

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).

Core Design Principles

- 1.3 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. 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.

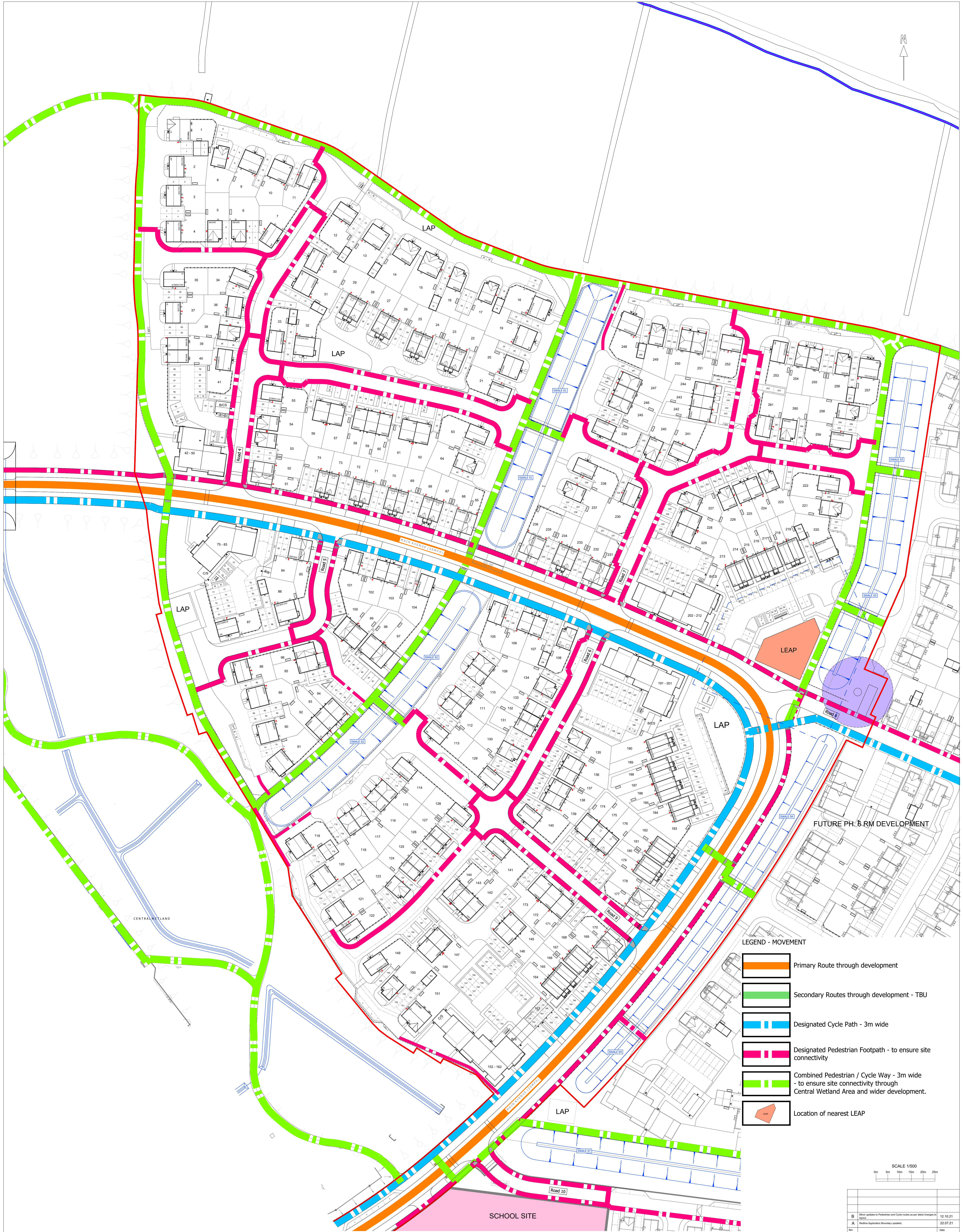
Conclusion

- 1.4 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: 24th August 2021

APPENDIX A: Persimmon Homes Thames Valley Movement and Hierarchy Plan



- LEGEND - MOVEMENT
- Primary Route through development
 - Secondary Routes through development - TBU
 - Designated Cycle 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

B Minor updates to Pedestrian and Cycle routes as per latest changes to plans		12.10.21
A Redline Application Boundary updated		22.07.21
Rev		Date

PERSIMMON
Together, we make a home

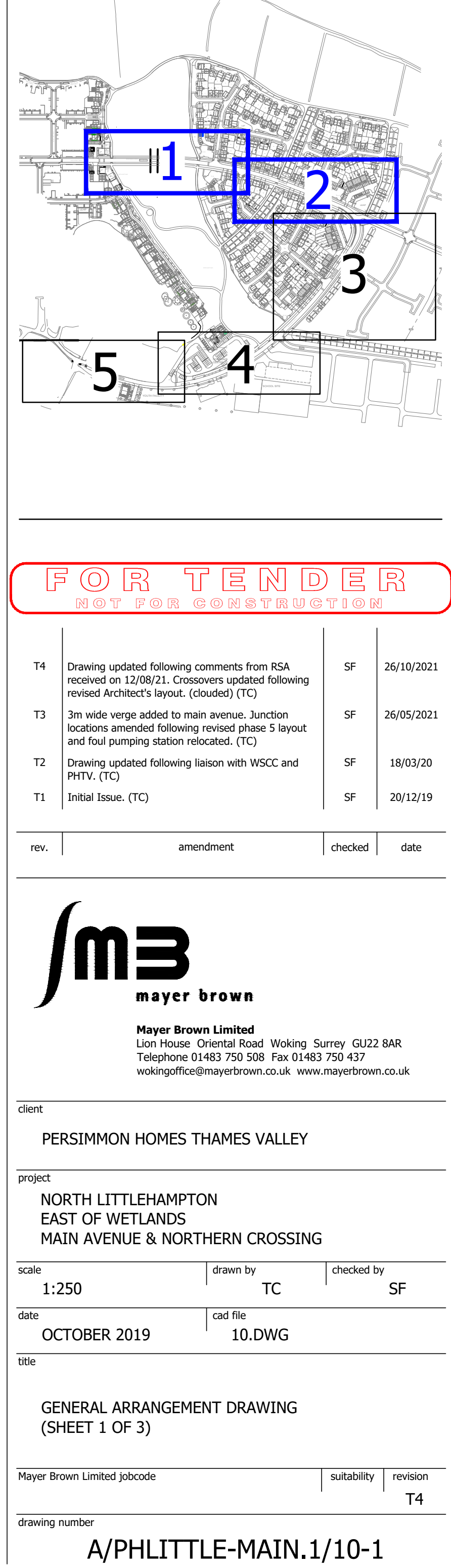
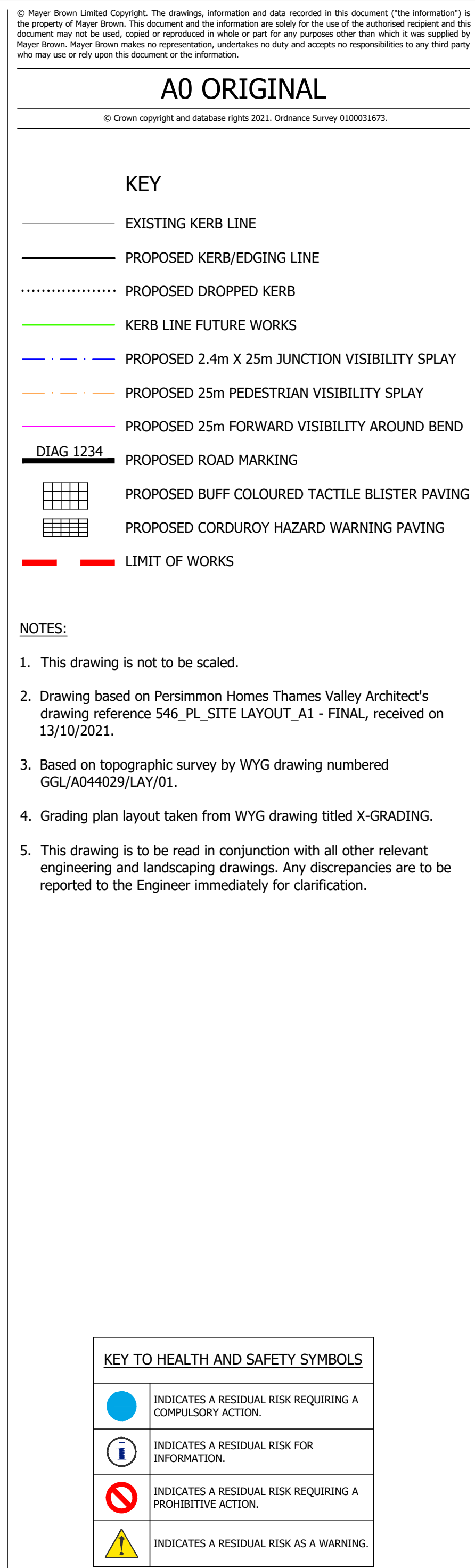
Persimmon Homes Thames Valley
Persimmon House, Knot Road,
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Tel: 01276 809080

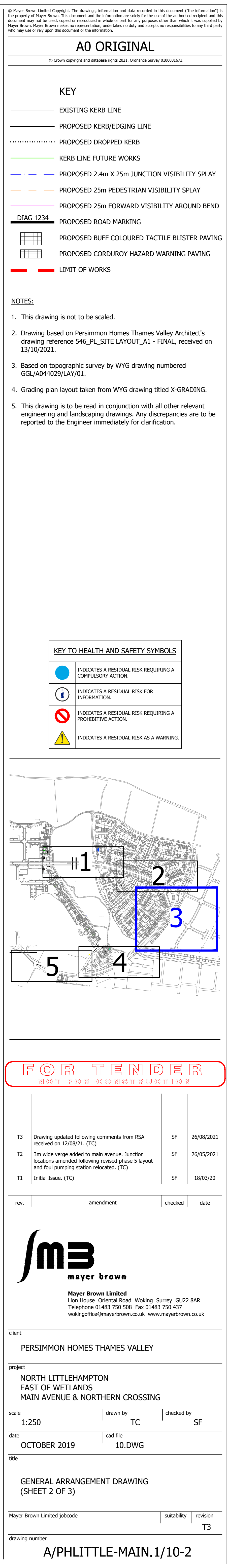
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Scale:	1:500 @ AOP	Drawn:	AT
Drawn:	AT	Checked:	ME
Rev:			B

Drawing Title: Movement & Hierarchy Plan

Drawing Status: SUBMITTED

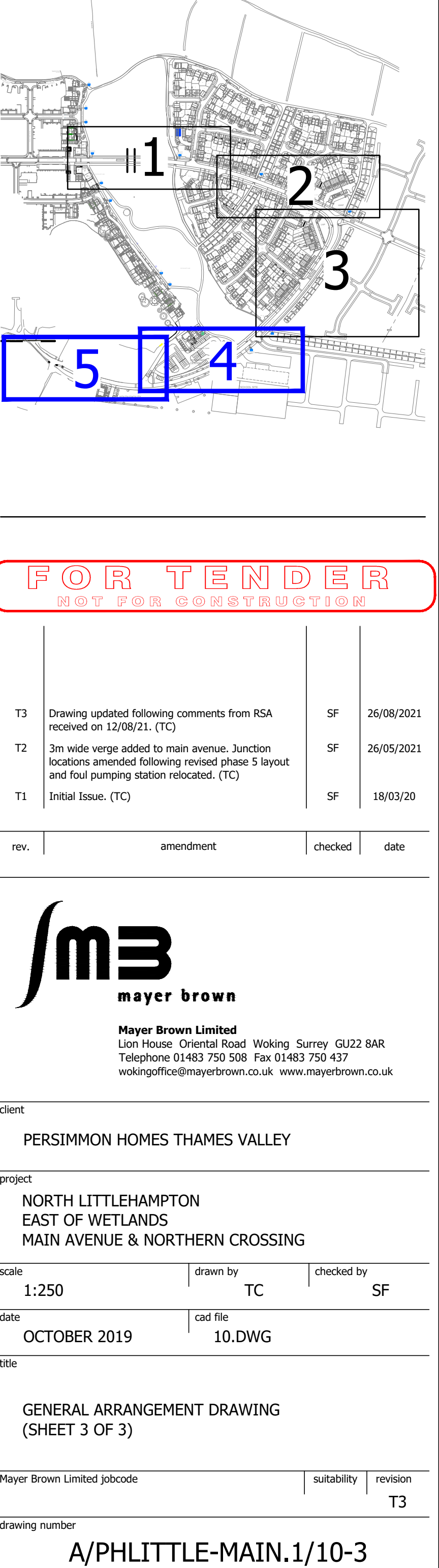
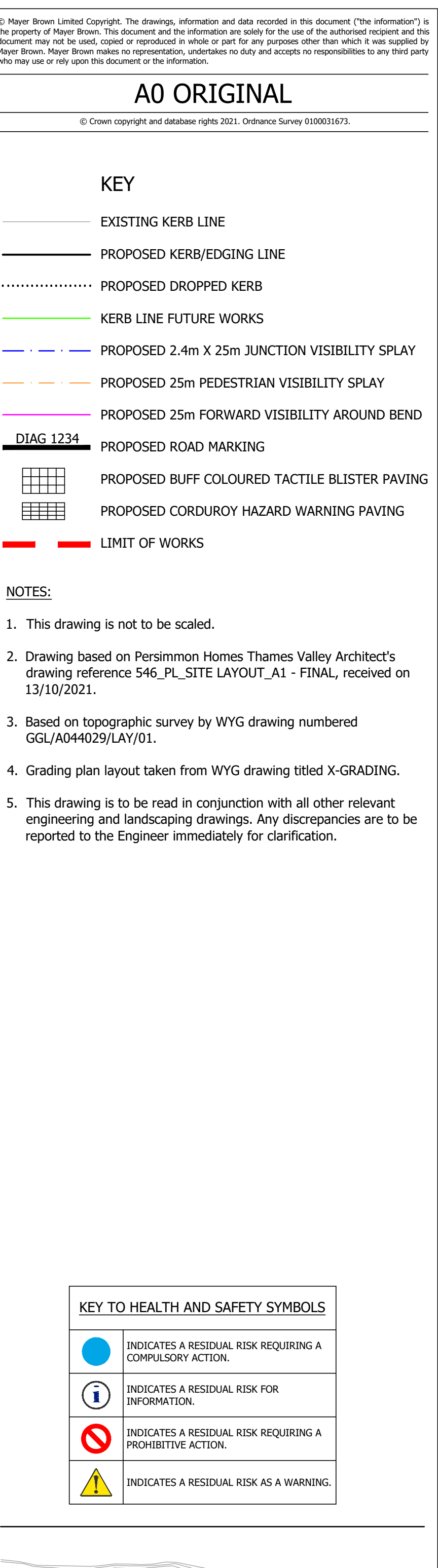
APPENDIX B: MBL General Arrangement Drawings





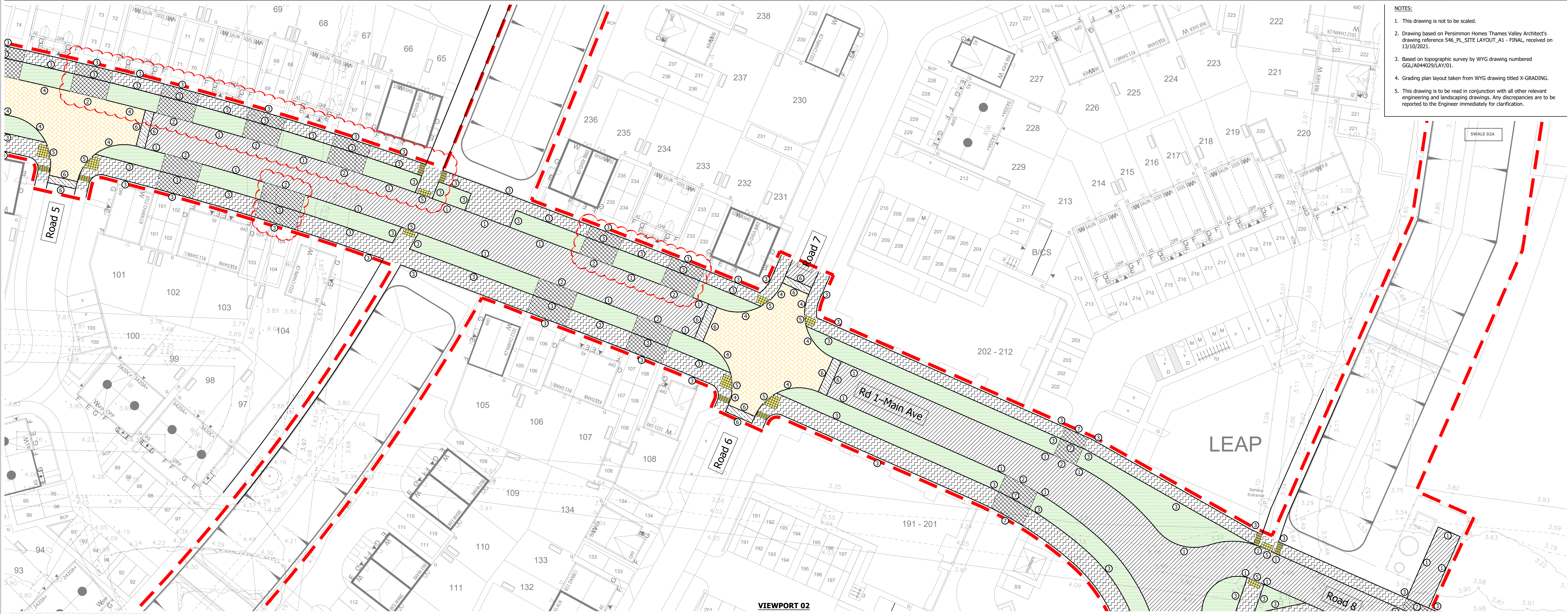
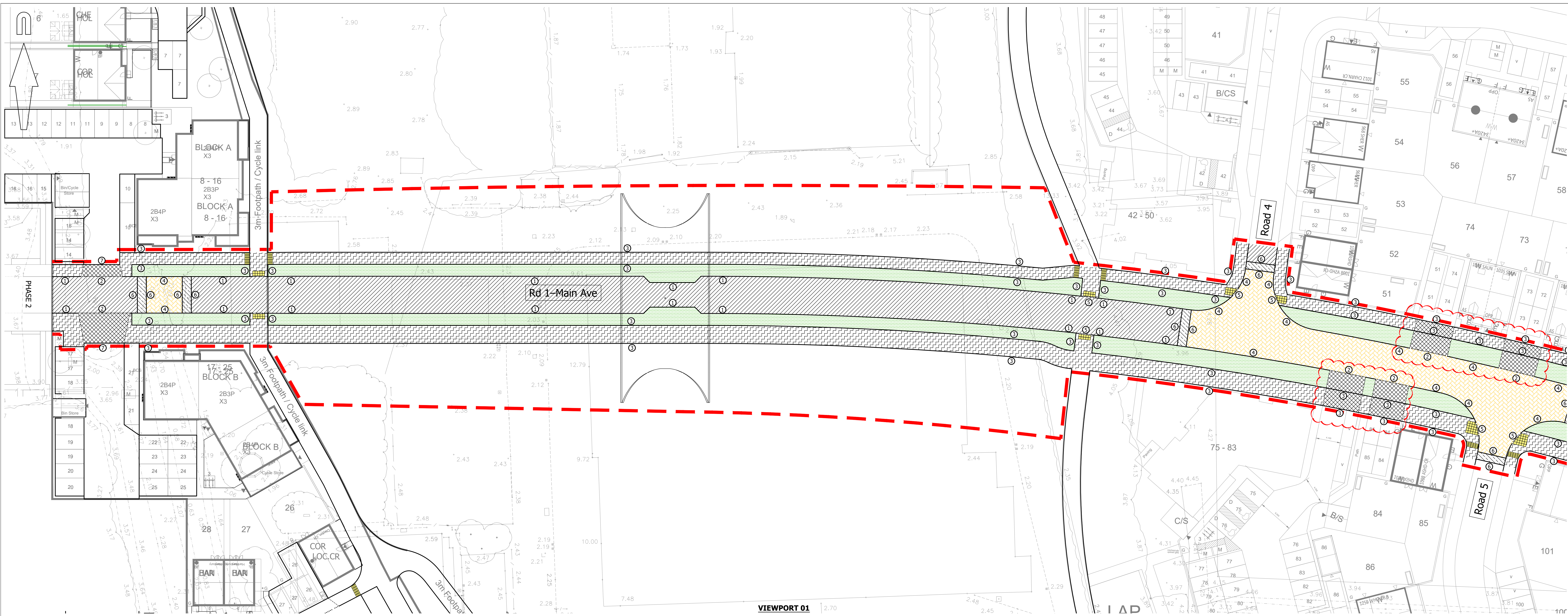
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A/PHLITTLE-MAIN.1/10-2

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



APPENDIX C: Persimmon Homes Thames Valley External Works Plan

APPENDIX D: MBL Construction Treatments Drawings



A0 ORIGINAL

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KEY

- EXISTING KERB LINE
- PROPOSED KERB/EDGE LINE
- PROPOSED DROPPED KERB
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR ROAD CARRIAGEWAY CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/21)
- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (WSCC DETAIL S278/38/07)
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR RAISED TABLE CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/16)
- PROPOSED MARSHALLS BLOCK PAVED CONSTRUCTION BRINDLE COLOUR LAID IN HARRINGTONS PATTERN (WSCC DETAIL S278/38/21)
- PROPOSED SOFT LANDSCAPING (REFER TO LANDSCAPE ARCHITECT DRAWINGS)
- PROPOSED BUFF COLOURED TACTILE PAVING
- PROPOSED CORDUROY HAZARD WARNING PAVING
- LIMIT OF WORKS

KERB TYPES

- TYPE 0 - NO KERB
- TYPE 1 - 125x255mm type H2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(a) laid with 125mm upstand with ST1 concrete bed and backing.
- 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.
- 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.
- TYPE 4 - 125x255mm type H2 precast concrete kerb to BS EN 1340:2003 Figure NA.1(d) laid with 50mm upstand with ST1 concrete bed and backing.
- 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.
- TYPE 6 - Marshalls 'Speedcheck' kerb (or similar approved) laid at bottom of ramp only, refer to (WSCC DETAIL S278/38/16)
- 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.

NOTES:

- This drawing is not to be scaled.
- Drawing based on Persimmon Homes Thames Valley Architect's drawing reference 546_PL_SITE LAYOUT_A1 - FINAL, received on 13/10/2021.
- Based on topographic survey by WYG drawing numbered GGLAD0402/LAY/01.
- Grading plan layout taken from WYG drawing titled X-GRADING.
- 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.

FOR TENDER
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
T4	Drawing updated following comments from RGA received on 12/08/21. Crossroads 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 3 layout and foul pumping station relocated. (TC)	SF	26/05/2021
T2	Drawing updated following liaison with WSCC and PHV. (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

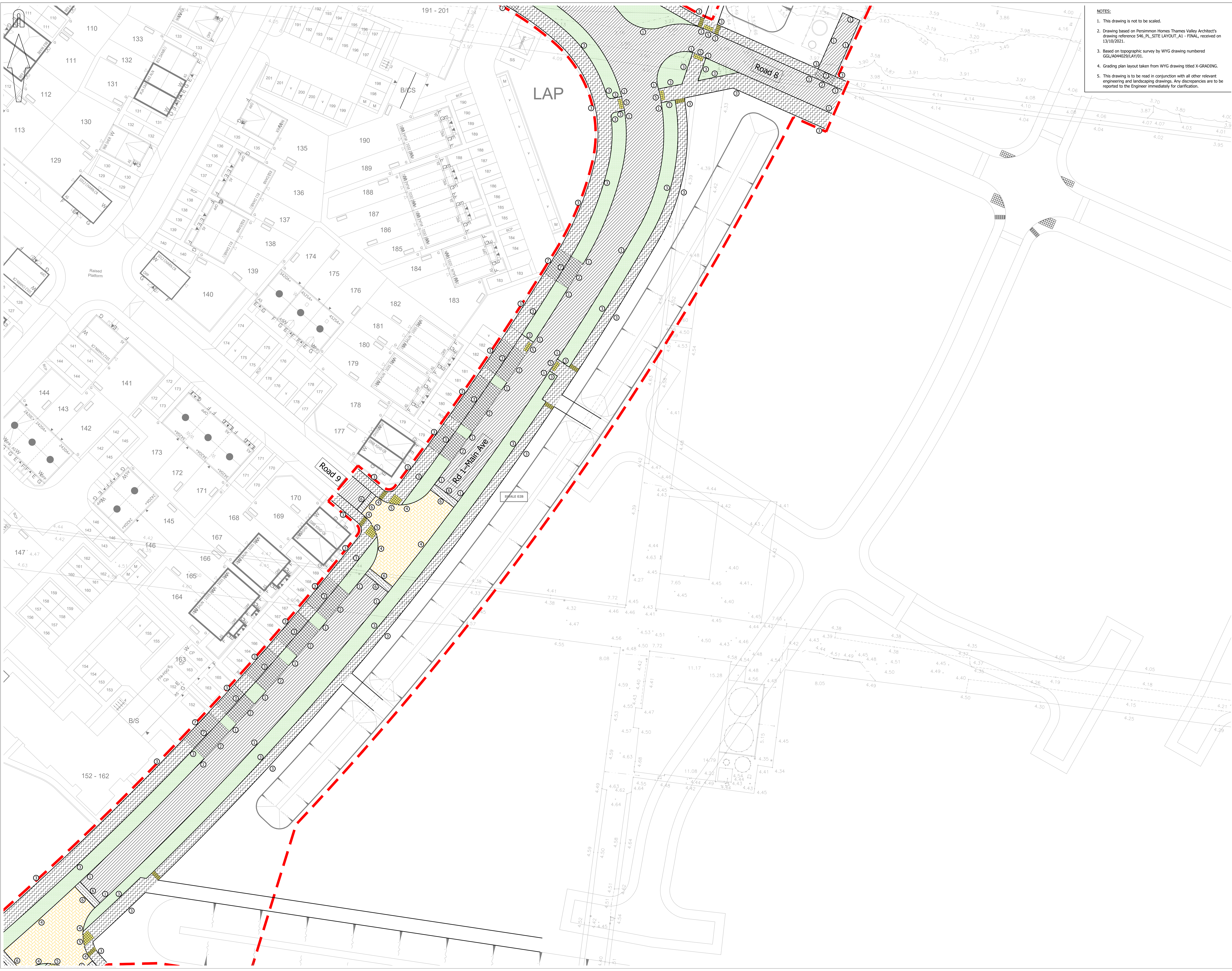
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title: CONSTRUCTION TREATMENTS DRAWING
(SHEET 1 OF 3)

Mayer Brown Limited jobcode	submittal	revision
		T4

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 S46_PL_SITE LAYOUT_A1 - FINAL, received on 13/10/2021.
 3. Based on topographic survey by WYG drawing numbered G02/A044022/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.

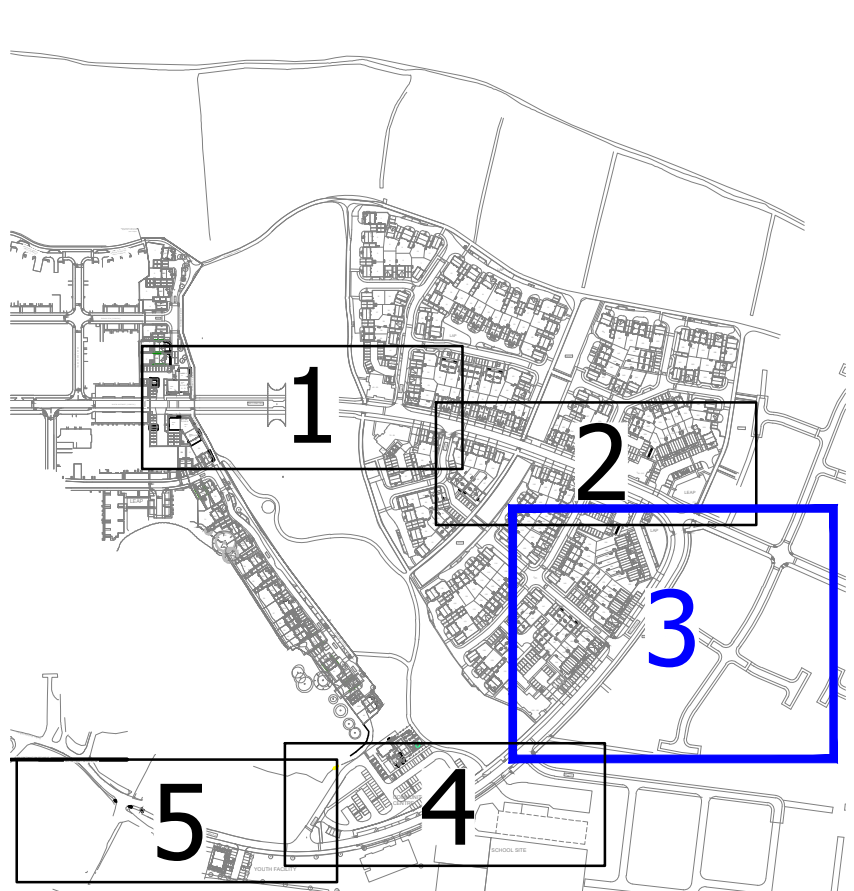
A0 ORIGINAL

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KEY

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- PROPOSED BITUMEN MACADAM FOOTWAY CONSTRUCTION (WSCC DETAIL S278/38/04)
- PROPOSED BITUMEN MACADAM FOOTWAY CROSSOVER TYPE 1 (WSCC DETAIL S278/38/07)
- PROPOSED FULL DEPTH LOCAL DISTRIBUTOR RAISED TABLE CONSTRUCTION MAIN AVENUE (WSCC DETAIL S278/38/16)
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FOR TENDER

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T3	Drawing updated following comments from RSA received on 12/06/21 (TC)	SF	26/10/2021
T2	3m wide verge added to main avenue. Junction locations amended following revised phase 5 layout and final pumping station repositioned. (TC)	SF	26/05/2021
T1	Initial Issue. (TC)	SF	18/03/20

rev.	amendment	checked	date
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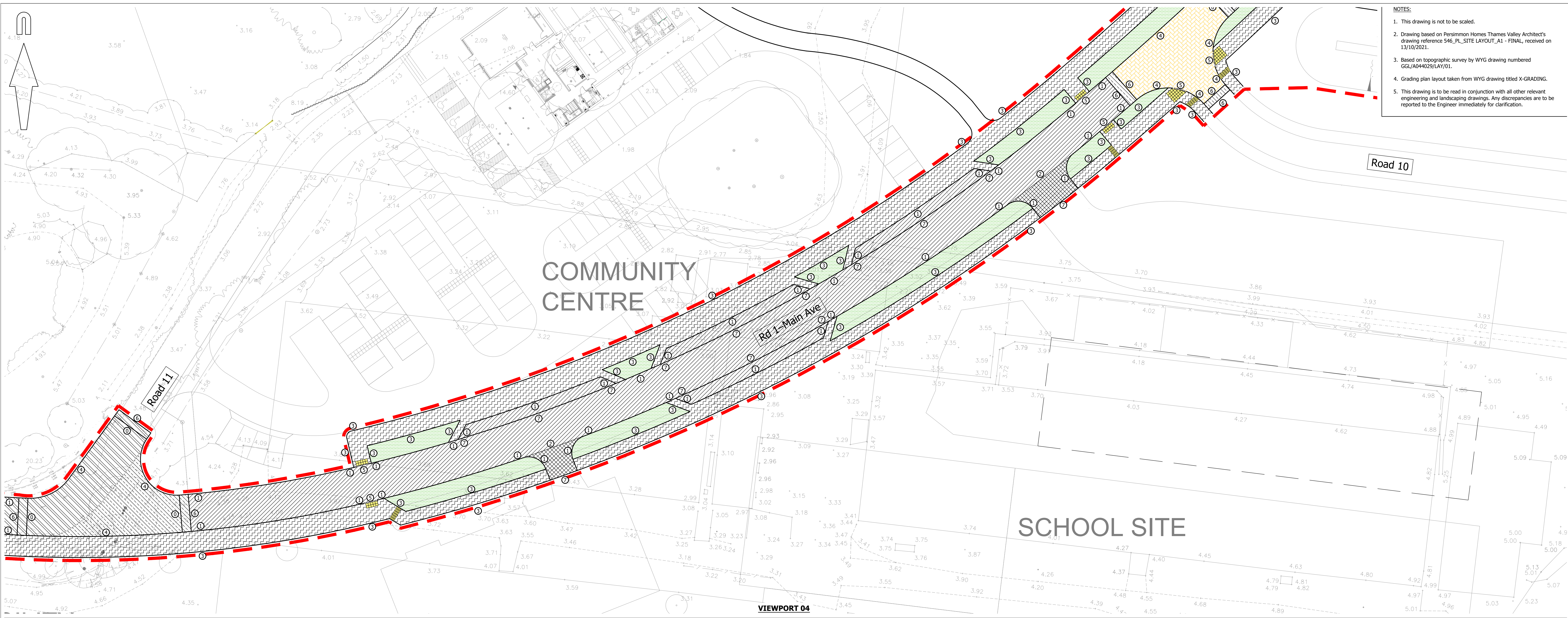
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(SHEET 2 OF 3)

Mayer Brown Limited jobcode
suitability
revision
T3

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



- NOTES:**
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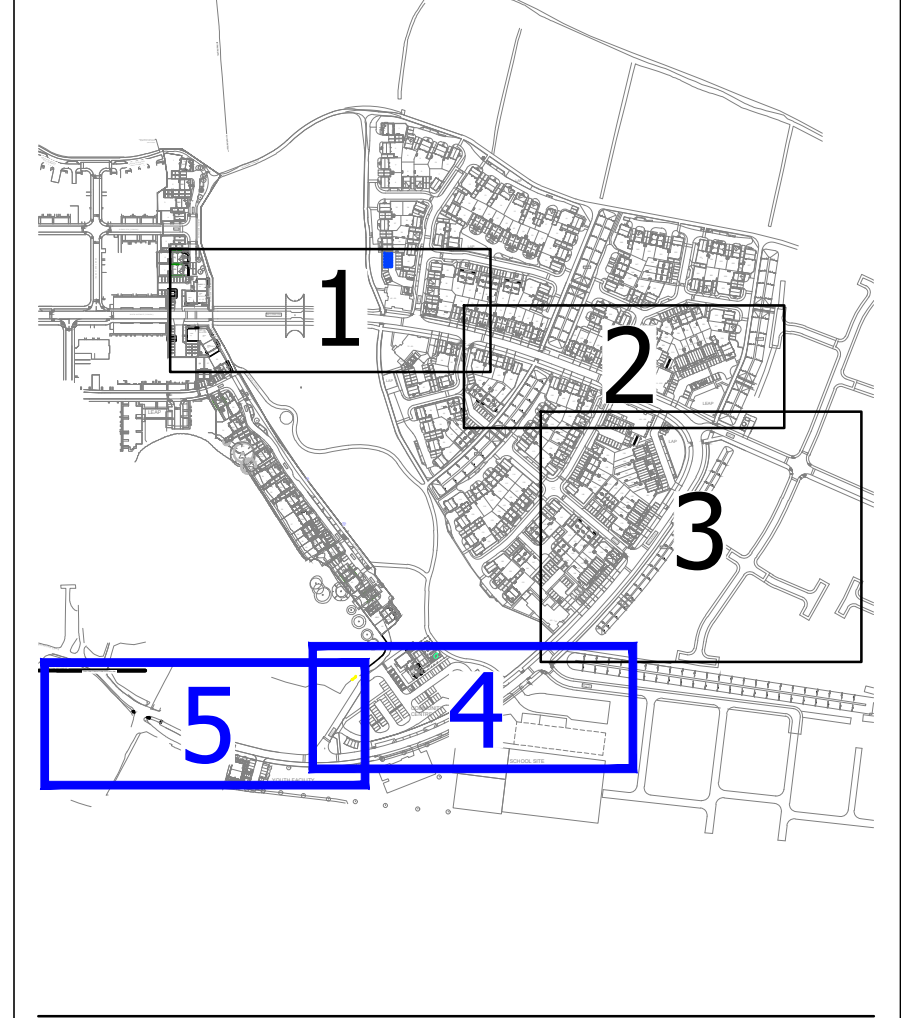
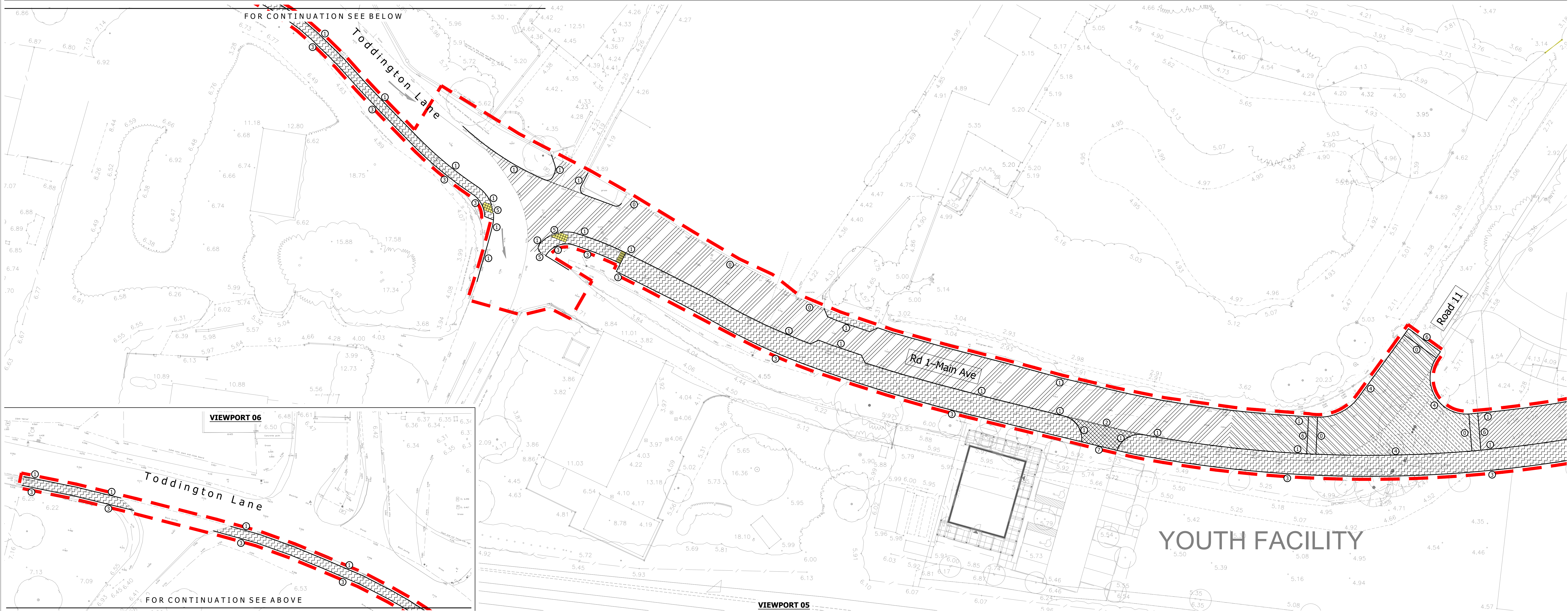
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(SHEET 3 OF 3)

Mayer Brown Limited jobcode	submittal	revision
		T3

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