact of your proposal on the provision of sustainable, accessible, affordable and safe transport services be rated?

Amber - Minor negative impacts identified / unknown impacts



The reasoning for the answer (details of impacts including evidence and knowledge gaps):

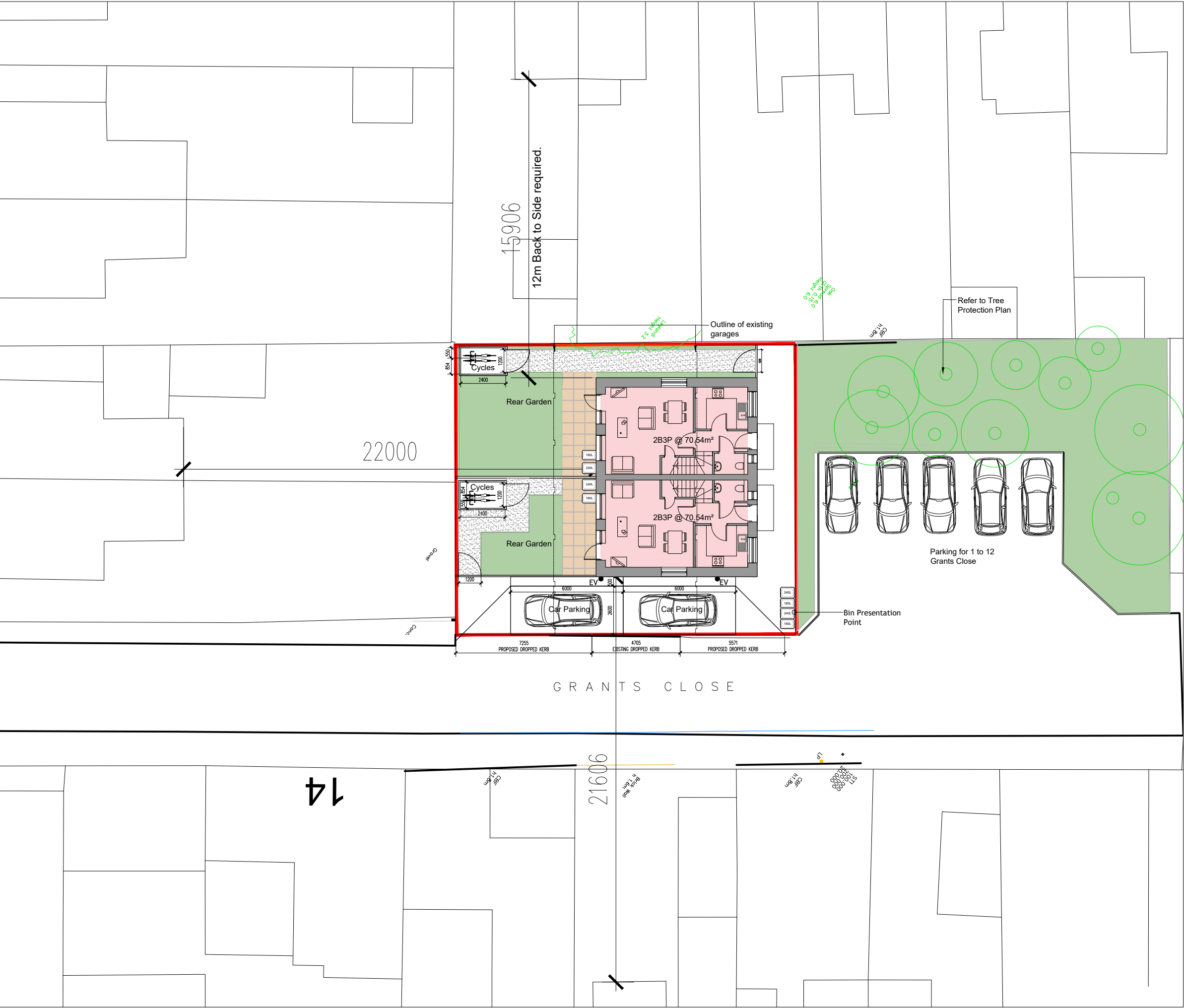
There are bus stops close to the development site. Local amenity facilities, educational and retail centres are accessible on foot for able bodied people. The location of the scheme may enable residents to rely less on personal transport to access their places of work.

Details of proposed mitigation and monitoring (inc. timescales, responsible officers, related business plans etc):

Impacts dependent on the scale of sustainable travel provisions and circumstances of the residents.

- NOTES:**
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 2. Scaled drawing for Planning purposes only.
 3. Contractors must verify all dimensions and report any discrepancies before putting work in hand or making any shop drawings.
 4. Lower ground construction/ retaining structure to be structural engineers design.
 5. Electrical layouts to be agreed with client & added to drawing
 6. Drawings to be read in conjunction with specification.





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2 x 2B3P PASSIVE HOUSES

A	29/11/22	Change location of the bike shed of the Unit on the right	By	CR
Rev	Date	Description	By	PM

REVISIONS:

PROJECT STAGE: PLANNING

CLIENT:
BCP

PROJECT & DRAWING TITLE:

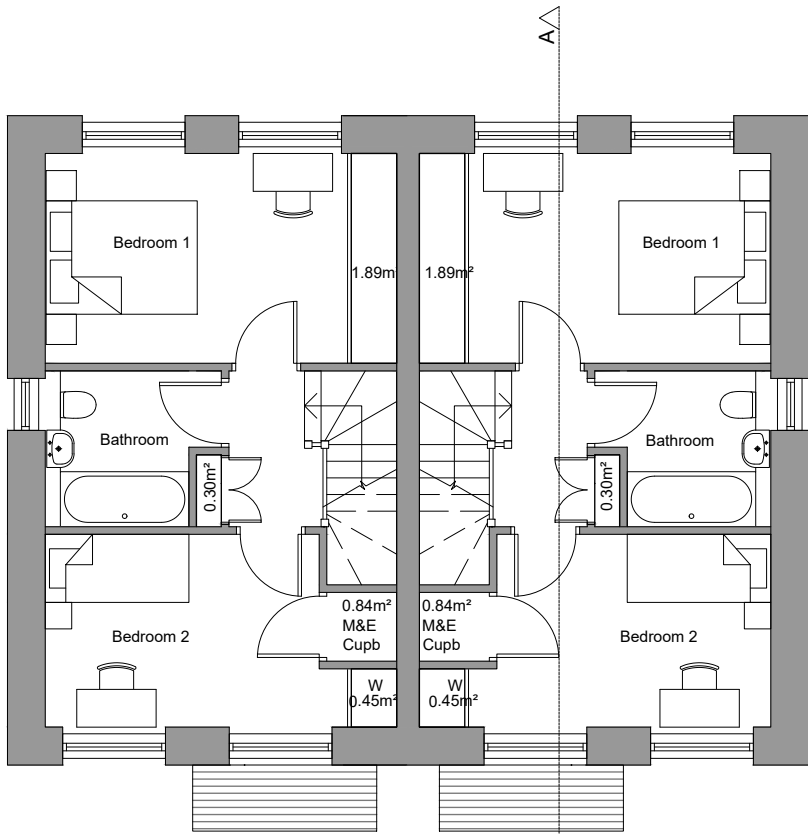
Garage Site at Grants Close, Bournemouth, BH1 4NY
Proposed Site Plan

Scale @ A3: 1:200	Drawn by: CR	
Date: 18.11.22	Checked by: NDP	
DRAWING No: ASP.22.032.003		REVISION: A

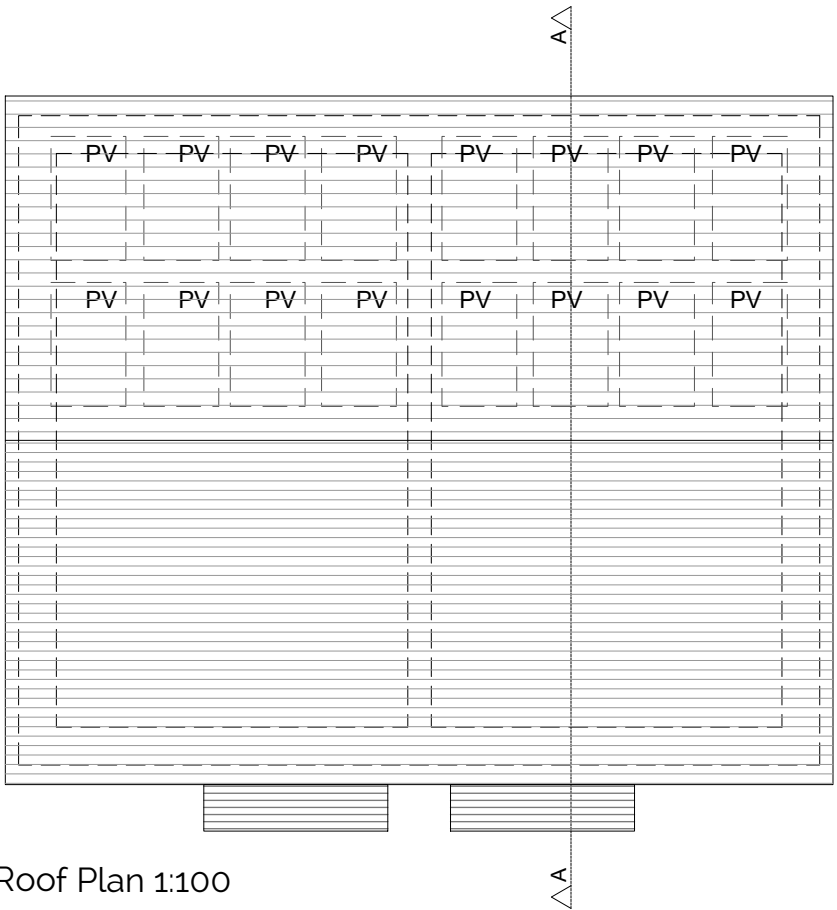
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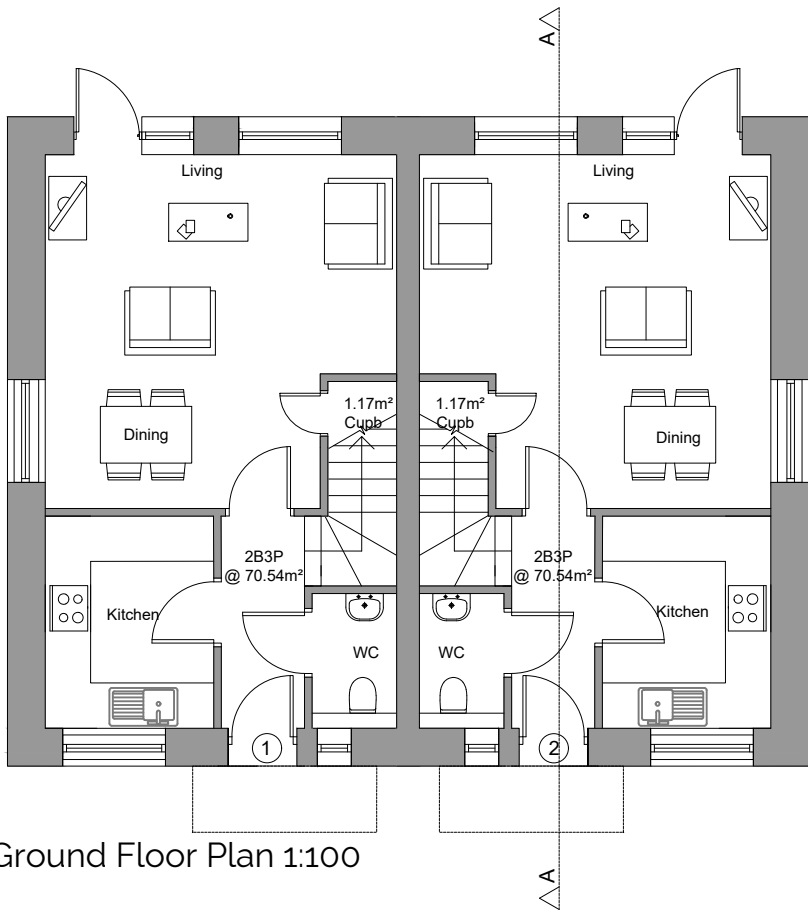




First Floor Plan 1:100



Roof Plan 1:100



Ground Floor Plan 1:100

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B	01/12/22	Include Photovoltaic panels	By	CR
A	29/11/22	Change the Bathroom window and layout	By	CR
Rev	Date	Description	By	PM

REVISIONS:

PROJECT STAGE: PLANNING

CLIENT:
BCP

PROJECT & DRAWING TITLE:

Garage Site at Grants Close, Bournemouth, BH1 4NY
Proposed Floor Plans

Scale @ A3: 1:100	Drawn by: NDP	
Date: 17.11.22		
DRAWING No: ASP.22.032.100	REVISION: B	

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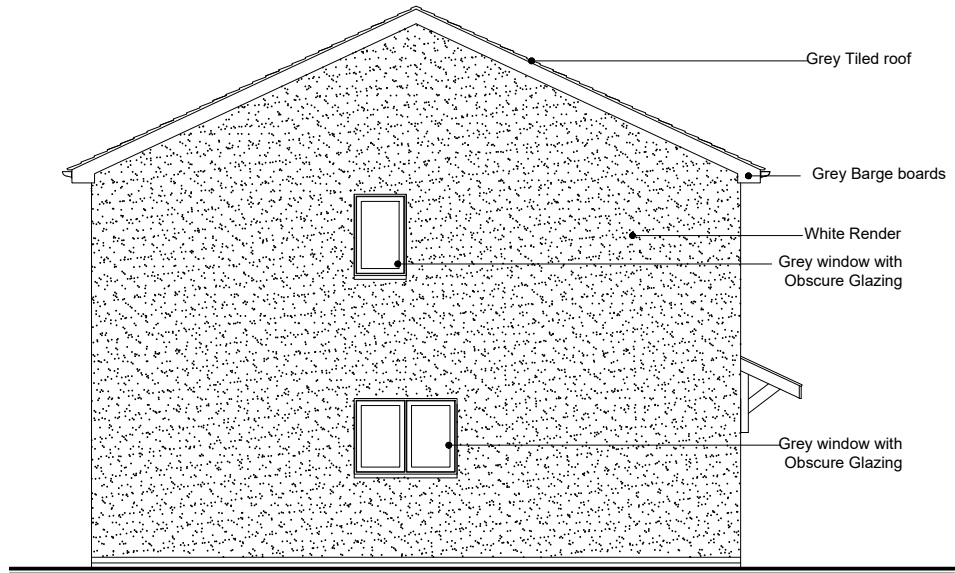
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Proposed Plans 1:100

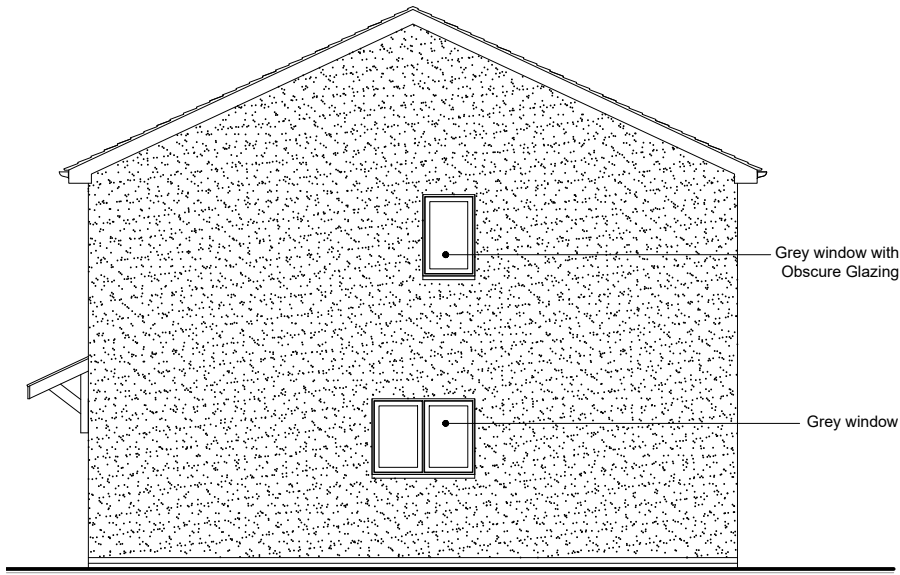




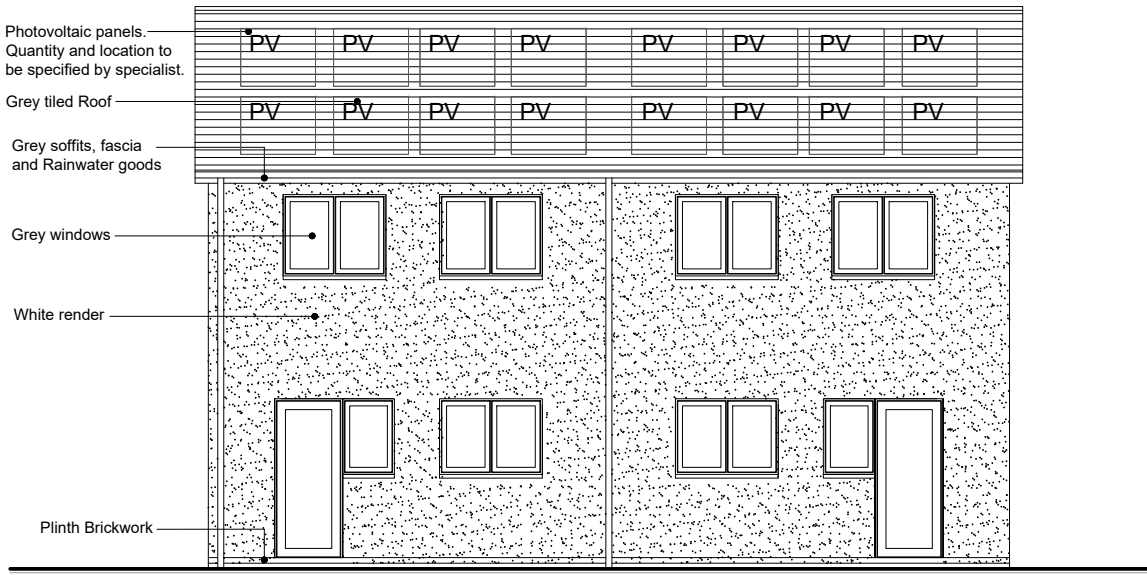
Front Elevation



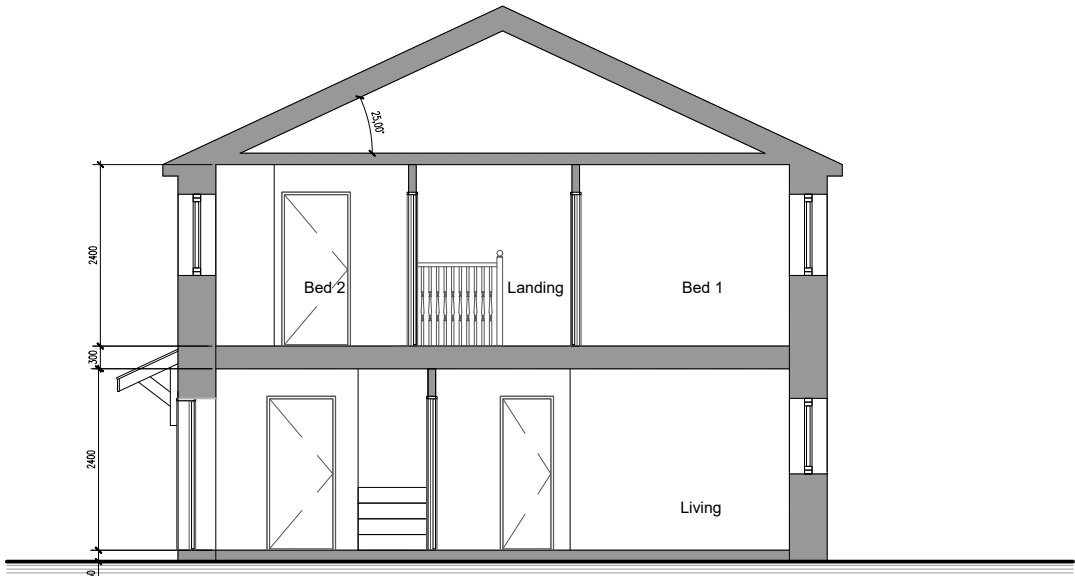
Side Elevation



Side Elevation



Rear Elevation



Section A-A

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 6. Drawings to be read in conjunction with specification.

B	01/12/22	Include Photovoltaic panels	By	CR
A	29/11/22	Change the Bathroom window and the colour of windows, soffit and fascia to grey	By	CR
Rev	Date	Description	By	PM

REVISIONS:

PROJECT STAGE: PLANNING

CLIENT:
BCP

PROJECT & DRAWING TITLE:

Garage Site at Grants Close, Bournemouth, BH1 4NY
Proposed Elevations and Section

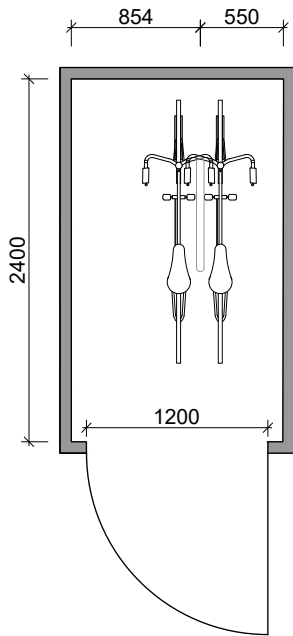
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Date: 18.11.22		
DRAWING No: ASP.22.032.200	REVISION: B	

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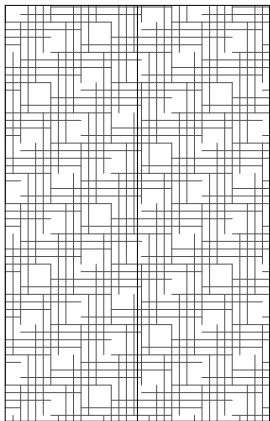
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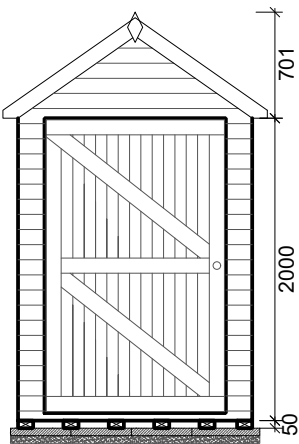
Proposed Elevations and Section 1:100
0 10m



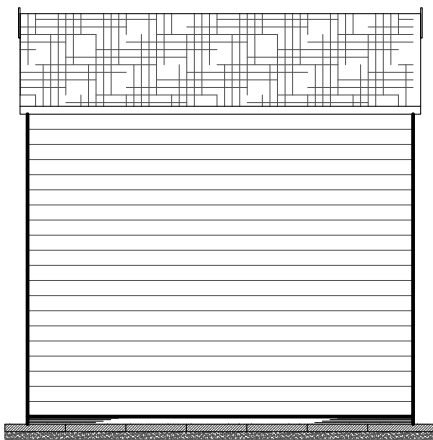
Ground Floor Plan



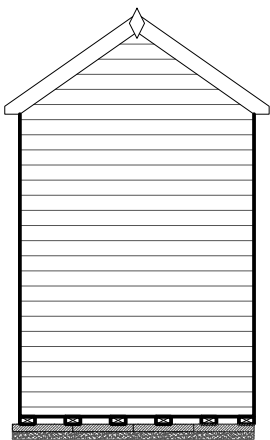
Roof Plan



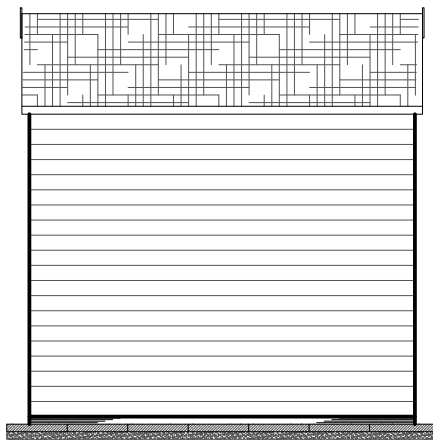
Front Elevation



Side Elevation



Rear Elevation



Side Elevation

- NOTES:**
1. The contents of this drawing are copyright.
 2. Scaled drawing for Planning purposes only.
 3. Contractors must verify all dimensions and report any discrepancies before putting work in hand or making any shop drawings.
 4. Lower ground construction/ retaining structure to be structural engineers design.
 5. Electrical layouts to be agreed with client & added to drawing
 6. Drawings to be read in conjunction with specification.

Rev	Date	Description	By	PM
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REVISIONS:

PROJECT STAGE: PLANNING

CLIENT:
BCP

PROJECT & DRAWING TITLE:

Garage Site at Grants Close, Bournemouth, BH1 4NY
Proposed Bike Store

Scale @ A3: 1:50 Date: 18.11.22	Drawn by: CR Checked by: NDP	
DRAWING No: ASP.22.032.201		REVISION:

ARCHITECTURE - PLANNING - PROJECT MANAGEMENT - CDM

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Equality Impact Assessment: Report and EIA Action Plan

Purpose

Policy/Service under development/review:	Development of the site at Grants Close, Bournemouth, BH1 4NY
Service Lead and Service Unit:	Nigel Ingram, Head of Housing Delivery; Housing Delivery Team.
People involved in EIA process:	Jonathan Thornton, Housing Development Manager. Lindsay Shearer, Development Project Manager
Date EIA conversation started:	12/01/2023

Background

To provide additional sustainable affordable housing in the BCP area. The project includes the development of 2 residential units. The completed project will provide much needed additional affordable housing (within the affordable rented tenure) within the BCP conurbation.

There is need for additional homes across all tenures, with the demand for affordable housing at sub-market levels being particularly high. There are circa 2,100 households on the Housing Register for the BCP area all waiting for affordable housing in the form of either Council or Housing Association (RP's) Homes.

The BCP owned site currently consists of 12 garages.

It is considered that this site represents an opportunity to create new high-quality purpose-built residential dwellings for affordable housing.

The benefits of the proposal include:

- Providing 2 new residential dwellings - houses. These dwellings will be provided within the affordable housing tenure.
- These homes will help towards imminent new Local Plan housing targets and will also contribute significantly to unmet housing need.
- All homes will be built to the highest sustainability standards delivered through the excellent fabric first and airtightness approach (designed in this case to accommodate the principles of Passivhaus).
- Decreasing the number of households on the BCP Housing Register.
- Benefiting couples and families which are either homeless or they may live in unsuitable or under/ over occupied housing.
- Increasing job opportunities within the construction sector during the construction phase.
- Generating a long-term surplus to the Housing Revenue Account (continual income from affordable rent).

The units, type and mix will be informed from the adopted and emerging Local Plans, the Strategic Housing Market Assessment (SHMA) and the housing register statistics. The final tenure mix will be developed after consideration of numerous factors including the need for the scheme to be financially viable and a providing a positive return, housing demands, site

specifics and the need to ensure a sustainable community. The Council's Neighbourhood Management team and the Housing Options and Partnerships team will be closely involved in the development of this scheme to help ensure that it adequately meets housing needs and is designed in such a way to be sustainable and to enable good quality housing management. The completed affordable housing dwellings will be let and managed on the same basis as our existing housing stock and all the EIA's and other policies which apply to our existing stock to apply to these new units.

The Housing Delivery Team will engage with the Housing Portfolio Holder on the strategic approach to new council owned affordable housing. As part of this engagement process, the team will also speak with the Ward Councillors and Portfolio Holder and relevant Council staff. Local residents will be consulted by letter prior to the planning application and also will have the opportunity during the planning process to comment.

The team will engage BCP's Communication Team to widely publicize this scheme via social mediate such as LinkedIn, BCP's own website, the Bournemouth Daily Echo and other media platforms, as appropriate. Comments about the proposals will be accepted by the Housing Delivery team throughout the duration of the project. Where relevant, advice or other information will be provided to interested parties.

Findings

How does your decision affect those of:

- **Different Ages:** Admission for new residents to the scheme will be by objective eligibility criteria, which will be operated by the Housing Solutions team, who undertake property allocations for the Council to ensure that the properties are let to those in housing need. These properties are designed for couples and families. There will be no loss of existing provision for other client groups as a result of this project.
- **Disability:** Properties will be eligible for all eligible applicants on the housing register. No issues regarding these characteristics have been identified but this factor will be considered along with any service user identified needs
- **Sex/ Gender Reassignment/ Pregnancy and Maternity/ Marriage and Civil/ Race/ Religion or Belief/ Sexual Orientation/ Armed Forces Community and any other factors/ groups:** Properties will be eligible for all eligible applicants on the housing register. No issues regarding these characteristics have been identified but this factor will be considered along with any service user identified needs.
- **Human Rights:** Will facilitate Article 11 of the International Covenant on Economic, Social and Cultural Rights – the right of everyone to adequate standard of living for themselves and their family, including adequate food, clothing and housing. No human rights have been identified but these factors will be considered/ monitored along with any service users identified needs.

Conclusion

1. This proposal does not introduce new changes to policy or services and the properties will be designed for singles/ couples.
2. These homes will help towards meeting imminent new Local Plan housing targets and will also contribute significantly to unmet housing need.
3. The new homes provided will be designed and built to a high standard. Please see point 3 and 4 below.
4. All homes will be built to the highest sustainability standards delivered through the excellent fabric first and airtightness approach (designed in this case to accommodate the principles of Passivhaus).
5. Decreasing the numbers of households on BCP Council's Housing Register.
6. Benefiting couples/ families which are either homeless or they may live in unsuitable or under/ over occupied housing.
7. Increasing job opportunities within the construction sector during the construction phase of the development.
8. Generating a short time and long-term surplus income to the Housing Revenue Account.

Equality Impact Assessment: Report and EIA Action Plan

Equality Impact Assessment Action Plan

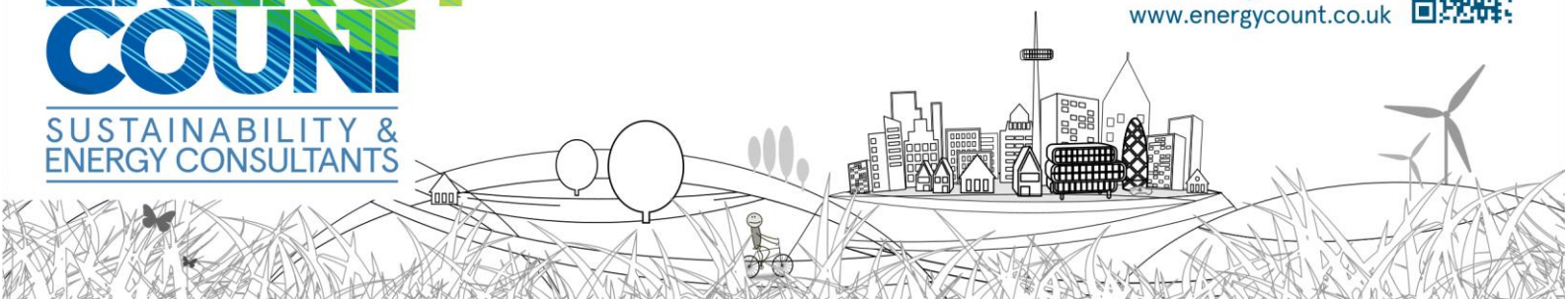
Issue identified	Action required to reduce impact	Timescale	Responsible officer
The properties are designed for Couples and families –2 bed houses.	<p>As a consequence of no 3 or 4 bed housing provision on this site, impact can be offset by delivery of homes elsewhere within the BCP area.</p> <p>Two bed houses can be more suitable for those occupying larger properties than they need. Subsequent downsizing will free up larger family houses.</p> <p>The identification of housing need for specific client groups within the neighbourhood will be monitored as part of the ongoing Housing Strategy process.</p>	Ongoing	Affordable Housing and Resettlement Manager.

Grants Close



RAG rating	G
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[illegible]



CARBON REDUCTION STATEMENT

PROJECT: Replacement of Garages with 2 new dwellings at Grants Close, Bournemouth

CLIENT: BCP Council

PROJECT REF: 0292-0123-02_r1

DATE: 20 January 2023

CONTENTS

1.0 - Introduction

2.0 - Energy Requirements

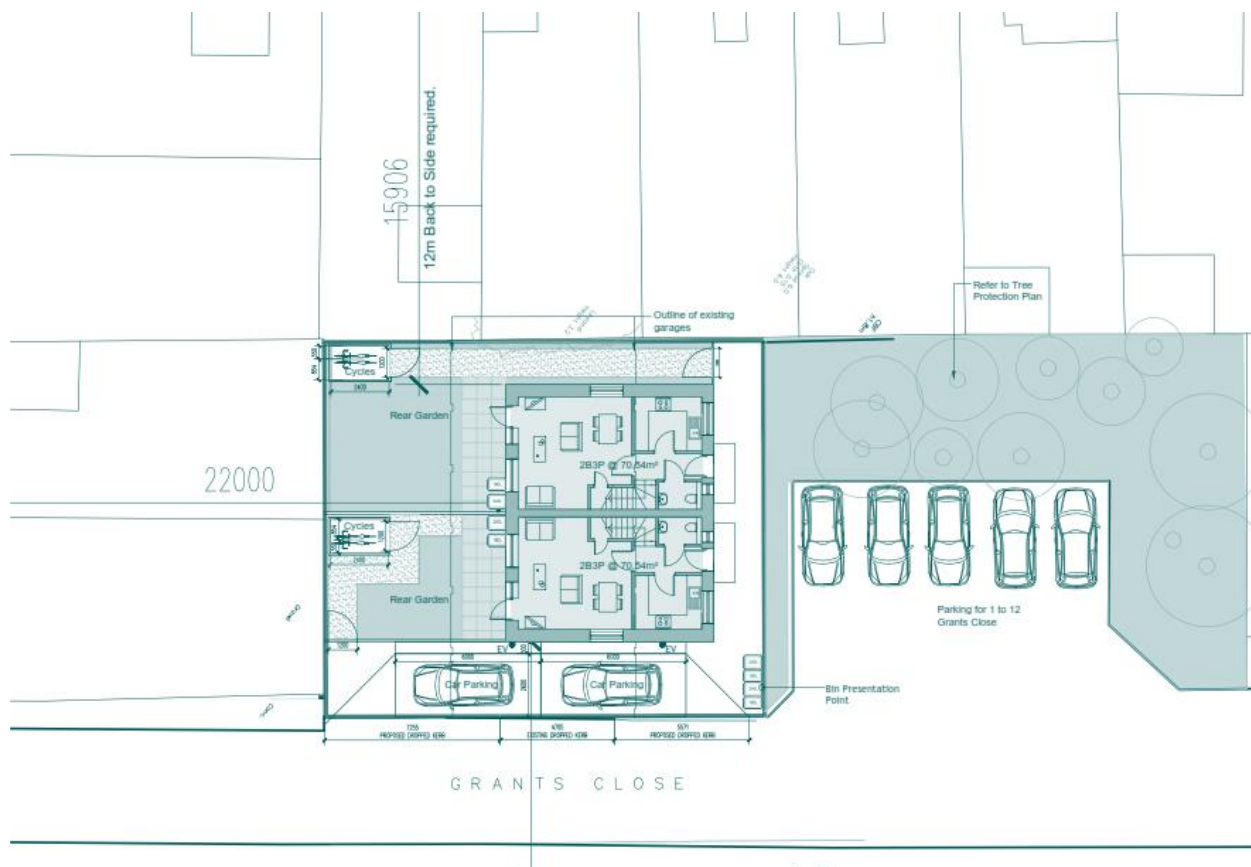
3.0 - Energy Hierarchy

4.0 - Methodology

5.0 – Findings

6.0 - Conclusions

1.0 – INTRODUCTION



The development at Grants Close consists of the construction of a pair of semi-detached houses.

As part of its commitment to reduce CO₂ emissions in the conurbation BCP Council declared a Climate & Ecological Emergency in July 2019. On the back of this the new BCP local plan is being developed to help achieve a reduction in CO₂ emissions in new developments across the conurbation. The existing local plan was adopted in October 2012 and is out-of-date¹ in planning terms.

The current Policy CS2 of the Core Strategy requires that all developments must have at least 10% of their energy demand come from decentralised and renewable or low carbon sources, unless this is demonstrated to be unfeasible or unviable.

The proposed development at Grants Close will be built to Passivhaus standards using a fabric-first approach that will exceed Building Regulations by a large margin.

The purpose of this report is to show how the fabric-first Passivhaus approach will provide a significant CO₂ emissions reduction across the development compared to the same buildings if it were built to current Building Regulations requirements.

¹ Refer to Appendix A

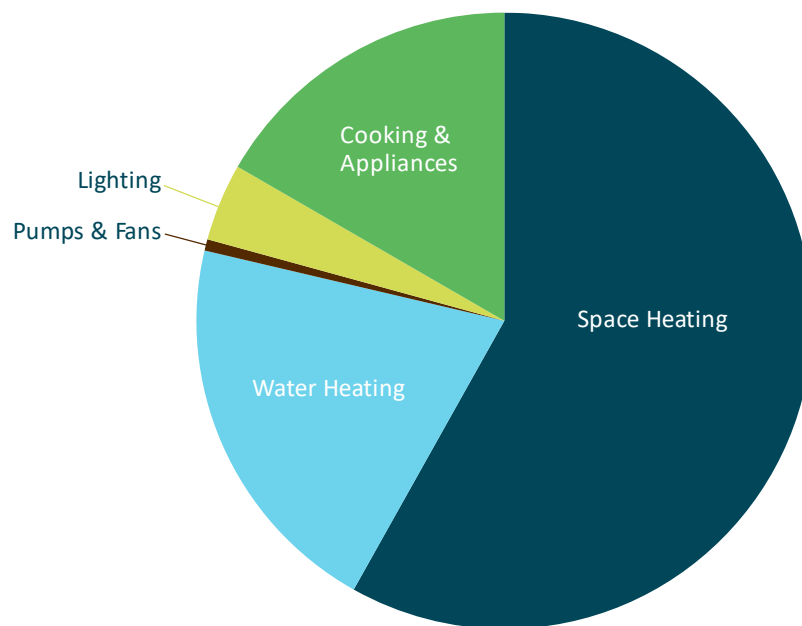
2.0 - ENERGY REQUIREMENTS

Energy efficiency first

The largest proportion of energy demand of a typical dwelling built to current regulations is from space and water heating.

Figure 2.1 below shows the energy split of a typical dwelling built to comply with Building Regulations.

Figure 2.1



It is good practice therefore to reduce the overall energy demand of a dwelling by utilising a low energy design approach.

Using a fabric-first approach, the space heating demand of a dwelling is brought closer to zero due to the high levels of thermal insulation and air tightness.

Low energy design involves the consideration and implementation of measures to reduce the energy requirement of a dwelling. This can be achieved by:

- Improving levels of insulation to reduce heat loss through the fabric of the building.
- Use of low-energy technologies, e.g. low-energy lighting, energy efficient heating systems & appliances.
- Use of passive solar design.

3.0 - ENERGY HIERARCHY

Be Lean, Be Clean, Be Green.

When designing a building it is advisable to follow an Energy Hierarchy. The primary aim is to make the building as energy efficient as possible in order to reduce the demand for energy, and thus CO₂ emissions.

Building Regulations 2021 Part L aims to reduce CO₂ emissions from new buildings by 30% compared to those built to 2013 regulations. This can be achieved by making improvements to the fabric of the building by increasing levels of insulation, increasing air tightness and the use of efficient heating & appliances. CO₂ emissions can be further reduced by using renewable or low-carbon energy sources.

In order to reduce the regulated CO₂ emissions of the proposed development the principle is to follow the energy hierarchy:

1. Use less energy – energy efficient measures, air tightness, passive solar, low energy design
2. Use renewable & low-carbon energy sources and/or other technologies

Use less energy

Areas of consideration in order to improve the efficiency of the fabric of a dwelling:

- Increased insulation to main thermal elements (roof, walls, floor, glazing)
- Reduce thermal bridging to near-zero
- Improved air tightness

Other areas for improvement:

- Efficient heating & hot water systems
- Improved heating & lighting controls
- Controlled ventilation
- Energy efficient lighting
- Energy efficient appliances (cooker, washing machine, fridges, etc.)

1. Use less energy

The proposed minimum Building Fabric specification for the development will be as follows:

Element	Proposed u-value (Passivhaus spec) (W/m ² K)	Maximum allowed by Building Regulations Part L1A (W/m ² K)
Walls	0.12	0.26
Floor	0.12	0.18
Roof	0.11	0.16
Glazing	0.8	1.6
Air tightness	1.0 ²	8.0

2. Use renewable & low carbon energy sources and/or other technologies

It is proposed that MVHR whole-house ventilation systems are used in each dwelling. MVHR extracts heat from expelled air and uses it to pre-warm incoming fresh air.

² Air tightness (or air permeability) is measured differently in Building Regulations and Passivhaus. Passivhaus uses the n50 methodology, which requires an air change/hour (ACH) rate of 0.6. An n50 result of 0.6 ACH is roughly equivalent to a 1.0 using the q50 methodology used by Building Regulations.

4.0 - METHODOLOGY

Project Appraisal

BCP Council impose a condition on all new dwellings that requires a 10% reduction in Energy Demand from renewable or low carbon sources. The 10% energy demand reduction requirement in the out-of-date Bournemouth Local Plan is a noble intention, but too simplistic a tool in practice.

Under the out-of-date local plan there is no requirement for a dwelling to exceed Building Regulations, just that the energy demand is reduced by 10% using renewable or low-carbon sources. This makes it possible to build an inefficient building that fails to meet Building Regulations Part L , which only passes with the addition of renewables.

Using a fabric-first approach can achieve a decent Building Regulations pass without the need for renewables.

The proposed development will be built to Passivhaus standard using a fabric-first approach that will greatly exceed Building Regulations.

The latest Design SAP software has been used to determine CO₂ emissions for the development.

5.0 – FINDINGS (Energy Demand)

Table 5.1 Benchmark Calculations (Base spec) & Base spec + PV

Grants Close Plot	Space Heating (kWh/year)	Water Heating (kWh/year)	Pumps & Fans (kWh/year)	Lighting (kWh/year)	Base Spec Total (kWh/year)	Qty of Solar PV to pass (kW)	PV Contribution (kWh/year)	TOTAL with PV (kWh/year)
1	1705.7	3429.5	258.2	157.4	5550.8	2.3	1893.7	3657.1
2	1619.7	3433.0	258.2	157.4	5468.3	2.3	1893.7	3574.6
					11,019.1			7231.7

Table 5.1 shows that the dwellings, if built to the base specification have a total energy demand of 11,019 kWh/year.

With solar PV (to Building Regulations pass) the total energy demand of the development reduces to 7231.7 kWh/year, which represents a 34.4% reduction.

Table 5.2 Proposed Specification (Passivhaus)

Grants Close Plot	Space Heating (kWh/year)	Water Heating (kWh/year)	Pumps & Fans (kWh/year)	Lighting (kWh/year)	TOTAL (kWh/year)
1	162.4	2476.6	172.2	157.4	2968.7
2	140.5	2476.6	172.2	157.4	2946.7
					5915.4

Table 5.2 shows that the dwellings, if built to the proposed Fabric-First Passivhaus specification have an energy demand of 5915.4 kWh/year.

This represents the following energy demand reduction:

- a 18.2% energy demand reduction over the Building Regulations pass, base specification + PV

5.0 – FINDINGS (CO₂ Emissions)

Table 5.3 Benchmark Calculations (Base spec)

Block Compliance Report - DER				
Block Reference: 0292-0123-02 Grants Close		Block Name: 2x New Dwellings at Grants Close, Bournemouth		
Property-Assessment Reference	Floor area (m ²)	DER (kgCO ₂ /m ²)	TER (kgCO ₂ /m ²)	% DER/TER
0292-0123-01_01 - BASE_gas	70.30	16.17	13.05	-23.91 %
0292-0123-01_02 - BASE_gas	70.30	15.93	12.80	-24.45 %
Totals:	140.60	32.10	25.85	
Average DER = 16.05 kgCO ₂ /m ²	% DER/TER	FAIL		
Average TER = 12.93 kgCO ₂ /m ²	-24.18 %			

Table 5.3 shows CO₂ emissions of the dwellings if built to a typical specification with gas boiler. The average DER is 16.05 kgCO₂/m², which for Building Regulations purposes represents a -24.18% fail.

The base spec used for the benchmark calculations is as follows:

Walls = 0.20 W/m ² K	(Building Regulations Part L limit = 0.26 W/m ² K)
Floor = 0.15 W/m ² K	(Building Regulations Part L limit = 0.18 W/m ² K)
Roof = 0.11 W/m ² K	(Building Regulations Part L limit = 0.16 W/m ² K)
Glazing = 1.4 W/m ² K	(Building Regulations Part L limit = 1.6 W/m ² K)
Air tightness (q50) = 3.80 m ³ /hr/m ²	(Building Regulations Part L limit = 8.0 m ³ /hr/m ²)

Table 5.4 Benchmark Calculations with renewables (Base spec + PV)

Block Compliance Report - DER				
Block Reference: 0292-0123-02 Grants Close		Block Name: 2x New Dwellings at Grants Close, Bournemouth		
Property-Assessment Reference	Floor area (m ²)	DER (kgCO ₂ /m ²)	TER (kgCO ₂ /m ²)	% DER/TER
0292-0123-01_01 - BASE_gas+PV	70.30	12.71	13.05	2.61 %
0292-0123-01_02 - BASE_gas+PV	70.30	12.47	12.80	2.58 %
Totals:	140.60	25.18	25.85	
Average DER = 12.59 kgCO ₂ /m ²	% DER/TER	PASS		
Average TER = 12.93 kgCO ₂ /m ²	2.59 %			

Table 5.4 shows CO₂ emissions of the dwellings if built to the same typical specification with gas boiler, plus 2.3 kW of Solar PV per dwelling to achieve a pass. The average DER is 12.59 kgCO₂/m², which for Building Regulations purposes represents a 2.59% pass.

Tables 5.3 & 5.4 represent dwellings built to a specification that is typical in the industry today. The specification exceeds the limits set in Building Regulations Part L, yet still requires some renewables to pass the CO₂ emissions requirement of Part L.

The fabric-first Passivhaus specification

The proposed dwellings will be built to Passivhaus standards, with the following specification:

Walls = 0.12 W/m ² K	(Building Regulations Part L limit = 0.26 W/m ² K)
Floor = 0.12 W/m ² K	(Building Regulations Part L limit = 0.18 W/m ² K)
Roof = 0.11W/m ² K	(Building Regulations Part L limit = 0.16 W/m ² K)
Glazing = 0.8 W/m ² K	(Building Regulations Part L limit = 1.6 W/m ² K)
Air tightness (q50) = 1.0 m ³ /hr/m ²	(Building Regulations Part L limit = 8.0 m ³ /hr/m ²)

Part of the Passivhaus specification requires that thermal bridges are largely designed out, making for an extremely well insulated and airtight thermal envelope.

Table 5.5 Calculations (Passivhaus spec)

Block Compliance Report - DER				
Block Reference: 0292-0123-02 Grants Close		Block Name: 2x New Dwellings at Grants Close, Bournemouth		
Property-Assessment Reference	Floor area (m ²)	DER (kgCO ₂ /m ²)	TER (kgCO ₂ /m ²)	% DER/TER
0292-0123-01_01 - PASSIVHAUS	70.30	6.01	12.66	52.53 %
0292-0123-01_02 - PASSIVHAUS	70.30	5.96	12.42	52.01 %
Totals:	140.60	11.97	25.08	
Average DER = 5.99 kgCO ₂ /m ²	% DER/TER	PASS		
Average TER = 12.54 kgCO ₂ /m ²	52.27 %			

Table 5.5 shows CO₂ emissions of the dwellings if built to the Fabric-First Passivhaus specification with electric heating. The average DER is 5.99 kgCO₂/m², which for Building Regulations purposes represents a 52.27% pass.

CO₂ EMISSIONS (TONNES/YEAR)

The following table shows CO₂ emissions reductions achieved:

Total Floor Area = 140.6m²

CO₂ emissions = Average DER x Total Floor Area (then divided by 1,000 to convert kg to tonnes)

Table 5.6 Calculated CO₂ emissions (tonnes/year)

Base Spec + PV	Proposed (Passivhaus spec)	Difference (Base spec+PV vs Passivhaus Spec)
1.77	0.84	0.93

Table 5.6 shows that by building to the Fabric-First Passivhaus spec would reduce CO₂ emissions by 0.93 tonnes/year.

BUILD COSTS vs CO₂ EMISSIONS.

Estimated Build Costs

Table 5.7 Estimated build cost (building costs excluding external works)

Proposed Passivhaus Build spec	'Normal' spec (7 % less, assumed)	Difference
(£)	(£)	(£)
450,000	418,500	31,500

CO₂ emissions over 75 years

Table 5.8 CO₂ emissions over 75 years for the development

Specification	CO ₂ emissions (tonnes)	CO ₂ emissions over 75 years (tonnes)	Different in CO ₂ emissions over base spec over 75 years (tonnes)	CO ₂ emissions reduction (%)
Base spec + PV	1.77	132.8		
Proposed (Passivhaus) spec	0.84	63.2	69.6	52.4

Calculation of Cost vs CO₂ Emissions saving

Table 5.9 Cost per tonne of CO₂

	Extra cost to build to proposed specification (£)	Difference in CO ₂ emissions over base spec + PV over 75 years (tonnes)	Cost per extra tonne of CO ₂ saved over 75 years (£)
2x new dwellings	31,500	69.6	452.61

Table 5.9 shows the monetary cost per tonne of CO₂ emissions saved by using the proposed specification over the base 'Building Regulations' specification as follows:

69.6 tonnes of CO₂ emissions are saved by the development when built to the Passivhaus specification. This equates to a monetary cost of £452.61 per tonne of CO₂ saved.

6.0 - CONCLUSIONS

Although it is possible to achieve a Building Regulations Part L pass with a significant quantity of renewables (i.e. around 2.3 kW of solar PV per dwelling), the CO₂ emissions of the development would exceed that of the same building if it were built to Passivhaus standard.

The metric of energy demand reduction from renewables in the out-of-date Bournemouth Local Plan, whilst worthy, does not provide as significant a CO₂ emissions reduction as if the same building were built to the Fabric-First Passivhaus standard.

If built to Passivhaus standard the development at Grants Close would produce around 52% less CO₂ emissions and have a 18.2% lower energy demand than the same development if it were built to comply with Building Regulations Part L 2021.

Findings show that building to the Fabric-First Passivhaus specification reduces CO₂ emissions of the development by 0.93 tonnes/year over the Building Regulations-compliant Base Spec with solar PV.

ADDENDUM - Trees

Over 75 years the Fabric-First Passivhaus specification would reduce CO₂ emissions over a Building Regulations compliant specification by 69.6 tonnes.

By comparison, a typical tree will absorb up to 1 tonne of CO₂ over 100 years, which equates to around 0.75 tonnes over 75 years.

A simple calculation shows that the CO₂ emissions reduction provided by the proposed specification is equivalent to planting **92 trees** (i.e. 69.6/0.75).

APPENDIX A

Paragraph 11 of the National Planning Policy Framework (2019) [NPPF] states that:

“Plans and decisions should apply a presumption in favour of sustainable development”. For decision-taking this means (..) where there are no relevant development plan policies, or the policies which are most important for determining the planning application are out-of-date, granting permission unless:

- (i) The application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed, **or**
- (ii) Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this framework taken as a whole.

‘Out-of-date means “that when a local authority cannot demonstrate a five year supply of deliverable sites (with the appropriate buffer); **or** where the Housing Delivery Test indicates that the delivery of housing was substantially below (less than 75%) of the housing requirement over the three years”. In terms of the term ‘particular importance’ this includes “heritage assets which includes a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest”.

The Housing Delivery Test (HDT) was introduced into national policy through the NPPF. The purpose of the HDT is to monitor local authority housing delivery against local requirements and to ensure that measures are taken to improve delivery where required. Where housing delivery falls below 95% of the local requirement (over the proceeding 3 financial years), an action plan must be prepared to identify measures to improve delivery and a buffer of 20% must be added to the 5-year housing land supply.

The first HDT measurement was published in February 2019 and was measured against the housing requirements set out in the adopted Local Plan for each former local authority area. *Table 1: HDT of the Housing Delivery Action Plan* shows that all former local authority areas failed to meet the housing delivery levels of 95%. For the Bournemouth area, the housing target was for 2,353 dwellings to be development from 2015/16 to 2017/18, with only 1,970 dwellings actually delivered thus equating to 84%. This means that outside of publishing an action plan, a 20% buffer was applied to the 5-year housing land supply.

Of particular interest, from 2019/20 onwards the housing requirement in Bournemouth steps up hugely from 730 to 1,422 dwellings per annum with the transition to the government’s standard methodology. This step change in housing requirement presents a significant challenge in relation to housing delivery and housing land supply. The results for HDT for 2019 was recently published by the Government (February 2020) and Bournemouth HDT measurement is 66% (total number of homes required is 3,064 dwellings a year, and the number of homes delivered is 2,010 dwellings) . Although the 2020 results will be published in February 2021, it is likely that the HDT will be significantly below 75% due to COVID. Thus, it could be argued that the average HDT for Bournemouth is substantially less than 75% for the proceeding three years, thus the policies which are most important for determining the planning application are out-of-date.

Five Year Housing Land Supply:

The Bournemouth Area Strategic Land Availability Assessment (2019) [SHLAA] provides information on the land available in the local authority area. The SHLAA is part of the Local Plan’s evidence base and is required by the NPPF. The SHLAA should plan for a supply of specific, deliverable sites for years one to five of the plan period and specific, deliverable sites or broad locations for growth for years six to ten and where possible years 11-15 of the plan. *Table 1: Sites Identified by types for year 1-5 (April 2019 to March 2024)* of the SHLAA shows that Bournemouth can only demonstrate a land supply of 2.9 years.

As stated in paragraph 9.8 of the SHLAA, due to the government’s change in approach to calculating housing need and supply, BCP Council for the Bournemouth area cannot demonstrate a 5-year supply against the local housing need figure derived from the 2014 Household Projections plus the 20% buffer required by the results of the 2018 Housing Delivery Test. “As a consequence, the presumption in favour of sustainable development as laid out in paragraph 11 of the NPPF now applies in the area of BCP Council covered by the Bournemouth Local Plan – Core Strategy”.