Optional Technical Standards

Topic Paper

South Ribble Borough Council

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1. Introduction

1.1. This topic paper supports the introduction of the optional technical standards for new homes as provided by the National Planning Practice Guidance (NPPG).

1.2. The optional technical standards for new homes include three components: Nationally Described Space Standards (NDSS) to regulate the internal size of homes, accessibility and wheelchair housing, and a water efficiency standard.

1.3. Through the emerging Central Lancashire Local Plan (Emerging Local Plan), the councils seek to adopt all three of the optional technical standards for new homes. Policy EN1 (3) will require NDSS and higher water efficiency standards compliance, while HS6 (1) addresses accessible housing provision requirements.

1.4. Local authorities are empowered to implement the optional technical housing standards pursuant to National Planning Policy Framework 135 (f) and associated footnote 51. Accordingly, each of the proposed standards will be considered in relation to the policy context and justification for each is provided in accordance with the NPPG.

2. Background

2.1. On 25 March 2015 the Government published a Written Ministerial Statement (WMS) on new technical housing standards in England. Consequently, the use of NDSS as optional standards became recognised in the National Planning Policy Framework (NPPF) and NPPG.

2.2. The WMS followed the Housing Standards Review 2015 (HSR). This review was undertaken to rationalise the number of different standards that local authorities were able to apply to new homes through the planning system.

2.3. In relation to the NDSS, several insightful studies were conducted preceding the 2014 HSR and 2015 WMS with respect to the quality of new homes. The conclusions on the need for an NDSS policy are based on local evidence, but the macro context these studies provide will also be discussed.

3. Policy Environment

National Planning Policy

3.1. The NPPF empowers Local Planning Authorities (LPAs) to regulate the design of new homes. This is pursuant to NPPF Part 12 Paragraph 135 (f). Footnote 51 is associated with Paragraph 135 (f) to direct how this may be done. Paragraph 135 and 135 (f) state:

- Paragraph 135: 'Planning policies and decisions should ensure that developments':

- (f): 'create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users[51]; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience'.

3.2. 135 (f) footnote 51 provides that where a need is identified, the optional technical standards for housing should be used for the regulation of new homes. It states:

- 'Planning policies for housing should make use of the Government's optional technical standards for accessible and adaptable housing, where this would address an identified need for such properties. Policies may also make use of the nationally described space standard, where the need for an internal space standard can be justified'.

3.3. Following Paragraph 135 (f) and footnote 51, the details of optional technical standards and the steps required to introduce them are provided in the NPPG. The NPPG and how it is addressed will therefore be discussed individually for each technical standard in this paper.

Local Policy

3.4. The optional technical housing standards are currently not implemented through the adopted Local Plans.

3.5. The councils are seeking to implement the optional technical housing standards in the in the Emerging Local Plan. The water efficiency standard and NDSS are proposed within emerging Policy EN1 (3), and the accessibility and wheelchair standards by Policy HS6.

4. Nationally Described Space Standards

4.1. Sections 4-9 of this paper supports the introduction of the NDSS through policy EN1 (3) in the Emerging Local Plan. National Planning Practice Guidance (NPPG) necessitates LPAs to establish an evidence base justifying their need for them.

4.2. The council's evidence for NDSS consists of relevant third-party studies, primary research regarding new housing approvals within South Ribble and viability evidence from the Local Plan Viability Study.

4.3. The raw data from the primary research is included in Appendix 1.

5. Context

NDSS metrics

5.1. The NDSS standards regulate the internal areas of new dwellings. Specifically, they provide standards for:

- gross internal area ("GIA") for each dwelling type (based on a combination of bedspaces and number of storeys);
- floor space and bedroom type;
- widths of each bedroom type;
- floor to ceiling height; and
- storage.

National Context of Undersized Housing

5.2. To introduce the evidence, it is necessary to acknowledge the broader context in which this paper's primary research data exists within. This context is a prevalence of undersized homes being built in the UK broadly.

5.3. Various contemporary studies by industry bodies and businesses have been undertaken in relation to undersized home construction in the UK. Among others, the Royal Institute of British Architects (RIBA) have published prominent studies in this space of housing size.

5.4. In 2011 RIBA provided the Case for Space[1], a national and regional level study providing a guide to the size of new homes. The 2011 RIBA Case for Space study collected data on a large sample of homes across a variety of sites and found that the area of one-bedroom dwellings averaged 46m^2, while three-bedroom properties averaged 88m^2.

5.5. In 2015 RIBA updated this exercise in its HomeWise Report, taking a random sample of over 100 development sites currently under construction by the country's 10 largest housebuilders[2]. It collected floor area data for these sites from documents published online by the local authorities in question. According to its results, the average new three-bedroom dwelling in England was 91m^2 – higher than the 88m^2 figure recorded in 2011, but still 2m^2 below the NDSS for three-bedroom homes with five bed spaces and two storeys. For the Northwest region, three-bedroom properties were slightly smaller still; 84m^2 in 2011 and 87m^2 in 2015. An update to RIBA's Case for Space work from 2015 also found that (inevitably), most people perceive that new homes are too small. 60% of people surveyed were unwilling to choose a new home built in the previous ten years.

5.6. Analysis by LABC Warranty's 'Are Britain's Houses Getting Smaller?' study in 2018 found homes in the last decade were the smallest on average of all decades covered dating back to the 1930s[3]. The contemporary average home size was found to be 67.82m^2, compared to largest average of 83.33m^2 in the 1970s, and the second smallest average of 68.14m^2 during the 1940s.

5.7. As of January 2025, prominent consultancy Building Cost Information Service (BCIS) forecast a17% increase in building costs over the next five years[4]. It is clear therefore, that the UK's undersized homes risk becoming even smaller unless policies are introduced necessitating minimum sizes.

[1] The Case for Space, The Size of England's New Homes, RIBA, 2011.
[2] Space Standards for Homes #HomeWise, RIBA, 2015.
[3] Are Britain's Houses Getting Smaller? (New Data), LABC, 2018.
[4] BCIS Building Forecast, BCIS, 09/01/2025

6. NPPG regarding NDSS

6.1. In terms of local evidence, the NPPG[5] provides guidance on implementing NDSS. It states that LPAs should address:

- need – evidence should be provided on the size and type of dwellings currently being built in the area, to ensure the impacts of adopting space standards can be properly assessed, for example, to consider any potential impact on meeting demand for starter homes;

- viability – the impact of adopting the space standard should be considered as part of a plan's viability assessment with account taken of the impact of potentially larger dwellings on land supply. LPAs will also need to consider impacts on affordability where a space standard is to be adopted; and

- timing – there may need to be a reasonable transitional period following adoption of a new policy on space standards to enable developers to factor the cost of space standards into future land acquisitions'.

6.2. Sections 7 and 8 of this report will explore the 'need' for the NDSS by detailing the primary research methodology and the study's findings.

6.3. Regarding viability, all modelling within the Local Plan's Viability Study[6] has assumed dwellings are consistent with NDSS.

6.4. The emerging Local Plan, however, will replace South Ribble, Chorley and Preston's entire suite of planning policies. The intention to adopt NDSS was first published within the Plan's Regulation 18 consultation[7] during 2022. The market has had a significant period to adapt to these well-established standards. Consequently, a transitional period is not considered necessary.

[5] Paragraph: 020 Reference ID: 56-020-20150327
[6] See Viability Study para 5.20
[7] See p82.

7. Primary Research Methodology

Evidence to establish need

7.1. The NPPG does not provide guidance on how to demonstrate 'need'. LPAs must therefore find their own approach.

7.2. To provide appropriate evidence to establish need, successful approaches by other planning authorities have been studied. A methodology presented in a paper prepared by Cheshire East[8] to demonstrate 'need' was found 'sound' in 2022[9] and forms the basis of this research.

Research Methodology

7.3. The study focused upon housing approvals within the SRBC area.

7.4. The data collected spanned from 2015 to 2024. The research period commenced in 2015 to coincide with the introduction of the NDSS in 2015 and concluded in 2024 – being the year the research was undertaken. It is noted that no major developments suitable for use were approved in 2024 at the time of the study, resulting in an effective data range from 2015 to 2023.

7.5. A sample of house designs was taken from each year. The sample included one-, two-, three- and four-bedroom homes. Subject to the availability of data, three designs of each house size were sampled. The available major development approvals with the largest volume of homes were selected for use.

7.6. Samples were only taken from major developments. The designs with the highest number of proposed dwellings within each approval for each house size were selected. Non-major developments were excluded as their small scales provide the smallest sample volumes, and the homes are typically customized to landowners' needs and budget. Comparatively, major development approvals represented the greatest volumes of new homes. As a result, major developments were the most representative samples for new homes in Council area.

7.7. The sampled homes were assessed against the NDSS standards for:

[8] Cheshire East Local Plan Site Allocations and Development Policies Document (SADPD) Nationally Described Space Standards Justification Paper, Cheshire East Council, 2021.
[9] See Cheshire East SADPD Examiner's Report paras 169-170.

- Gross Internal Area (GIA);
- Bedroom Width; and
- Bedroom floor area.

The above are the most fundamental performance metrics of the NDSS and therefore were selected as the metrics to be researched in volume[10]. GIA and bedroom sizes were considered to most acutely affect the amenity of residents and determine a home's fitness for purpose. Accordingly, these metrics are frequently scrutinized by Registered Providers (RPs) for determining whether to accept a home built by a private developer to manage. Additionally, these metrics are highly vulnerable to quality erosion from construction cost-cutting.

NDSS standards omitted from the research assessment were:

- Built-in storage space; and
- Minimum floor to ceiling height.

7.8. These metrics were measured for all homes, as well as for affordable housing in isolation.

8. Research findings

Summary

8.1. The data indicates that most affordable homes failed to comply with the NDSS, performing poorly against most of the metrics.

8.2. For market homes, there is a patchwork of performance. Most market homes failed to meet at least one of the measured NDSS metrics, but overall performed better than affordable homes. Where metrics were exceeded however, in most instances this was only marginal (less than 10%). The only metric in which the average exceeded the NDSS standard by more than 10% was bedroom width.

8.3. Raw data informing the findings can be found within Appendix 1.

Detailed findings

8.4. The data produced by the research project includes:

- Overall percentage non-NDSS compliant homes;

[10] Note that these were the only metrics used within the Cheshire East study.

- GIA performance measured as a percentage NDSS metric;
- Overall percentage of non-compliant bedrooms;
- Bedroom width, measured as a percentage of the relevant NDSS metric;
- Bedroom floor area, measured as a percentage of the relevant NDSS metric;
- Volume of homes studied by year; and
- Volume of bedrooms studied by year.

8.5. Table 1 below is a high-level analysis showing that overall, most homes failed at least 1x NDSS metric.

Table 1- Total Proportion of NDSS Non-Compliance

Housing Category	**Percentage of non-compliant homes (1x or more NDSS metric)**
Market Homes	89%
Affordable Homes	93%
All Homes	91%

8.6. Table 2 depicts performance against GIA and shows that affordable homes performed poorly, while market homes exceeded the relevant standard only marginally.

Table 2- GIA Performance

Housing Category	**GIA as percentage of NDSS (average)**
Market Homes	106%
Affordable Homes	90%
All Homes	97%

8.7. Table 3 shows how bedrooms performed against the NDSS and shows failure against either bedroom area or width. For both market and affordable homes, there was greater compliance overall with this metric, but most homes failed none the less. Whilst not presented in detail here, a pattern was observed where often 'Master' bedrooms exceeded the NDSS metric by some margin, whilst all other bedrooms in the home failed.

Table 3- Proportion of Non-Compliant Bedrooms

Housing Category	Percentage of non-compliant homes (bedroom area or width NDSS metric)
Market Homes	54.01%
Affordable Homes	71.11%
All Homes	58.66%

8.8. The total homes studied broken down by year are included below in Table 4:

Table 4- Total Homes Studied

Year	Market	Affordable Homes	Combined Total
2015	106	28	134
2016	57	21	78
2017	50	12	62
2018	199	124	323
2019	129	59	188
2020	32	57	89
2021	21	14	35
2022	48	54	102
2023	43	76	119
Total	685	445	1130

8.9. The total Bedrooms Studied are shown in Table 5:

Table 5- Total Bedrooms Studied

Year	Market Bedrooms	Affordable Bedrooms	Combined Total
2015	370	60	430
2016	184	45	229

2017	160	12	172
2018	698	235	933
2019	457	201	658
2020	134	120	254
2021	83	35	118
2022	233	185	418
2023	265	180	445
Total	2584	1073	3657

8.10. As shown by Tables 4 and 5, there were variations in the amount of suitable data available between different years. Most notably, there was an absence of suitable data in 2024 at the time of study.

9. NDSS Summary

9.1. The research findings show an overall picture, consistent with the third-party studies prepared by the construction industry bodies[11], that most homes built within South Ribble since the NDSS were introduced are too small. With construction costs also rising, it cannot be anticipated that without planning policy necessitating NDSS, the market will naturally deliver compliant schemes. Diminutive homes are a particular issue regarding affordable housing. Whilst not explored in this paper, at examination the councils will be able to cite instances where the management of affordable housing has been hampered by difficulties in finding RPs willing to adopt non-NDSS compliant properties.

[11] See Section 5

10. Water efficiency standard

10.1. Proposed policy EN1, criterion requires new homes to meet the optional technical standards for water efficiency.

11. NPPG regarding water efficiency

Scope

11.1. Under the NPPG[12], the scope of the optional water efficiency standard is for homes to accommodate a consumption of 110 litres of water per day per person. This compares to the building regulations' standard of 125 litres of water per person per day.

Evidence to establish need

11.2. The NPPG provides how need should be demonstrated. The NPPG provides that need should be based on:

- 'Existing sources of evidence';
- consultations with the local water and sewerage company, the Environment Agency and catchment partnerships. See paragraph 003 of the Water Supply Guidance;
- consideration of the impact on viability and housing supply of such a requirement'.

The NPPG provides examples of 'existing sources of evidence, including:

- 'The Environment Agency Water Stressed Areas 2021 Classification which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand;
- Water resource management plans produced by water companies; and
- River Basin Management Plans which describe the river basin district and the pressure that the water environment faces. These include information

[12] NPPG regarding Optional Technical Housing Standards.

on where water resources are contributing to a water body being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability'.

Local evidence

11.3. Water provision within the CLLP area is managed by United Utilities (UU), who are members of the Water Resources West (WRW) partnership. The objective of the partnership is to develop a regional strategy, ensuring the sustainability of water across the Northwest, West Midlands and Wales. WRW strongly advocates for LPAs within the region, to adopt the Government's Optional Standards. Evidence prepared by WRW can be viewed at appendix 2[13].

11.4. The WRW evidence refers to the Water Stressed Areas 2021 Classification, citing that the UU company area is currently under moderate water stress[14]. It also models four future scenarios representing various potential impacts of factors affecting water supply and demand. The UU area is indicated to remain under moderate water stress within all four of the modelled future scenarios.

11.5. The National Framework for Water Resources (NFWR) is also referred to within the WRW evidence. The NFWR forecasts that the WRW area will be subject to the second highest pressure on water resources in the nation. This is predominantly due to population growth. Note that the NFWR forecast already assumes a consumption rate of 110 litres per day per person[15].

11.6. The above was considered by UU in its Water Resource Management Plan 2024 (WRMP). In the WRMP, UU requests all LPAs within its supply area to adopt the optional water efficiency standard[16].

11.7. Note that the WRW evidence advises that constructing homes to the 110 litres per person per day consumption rate can be achieved without additional development costs, beyond a one-off additional cost of £9[17]. This negligible cost has been incorporated into the Local Plan Viability Study modelling[18].

12. Water efficiency standards summary

12.1. Water efficiency standards are necessary to help deliver UU and WRW's objectives.

[13] Refer to 'Recommendations' on page 7 within Appendix 3.
[14] Water Stressed Areas- 2021 Classification, Environment Agency, 2021.
[15] National Framework for Water Resources, the Environment Agency, 2020.
[16] Final Water Resources Management Plan 2024, United Utilities, 2024. See p74.
[17] Housing Standards Review Cost Impacts, Department, 2018.
[18] Water efficiency standards are included within the basic build costs from the Building Cost Information Service, which form the basis of the viability modelling. See Viability Study Appendix 7.

13. Accessibility and Wheelchair Housing Standards

13.1. Policy HS6 of the Emerging Local Plan For housing developments introduces requirements for accessible homes. HS6 applies to developments of 10 or greater or on sites of 0.4 hectares or greater. HS6 1 (b) requires all new homes to be built to M4 (2) accessible and adaptable standard and (1) (c) requires at least 4% of affordable dwellings on sites in Preston and Chorley, and at least 5% of affordable dwellings on sites in South Ribble, to be built to M4(3) wheelchair accessible standard.

14. NPPG for Accessibility and Wheelchair Housing Standards

Scope

14.1. The NPPG allows the local authority to determine if there is a need for, and what proportion of homes should be built to M4 (2) or M4 (3) standard of the building regulations.

Evidence to establish need

14.2. The NPPG[19] provides the following for LPAs to demonstrate the need for accessibility and wheelchair access standards:

'Based on their housing needs assessment and other available datasets it will be for LPAs to set out how they intend to approach demonstrating the need for Requirement M4(2) (accessible and adaptable dwellings), and/or M4(3) (wheelchair user dwellings), of the Building Regulations. There is a wide range of published official statistics and factors which LPAs can consider and take into account, including:

- the likely future need for housing for older and disabled people (including wheelchair user dwellings).
- size, location, type and quality of dwellings needed to meet specifically evidenced needs (for example retirement homes, sheltered homes or care homes).

[19] Paragraph: 007 Reference ID: 56-007-20150327

- the accessibility and adaptability of existing housing stock.
- how needs vary across different housing tenures.
- the overall impact on viability.

Local evidence

14.3. The need for wheelchair and accessibility standards has been demonstrated in the Housing Demand and Need Assessments (HDNA). The requirements of policy HS6 (1) directly follow the recommendation of the Housing Need and Demand Assessments. The South Ribble HDNA[20], Chorley HDNA[21] and Preston HDNA[22] are all published as evidence for the Emerging Local Plan accordingly.

14.4. Each HDNA provides evidence in accordance with the NPPG, using the data below:

- Wheelchair use from the English Housing Survey (EHS) 2018/2019 in conjunction with wheelchair housing needs research by Aspire Housing on the number of wheelchair users waiting for housing;

- Wheelchair dwellings needed by age group and number of bedrooms using EHS data.

14.5. Using the above data, the annual need for M4 (3) and M4 (2) homes has been generated. Accordingly, this has been incorporated into Policy HS6 (1).

14.6. The cost associated with delivering M4 (3) and M4 (2) homes consistent with Policy HS6 have also been modelled within the Local Plan Viability Study[23].

15. Accessibility and Wheelchair Housing Standards Summary

15.1. The NPPG for accessibility and wheelchair standards has been considered through the HDNA of each council. The HDNAs have addressed the NPPG requirements and established appropriate figures that have been incorporated into the Emerging Local Plan.

[20] Refer to pp 95-98
[21] Refer to pp 101-104
[22] Refer to pp 104-107
[23] See para 5.51

Appendix 1: Data

Table 6: 2015 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Leyland Road	**07/2015/0315/REM**	**1**	**71.01**	**39**	**182%**	**Master**	**3.03**	**2.75**	**110%**	**8.36**	**11.5**	**73%**
Leyland Road	**07/2015/0315/REM**	**17**	**63.21**	**70**	**90%**	**Master**	**3.27**	**2.75**	**119%**	**12.29**	**11.5**	**107%**
						Bed 2-Single	2.03	2.15	**94%**			
Leyland Road	**07/2015/0315/REM**	**1**	**72.33**	**70**	**103%**	**Master**	**3.05**	**2.75**	**111%**	**12.35**	**11.5**	**107%**
						Bed 2-double	3.12	2.55	**122%**	11.77	11.5	**102%**
Leyland Road	**07/2015/0315/REM**	**25**	**81.3**	**84**	**97%**	**Master**	**2.9**	**2.75**	**105%**	**10.07**	**11.5**	**88%**
						Bed 2-single	2.51	2.15	**117%**	7.88	7.5	**105%**
						Bed 3-single	2.33	2.15	**108%**	7.52	7.5	**100%**
Leyland Road	**07/2015/0315/REM**	**25**	**88.9**	**93**	**96%**	**Master**	**3.2**	**2.75**	**116%**	**11.52**	**11.5**	**100%**
						Bed 2-double	3.2	2.55	125%	10.38	11.5	90%
						Bed 3-single	2.52	2.15	117%	7.04	7.5	94%
Leyland Road	**07/2015/0315/REM**	**23**	**110.78**	**106**	**105%**	**Master**	**3.49**	**2.75**	**127%**	**15.44**	**11.5**	**134%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 2-double	3.01	2.55	118%	12.86	11.5	112%
						Bed 3-single	2.52	2.15	117%	7.26	7.5	97%
						Bed 4-single	1.89	2.15	88%	6.9	7.5	92%
Leyland Road	**07/2015/0315/REM**	**29**	**113.14**	**115**	**98%**	**Master**	**3.17**	**2.75**	**115%**	**11.53**	**11.5**	**100%**
						Bed 2-double	2.7	2.55	106%	10.2	11.5	89%
						Bed 3-single	1.63	2.15	76%	7.24	7.5	97%
						Bed 4--single	2.3	2.15	107%	7.18	7.5	96%
Mather Fold Farm	**07/2014/0677/FUL**	**2**	**96.87**	**93**	**104%**	**Master**	**3.16**	**2.75**	**115%**	**11.4**	**11.5**	**99%**
						Bed 2-double	3.41	2.55	134%	12.86	11.5	112%
						Bed 3-single	2.1	2.15	98%	5.63	7.5	75%
Mather Fold Farm	**07/2014/0677/FUL**	**1**	**198.35**	**106**	**187%**	**Master**	**4.14**	**2.75**	**151%**	**20.71**	**11.5**	**180%**
						Bed 2-double	4.15	2.55	163%	20.71	11.5	180%
						Bed 3-single	2.95	2.15	**137%**	9.43	7.5	**126%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 4-single	2.95	2.15	**137%**	9.86	7.5	**131%**

Table 7: 2016 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Carr Lane	**07/2016/0499/REM**	**5**	**69.61**	**79**	**88%**	**Master**	**3.26**	**2.75**	**119%**	**13.03**	**11.5**	**113%**
						Bed 2-double	3.11	2.55	122%	12.02	11.5	105%
Carr Lane	**07/2016/0499/REM**	**16**	**74.71**	**84**	**89%**	**Master**	**3.13**	**2.75**	**114%**	**11.68**	**11.5**	**102%**
						Bed 2-Single	2.17	2.15	101%	6.95	7.5	93%
						Bed 2-Single	2.12	2.15	99%	4.61	7.5	61%
Carr Lane	**07/2016/0499/REM**	**10**	**70.21**	84	84%	**Master**	**3.05**	**2.75**	111%	**10.35**	**11.5**	90%
						Bed 2-Single	2	2.15	93%	6.01	7.5	80%
						Bed 3-single	2.03	2.15	94%	4.2	7.5	56%
Land To the Rear Of 110 -	**07/2015/1845/FUL**	**2**	**47.13**	**50**	**94%**	**Master**	**3.4**	**2.75**	**124%**	**11.76**	**11.5**	**102%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
120 and Adjacent To 136 Liverpool Road												
Land To the Rear Of 110 - 120 and Adjacent Land to the Rear of 110-136 and Adjacent Liverpool Road	**07/2015/1845/FUL**	**2**	**48.55**	**50**	**97%**	**Master**	**3.36**	**2.75**	**122%**	**12.45**	**11.5**	**108%**
Land to the Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**10**	**63.84**	**79**	**81%**	**Master**	**2.62**	**2.75**	**95%**	**12**	**11.5**	**104%**
						Bed 2-double	2.51	2.55	98%	9.76	11.5	85%
Land To the Rear Of 110 - 120 and Adjacent To 136	**07/2015/1845/FUL**	**6**	**100.28**	**93**	**108%**	**Master**	**3.27**	**2.75**	**119%**	**16.12**	**11.5**	**140%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Liverpool Road												
						Bed 2-double	2.78	2.55	109%	12.4	11.5	108%
						Bed 3-single	2.48	2.15	115%	6.73	7.5	90%
Land To the Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**5**	**133.36**	**124**	**108%**	**Master**	**3.31**	**2.75**	**120%**	**13.68**	**11.5**	**119%**
						Bed 2-double	2.82	2.55	111%	12.35	11.5	107%
						Bed 3-double	2.68	2.55	105%	9.44	11.5	82%
						Bed 4-double	3.26	2.55	128%	9.21	11.5	80%
Land To the Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**6**	**133.94**	**124**	**108%**	**Master**	**3.41**	**2.75**	**124%**	**13.68**	**11.5**	**119%**
							2.79	2.55	109%	12.32	11.5	107%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
							2.69	2.55	105%	9.45	11.5	82%
							3.26	2.55	128%	9.1	11.5	79%
Land To the Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**5**	**173.56**	**124**	**140%**	**Master**	**3.19**	**2.75**	**116%**	**15.39**	**11.5**	**134%**
						Bed 2-double	3.17	2.55	124%	12.98	11.5	113%
						Bed 3-double	2.59	2.55	102%	10.73	11.5	93%
						Bed 4-double	2.65	2.55	104%	8.67	11.5	75%

Table 8: 2017 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Wesley Street	**07/2016/0690/REM**	**6**	**62**	**79**	**78%**	**Master**	**2.59**	**2.75**	**94%**	**10.58**	**11.5**	**92%**
						Bed 2-double	2.72	2.55	107%	11.24	11.5	**98%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Wesley Street	**07/2016/0690/REM**	**9**	**121**	**121**	**100%**	**Master**	**3.79**	**2.75**	**138%**	**14.05**	**11.5**	**122%**
						Bed 2-double	2.74	2.55	107%	9.87	11.5	86%
						Bed 3-double	2.74	2.55	107%	9.04	11.5	79%
						Bed 4-single	2.38	2.15	111%	6.12	7.5	82%
The Maltings Site	**07/2017/1266/REM**	**18**	**66.34**	**79**	**84%**	**Master**	**2.38**	**2.75**	**87%**	**11.53**	**11.5**	**100%**
						Bed 2-double	2.87	2.55	113%	10.82	11.5	94%
Land at Claytongate Drive	**07/2016/0512/FUL**	**8**	**68.02**	**79**	**86%**	**Master**	**2.68**	**2.75**	**97%**	**10.87**	**11.5**	**95%**
						Bed 2-double	2.56	2.55	**100%**	11.09	11.5	**96%**
Land at Claytongate Drive	**07/2016/0512/FUL**	**4**	**77.39**	**93**	**83%**	**Master**	**2.64**	**2.55**	**104%**	**10.04**	**11.5**	**87%**
						Bed 2-double	2.62	2.55	103%	8.81	11.5	77%
						Bed 3-single	1.85	2.15	**86%**	5.91	7.5	**79%**
Land at Claytongate Drive	**07/2016/0512/FUL**	**2**	**88.34**	**93**	**95%**	**Master**	**3.38**	**2.75**	**123%**	**12.8**	**11.5**	**111%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 2-double	2.92	2.55	115%	8.55	11.5	74%
						Bed 3-double	2.1	2.15	**98%**	5.89	7.5	**79%**
Land at Claytongate Drive	**07/2016/0512/FUL**	**7**	**154.09**	**106**	**145%**	**Master**	**3.39**	**2.75**	**123%**	**16.84**	**11.5**	**146%**
						Bed 2-double	2.66	2.55	104%	10.95	11.5	95%
						Bed 3-single	3.19	2.15	148%	9.61	7.5	128%
						Bed 4-single	2.64	2.15	**123%**	9.98	7.5	**133%**
Springbank, 123 Duddle Lane	**07/2016/0479/FUL**	**4**	**154.09**	**106**	**145%**	**Master**	**3.39**	**2.75**	**123%**	**16.84**	**11.5**	**146%**
						Bed 2-double	2.66	2.55	104%	10.95	11.5	95%
						Bed 3-single	3.19	2.15	148%	9.61	7.5	128%
						Bed 4-single	2.64	2.15	123%	9.98	7.5	133%

Table 9: 2018 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Altcar Lane	**07/2018/1674/REM**	**18**	**100.45**	**93**	**108%**	**Master**	**3.56**	**2.75**	**129%**	**12.92**	**11.5**	**112%**
						Bed 2-double	3.44	2.55	135%	11.98	11.5	104%
						Bed 3-single	2.21	2.15	103%	7.6	7.5	101%
Altcar Lane	**07/2018/1674/REM**	**29**	**140.18**	**115**	**122%**	**Master**	**3.36**	**2.75**	**122%**	**15.64**	**11.5**	**136%**
						Bed 2-double	3.03	2.55	119%	12.94	11.5	113%
						Bed 3-double	3.33	2.55	131%	10.84	11.5	94%
						Bed 4-single	2.96	2.15	138%	8.21	7.5	109%
Land North of Altcar Lane	**07/2018/3247/REM**	**36**	**62.71**	**79**	**79%**	**Master**	**2.68**	**2.75**	**97%**	**11.42**	**11.5**	**99%**
						Bed 2-double	3.16	2.55	124%	9.65	11.5	84%
Land North of Altcar Lane	**07/2018/3247/REM**	**30**	**117.32**	**93**	**126%**	**Master**	**3.2**	**2.75**	**116%**	**11.58**	**11.5**	**101%**
						Bed 2-double	3.16	2.55	124%	10.62	11.5	92%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 3-single	2.35	2.15	109%	7.72	7.5	103%
Land North of Altcar Lane	**07/2018/3247/REM**	**34**	**117.24**	**106**	**111%**	**Master**	**2.8**	**2.75**	**102%**	**13.03**	**11.5**	**113%**
						Bed 2-double	2.73	2.55	107%	10.95	11.5	95%
						Bed 3-single	2.46	2.15	114%	7.46	7.5	99%
						Bed 4-single	2.36	2.15	**110%**	7.27	7.5	**97%**
Altcar Lane	**07/2018/1674/REM**	**30**	**70.83**	**79**	**90%**	**Master**	**2.72**	**2.75**	**99%**	**11.79**	**11.5**	**103%**
						Bed 2-double	3.15	2.55	124%	11.71	11.5	102%
Wheelton Lane	**07/2018/0865/REM**	**9**	**59.32**	**79**	**75%**	**Master**	**3.2**	**2.75**	**116%**	**11.1**	**11.5**	**97%**
						Bed 2-double	2.78	2.55	**109%**	9.75	11.5	85%
Wheelton Lane	**07/2018/0865/REM**	**32**	**74.4**	**84**	**89%**	**Master**	**3.16**	**2.75**	**115%**	**11.64**	**11.5**	**101%**
						Bed 2-single	2.14	2.15	100%	6.82	7.5	91%
						Bed 3-single	2.16	2.15	100%	4.52	7.5	60%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Wheelton Lane	**07/2018/0865/REM**	**25**	**116.85**	**106**	**110%**	**Master**	**3.08**	**2.75**	**112%**	**10.9**	**11.5**	**95%**
						Bed 2-double	3.37	2.55	132%	10.7	11.5	93%
						Bed 3-single	2.63	2.15	**122%**	7.83	7.5	104%
						Bed 4-single	1.94	2.15	**90%**	5.11	7.5	68%
St Mary's Church Hall	**07/2017/2989/FUL**	**18**	**61.37**	**50**	**123%**	**Master**	**3.2**	**2.75**	**116%**	**20.09**	**11.5**	**175%**
Expac Ltd, Dunkirk Mill	**07/2017/3413/REM**	**2**	**49**	**50**	**98%**	**Master**	**3.22**	**2.75**	**117%**	**10.54**	**11.5**	**92%**
Expac Ltd, Dunkirk Mill	**07/2017/3413/REM**	**2**	**59**	**50**	**118%**	**Master**	**2.68**	**2.75**	**97%**	**12.1**	**11.5**	**105%**

Table 10: 2020 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Land Near Shaw Brook Road	**07/2019/0300/REM**	**17**	**100.45**	**93**	**108%**	**Master**	**3.56**	**2.75**	**129%**	**12.92**	**11.5**	**112%**
						Bed 2-double	3.44	2.55	135%	11.98	11.5	104%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 3-single	2.21	2.15	**103%**	7.6	7.5	**101%**
Land Near Shaw Brook Road	**07/2019/0300/REM**	**30**	**70.83**	**79**	90%	**Master**	**2.72**	**2.75**	99%	**11.79**	**11.5**	103%
						Bed 2-double	3.15	2.55	124%	11.71	11.5	102%
McKenzie Arms	**07/2020/0396**	**9**	**50.04**	**50**	**100%**	**Master**	**2.76**	**2.75**	**100%**	**12.42**	**11.5**	**108%**
McKenzie Arms	**07/2020/0396**	**3**	**71.94**	**70**	103%	**Master**	**2.65**	**2.75**	96%	**17**	**11.5**	148%
						Bed 2-double	2.63	2.55	103%	13	11.5	113%
McKenzie Arms	**07/2020/0396**	**3**	**117.49**	**108**	**109%**	**Master**	**3.13**	**2.75**	**114%**	**16**	**11.5**	**139%**
						Bed 2-double	2.93	2.55	**115%**	13	11.5	113%
						Bed 3-double	3.7	2.55	145%	17	11.5	148%
Land off Oldfield and Long Meadow	**07/2020/0277/FUL**	**4**	**83.96**	**70**	**120%**	**Master**	**3.04**	**2.75**	**111%**	**14.91**	**11.5**	**130%**
						Bed 2-double	3.23	2.55	127%	12.16	11.5	106%
Land off Oldfield and Long Meadow	**07/2020/0277/FUL**	**8**	**118.32**	**95**	**125%**	**Master**	**3.43**	**2.75**	**125%**	**13.46**	**11.5**	**117%**
						Bed 2-double	3.34	2.55	131%	15.75	11.5	137%
						Bed 3-double	2.86	2.55	112%	9.67	11.5	84%
Cottage Gardens	**07/2020/0443/FUL**	**3**	**158.28**	**124**	**128%**	**Master**	**4.07**	**2.75**	**148%**	**17.57**	**11.5**	**153%**
						Bed 2-double	3.15	2.55	160%	12.24	11.5	106%
						Bed 3-double	3.03	2.55	124%	9.76	11.5	85%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 4-double	3.05	2.55	120%	10.43	11.5	91%

Table 11:2021 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land South of Hampshire Road	**07/2021/00532/FUL**	**7**	**73.18**	**93**	**79%**	**Master**	**2.7**	**2.75**	**98%**	**10.1**	**11.5**	**88%**
						Bed 2-double	2.7	2.55	106%	10	11.5	87%
						Bed 3-single	2.08	2.15	**97%**	4.36	7.5	58%
Land South of Hampshire Road	**07/2021/00532/FUL**	**7**	**60.32**	**79**	76%	**Master**	**2.7**	**2.75**	**98%**	**11.33**	**11.5**	**99%**
						Bed 2-double	2.52	2.55	99%	9.46	11.5	82%
Land South of Hampshire Road	**07/2021/00532/FUL**	**5**	**157.29**	**124**	**127%**	**Master**	**3.8**	**2.75**	**138%**	**17.82**	**11.5**	**155%**
						Bed 2-double	3.11	2.55	122%	12.3	11.5	107%
						Bed 3-double	3.68	2.55	144%	13.9	11.5	121%
						Bed 4-double	2.56	2.55	100%	9.93	11.5	86%
Land South of Hampshire Road	**07/2021/00532/FUL**	**7**	**131.73**	**124**	**106%**	**Master**	**3.62**	**2.75**	**132%**	**14.07**	**11.5**	**122%**
						Bed 2-double	2.84	2.55	111%	13.42	11.5	117%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 3-double	2.6	2.55	102%	8.88	11.5	77%
						Bed 4-double	2.81	2.55	110%	9.17	11.5	80%
Land South of Hampshire Road	**07/2021/00532/FUL**	**3**	**83.96**	**93**	**90%**	**Master**	**2.56**	**2.75**	**93%**	**11.2**	**11.5**	**97%**
						Bed 2-double	2.79	2.55	109%	9.51	11.5	83%
						Bed 3-single	2.21	2.15	103%	5.56	7.5	74%
The Old Police Station	**07/2021/00713/FUL**	**1**	**47.95**	**50**	**96%**	**Master**	**3.46**	**2.75**	**126%**	**12.49**	**11.5**	**109%**
The Old Police Station	**07/2021/00713/FUL**	**1**	**46.2**	**50**	**92%**	**Master**	**2.51**	**2.75**	**126%**	**11.32**	**11.5**	**98%**
Lyme Road and The Cawsey	**07/2020/00365/FUL**	**1**	**102.41**	**93**	**110%**	**Master**	**3.17**	**2.75**	**91%**	**13.12**	**11.5**	**114%**
						Bed 2-double	3.16	2.55	124%	10.3	11.5	90%
						Bed 3-single	2	2.15	93%	5.54	7.5	74%
Lyme Road and The Cawsey	**07/2020/00365/FUL**	**3**	**140.51**	**115**	**122%**	**Master**	**3.67**	**2.75**	133%	**16.49**	**11.5**	**143%**
						Bed 2-double	3.04	2.55	119%	13.94	11.5	121%
						Bed 3-double	3.18	2.55	125%	11.33	11.5	99%
						Bed 4-single	2.78	2.15	129%	7.66	7.5	102%

Table 12:2022 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Altcar Lane	**07/2021/01247/REM**	**23**	**66.52**	**79**	**84%**	**Master**	**3.01**	**2.75**	**109%**	**9.12**	**11.5**	**79%**
						Bed 2-double	2.8	2.55	110%	10.65	11.5	93%
Altcar Lane	**07/2021/01247/REM**	**8**	**77.32**	**93**	**83%**	**Master**	**2.53**	**2.75**	**92%**	**11.45**	**11.5**	**100%**
						Bed 2-double	2.68	2.55	105%	7.74	11.5	67%
						Bed 3-single	1.93	2.15	90%	5.04	7.5	67%
Altcar Lane	**07/2021/01247/REM**	**11**	**122.44**	**102**	**120%**	**Master**	**3.28**	**2.75**	119%	**19.93**	**11.5**	173%
						Bed 2-double	3.24	2.55	127%	11.06	11.5	96%
						Bed 3-double	3.03	2.55	119%	10.09	11.5	88%
Altcar Lane	**07/2021/01247/REM**	**20**	**134.68**	**124**	**109%**	**Master**	**3.11**	**2.75**	**113%**	**12.43**	**11.5**	**108%**
						Bed 2-double	2.85	2.55	112%	11.01	11.5	96%
						Bed 3-double	2.44	2.55	96%	8.93	11.5	78%
						bed 4-double	2.67	2.55	105%	9.37	11.5	81%
Altcar Lane	**07/2021/01247/REM**	**12**	**122.44**	**115**	**106%**	**Master**	**3.29**	**2.75**	**120%**	**15.65**	**11.5**	**136%**
						Bed 2-double	3	2.55	118%	12.8	11.5	111%
						Bed 3-double	3.28	2.55	129%	10.71	11.5	93%
						Bed 4-single	2.97	2.15	138%	8.18	7.5	109%
Belle Field Close	**07/2021/00665/FUL**	**4**	**51.01**	**50**	**102%**	**Master**	**3.19**	**2.75**	116%	**12.14**	**11.5**	106%
Belle Field Close	**07/2021/00665/FUL**	**4**	**51.93**	**50**	**104%**	**Master**	**3.33**	**2.75**	121%	**11.85**	**11.5**	103%
Belle Field Close	**07/2021/00665/FUL**	**4**	**64.14**	**79**	**81%**	**Master**	**3.05**	**2.75**	111%	**11.11**	**11.5**	97%
						Bed 2-double	2.84	2.55	111%	11.12	11.5	97%

Belle Field Close	**07/2021/0 0665/FUL**	**7**	**74.2**	**93**	**80%**	**Master**	**3.02**	**2.75**	110%	**11.44**	**11.5**	99%
						Bed 2-double	3.05	2.55	120%	9.17	11.5	80%
						Bed 3-single	1.82	2.15	85%	5.56	7.5	74%
Belle Field Close	**07/2021/0 0665/FUL**	**3**	**119.17**	**124**	**96%**	**Master**	**3.37**	**2.75**	**123%**	**11.87**	**11.5**	**103%**
						Bed 2-double	2.99	2.55	117%	8.88	11.5	77%
						Bed 3-double	2.75	2.55	108%	9.13	11.5	79%
						bed 4-double	2.69	2.55	105%	8.43	11.5	73%
The Rose (Stanifield Lane	**07/2021/0 1122/FUL**	**1**	**36.76**	**50**	**74%**	**Master**	**2.92**	**2.75**	**106%**	**9.64**	**11.5**	**84%**
The Rose (Stanifield Lane	**07/2021/0 1122/FUL**	**1**	**65.95**	**70**	**94%**	**Master**	**2.98**	**2.75**	108%	**11.07**	**11.5**	96%
						Bed 2-double	2.46	2.55	96%	10.52	11.5	91%

Table 13:2023 All Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land off Shaw Brook Road and Altcar Lane	**07/2023/0 0718/FUL**	**23**	**66.52**	**79**	**84%**	**Master**	**3.01**	**2.75**	**109%**	**9.12**	**11.5**	**79%**
						Bed 2-double	2.8	2.55	**110%**	10.65	11.5	93%
Land off Shaw Brook Road and Altcar Lane	**07/2023/0 0718/FUL**	**8**	**77.32**	**93**	**83%**	**Master**	**2.53**	**2.75**	**92%**	**11.45**	**11.5**	**100%**
						Bed 2-double	2.68	2.55	**105%**	7.74	11.5	67%

						Bed 3-single	1.93	2.15	**90%**	5.04	7.5	67%
Land off Shaw Brook Road and Altcar Lane	**07/2023/00718/FUL**	**12**	**122.44**	**102**	**120%**	**Master**	**3.28**	**2.75**	**119%**	**19.93**	**11.5**	173%
						Bed 2-double	3.24	2.55	**127%**	11.06	11.5	96%
						Bed 3-double	3.03	2.55	**119%**	10.09	11.5	88%
Land off Shaw Brook Road and Altcar Lane	**07/2023/00718/FUL**	**16**	**134.68**	**124**	**109%**	**Master**	**3.11**	**2.75**	**113%**	**12.43**	**11.5**	**108%**
						Bed 2-double	2.85	2.55	**112%**	11.01	11.5	96%
						Bed 3-double	2.44	2.55	**96%**	8.93	11.5	78%
						bed 4-double	2.67	2.55	**105%**	9.37	11.5	81%
Land off Shaw Brook Road and Altcar Lane	**07/2023/00718/FUL**	**15**	**107.63**	**115**	**94%**	**Master**	**3.31**	**2.75**	**120%**	**13.72**	**11.5**	**119%**
						Bed 2-double	2.84	2.55	**111%**	11.11	11.5	97%
						Bed 3-double	2.57	2.55	**101%**	9.52	11.5	83%
						Bed 4-single	3.13	2.15	**146%**	10.43	7.5	139%
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**4**	**49.02**	**50**	**98%**	**Master**	**3.05**	**2.75**	**111%**	**10.19**	**11.5**	89%
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**4**	**53.31**	**50**	**107%**	**Master**	**3.05**	**2.75**	**111%**	**10.19**	**11.5**	89%

Former Lostock Hall Primary School	**07/2022/0 0457 FUL**	**15**	**80.1**	**79**	**101%**	**Master**	**3.05**	**2.75**	**111%**	**14.79**	**11.5**	**129%**
						Bed 2-double	3.25	2.55	127%	13.44	11.5	117%
Former Lostock Hall Primary School	**07/2022/0 0457 FUL**	**10**	**97.6**	**93**	**105%**	**Master**	**3.28**	**2.75**	**119%**	**11.54**	**11.5**	**100%**
						Bed 2-double	3.28	2.55	129%	9.7	11.5	84%
						Bed 3-single	2.25	2.15	105%	6.93	7.5	92%
Former Lostock Hall Primary School	**07/2022/0 0457 FUL**	**6**	**115.09**	**106**	**109%**	**Master**	**3.62**	**2.75**	**132%**	**10.87**	**11.5**	**95%**
						Bed 2-double	2.64	2.55	104%	10.03	11.5	87%
						Bed 3-single	2.59	2.15	120%	9.3	7.5	124%
						Bed 4-Single	2.64	2.15	123%	7.15	7.5	95%

Table 14:2015 Affordable Homes

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Leyland Road	**07/2015/0 315/REM**	**1**	**71.01**	**39**	**182%**	**Master**	**3.03**	**2.75**	**110%**	**8.36**	**11.5**	**73%**
Leyland Road	**07/2015/0 315/REM**	**17**	**63.21**	**70**	**90%**	**Master**	**3.27**	**2.75**	**119%**	**12.29**	**11.5**	**107%**
						Bed 2-Single	2.03	2.15	94%	17	7.5	227%
Leyland Road	**07/2015/0 315/REM**	**1**	**68.56**	**70**	**98%**	**Master**	**3.09**	**2.75**	**112%**	**12.4**	**11.5**	**108%**
						Bed 2-Single	2.13	2.15	**99%**	7.78	7.5	104%

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Leyland Road	**07/2015/0315/REM**	**2**	**88.66**	**93**	**95%**	**Master Bedroom (Double)**	**2.88**	**2.75**	**105%**	**11.95**	**11.5**	**104%**
						Bed 2-double	2.69	2.55	105%	8.2	11.5	71%
						Bed 3-single	2	2.15	93%	5.58	7.5	74%
Leyland Road	**07/2015/0315/REM**	**7**	**68.15**	**84**	**81%**	**Master**	**2.49**	**2.75**	**91%**	**9.82**	**11.5**	**85%**
						Bed 2-Single	2.08	2.15	97%	6.8	7.5	91%
						Bed 3-single	1.79	2.15	83%	4.23	7.5	56%

Table 4:2016 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land To The Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**2**	**47.13**	**50**	**106%**	**Master**	**3.4**	**2.75**	**124%**	**11.76**	**11.5**	**102%**
Land To The Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**2**	**48.55**	**50**	**103%**	**Master**	**3.36**	**2.75**	**122%**	**12.45**	**11.5**	**108%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land To The Rear Of 110 - 120 and Adjacent To 136 Liverpool Road	**07/2015/1845/FUL**	**10**	**63.84**	**79**	**81%**	**Master**	**2.62**	**2.75**	**95%**	**12**	**11.5**	**104%**
						Bed 2-Double	2.51	2.75	98%	9.76	11.5	85%
Car Lane	**07/2016/0499/REM**	**7**	**82.89**	**93**	**89%**	**Master**	**3.08**	**2.75**	**112%**	**13.87**	**11.5**	**121%**
						Bed 2-double	2.17	2.55	85%	8.96	11.5	78%

Table 15:2017 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land at Claytongate Drive	**07/2016/0512/FUL**	**8**	**68.02**	**79**	**86%**	**Master**	**2.68**	**2.75**	**97%**	**10.87**	**11.5**	**95%**
						Bed 2-double	2.56	2.55	100%	11.09	11.5	96%
Springbank, 123 Duddle Lane	**07/2016/0479/FUL**	**4**	**54.63**	**70**	**78%**	**Master**	**3.44**	**2.75**	**125%**	**13.91**	**11.5**	**121%**
						Bed 2-single	2.93	2.15	136%	7.9	7.5	105%

Table 5:2018 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land North of Altcar Lane	**07/2018/3247/REM**	**36**	**62.71**	**79**	**79%**	**Master**	**2.68**	**2.75**	**97%**	**11.42**	**11.5**	**99%**
						Bed 2-double	3.16	2.55	124%	9.65	11.5	84%
Land North of Altcar Lane	**07/2018/3247/REM**	**8**	**80.75**	**93**	**87%**	**Master**	**2.59**	**2.75**	**94%**	**11.47**	**11.55**	**99%**
						Bed 2-double	2.79	2.55	109%	10.3	11.55	89%
						Bed 3-single	2.36	2.15	110%	6.07	7.5	81%
Altcar Lane	**07/2018/1674/REM**	**30**	**70.83**	**79**	**90%**	**Master**	**2.72**	**2.75**	**99%**	**11.79**	**11.5**	**103%**
						Bed 2-double	3.15	2.55	124%	11.71	11.5	102%
Altcar Lane	**07/2018/1674/REM**	**12**	**80.01**	**93**	**86%**	**Master**	**3.21**	**2.75**	**117%**	**12.55**	**11.5**	**109%**
						Bed 2-double	2.73	2.55	107%	8.69	11.5	76%
						Bed 3-single	2.25	2.15	105%	6.12	11.5	53%
Land off Brindle Road	**07/2017/2900/FUL**	**25**	**68.15**	**84**	**81%**	**Master**	**2.49**	**2.75**	**91%**	**9.82**	**11.5**	**85%**
						Bed 2-Single	2.08	2.15	97%	6.8	7.5	91%
						Bed 3-single	1.79	2.15	83%	4.23	7.5	*56%*
Land off Brindle Road	**07/2017/2900/FUL**	**9**	**56.17**	**70**	**80%**	**Master**	**2.91**	**2.75**	**106%**	**10.47**	**11.5**	**91%**
						Bed 2-Single	2.23	2.15	**104%**	7.68	7.5	**102%**

Table 6:2019 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Brindle Road	**07/2017/2325/FUL**	**12**	**85.9**	**nil**		**Master**	**2.54**	**2.75**	**92%**	**12.07**	**11.5**	**105%**
						Bed 2	2.75	2.15	**128%**	9.19	7.5	123%
Brindle Road	**07/2017/2325/FUL**	**12**	**90.19**	**93**	**97%**	**Master**	**2.97**	**2.75**	**108%**	**12.19**	**11.5**	**106%**
						Bed 2-double	2.9	2.55	**114%**	12.94	11.5	113%
						Bed 3-single	2.99	2.15	**139%**	7.51	7.5	100%
Land at Bannister Lane	**07/2019/2313/REM**	**18**	**61.32**	**70**	**88%**	**Master**	**2.91**	**2.75**	**106%**	**12.24**	**11.5**	**106%**
						Bed 2-single	2.03	2.15	**94%**	7.17	7.5	96%
Land at Bannister Lane	**07/2019/2313/REM**	**6**	**50**	**50**	**100%**	**Master**	**3.17**	**2.75**	**115%**	**12.41**	**11.5**	**108%**
Land at Bannister Lane	**07/2019/2313/REM**	**3**	**74.43**	**84**	**89%**	**Master**	**2.87**	**2.75**	**104%**	**12.41**	**11.5**	**108%**
						Bed 2-Single	1.97	2.15	**92%**	6.54	7.5	87%
						Bed 3-single	2.27	2.15	**106%**	6.14	7.5	82%
Wateringpool Lane	**07/2018/9534/FUL**	**4**	**69.75**	**79**	**88%**	**Master**	**3.04**	**2.75**	**111%**	**12.19**	**11.5**	**106%**
						Bed 2-double	3.07	2.55	**120%**	11.88	11.5	103%
Wateringpool Lane	**07/2018/9534/FUL**	**3**	**72.78**	**84.00**	**87%**	**Master**	**2.48**	**2.75**	**90%**	**11.02**	**11.5**	**96%**
						Bed 2-single	2.08	2.15	**97%**	7.55	7.5	101%
						Bed 3-single	2.37	2.15	**110%**	5.91	7.5	79%
Pearson House	**07/2019/0402**	**1**	**50.77**	**50**	**102%**	**Master**	**2.99**	**2.75**	**109%**	**11.04**	**11.5**	**96%**

Table 7:2020 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Space Standard	Percentage of NDSS Bedroom Floor Area Standard
Land Near Shaw Brook Road	**07/2019/0300/REM**	**30**	**70.83**	**79**	**90%**	**Master**	**2.72**	**2.75**	**99%**	**11.79**	**11.5**	**103%**
						Bed 2-double	3.15	2.55	124%	11.71	11.5	102%
Land Near Shaw Brook Road	**07/2019/0300/REM**	**12**	**80.01**	**93**	**86%**	**Master**	**3.21**	**2.75**	**117%**	**12.55**	**11.5**	**109%**
						Bed 2-double	2.73	2.55	107%	8.69	11.5	76%
						Bed 3-single	2.25	2.15	105%	6.12	11.5	53%
McKenzie Arms	**07/2020/00396**	**9**	**50.04**	**50**	**100%**	**Master**	**2.76**	**2.75**	**100%**	**12.42**	**11.5**	**108%**
McKenzie Arms	**07/2020/00396**	**3**	**71.94**	**70**	**103%**	**Master**	**2.65**	**2.75**	**96%**	**17**	**11.5**	**148%**
						Bed 2-double	2.63	2.55	103%	13	11.5	113%
McKenzie Arms	**07/2020/00396**	**3**	**117.49**	**108**	**109%**	**Master**	**3.13**	**2.75**	**114%**	**16**	**11.5**	**139%**
		57				Bed 2-double	2.93	2.55	115%	13	11.5	113%
						Bed 3-double	3.7	2.55	145%	17	11.5	148%

Table 8: 2021 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Land South of Hampshire Road	**07/2021/00532/FUL**	**7**	**73.18**	**93**	**79%**	**Master**	**2.7**	**2.75**	**98%**	**10.1**	**11.5**	**88%**
						Bed 2-double	2.7	2.55	**106%**	10	11.5	**87%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 3-single	2.08	2.15	**97%**	4.36	7.5	**58%**
Land South of Hampshire Road	**07/2021/00532/FUL**	**7**	**60.32**	**79**	**76%**	**Master**	**2.7**	**2.75**	**98%**	**11.33**	**11.5**	**99%**
						Bed 2-double	2.52	2.55	**99%**	9.46	11.5	**82%**

Table 9: 2022 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Altcar Lane	**07/2021/01247/REM**	**23**	**67.58**	**79**	**86%**	**Master**	**3.01**	**2.75**	**109%**	**9.12**	**11.5**	**79%**
						Bed 2-double	2.8	2.55	**110%**	10.65	11.5	**93%**
Altcar Lane	**07/2021/01247/REM**	**8**	**78.47**	**93**	**84%**	**Master**	**2.53**	**2.75**	**92%**	**11.45**	**11.5**	**100%**
						Bed 2-double	2.68	2.55	**105%**	7.74	11.5	**67%**
						Bed 3-single	1.93	2.15	**90%**	5.04	7.5	**67%**
Belle Field Close	**07/2021/00665/FUL**	**4**	**51.01**	**50**	**102%**	**Master**	**3.19**	**2.75**	**116%**	**12.14**	**11.5**	**106%**
Belle Field Close	**07/2021/00665/FUL**	**4**	**51.93**	**50**	**104%**	**Master**	**3.33**	**2.75**	**121%**	**11.85**	**11.5**	**103%**
Belle Field Close	**07/2021/00665/FUL**	**4**	**64.14**	**79**	**81%**	**Master**	**3.05**	**2.75**	**111%**	**11.11**	**11.5**	**97%**
						Bed 2-double	2.84	2.55	**111%**	11.12	11.5	**97%**
Belle Field Close	**07/2021/00665/FUL**	**4**	**56.56**	**70**	**81%**	**Master**	**3.07**	**2.75**	**112%**	**10.5**	**11.5**	**91%**
						Bed 2-single	2.47	2.15	**115%**	6.93	7.5	**92%**
Belle Field Close	**07/2021/00665/FUL**	**7**	**74.2**	**93**	**80%**	**Master**	**3.02**	**2.75**	**110%**	**11.44**	**11.5**	**99%**
						Bed 2-double	3.05	2.55	**120%**	9.17	11.5	**80%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
						Bed 3-single	1.82	2.15	**85%**	5.56	7.5	**74%**

Table 10: 2023 Affordable Homes Data

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Land off Shaw Brook Road and Altcar Lane	**07/2023/00718/FUL**	**23**	**66.52**	**79**	**84%**	**Master**	**3.01**	**2.75**	**109%**	**9.12**	**11.5**	**79%**
						Bed 2-double	2.8	2.55	**110%**	10.65	11.5	**93%**
Land off Shaw Brook Road and Altcar Lane	**07/2023/00718/FUL**	**8**	**77.32**	**93**	**83%**	**Master**	**2.53**	**2.75**	**92%**	**11.45**	**11.5**	**100%**
						Bed 2-double	2.68	2.55	**105%**	7.74	11.5	**67%**
						Bed 3-single	**1.93**	**2.15**	**90%**	**5.04**	**7.5**	**67%**
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**4**	**49.02**	**50**	**98%**	**Master**	**3.05**	**2.75**	**111%**	**10.19**	**11.5**	**89%**
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**4**	**53.31**	**50**	**107%**	**Master**	**3.05**	**2.75**	**111%**	**10.19**	**11.5**	**89%**
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**15**	**80.1**	**79**	**101%**	**Master**	**3.05**	**2.75**	**111%**	**14.79**	**11.5**	**129%**
						Bed 2-double	3.25	2.55	**127%**	13.44	11.5	**117%**

Site Address	Planning Reference	Number of Design Approved	Gross Internal Area (GIA)	NDSS GIA Standard	Percentage of NDSS GIA Standard	Bedroom	Bedroom Width	NDSS Bedroom Width Standard	Percentage of NDSS Bedroom Width Standard	Bedroom Floor Area	NDSS Floor Area Standard	Percentage of NDSS Bedroom Floor Area Standard
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**10**	**97.6**	**93**	**105%**	**Master**	**3.28**	**2.75**	**119%**	**11.54**	**11.5**	**100%**
						Bed 2-double	3.28	2.55	**129%**	9.7	11.5	**84%**
						Bed 3-single	2.25	2.15	**105%**	6.93	7.5	**92%**
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**6**	**88.34**	**93**	**95%**	**Master**	**2.61**	**2.75**	**95%**	**11.24**	**11.5**	**98%**
						Bed 2-double	2.61	2.55	**102%**	8.95	11.5	**78%**
						Bed 3-single	2.26	2.15	**105%**	7.17	7.5	**96%**
Former Lostock Hall Primary School	**07/2022/00457 FUL**	**6**	**115.09**	**106**	**109%**	**Master**	**3.62**	**2.75**	**132%**	**10.87**	**11.5**	**95%**
						Bed 2-double	2.64	2.55	**104%**	10.03	11.5	**87%**
						Bed 3-single	2.59	2.15	**120%**	9.3	7.5	**124%**
						Bed 4-Single	2.64	2.15	**123%**	7.15	7.5	**95%**

Appendix 2: United Utilities Representation

WATER EFFICIENCY IN NEW HOMES

Evidence to support adoption of the Building Regulations Optional Requirement for local authorities in North West England and the Midlands

Background

Water is essential for life - yet here in the UK (as in many regions across the world) the future availability of water is a concern. The area covered by Water Resources West is an area the Environment Agency has described as having 'moderate water stress'; water scarcity/stress occurs when demand is high compared to the water that is available[1] .

Population growth, climate change and environmental protection measures all put pressure on water resources and contribute to water stress in our region. On top of this, housing shortages mean that lots more housing is needed today and in the future. Hence, planning policy is a vital tool to help ensure long term sustainable management of water supplies, as well as helping protect our local rivers and wildlife. Achieving a balance between these conflicting demands is a challenge for us all.

Water Efficiency Standards for New Homes

The Code for Sustainable Homes was launched in 2006 to help reduce UK carbon emissions and create more sustainable homes; it was the national standard for use in the design and construction of new homes in the UK and is still referred to in older Local Plans. In 2015 it was withdrawn and some of its standards were consolidated into Building Regulations including the requirement for all new dwellings to achieve a water efficiency standard of 125 litres of water per person per day (l/p/d). In the same year, the Government updated Building Regulations Part G, introducing an 'optional' requirement of 110 l/p/day for new residential development, which should be implemented through local policy where there is a clear need based on evidence. (See Appendix 1).

In 2018, Welsh Government amended building regulations so that new builds are built to a standard of 110 l/p/d[2]. In England however the standard of 110 l/p/d needs to be adopted as a local policy by each planning authority in its local plan before it can take effect.

In 2020, the government published a White Paper on future planning[3] in England. The focus is on clear requirements and standard approaches. It clear that water will remain an important consideration and that "sustainable development" will be a key test.

The Need for Water Efficiency in New Homes

The Water Framework Directive (WFD) was adopted into UK Law in 2003. It was designed to change water management for the better by putting aquatic ecology at the heart of all management decisions. One of the most important features of the WFD is that it encourages public consultation, meaning everyone can have a say in what is needed to protect our water resources. It also takes into account the environmental, economic and social implications of any such investment/decisions.

Delivery of the WFD objectives in our region is set out in River Basin Management Plans for the Solway Tweed, North West, Dee, Severn and Humber River Basins. These documents highlight a number of issues that are affecting the achievement of the WFD objectives, one of these is the pressures from water supply. Thus, there are a variety of reasons why water efficiency is important for Local Authorities.

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[1] Water stressed areas – final classification, Environment Agency and Natural Resources Wales, July 2013
[2] The Building (Amendment) (Wales) Regulations 2018
[3] Planning for the future, Ministry of Housing, Communities and Local Government, August 2020

Local Authorities have a duty of care for communities and the environment and the reduction in water use can help to minimise the quantity of water taken from the environment as well as helping to control customer bills. There are some important factors to consider in this regard:

- The general Duty to Co-operate[4] can also apply to water efficiency and, across the region, there are several examples of exemplar project partnerships between Local Authorities and water companies.
- The National Planning Policy Framework[5] Section 2 requires strategic policies to make sufficient provision for water supplies. Section 14 of the NPPF concerns "Meeting the challenge of climate change, flooding and coastal change" and paragraph 149 make specific reference to water supply within this context. Paragraph 170 goes on the set out that planning policies and decisions should contribute to and enhance the natural and local environment including water. For reference we have included specific government guidance in relation to the optional standard in Appendix 2.
- Local Authorities must "have regard to the River Basin Management Plans and any supplementary plans in exercising their functions" and this includes taking action on water efficiency.
- The production of mains water requires significant energy and chemical inputs and hence reducing demand for water can contribute significantly to reducing carbon emissions, especially where those savings are of hot water.

Why do we need to save water?

The areas covered by Water Resources West are classed as an area under 'water stress' by the Environment Agency (Table 1). While local planning authorities are encouraged to draw on this existing evidence to establish the need for possible action government makes clear that this should not be the only consideration[6] – not least because current maps were not developed to establish areas where additional controls were required on new homes. A requirement for a higher water efficiency standard within a local plan should also follow on from consultation with the local water supplier and the Environment Agency. Additional reasons for the local need for action highlighted by the Environment Agency and the local water suppliers are set out below.

Table 1. Water Stress Classification for current and future scenarios[1] (L=low stress; M=moderate stress; S=serious stress). The four scenarios represent the range of pressures on water resources from climate change and future demands.

Water company area	Current Stress	Future Scenario 1	Future Scenario 2	Future Scenario 3	Future Scenario 4
Dwr Cymru Welsh Water	M	M	M	M	M
Severn Trent	M	M	M	M	M
South Staffs Water	M	M	M	M	M
United Utilities	M	M	M	M	M

[4] Section 110 of the Localism Act sets out the 'Duty to Co-operate'. It requires cooperation between local planning authorities and other public bodies to maximise the effectiveness of policies for strategic matters in Local Plans. Even if the formal duty is removed in future legislation, the August 2020 White Paper[3] makes it clear that strategic, cross-boundary issues should still be considered in the context of sustainable development.

[5] National Planning Policy Framework, Ministry of Housing, Communities & Local Government, February 2019

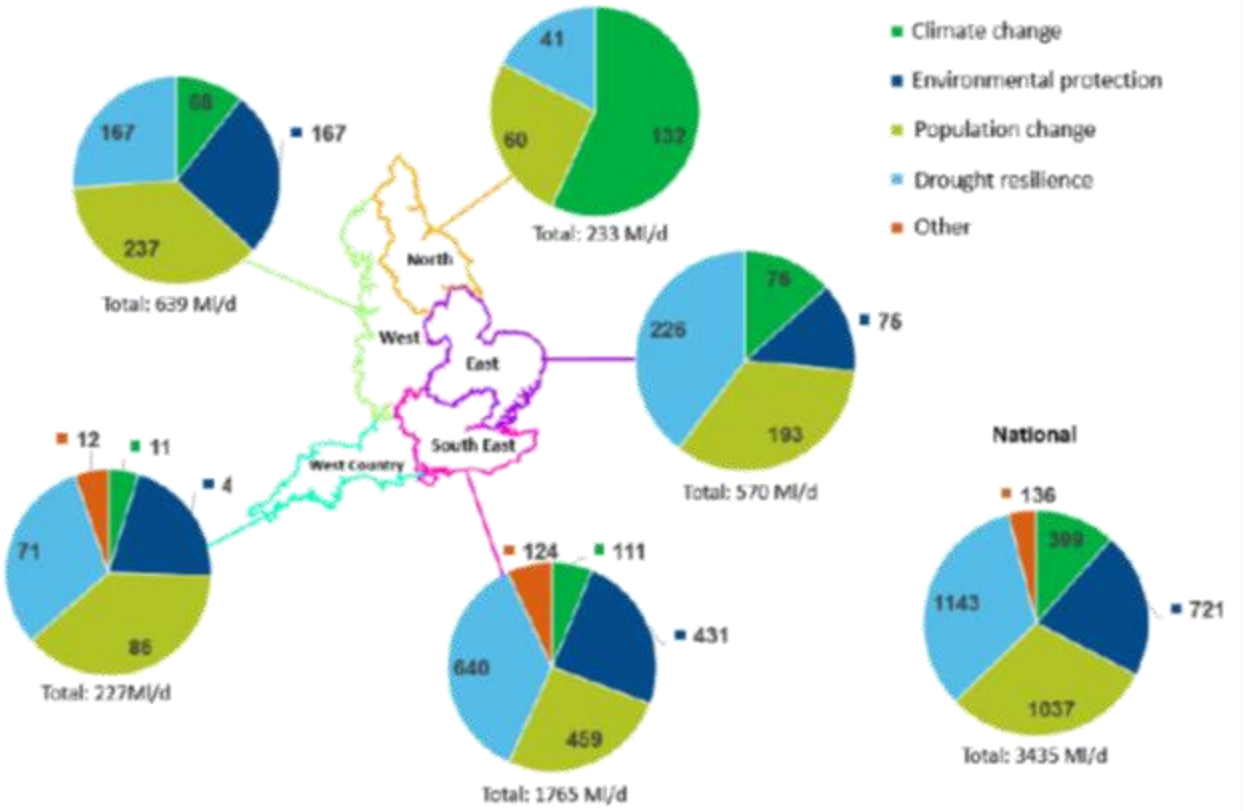
[6] Housing Standards Review Consultation, Department for Communities and Local Government, August 2013

In March 2020, the Environment Agency published the National Framework for Water Resources[7]. This identifies strategic water needs for England and its regions across all sectors up to and beyond 2050. The National Framework identifies that our region faces the second highest pressures on Water Resources. Significantly, the National Framework identifies that increased consumption, driven by population increases, is the largest driver of additional water need in the region. Increased public water supply drought resilience, increased protection for the environment and the impact of climate change reducing water availability of existing supplies also have impacts on water availability (Figure 1).

Based on the best available evidence the National Framework adopted a planning assumption of reducing *average* per capita consumption (PCC) to 110 l/p/d by 2050 nationally. Water Resources West's projections are broadly consistent with that, with average per capita consumption reducing to 111 l/p/d by 2050[8]. These projections are based on forecasts made for the water companies' 2019 WRMPs.

Even with these reductions in consumption, parts of our region will need new water resources to be developed[8]. If the planned reductions are not achieved then more significant and more costly water resources will need to be developed. It is therefore important the measures are taken across the region to support the achievement of the lower per capita consumption.

Figure 1. Extract from the National Framework[7] showing how population growth results in Water Resources West having the second highest pressure on water resources in England. Numbers in the pie charts show the additional water needed by 2050 due to different drivers (in Ml/d).



[7] Meeting our future water needs: a national framework for water resources, Environment Agency, March 2020

[8] Initial Resource Position, Water Resources West, March 2020

Public concern also highlights the need to support water saving. Surveys[9] of water users in North West England and the Midlands have shown that, while there is little general awareness of the issues, once informed 70% are concerned about water scarcity. In addition to running out of water, customers are worried about the potential impact on water bills, restrictions and wastage

Water Framework Directive requirements are set out in River Basin Management Plans. Water efficiency measures have a direct effect in reducing the abstraction from water bodies assessed in those plans. Abstraction in turn affects the hydrological regime of those water bodies. River Basin Management Plans for the Solway Tweed, North West, Dee, Severn and Humber River Basins identify that there are waterbodies within all those areas for which the hydrological regime does not support good status. In turn the hydrological regime can affect water quality, species and habitats.

Changes to the natural flow and level of water is identified as a significant water management issue. Reduced flow and water levels in rivers and groundwater caused by human activity (such as abstraction) can mean that there is not enough water for people to use and wildlife might not be able to survive. Reduced flow affects the health of fish and exaggerates the impacts of barriers such as weirs.

Table 2. WFD classification of waterbodies in 2015 River Basin Management Plans

River Basin District	Percentage of surface water bodies not achieving good ecological status or potential	Percentage of groundwater bodies not achieved good quantitative status
Solway Tweed[10]	54% (305 out of 560)	28% (18 out of 64)
North West[11]	78% (480 out of 613)	11% (2 out of 18)
Humber[12]	86% (839 out of 987)	25% (13 out of 51)
Severn[13]	80% (604 out of 755)	21% (9 out of 42)
Dee[14]	73% (68 out of 93)	0% (0 out of 5)

Summary of evidence on the need for the optional water efficiency standard

As we have seen above, there is a range of evidence on the water stress across the North West and the Midlands. This means there is a clear need for the 110 l/p/d water efficiency standard.

For inclusion in a local plan a local planning authority must be able to demonstrate at examination of the plan that the standard is required to address a clear need and as part of an approach to water efficiency that is consistent with a wider approach to water efficiency as set out in the local water undertaker's water resources management plan. We recommend that the following evidence is cited:

- The classification of moderate water stress for the water supplier in your area (Table 1)[1].
- The National Framework for water resources noting that Water Resources West faces the second highest pressures on water resources in England due largely to population growth[7].
- The National Framework for water resources planning assumption of 110 l/p/d[7].
- The consistency between these planned reductions in consumption between the National Framework, Water Resources West's plans and your water supplier's WRMP[8].

[9] Customer Survey for Severn Trent, Thames Water and United Utilities, Verve, July 2018
[10] River basin management plan for the Solway Tweed river basin district: 2015 update, Environment Agency and Natural Scotland, 21 December 2015
[11] River basin management plan, Part 1: North West river basin district, Environment Agency, December 2015
[12] River basin management plan, Part 1: Humber river basin district, Environment Agency, December 2015
[13] River basin management plan, Part 1: Severn river basin district, Environment Agency, December
[14] Dee River Basin Management Plan 2015 – 2021, Proposed Summary, Natural Resources Wales and Environment Agency, October 2015

- High levels of public concern (70%) in the region, when informed about issues of water scarcity[9].
- Reference to the WFD ecological status of water bodies in your River Basin District, with changes to flow and level recognised as a significant water management issue in the River Basin Management Plan (Table 2).

Water Companies

A consequence of the population and housing growth in our region has meant that water companies have been asked to accommodate the new growth, yet at the same time their abstraction licenses are being reduced. Therefore it is vital that water companies support and are supported in initiatives to help get 110 l/p/d in planning policies across local authorities in the region, to help meet their requirement to supply their customers. The water companies in Water Resources West are Dwr Cymru Welsh Water, Severn Trent, South Staffs and United Utilities.

In preparing your local plan you should consult with your local water supply company on specific local issues.

New Homes

The scale of new development that is needed across our region is immense - the Government aiming for delivery of 300,000 new homes a year across England[15]. Within Water Resources West's region we estimate that there will be 1.6 million new properties by 2050. Yet at the same time there is need to share the already scarce water resources - therefore the need for implementing at least 110 l/p/d into local plans and policies is apparent.

Impact on viability

The cost of installing water-efficient fittings to target a per capita consumption of 110l/d has been estimated as a one-off cost of £9 for a four bedroom house[16]. Research undertaken for the Welsh Government indicated potential annual savings on water and energy bills for householders of £24 per year as a result of such water efficiency measures[17].

The Consumer Council for Water notes that the discretionary, tighter (building) standard of 110 l/p/d is something that should be pursued, also bearing in mind that saving water is not the only a driver of water efficiency[18]. This is because water efficiency could also have a positive effect on reducing energy bills, water bills of metered customers and carbon emissions.

The Greater London Authority carried out a survey of developers to test the viability of the 110 l/p/d standard. The results of this survey[19] made it clear that those associated with the development industry did not consider that the proposed changes would have any impact on building.

Viability is also evidenced by the examples from other local authorities who have adopted the standard. South Worcestershire adopted the 110 l/p/d standard in its February 2016 local plan. The standard remains the preferred option for next local plan. See the case study below. Bromsgrove and Redditch councils cooperated to require the 110 l/p/d standard for certain developments in their plans which were adopted in January 2017. Another example is Nottingham City Council who adopted the 110 l/p/d standard for all new dwellings in January 2020.

[15] Planning for the Future, Ministry of Housing, Communities and Local Government, March 2020
[16] Housing Standards Review Cost Impacts, Department for Communities and Local Government, September 2014
[17] Advice on water efficient new homes for England, Waterwise, September 2018
[18] Response to Defra consultation on measures to reduce personal water use, Consumer Council for Water, October 2019
[19] Greater London Authority Housing Standards Review: Evidence Of Need, David Lock Associates, May 2015

Water efficiency is therefore not only viable but of positive economic benefit to both private homeowners and tenants.

Water Calculator

The Water Calculator was developed to help provide a working example of the calculator used for part G of the building regulations. It uses the method set out in the 'Water Efficiency Calculator for New Dwellings'[20] . The Water Calculator contains information on water consumption for hundreds of products, enabling quick and easy specification, without the hassle of gathering data from several product manufacturers. To access the water calculator visit: www.thewatercalculator.org.uk

Case study

South Worcestershire's current local plan was adopted, following examination, in February 2016[21]. It is a major sub-regional land use plan, prepared jointly by the three South Worcestershire Councils; Malvern Hills, Worcester City and Wychavon working together. Within the local plan, policy SWDP30c states that "for housing proposals, it must be demonstrated that the daily non-recycled water use per person will not exceed 110 l/p/d". The reasoned justification for this policy highlights the following factors:

- This policy is central to the council's response to the Framework, which advocates that local plans incorporate strategies to mitigate and adapt to climate change, in line with the objectives and provisions of the Climate Change Act 2008 over the longer term. This includes factors such as flood risk, water supply and changes to biodiversity.
- Without effective local planning and risk management, the consequences of climate change may also have a significant detrimental impact on budgets and service delivery. It may also compromise the Government's ability to meet the statutory requirements under the Climate Change Act 2008.
- Local planning authorities have a general responsibility not to compromise the achievement of United Kingdom compliance with the Water Framework Directive (WFD(68)) (Directive 2000/60/EC). More specifically, the local plan has to take into account the River Severn Basin Management Plan, which in itself is a requirement of the WFD. All surface water bodies need to achieve "good ecological status" by 2015.
- The Localism Act 2011 enables the UK government to require local authorities to pay if their inaction results in a failure to meet WFD requirements.
- The Localism Act 2011 also requires local planning authorities to co-operate on strategic cross-boundary matters, for example the provision of water supply infrastructure, water quality, water supply and enhancement of the natural environment. Consequently, there is a need for developers to engage positively with the local water supplier to ensure that all the necessary infrastructure is secured, so as to ensure that there is no deterioration in the quality or quantity of water of the receiving water body(ies) and to avoid delays in the delivery of development.
- The 2006 Natural Environment and Rural Communities (NERC) Act imposes a duty on local planning authorities to have regard to conserving biodiversity in carrying out all of their functions.
- The South Worcestershire Water Cycle Study looks at the level of planned growth and the ability of the infrastructure (i.e. water supply and waste water treatment) to accommodate it without adversely affecting the natural water cycle. It identifies an overall shortage in future water supplies that necessitates the delivery of minimum water efficiency targets.
- The effective management of water is considered critical in the pursuit of sustainable development and communities. It reduces the impact flooding can have on the community, maintains water quality and quantity and helps to enhance local amenity / property value and biodiversity through the provision of Green Infrastructure. Effective water management also reduces the movement of water and sewage, thereby reducing energy requirements. Development proposals incorporating grey

[20] Appendix A of Approved Document G, The Building Regulations 2010, HM Government 2015 edition with 2016 amendments

[21] South Worcestershire Development Plan, Adopted, February 2016.

water recycling will therefore be supported and opportunities for the retrofitting of water efficiency measures will be encouraged.

The South Worcestershire Councils are currently preparing the next local plan. Following consultation its Preferred Options report[22] was published in November 2019. In relation to water efficiency the preferred option is to require new dwellings to meet the tighter Building Regulations optional requirement of 110 l/p/d as per the adopted policy.

Recommendations

There is firm evidence in across the North West and the Midlands that clearly justifies the need for more stringent water efficiency targets for new residential development. Local Authorities should consider all the factors in their local plans and we strongly recommend they adopt 110 l/p/d for water efficiency using the suggested wording below:

> **All new residential development must achieve as a minimum the optional requirement set through Building Regulations for water efficiency that requires an estimated water use of no more than 110 litres per person per day.**

Past experience has shown that successful adoption of 110l/p/d in local plans requires the following:

1. Significant engagement and consultation is required in developing local plans, including engagement with key stakeholders and public sector partners, responsible for delivering a range of services and infrastructure.
2. Recommend local plans are subject to public consultations (many people are concerned about water) and that where appropriate, comments from the public help shape the contents of this plan and helps with public buy-in.
3. Local plans should actively encourage the design of new buildings that minimise the need for energy and water consumption, use renewable energy sources, provide for sustainable drainage, support water re-use and incorporate facilities to recycling of waste and resources.
4. Local plans should have a positive approach to the adaptation of climate change –
    - by avoiding development in areas at greatest risk of flooding, and
    - promoting sustainable drainage, and
    - challenging water efficiency standards.

[22] South Worcestershire Development Plan Review, Preferred Options Consultation, November 2019.

Appendix 1. Extract from Part G of the Building Regulations

Extract from Part G of Building Regulations

Optional requirement

2.8 The optional requirement only applies where a condition that the dwelling should meet the optional requirement is imposed as part of the process of granting planning permission. Where it applies, the estimated consumption of wholesome water calculated in accordance with the methodology in the water efficiency calculator, should not exceed 110 litres/person/day.

2.9 The person carrying out the work must inform the ***BCB*** where the optional requirement applies.

2.10 As an alternative to calculating the water consumption (as paragraph 2.8), a fittings approach that is based on the water efficiency calculator methodology may be used.

2.11 Where the fittings approach is used, the water consumption of the fittings provided must not exceed the values in Table 2.2. If they do, the water efficiency calculator must be completed to demonstrate compliance. Similarly, where a shower is not to be provided or where a waste disposal unit, a water softener or water re-use is to be provided the water efficiency calculator must be completed.

2.12 Where the fittings approach is used, the notice given under regulation 37 should state "Less than 110 litres/person/day using fittings approach".

Table 2.2 **Maximum fittings consumption optional requirement level**

Water fitting	Maximum consumption
WC	4/2.6 litres dual flush
Shower	8 l/min
Bath	170 litres
Basin taps	5 l/min
Sink taps	6 l/min
Dishwasher	1.25 l/place setting
Washing machine	8.17 l/kilogram

Appendix 2 NPPF Planning Practice Guidance
Housing: optional technical standards, Water efficiency standards[23]

Can local planning authorities require a tighter water efficiency standard in new dwellings?
In setting out how the planning system should contribute to the achievement of sustainable development, the National Planning Policy Framework and guidance makes clear this includes planning to provide the high quality housing required to meet the needs of present and future generations, and helping to use natural resources prudently. The Framework's policies expect local planning authorities to adopt proactive strategies to adapt to climate change that take full account of water supply and demand considerations. Early engagement between local planning authorities and water companies can help ensure the necessary water infrastructure is put in place to support new development. See water supply guidance. The local planning authority may also consider whether a tighter water efficiency requirement for new homes is justified to help manage demand.
Paragraph: 013 Reference ID: 56-013-20150327

Revision date: 27 03 2015

What standard should be applied to new homes?
All new homes already have to meet the mandatory national standard set out in the Building Regulations (of 125 litres/person/day). Where there is a clear local need, local planning authorities can set out Local Plan policies requiring new dwellings to meet the tighter Building Regulations optional requirement of 110 litres/person/day.
Paragraph: 014 Reference ID: 56-014-20150327

Revision date: 27 03 2015

How should local planning authorities establish a clear need?
It will be for a local planning authority to establish a clear need based on:

- existing sources of evidence.
- consultations with the local water and sewerage company, the Environment Agency and catchment partnerships. See paragraph 003 of the water supply guidance
- consideration of the impact on viability and housing supply of such a requirement.

Paragraph: 015 Reference ID: 56-015-20150327

Revision date: 27 03 2015

What are the existing sources of evidence?

Primary sources of evidence which might support a tighter water efficiency standard for new dwellings are:

- The Environment Agency Water Stressed Areas Classification (2013) which identifies areas of serious water stress where household demand for water is (or is likely to be) a high proportion of the current effective rainfall available to meet that demand.
- Water resource management plans produced by water companies.
- River Basin Management Plans which describe the river basin district and the pressure that the water environment faces. These include information on where water resources are contributing to a water body

[23] https://www.gov.uk/guidance/housing-optional-technical-standards#water-efficiency-standards

being classified as 'at risk' or 'probably at risk' of failing to achieve good ecological status, due to low flows or reduced water availability.

In addition to these primary data sources, locally specific evidence may also be available, for example collaborative 'water cycle studies' may have been carried out in areas of high growth.

Paragraph: 016 Reference ID: 56-016-20150327

Revision date: 27 03 2015

Where can I find out more about the water efficiency standard?
See further information on the water efficiency standard.

Paragraph: 017 Reference ID: 56-017-20150327

Revision date: 27 03 2015