

# TPS Transport Consultants Ltd

## Highway Design Overview Checklist

Client	Strata and Thirteen Group
Project	Land at Main Avenue, Cowlersley, Huddersfield
TPS Reference	P2445
Date Prepared	29.10.24
Prepared By	ST
Checked By	JT

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# 1. INTRODUCTION

- 1.1 TPS Transport Consultants Ltd (TPS) has been instructed by Strata and Thirteen Group to prepare a Highways Design Overview Checklist in support of a planning application for 57no. dwellings on land at Main Avenue, Cowlersley, Huddersfield. This report is prepared to provide an overview of the intended highways layout within the site and is accompanied by a number of drawings in the Appendices.7
- 1.2 A copy of the proposed site layout plan is attached at **Appendix A**, whilst a drawing providing a summary of the highway design is attached at **Appendix B**.

## 2. HIGHWAY DESIGN OVERVIEW CHECKLIST

Design Topic	Relevant Guidance Document	Requirement	Proposed Development
<b>Parking</b>	Kirklees Highway Design Guide SPD	Kirklees Council has not set local parking standards for residential and non-residential development, however in practice the majority of new 2 to 3 bedroom dwellings within Kirklees have provided 2 off-street parking spaces; with 4+ bedroom dwellings providing 3 off street car parking spaces... In most circumstances this has been supplemented by visitor parking at the rate of 1 per 4 dwellings	Houses throughout the site are to be provided with 2no. parking spaces per dwelling. The proposed apartments are to be provided with only 1no. space per dwelling. 4no. bedroom dwellings are provided with 3no. spaces.  13no. visitor parking spaces are to be provided, at a ratio of 1 space per 4.4 dwellings and are demonstrated on the drawing attached at <b>Appendix B</b> .
<b>Carriageway widths (adopted roads)</b>	Kirklees Highway Design Guide SPD	The typical width of adopted carriageways is generally 5.5m. This allows all vehicles to pass each other with ease given the infrequency of large vehicles on residential streets. This width is only sufficient to cope with typical residential traffic provided that sufficient off-street parking is available.	In line with the guidance within the Kirklees Highway Design Guide SPD, carriageways throughout the site are to be provided at 5.5m wide and be bound by 2m wide footways to both sides. These are indicated by the blue measurements in the drawing attached at <b>Appendix B</b> .  It is proposed to provide a shared surface arrangement serving plots 49-53 which will have a 4.8m wide carriageway width, bound by 0.6m wide hard margin to both sides of the carriageway.  6m kerb radii are provided at junctions throughout the site.  Speed restraint measures, in the form of vertical deflection are provided along the main route through the site, in order to reduce vehicle speeds. By not providing a linear route through the site, instead it has curves in the road layout, this will also naturally slow vehicles.
<b>Carriageway widths (private drives)</b>	Kirklees Highway Design Guide SPD	The initial section of a shared private drive is 5m wide	The two private drives proposed within the site will be provided with a 6m carriageway width.
<b>Visibility Splays</b>	Kirklees Highway Design Guide SPD with reference to Manual for Streets	Visibility splays should be provided in line with Table 7.1 of Manual for Streets for a 20mph speed limit – 2.4m x 25m	Visibility splays within the site are indicated on the drawing attached at <b>Appendix B</b> . This demonstrates that visibility can be provided in line with the intended speed limit throughout the site – 20mph.

			It is recognised that visibility adjacent plot 25 and plot 26 crosses the plot boundary. These plots will have a restrictive covenant to ensure that no permanent feature over 600mm is erected across the path of the visibility.
<b>Kerb Radii</b>	Kirklees Highway Design Guide SPD	6m kerb radii to be provided	6m kerb radii are provided at junctions throughout the site.
<b>Turning Heads / vehicles tracking</b>	Kirklees Highway Design Guide SPD	Where practicable, highways should be designed to accommodate a refuse vehicle with the following dimensions: <ul style="list-style-type: none"> <li>• Length = 11.85m</li> <li>• Width = 2.5m</li> <li>• Turning Circle (between kerbs) = 17.88m</li> </ul>	Swept path analysis of the proposed site layout has been undertaken with an 11.6m refuse vehicle in order to ensure that a robust analysis of the layout has been undertaken and to futureproof the layout should larger vehicles be utilised by Kirklees Council in the future. The tracking of the site is demonstrated on the drawing attached at <b>Appendix C.</b>

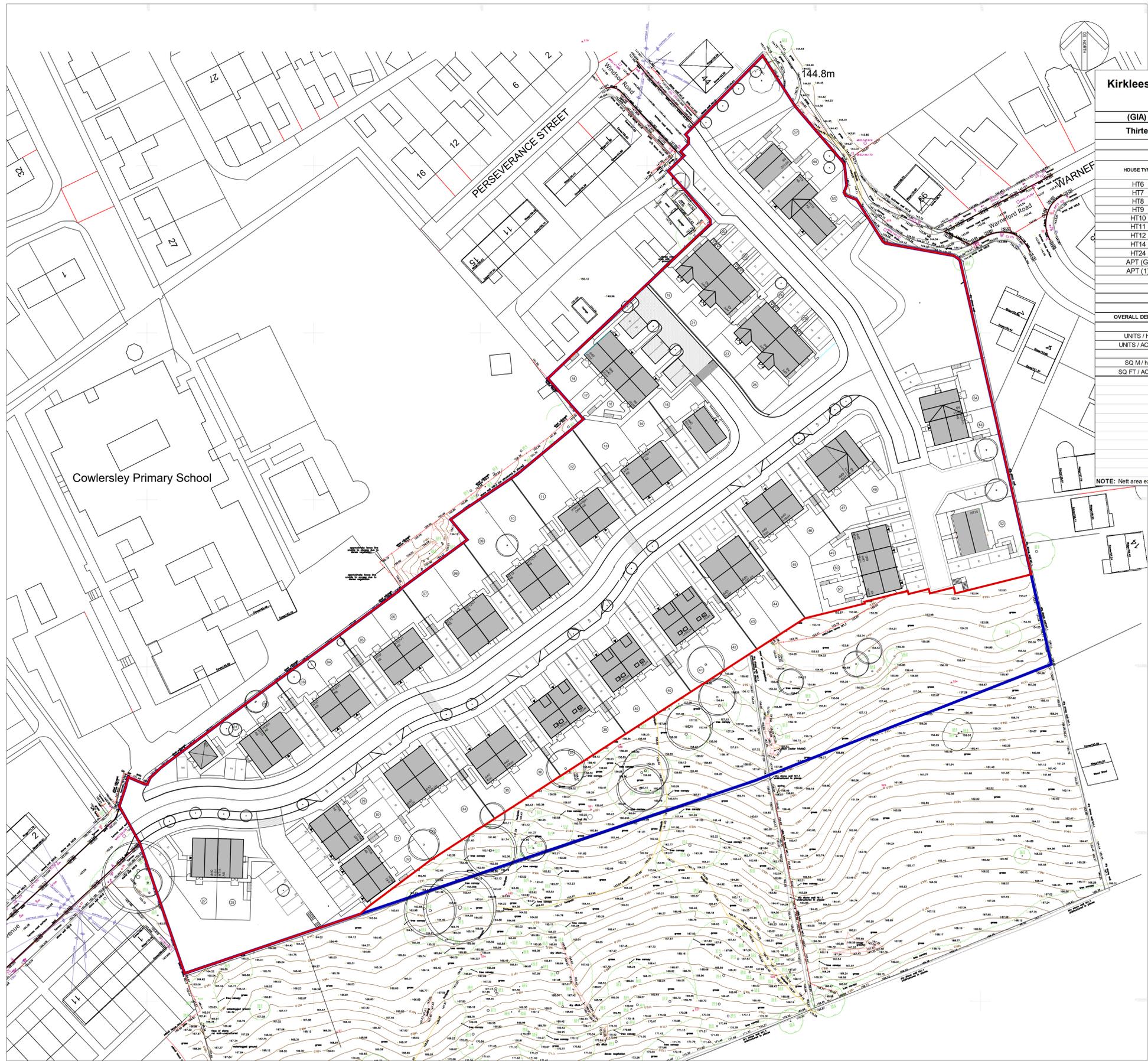
# Appendix A

## Proposed Site Layout Plan

DO NOT SCALE  
All dimensions to be checked on site and Architect to be notified of any discrepancies prior to commencement

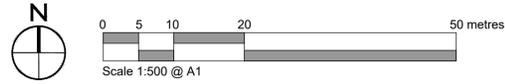
DESIGNERS RISK ASSESSMENT  
Construction (Design and Management) Regulations 2015  
RESIDUAL RISKS

REF	DATE	DESCRIPTION
P1	03.10.24	Planning Issue GP
P2	11.10.24	Apartment footprints revised. GP
P3	22.10.24	Substation location revised. GP
P4	23.10.24	Private drive arrangement altered plots 16-18. GP Plot 1 changed to HT11 from HT9.



Kirkles - Main Avenue													
(GIA)													
Thirteen Group/Strata													
								ha	acres				
GROSS SITE AREA								2.12	5.24				
NET SITE AREA								1.55	3.83				
HOUSE TYPE	BEDROOM	APPROVED DOCUMENT M COMPLIANCE	CONFIG	STOREYS	NO	MIX %	SQ FT	SQ M	TOTAL SQ FT	TOTAL SQ M			
HT6	2B3P	CAT M4(2)	HOUSE	2	7	12	784.69	72.9	5493	510.30			
HT7	2B4P	CAT M4(2)	HOUSE	2	8	14	877.26	81.5	7018	652.00			
HT8	3B4P	CAT M4(1)	HOUSE	2	8	14	928.92	86.3	7431	690.40			
HT9	3B5P	CAT M4(1)	HOUSE	2	3	5	1020.42	94.80	3061	284.40			
HT10	3B5P	CAT M4(2)	HOUSE	2	1	2	1020.42	94.80	1020	94.80			
HT11	3B5P	CAT M4(2)	HOUSE	2	7	12	1020.42	94.80	7143	663.60			
HT12	3B5P	CAT M4(2)	HOUSE	2	8	14	1032.26	95.90	8258	767.20			
HT14	4B6P	CAT M4(2)	HOUSE	2	1	2	1184.03	110.00	1184	110.00			
HT24	4B6P	CAT M4(1)	HOUSE	2.5	6	11	1357.33	126.10	8144	756.60			
APT (G)	2B3P	CAT M4(2)	APARTMENT	1	4	7	659.83	61.30	2639	245.20			
APT (1)	2B3P	CAT M4(2)	APARTMENT	1	4	7	731.95	68.00	2928	272.00			
<b>OVERALL TOTALS</b>				<b>57</b>	<b>100</b>				<b>54320</b>	<b>5047</b>			
OVERALL DENSITY		UNITS / ha		36.77	UNITS / ACRE		14.88	SQ M / ha		3256	SQ FT / ACRE		14183
OVERALL MIX				TOTAL		%							
2 BED				23		40							
3 BED				27		47							
4 BED				7		12							
				<b>57</b>		<b>100</b>							
OVERALL MIX APPROVED DOCUMENT M				TOTAL		%							
CAT M4(1)				17		30							
CAT M4(2)				40		70							
CAT M4(3)				0		0							
				<b>57</b>		<b>100</b>							
<b>TOTAL NO</b>				<b>57</b>									

NOTE: Nett area excludes all public open space and associated structural landscaping / buffer planting / half road



PROJECT / CLIENT Kirkles Cluster Sites Main Avenue, Cowlersley		PROJECT NO. <b>N81-3084</b>	
DRAWING TITLE Proposed Site Layout		DRAWING STATUS <b>Planning</b>	
PROJECT LEADER GP		DRAWING NO. <b>102</b>	
DRAWN BY GP		DRAWING REVISION	
CHECKED BY IDP		<b>P4</b>	
SCALE 1 to 500 @ A1		DATE 22.10.2024	



idp Architecture  
Masterplanning  
Urban Design

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## Appendix B

### Highway Design Overview Drawing



# Appendix C

## Swept Path Analysis

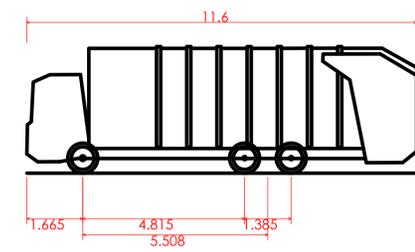
SCALE 1:500



SCALE 1:250



SCALE 1:500



11.6 Refuse  
 Overall Length  
 Overall Width  
 Overall Body Height  
 Min Body Ground Clearance  
 Track Width  
 Lock to lock time  
 Kerb to Kerb Turning Radius

11.600m  
 2.550m  
 3.760m  
 0.312m  
 2.550m  
 4.00s  
 10.150m

Standard Notes

1. This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings and specification.
2. This drawing should not be scaled.

Location Plan



Notes and Keys

Date	Rev	Description	Drawn	Checked
28/10/24	A	Site layout updated to final planning layout	JT	JT



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Project  
 P2445,  
 Main Avenue,  
 Kirklees

Title  
 Swept Path Analysis

INFORMATION

Scale @ A1	Date Created	Drawn	Checked
SHOWN	10/09/24	ST	JT
TPS Project Number	Revision		
P2445	A		
Drawing Number			
P2445 - T - 1002			