Technical Note

Littlehampton, Phase 5 - LTN 1/20 Cycle Infrastructure Design Review

Introduction

1.1 This Technical Note is in relation to the planning application for approval of reserved matters following outline consent LU/47/11/ for the development of 261 No. dwellings and the construction of the Central Spine Road running through Hampton Park.

1.2 This note presents a review of Local Transport Note 1/20 (July 2020) following a consultation response from West Sussex County Council (WSCC) dated 12/08/2021 which requested further information explaining how the on-site cycle infrastructure meets with the guidance contained in Local Transport Note 1/20 (Cycling Infrastructure Design).

1.3 WSCC Highways (CHA) have requested an update to this Technical Note to include predicted cyclist user flows in order to demonstrate the proposed cycle infrastructure (further) complies with LTN 1/20. For ease of use, any text that has been added or updated is presented in blue.

Core Design Principles

1.4 We have considered how the 5 core design principles noted in LTN 1/20 have been applied to the S278 proposals to ensure the cycle facilities are in line with the latest guidance. The design principles are presented in table 1.1 below together with comments on how the S38 proposals have considered each principle.

Design Principle	Consideration of Design Principle in Development Proposals
Coherence	The main designated cycle path and the combined pedestrian/cycle route have been designed such that it is simple to navigate, well connected and of consistent high quality. Both the designated cycle route and the combined pedestrian/cycle route have been signed such that the route and usage is clear to all users. The combined pedestrian/cycle network is extensive and provides a coherent, connected route through the central wetland area and wider development. Refer to Persimmon Homes Thames Valley (PHTV) Movement and Hierarchy Plan (Appendix A) for an overview of the proposed cycle facilities and the coherence of the network.
Directness	Directness has been considered in the design of the designated cycle route and the combined pedestrian/cycle network.

	The designated route runs parallel the spine road through the development, without directing users through smaller residential streets or requiring users to deviate off this direct route. The combined pedestrian/cycle route provides more opportunities for users to use a direct route by providing a network of routes though the central wetland area and throughout the wider development, minimising delay, and the need to stop. The combination of designated and combined pedestrian/cycle routes creates opportunities for cycle users to follow a direct and safe route to their destination. Refer to Persimmon Homes Thames Valley (PHTV) Movement and Hierarchy Plan (Appendix A) to see the directness of the network.
Safety	A dedicated and protected cycle route has been provided parallel to the main spine road through the development. The route is separated from the road by a 3m verge along the majority of the spine road in order to protect users from traffic. There is a section of spine road to the southwest of the development that does not feature the 3m verge and therefore the cycle route is adjacent to the road in this location. To compensate for this the cycle route is wider in this location, being 3.5m wide as opposed to 3m. Where shared pedestrian/cycle routes are provided, these are 3m wide to ensure adequate space for all users, improving safety. Table 6-3 within LTN 1/20 states that a minimum width of 3.0m is required for shared-use footpaths when predicted cyclist flows are less than 300 cyclists / hour, and a minimum width of 4.5m is required when cyclist flows are more than 300 cyclists / hour. To ensure the shared use footpath is correctly designed in line with LTN 1/20, predicted cyclist flows in Arun District Council were calculated using TRICS. The TRICS calculations show predicted cyclist flows of well below 300 cyclists / hour. Refer to Appendix E for the TRICS calculations. To further support the predicted cyclist flows, the results were cross checked against the 2011 National Census Data. The Census data included as Appendix F confirms that predicted peak cyclist flows per hour are in the region of 56 cyclists/hour. Therefore, a minimum with of 3.0m is appropriate and in line with LTN 1/20. Surface finish of shared paths will be tarmacadam throughout, providing a safe surface for all cycles reducing the chance of any slips/accidents. Adequate signage and corduroy paving will be provided to inform pedestrians they are entering a shared pathway, and also signage to inform cyclists when the shared path ends informing the user that they need to either re-join the carriageway or dismount. Additionally, the 25m pedestrian and cyclist forward visibility at crossing points of the spine road will be based upon a 20mph speed limit.

	Refer to MBL drawing A/PHLITTLE-MAIN.1/10-1,2,3 for the general arrangement drawing (Appendix B) showing widths and locations of the dedicated cycle route along the spine road. Refer to PHTV External Works Plan (Appendix C) and MBL drawings A/PHLITTLE-MAIN.1/30-1,2,3 (Appendix D) for the finished surfaces.
Comfort	The routes are generally quite flat, are sufficiently wide, and will be maintained such that they are kept clear of vegetation and obstruction and generally kept in good working order. A gradient will be encountered by users when pathways enter and exit the central wetland area, however this gradient will not exceed 1 in 20. Additionally, the shared pedestrian/cycle network through the central wetland minimises the need to stop. Surface finish of shared paths will be tarmacadam throughout, providing a comfortable surface for all cycles. The above mentioned features contribute to a comfortable cycle network that will encourage its use. Refer to PHTV External Works Plan (Appendix C) and MBL drawings A/PHLITTLE-MAIN.1/30-1,2,3 (Appendix D) for the finished surfaces.
Attractiveness	The dedicated cycle route features a vegetation strip between the route and the road. This tree lines route will offer an attractive, more natural cycle route for users. Additionally, the combined pedestrian/cycle route allows users to cycle through the central wetland area. This represents a very attractive cycle route through green, open space that will encourage cyclists to use the network. Refer to PHTV External Works Plan (Appendix C) for an overview of the green spaces and general surroundings of the cycle network proposed.

Conclusion

1.5 With the above in mind, we consider that the development proposals have taken into account the LTN 1/20 guidance, particularly noting the dedicated cycle route in combination with the shared pedestrian/cycle network through the central wetland area and wider development.

Author/s: AJB

Date: 07/06/2022

APPENDIX A: Persimmon Homes Thames Valley Movement and Hierarchy Plan

N

LAP

LAP

LAP

LAP

LEAP

B/CS

C/S

B/S

D/S

42 - 50

75 - 83

152 - 162

202 - 212

191 - 201

Road 10

SCHOOL SITE

FUTURE PH. 6 RM DEVELOPMENT

LEGEND - MOVEMENT

- Primary Route through development
- Secondary Routes through development
- Designated Combined Use Cycle/Pedestrian Path 3m wide
- Designated Pedestrian Footpath - to ensure site connectivity
- Combined Pedestrian / Cycle Way - 3m wide - to ensure site connectivity through Central Wetland Area and wider development.
- Location of nearest LEAP

SCALE 1/500

0m 5m 10m 15m 20m 25m

Rev		Date
E	Footpath opposite plots 152-162 changed to be a cycle/pedestrian path as requested by Highways.	30.05.22
D	Bus Stop & Toucan Crossing location and Visitor layby's updated.	11.05.22
C	Safe Crossing added to Spine Rd (opposite School/Southern section) Bus Stop / Visitor Space relocated to southern section of Spine Rd S38 Roads within development parcel updated as per comments made by WSCC	25.02.22
B	Minor updates to Pedestrian and Cycle routes as per latest changes to layout.	12.10.21
A	Redline Application Boundary updated.	22.07.21

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site: Phase 5 Littlehampton

Date: April. 2021

Scale: 1:500 @ A0P

Drg No: 546_PL_108

Drawing Title: Movement & Hierarchy Plan

Drawing Status: SUBMITTED

Drawn: AT

Checked: ME

Rev: E

minster

Black Ditch

PHASE 2A
Approved

PHASE 2B
Approved

PHASE 5
Pending Planning Approval

Central Wetland

PHASE 1A
Approved

BOVIS
Approved

PHASE 2C
Approved

PHASE 3
Pending Planning Approval

PHASE 6
Design Stage

PHASE 3
A2
Approved

B6
Approved

Hollyacres
Existing Development

SCHOOL SITE
1.3Ha

Toddington

Wick

LEGEND - MOVEMENT

- Primary Route through development
- Secondary Routes through development
- Designated Combined Use Cycle/Pedestrian Path 3m wide
- Designated Pedestrian Footpath - to ensure site connectivity
- Combined Pedestrian / Cycle Way - 3m wide - to ensure site connectivity through Central Wetland Area and wider development.

N

Rev	Description	Date
-		-
B	Spine Road and path opposite plots 152-162 updated as per Highways comments.	01.06.22
A	Central Wetland Area design updated.	25.02.22

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Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Title: Hampton Park
Toddington Lane
Littlehampton

Date: Jan. 2022

Scale: 1:2000 @A0

Drg No: 519_MP_PCA_01

Drawing Title: Masterplan
Pedestrian & Cycle Access Routes
WIP

Drawing Status: SUBMITTED

Drawn by: AT

Checked by: -

Rev: B

ARUN DISTRICT COUNCIL LU20/0137/RES

APPENDIX B: MBL General Arrangement Drawings

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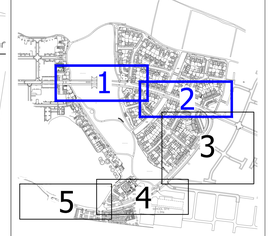
- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- KERB LINE FUTURE WORKS
- PROPOSED 2.4m X 25m JUNCTION VISIBILITY SPLAY
- PROPOSED 25m PEDESTRIAN VISIBILITY SPLAY
- PROPOSED 25m FORWARD VISIBILITY AROUND BEND
- DIAG 1234 — PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE BLISTER PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PROPOSED 1.5m HIGH KEE CLAMP RAIL WITH MESH INFILL
- PROPOSED 6 METRE COLUMN FITTED WITH POST TOP MOUNTED LUMINAIRE WITH 5 DEGREE TILT. LUMINAIRE TO BE PHILIPS DIGISTREET MICRO BGP760 DW50, LED-HB 5.1S CW, 5-40KLM. LUMINAIRE TO BE FITTED WITH ELECTRONIC DIMMABLE BALLAST COMPATIBLE WITH MAYFLOWER CMS VIA DALI PROTOCOL. LUMINAIRE IS TO BE CONTROLLED VIA A MAYFLOWER EXTERNAL NODE. COLUMN TO BE PAINTED BS12B21 (GREEN).*
- LIMIT OF WORKS ASSOCIATED WITH MAIN AVENUE

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's drawing reference " _100b_ COMMUNITY CENTRE" Community Cntr_PRELIM", received on 16/03/2022 and drawing reference "546_PL_SITE LAYOUT_A1 - PRELIM 12" received on 22/11/2021.
3. Based on topographic survey by WYG drawing numbered GGL/AD44029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
5. This drawing is to be read in conjunction with all other relevant engineering and landscaping drawings. Any discrepancies are to be reported to the Engineer immediately for clarification.

KEY TO HEALTH AND SAFETY SYMBOLS

	INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION.
	INDICATES A RESIDUAL RISK FOR INFORMATION.
	INDICATES A RESIDUAL RISK REQUIRING A PROHIBITIVE ACTION.
	INDICATES A RESIDUAL RISK AS A WARNING.



FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T9	Streetlighting added and key updated. (TC)	SF	26/05/2022
T8	Tactile paving at cycle crossing points amended. (TC)	IC	19/04/2022
T7	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC)	IC	24/02/2022
T6	Kerbs added across raised tables and at vehicle crossovers onto soft landscaping. (IC)	SF	07/01/2022
T5	Crossover updated for plots 84-85 following revised Architect's layout received on 22/11/2021. (clouded) (TC).	SF	24/11/2021
T4	Drawing updated following comments from RSA received on 12/08/21. Crossovers updated following revised Architect's layout. (clouded) (TC)	SF	26/10/2021
T3	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T2	Drawing updated following liaison with WSCC and PHTV. (TC)	SF	18/03/20
T1	Initial Issue. (TC)	SF	20/12/19

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client: PERSIMMON HOMES THAMES VALLEY

project: NORTH LITTLEHAMPTON
EAST OF WETLANDS
MAIN AVENUE & NORTHERN CROSSING

scale	drawn by	checked by
1:250	TC	SF

date	cad file
OCTOBER 2019	10.DWG

title: GENERAL ARRANGEMENT DRAWING
(SHEET 1 OF 3)

Mayer Brown Limited jobcode	suitability	revision
		T9

drawing number: A/PHLITTLE-MAIN.1/10-1

VIEWPORT 01

VIEWPORT 02

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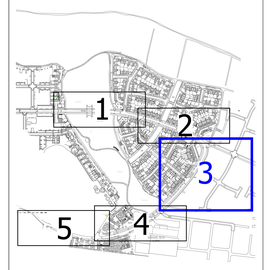
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- DIAG 1234 — PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE BLISTER PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PROPOSED 6 METRE COLUMN FITTED WITH POST TOP MOUNTED LUMINAIRE WITH 5 DEGREE TILT. LUMINAIRE TO BE PHILLIPS DIGISTREET MICRO BGP760 DM50, LED-HB 5.1S CW, 5.4KLM. LUMINAIRE TO BE FITTED WITH ELECTRONIC DIMMABLE BALLAST COMPATIBLE WITH MAYFLOWER CMS VIA DALI PROTOCOL. LUMINAIRE IS TO BE CONTROLLED VIA A MAYFLOWER EXTERNAL NODE. COLUMN TO BE PAINTED BS12B21 (GREEN).*
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3. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
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FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T8	Streetlighting added and key updated. (TC)	SF	26/05/2022
T7	Parallel crossing removed. (TC)	IC	19/04/2022
T6	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC)	IC	24/02/2022
T5	Parallel crossing added near community centre. Kerbs added across raised tables and at vehicle crossovers onto soft landscaping. (IC)	SF	06/01/2022
T4	Revised Architect's layout received on 22/11/2021. Internal layout updated. No changes to Main Avenue Road design. (TC)	SF	24/11/2021
T3	Drawing updated following comments from RSA received on 12/08/21. (TC)	SF	26/08/2021
T2	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T1	Initial Issue. (TC)	SF	18/03/20

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client
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project
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EAST OF WETLANDS
MAIN AVENUE & NORTHERN CROSSING

scale	drawn by	checked by
1:250	TC	SF

date	cad file
OCTOBER 2019	10.DWG

title
GENERAL ARRANGEMENT DRAWING
(SHEET 2 OF 3)

Mayer Brown Limited jobcode	suitability	revision
		T8

drawing number
A/PHLITTLE-MAIN.1/10-2

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KEY

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- KERB LINE FUTURE WORKS
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- DIAG 1234 — PROPOSED ROAD MARKING
- PROPOSED BUFF COLOURED TACTILE BLISTER PAVING
- PROPOSED RED COLOURED TACTILE BLISTER PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PRIMARY 3-LIGHT SIGNAL HEAD
- SECONDARY 3-LIGHT SIGNAL HEAD
- ON CORSSING DETECTOR
- KERBSIDE DETECTOR
- TWO-ASPECT NEARSIDE PEDESTRIAN SIGNAL TO DIAG 4003.1 WITH COMBINED PUSH BUTTON
- PROPOSED 6 METRE COLUMN FITTED WITH POST TOP MOUNTED LUMINAIRE WITH 5 DEGREE TILT. LUMINAIRE TO BE PHILIPS DIGISTREET MICRO BGP760 DW50, LED-HB 5.1S CW, 5.40KLM. LUMINAIRE TO BE FITTED WITH ELECTRONIC DIMMABLE BALLAST COMPATIBLE WITH MAYFLOWER CMS VIA DALI PROTOCOL. LUMINAIRE IS TO BE CONTROLLED VIA A MAYFLOWER EXTERNAL NODE. COLUMN TO BE PAINTED BS12B21 (GREEN).*
- LIMIT OF WORKS ASSOCIATED WITH MAIN AVENUE

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's drawing reference "_100b_ COMMUNITY CENTRE" Community Cntr_PRELIM", received on 16/03/2022 and drawing reference "S46_PL_SITE LAYOUT_A1 - PRELIM 12" received on 22/11/2021.
3. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
5. This drawing is to be read in conjunction with all other relevant engineering and landscaping drawings. Any discrepancies are to be reported to the Engineer immediately for clarification.

SCHOOL SITE
1.3Ha

VIEWPORT 04

VIEWPORT 05

VIEWPORT 06

FOR CONTINUATION SEE BELOW

FOR CONTINUATION SEE ABOVE

Signs to Diag 965 & 956 to be provided (back to back)

Signs to Diag 615 & 615.1 to be provided

Signs to Diag 956 & 965 to be provided (back to back)

Signs to Diag 811 & 811.1 to be provided

LIVE SERVICES UNDERGROUND - REFER TO STATUTORY UNDERTAKERS RECORDS

LIVE SERVICES OVERHEAD - REFER TO STATUTORY UNDERTAKERS RECORDS

Proposed Narrowing down to 4.1m helps with tie in with private driveway

Rd 1–Main Ave

Road 10

Road 11

Toddington Lane

Tulley Cottages

Main Entrance

Landscaping

LEAP 575m²

Fitness Area

Existing Property Access ? Rights of Access permitted

33 SPACES

16 SPACES

UNALLOCATED 48 SPACES

KEY TO HEALTH AND SAFETY SYMBOLS

- INDICATES A RESIDUAL RISK REQUIRING A COMPULSORY ACTION.
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- INDICATES A RESIDUAL RISK AS A WARNING.

FOR TENDER

rev.	amendment	checked	date
T9	Maintenance bay added near toucan crossing, Streetlighting added, kerbs removed to minor access adjacent to Toddington lane and key updated. (TC)	SF	26/05/2022
T8	Footpath widened at the back of bus stop lay-by and extend it (as 3m) to the toucan crossing to the north. Pedestrian Crossing Point moved towards the bus lay-by. Footpath widened. (clouded) (TC)	IC	11/05/2022
T7	Parallel crossing removed. Toucan crossing and bus stop lay-by added near school site. School access amended and key updated. Cycle crossings added at locations clouded. (TC)	IC	19/04/2022
T6	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC)	IC	24/02/2022
T5	Parallel crossing added near community centre. (IC)	SF	06/01/2022
T4	Revised Architect's layout received on 22/11/2021. Internal layout updated. No changes to Main Avenue Road design. (TC)	SF	24/11/2021
T3	Drawing updated following comments from RSA received on 12/08/21. (TC)	SF	26/08/2021
T2	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T1	Initial Issue. (TC)	SF	18/03/20

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scale	drawn by	checked by
1:250	TC	SF

date	cad file
OCTOBER 2019	10.DWG

title
GENERAL ARRANGEMENT DRAWING
(SHEET 3 OF 3)

Mayer Brown Limited jobcode	suitability	revison
		T9

drawing number
A/PHLITTLE-MAIN.1/10-3

APPENDIX C: Persimmon Homes Thames Valley External Works Plan

N

LAP

LAP

LAP

LAP

LEAP

MAIN AVENUE (20MPH)

MAIN AVENUE (20MPH)

LEGEND

Shed/Cycle Store - 2m x 1.2m (1 space)for 2 bed houses & 2m x 1.8m (2 spaces) for 3+ houses. All sheds to have concrete bases, with cast in locking facility.

Utility Services Location.

F — Location of Boiler Flue.

'As Laid' Southern Water 14" CI Rising Water Main (blue line) with 6m easement offset (pink line).

Location of 'As Built' Gas Easement

Location of Gas Governor unit.

20m Offset Buffer from LEAP area.

Chimney Locations

LEGEND - BOUNDARY TREATMENT TYPES

1.8m Close Boarded Fence

1.8m Wall with Timber Panels and Brick plinths + piers with Brick on Edge coping - Green Edges Character & Central Wetland Character.

1.8m Wall with Stone coping - Central Spaces Character

0.6m Timber Knee Rail - Green Edges Character

0.6m Black Steel (square post) Knee Rail - Green Edges (Spine Road) Character

0.6m Low Level Walls with brick piers and stone coping - Central Spaces Character

1.2m Metal Estate Railings - Central Spaces & Central Wetland Character

NOTE: refer to engineers' drawing for location of retaining walls if required.

LEGEND - SURFACE FINISHES - TBU

Bitumen Macadam Carriageways & Cycleways / Footways

Herringbone Block paving - Bracken

Herringbone Block paving - Brindle

SCALE 1/500

0m 5m 10m 15m 20m 25m

Rev		Date
-	-	-

PERSIMMON
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Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site: Phase 5 Littlehampton

Date: April. 2021

Scale: 1:500 @ A0P

Drg No: 546_PL_104

Drawing Title: External Works Plan

Drawing Status: PRELIMINARY

Drawn: AT

Checked: ME

Rev: -

APPENDIX D: MBL Construction Treatments Drawings

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KEY:

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED 1.5m HIGH KEE CLAMP RAIL WITH MESH INFILL
- PROPOSED FULL DEPTH FLEXIBLE LOCAL DISTRIBUTOR ROAD CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21)
- EXISTING ROAD TO BE BROKEN OUT AND REINSTATED WITH FULL DEPTH FLEXIBLE CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21)
- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (IN ACCORDANCE WITH WSCC DETAIL S278/38/07)
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR RAISED TABLE CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/16)
- PROPOSED MARSHALLS BLOCK PAVED BRINDLE COLOUR LAID IN HARRINGBONE PATTERN (IN ACCORDANCE WITH WSCC DETAIL S278/38/21) (ONLY ON RAISED TABLES)
- PROPOSED SOFT LANDSCAPING (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PROPOSED RED COLOURED TACTILE PAVING
- LIMIT OF WORKS ASSOCIATED WITH MAIN AVENUE

CENTRAL WETLAND

3m Footpath / Cycle link

Rd 1-Main Ave

Road 4

Road 5

Road 6

Road 7

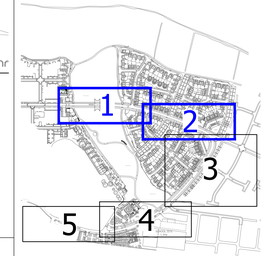
Road 8

PHASE 2

LEAP

VIEWPORT 01

VIEWPORT 02



NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's drawing reference $46_PL_SITE LAYOUT_A1 - PRELIM 12, received on 24/11/2021.
3. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
5. This drawing is to be read in conjunction with all other relevant engineering and landscaping drawings. Any discrepancies are to be reported to the Engineer immediately for clarification.

KERB TYPES

0. TYPE 0 - NO KERB
1. TYPE 1 - 125x255mm type HB2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(d) laid with 125mm upstand with ST1 concrete bed and backing
2. TYPE 2 - 125x150mm type BN precast concrete kerb laid 25mm for vehicular access to Figure NA.1(a) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
3. TYPE 3 - 50x150mm type EF precast concrete flat top edging to Figure NA.3(b) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
4. TYPE 4 - 125x255mm type HB2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(d) laid with 50mm upstand with ST1 concrete bed and backing
5. TYPE 5 - 125x150mm type BN precast concrete kerb laid flush (0 to 6mm) to Figure NA.1(a) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
6. TYPE 6 - Marshalls 'Speedcheck' kerb (or similar approved) laid at bottom of ramp only, refer to (WSCC DETAIL S278/38/16)
7. KERB TYPE 7 - 125x255mm type CS1 precast concrete flat top kerb laid flush to adjoining surface to Figure NA.1(f) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
8. KERB TYPE 8 - 390x400mm Marshalls precast concrete Titan High Containment kerb laid with a 296mm upstand to adjoining carriageway and mix ST4 concrete bed and backing with a 300mm x 16mm Ø mild steel dowel bar at 450 c/c.

FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T9	Key Updated. (TC)	SF	30/05/2022
T8	Tactile paving at cycle crossing points amended. (TC)	IC	19/04/2022
T7	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC)	IC	24/02/2022
T6	Surface finishes amended at raised tables. EF edging added to crossovers. (IC)	SF	06/01/2022
T5	Crossover updated for plots 84-85 following revised Architect's layout received on 22/11/2021. (clouded) (TC).	SF	24/11/2021
T4	Drawing updated following comments from RSA received on 12/08/21. Crossovers updated following revised Architect's layout. (clouded) (TC)	SF	26/10/2021
T3	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T2	Drawing updated following liaison with WSCC and PHTV. (TC)	SF	18/03/2021
T1	Initial Issue. (TC)	SF	20/12/2019

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client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON
EAST OF WETLANDS
MAIN AVENUE & NORTHERN CROSSING

scale	drawn by	checked by
1:250	TC	SF

date	cad file
OCTOBER 2019	30.DWG

title
CONSTRUCTION TREATMENTS DRAWING
(SHEET 1 OF 3)

Mayer Brown Limited jobcode	suitability	revision
		T9

drawing number
A/PHLITTLE-MAIN.1/30-1

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's drawing reference 546_PL_SITE LAYOUT_A1 - PRELIM 12, received on 24/11/2021.
3. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
5. This drawing is to be read in conjunction with all other relevant engineering and landscaping drawings. Any discrepancies are to be reported to the Engineer immediately for clarification.

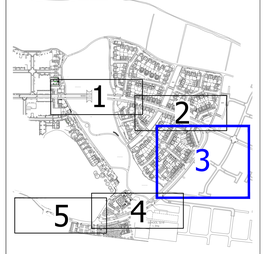
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KEY:

- EXISTING KERB LINE
- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED FULL DEPTH FLEXIBLE LOCAL DISTRIBUTOR ROAD CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21)
- EXISTING ROAD TO BE BROKEN OUT AND REINSTATED WITH FULL DEPTH FLEXIBLE CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21)
- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (IN ACCORDANCE WITH WSCC DETAIL S278/38/07)
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR RAISED TABLE CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/16)
- PROPOSED MARSHALLS BLOCK PAVED BRINDLE COLOUR LAID IN HARRINGBONE PATTERN (IN ACCORDANCE WITH WSCC DETAIL S278/38/21) (ONLY ON RAISED TABLES)
- PROPOSED SOFT LANDSCAPING (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PROPOSED RED COLOURED TACTILE PAVING
- LIMIT OF WORKS ASSOCIATED WITH MAIN AVENUE



FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T8	Key Updated. (TC)	SF	30/05/2022
T7	Parallel crossing removed. (TC)	JC	19/04/2022
T6	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC). Surface finishes amended at raised tables. EF edging added to crossovers. (JC)	JC	24/02/2022
T4	Revised Architect's layout received on 22/11/2021. Internal layout updated. No changes to Main Avenue Road design. (TC)	SF	24/11/2021
T3	Drawing updated following comments from RSA received on 12/08/21. (TC)	SF	26/10/2021
T2	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T1	Initial Issue. (TC)	SF	18/03/20

KERB TYPES

- 0 TYPE 0 - NO KERB
- 1 TYPE 1 - 125x255mm type HB2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(d) laid with 125mm upstand with ST1 concrete bed and backing
- 2 TYPE 2 - 125x150mm type BN precast concrete kerb laid 25mm for vehicular access to Figure NA.1(a) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
- 3 TYPE 3 - 50x150mm type EF precast concrete flat top edging to Figure NA.3(b) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
- 4 TYPE 4 - 125x255mm type HB2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(d) laid with 50mm upstand with ST1 concrete bed and backing
- 5 TYPE 5 - 125x150mm type BN precast concrete kerb laid flush (0 to 6mm) to Figure NA.1(a) of BS EN 1340:2003 with mix ST1 concrete bed and backing.
- 6 TYPE 6 - Marshalls 'Speedcheck' kerb (or similar approved) laid at bottom of ramp only, refer to (WSCC DETAIL S278/38/16)
- 7 KERB TYPE 7 - 125x255mm type CS1 precast concrete flat top kerb laid flush to adjoining surface to Figure NA.1(f) of BS EN 1340:2003 with mix ST1 concrete bed and backing.

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project
NORTH LITTLEHAMPTON
EAST OF WETLANDS
MAIN AVENUE & NORTHERN CROSSING

scale	drawn by	checked by
1:250	TC	SF

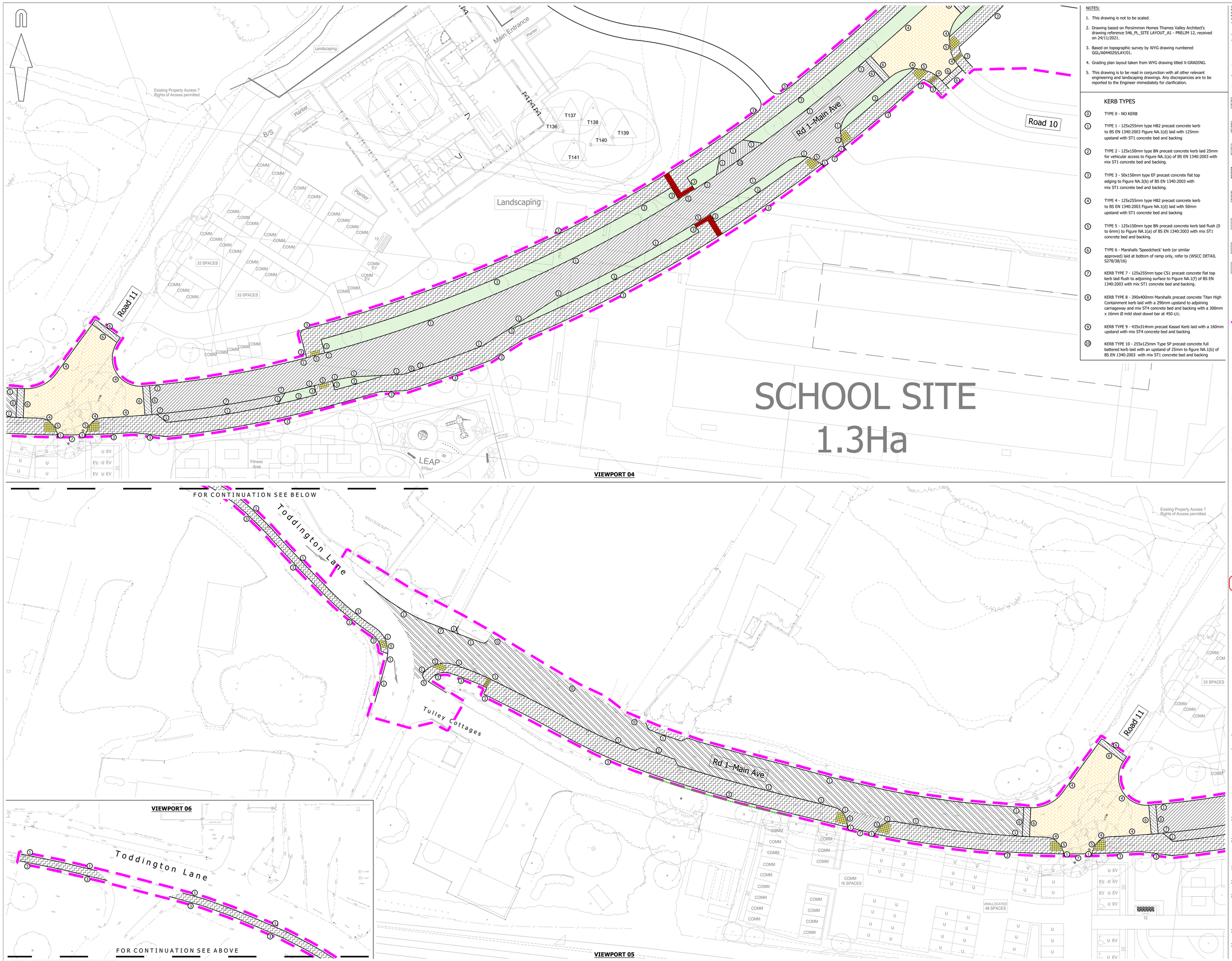
date	cad file
OCTOBER 2019	30.DWG

title
CONSTRUCTION TREATMENTS DRAWING
(SHEET 2 OF 3)

Mayer Brown Limited jobcode	suitability	revision
		T8

drawing number
A/PHLITTLE-MAIN.1/30-2

DATA PROTECT: CONTROL: CLIENT-RED



SCHOOL SITE
1.3Ha

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's drawing reference 546_PL_SITE LAYOUT_A1 - PRELIM 12, received on 24/11/2021.
3. Based on topographic survey by WYG drawing numbered GGL/A044029/LAY/01.
4. Grading plan layout taken from WYG drawing titled X-GRADING.
5. This drawing is to be read in conjunction with all other relevant engineering and landscaping drawings. Any discrepancies are to be reported to the Engineer immediately for clarification.

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8. KERB TYPE 8 - 390x400mm Marshalls precast concrete Titan High Containment kerb laid with a 296mm upstand to adjoining carriageway and mix ST4 concrete bed and backing with a 300mm x 16mm Ø mild steel dowel bar at 450 c/c.
9. KERB TYPE 9 - 435x314mm precast Kassel Kerb laid with a 160mm upstand with mix ST4 concrete bed and backing
10. KERB TYPE 10 - 255x125mm Type SP precast concrete full battered kerb laid with an upstand of 25mm to figure NA.1(b) of BS EN 1340:2003 with mix ST1 concrete bed and backing

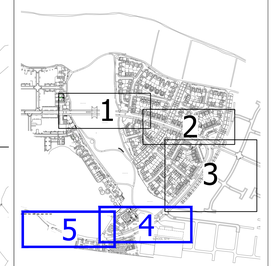
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A0 ORIGINAL

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KEY:

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- PROPOSED KERB/EDGING LINE
- PROPOSED DROPPED KERB
- PROPOSED FULL DEPTH FLEXIBLE LOCAL DISTRIBUTOR ROAD CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21 CBR OF 2-2.5%)
- EXISTING ROAD TO BE BROKEN OUT AND REINSTATED WITH FULL DEPTH FLEXIBLE CARRIAGEWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/21 CBR GREATER THAN 5%)
- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (IN ACCORDANCE WITH WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (IN ACCORDANCE WITH WSCC DETAIL S278/38/07)
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR RAISED TABLE CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/16)
- PROPOSED MARSHALLS BLOCK PAVED BRINDLE COLOUR LAID IN HARRINGBONE PATTERN (IN ACCORDANCE WITH WSCC DETAIL S278/38/21) (ONLY ON RAISED TABLES)
- PROPOSED SOFT LANDSCAPING (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED GRASSCRETE CONSTRUCTION (LIGHT VEHICLE PARKING)
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- PROPOSED RED COLOURED TACTILE PAVING
- LIMIT OF WORKS ASSOCIATED WITH MAIN AVENUE



FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T10	Maintenance bay added near toucan crossing. Hatching, Kerb types and Key Updated. (TC)	SF	30/05/2022
T9	Footpath widened at the back of bus stop lay-by and extend it (as 3m) to the toucan crossing to the north, Pedestrian Crossing Point moved towards the bus lay-by. Footpath widened. (clouded) (TC)	IC	11/05/2022
T8	Parallel crossing removed. Toucan crossing and bus stop lay-by added near school site. School access amended and key updated. Cycle crossings added at locations clouded. (TC)	IC	19/04/2022
T7	Bus lay-by added adjacent to LEAP area.Access point amended/removed. Key updated. (clouded) (TC)	SF	06/04/2022
T6	Drawing updated following RSA comments received on 12/01/22 and comments from WSCC dated 08/02/22. (TC)	IC	24/02/2022
T5	Drawing and key updated following addition of parallel crossing near community centre. (IC)	SF	05/01/2022
T4	Revised Architect's layout received on 22/11/2021. Internal layout updated. No changes to Main Avenue Road design. (TC)	SF	24/11/2021
T3	Drawing updated following comments from RSA received on 12/08/21. (TC)	SF	26/10/2021
T2	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T1	Initial Issue. (TC)	SF	18/03/2021

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PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON
EAST OF WETLANDS
MAIN AVENUE & NORTHERN CROSSING

scale	drawn by	checked by
1:250	TC	SF

date	cad file
OCTOBER 2019	30.DWG

title
CONSTRUCTION TREATMENTS DRAWING
(SHEET 3 OF 3)

Mayer Brown Limited jobcode	suitability	revision
		T10

drawing number
A/PHLITTLE-MAIN.1/30-3

DRAWING CONTROL CLASSIFICATION

APPENDIX E: TRICS Calculations

Calculation Reference: AUDIT-807401-220223-0223

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
04	EAST ANGLIA		
	NF	NORFOLK	4 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 179 to 984 (units:)
Range Selected by User: 175 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 23/09/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	4 days
Tuesday	3 days
Wednesday	5 days
Thursday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	13

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	13

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	15 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	4 days
10,001 to 15,000	6 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	7 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	10 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	9 days
No	6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	15 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

2 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

3 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

4 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

5 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

6 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

7 NF-03-A-09 MIXED HOUSES & FLATS NORFOLK
ROUND HOUSE WAY
NORWICH
CRINGLEFORD
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date: TUESDAY *24/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date: WEDNESDAY *22/09/21* *Survey Type: MANUAL*

9 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY *23/09/21* *Survey Type: MANUAL*

10 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

11 SF-03-A-09 MIXED HOUSES & FLATS SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 179
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

12 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

13 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

14 WS-03-A-11 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY *02/04/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 WS-03-A-13 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: WEDNESDAY *23/06/21* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.72

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	376	0.077	15	376	0.309	15	376	0.386
08:00 - 09:00	15	376	0.139	15	376	0.375	15	376	0.514
09:00 - 10:00	15	376	0.134	15	376	0.159	15	376	0.293
10:00 - 11:00	15	376	0.110	15	376	0.130	15	376	0.240
11:00 - 12:00	15	376	0.122	15	376	0.125	15	376	0.247
12:00 - 13:00	15	376	0.139	15	376	0.139	15	376	0.278
13:00 - 14:00	15	376	0.143	15	376	0.131	15	376	0.274
14:00 - 15:00	15	376	0.152	15	376	0.171	15	376	0.323
15:00 - 16:00	15	376	0.237	15	376	0.164	15	376	0.401
16:00 - 17:00	15	376	0.272	15	376	0.159	15	376	0.431
17:00 - 18:00	15	376	0.350	15	376	0.168	15	376	0.518
18:00 - 19:00	15	376	0.305	15	376	0.167	15	376	0.472
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.180			2.197			4.377

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	179 - 984 (units:)
Survey date date range:	01/01/13 - 23/09/21
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	376	0.003	15	376	0.006	15	376	0.009
08:00 - 09:00	15	376	0.005	15	376	0.015	15	376	0.020
09:00 - 10:00	15	376	0.001	15	376	0.002	15	376	0.003
10:00 - 11:00	15	376	0.002	15	376	0.003	15	376	0.005
11:00 - 12:00	15	376	0.002	15	376	0.002	15	376	0.004
12:00 - 13:00	15	376	0.002	15	376	0.003	15	376	0.005
13:00 - 14:00	15	376	0.002	15	376	0.001	15	376	0.003
14:00 - 15:00	15	376	0.003	15	376	0.004	15	376	0.007
15:00 - 16:00	15	376	0.009	15	376	0.004	15	376	0.013
16:00 - 17:00	15	376	0.014	15	376	0.008	15	376	0.022
17:00 - 18:00	15	376	0.011	15	376	0.006	15	376	0.017
18:00 - 19:00	15	376	0.008	15	376	0.007	15	376	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.062			0.061			0.123

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

APPENDIX F: National Census Data

QS701EW - Method of travel to work

Source ONS Crown Copyright Reserved [from Nomis on 23 February 2022]
Population All usual residents aged 16 to 74
Units Persons

date	2011													
geography	Arun													
measures	value													
Method of Travel to Work	All categories: Method of travel to work	Work mainly at or from home	Underground, metro, light rail, tram	Train	Bus, minibus or coach	Taxi	Motorcycle, scooter or moped	Driving a car or van	Passenger in a car or van	Bicycle	On foot	Other method of travel to work	Not in employment	
Rural Urban														
Total	106,071	4,133	94	3,101	1,646	239	608	43,621	4,199	2,497	6,848	457	38,628	2.4%
Urban (total)	87,626	3,046	69	2,331	1,516	225	518	35,278	3,675	2,244	5,918	344	32,462	
Urban major conur	0	0	0	0	0	0	0	0	0	0	0	0	0	
Urban minor conur	0	0	0	0	0	0	0	0	0	0	0	0	0	
Urban city and tow	87,626	3,046	69	2,331	1,516	225	518	35,278	3,675	2,244	5,918	344	32,462	
Urban city and tow	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rural (total)	18,445	1,087	25	770	130	14	90	8,343	524	253	930	113	6,166	
Rural town and frir	12,002	624	14	554	99	7	66	5,677	370	174	600	54	3,763	
Rural town and frir	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rural village	3,745	238	6	146	19	4	10	1,499	85	46	184	35	1,473	
Rural village in a s	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rural hamlet and i	2,698	225	5	70	12	3	14	1,167	69	33	146	24	930	
Rural hamlet and i	0	0	0	0	0	0	0	0	0	0	0	0	0	

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies

TRICS 7.8.4
Trip Rate P No of Dwellings 1175

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: CYCLISTS

	ARRIVALS		DEPARTURES		TOTALS	
	Trip		Trip		Trip	
Time Range	Rate	Trips	Rate	Trips	Rate	Trips
07:00-08:00	0.003	4	0.006	7	0.009	11
08:00-09:00	0.005	6	0.015	18	0.02	24
09:00-10:00	0.001	1	0.002	2	0.003	4
10:00-11:00	0.002	2	0.003	4	0.005	6
11:00-12:00	0.002	2	0.002	2	0.004	5
12:00-13:00	0.002	2	0.003	4	0.005	6
13:00-14:00	0.002	2	0.001	1	0.003	4
14:00-15:00	0.003	4	0.004	5	0.007	8
15:00-16:00	0.009	11	0.004	5	0.013	15
16:00-17:00	0.014	16	0.008	9	0.022	26
17:00-18:00	0.011	13	0.006	7	0.017	20
18:00-19:00	0.008	9	0.007	8	0.015	18
Daily Trip Rates:	0.062	73	0.061	72	0.123	145