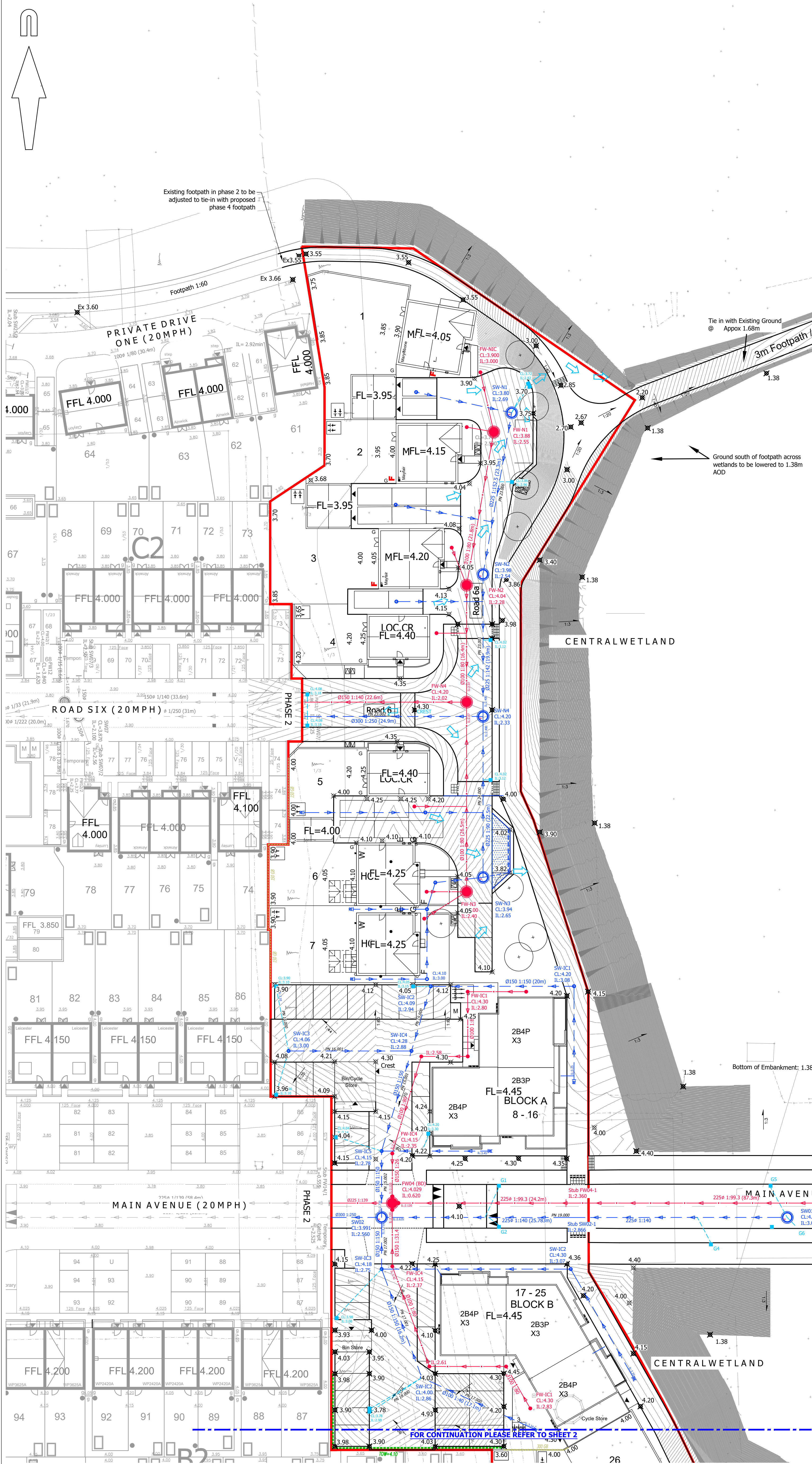
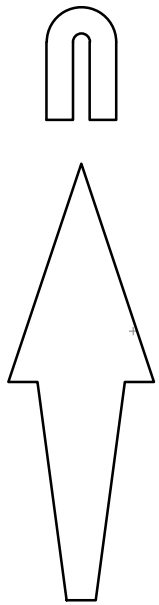




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A1 ORIGINAL

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DRAINAGE KEY:

- PROPOSED SURFACE WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER BACKDROP
- PROPOSED SURFACE WATER SEWER AND INSPECTION CHAMBER
- PROPOSED FOUL WATER SEWER AND INSPECTION CHAMBER
- PROPOSED ROAD GULLY
- PROPOSED RODDING EYE
- PROPOSED SURFACE WATER OUTFALL
- PROPOSED ATTENUATION TANK
- PROPOSED PERMEABLE PAVING & FIN DRAIN
- EXCEEDENCE FLOW ARROWS
- PROPOSED CONTOURS
- PROPOSED FOUL RISING MAIN
- SITE BOUNDARY
- LEVELS KEY:
- FL=1.45 PROPOSED FLOOR LEVEL
- 1/200 PROPOSED GRADIENT
- PROPOSED GRAVEL BOARD RETENTION
- PROPOSED RETAINING WALL

NOTES:

- This drawing is not to be scaled.
- Drawing based on Persimmon Homes Thames Valley Architect's 'Site Layout' drawing reference 545_PL_101, received on 04/06/2020.

FOR INFORMATION NOT FOR CONSTRUCTION

P8	Pipe gradients and manhole reference numbers updated. Gully's cover and invert levels added. (IC)	SF	01/09/21
P7	Junction between footpath linking phase 2 and 4, and cycleway amended to match revised Architect's layout received on 26/03/2021 (clouded). Red line boundary amended. (IC)	SF	30/03/21
P6	Footpath linking phase 2 and 4 amended to a constant 2m width. (TC)	SF	18/03/21
P5	Microdrainage pipe labels added. (TC)	SF	22/12/20
P4	Drawing updated following revised layout. Key Updated (TC)	SF	02/10/20
P3	Exceedence Flow Arrows Added (SF)	SF	06/07/20
P2	Kerbs updated in parking courts A & B and along the main avenue. (TC)	SF	09/06/20
P1	Initial Issue. (TC)	SF	04/06/2020

rev.	amendment	checked	date
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Mayer Brown Limited
Lion House Oriental Road Woking Surrey GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client
PERSIMMON HOMES THAMES VALLEY

project
PHASE 4
LITTLEHAMPTON

scale
1:250

drawn by
TC

checked by
SF

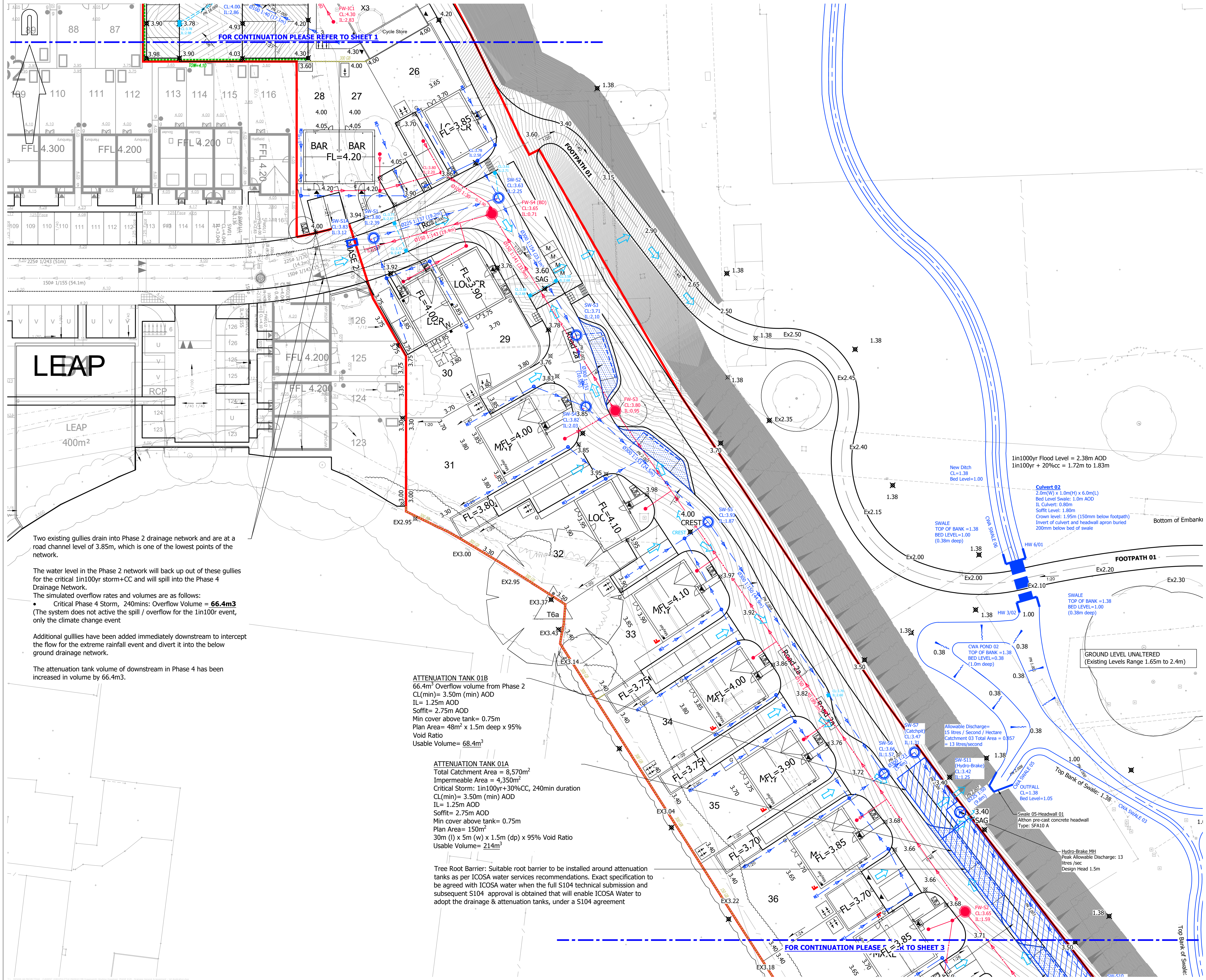
date
FEBRUARY 2020

cad file
20.DWG

title
PROPOSED DRAINAGE AND LEVELS DRAWING
(SHEET 1 OF 3)

Mayer Brown Limited jobcode
suitability
revision
P8

drawing number
PHLITTLE P4-20-1



Two existing gullies drain into Phase 2 drainage network and are at a road channel level of 3.85m, which is one of the lowest points of the network.

The water level in the Phase 2 network will back up out of these gullies for the critical 1in100yr storm+CC and will spill into the Phase 4 Drainage Network.
The simulated overflow rates and volumes are as follows:
• Critical Phase 4 Storm, 240mins: Overflow Volume = **66.4m³**
(The system does not active the spill / overflow for the 1in100r event, only the climate change event)

Additional gullies have been added immediately downstream to intercept the flow for the extreme rainfall event and divert it into the below ground drainage network.

The attenuation tank volume of downstream in Phase 4 has been increased in volume by 66.4m³.

ATTENUATION TANK 01B
66.4m³ Overflow volume from Phase 2
CL(min)= 3.50m (min) AOD
IL= 1.25m AOD
Soffit= 2.75m AOD
Min cover above tank= 0.75m
Plan Area= 48m² x 1.5m deep x 95%
Void Ratio
Usable Volume= 68.4m³

ATTENUATION TANK 01A
Total Catchment Area = 8,570m²
Impermeable Area = 4,350m²
Critical Storm: 1in100yr+30%CC, 240min duration
CL(min)= 3.50m (min) AOD
IL= 1.25m AOD
Soffit= 2.75m AOD
Min cover above tank= 0.75m
Plan Area= 150m²
30m (l) x 5m (w) x 1.5m (dp) x 95% Void Ratio
Usable Volume= 214m³

Tree Root Barrier: Suitable root barrier to be installed around attenuation tanks as per ICOSA water services recommendations. Exact specification to be agreed with ICOSA water when the full S104 technical submission and subsequent S104 approval is obtained that will enable ICOSA Water to adopt the drainage & attenuation tanks, under a S104 agreement

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DRAINAGE KEY:

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- PROPOSED FOUL WATER SEWER AND MANHOLE
- PROPOSED FOUL WATER BACKDROP
- PROPOSED SURFACE WATER SEWER AND INSPECTION CHAMBER
- PROPOSED FOUL WATER SEWER AND INSPECTION CHAMBER
- PROPOSED ROAD GULLY
- PROPOSED RODDING EYE
- PROPOSED SURFACE WATER OUTFALL
- PROPOSED ATTENUATION TANK
- PROPOSED PERMEABLE PAVING & FIN DRAIN
- EXCEEDENCE FLOW ARROWS
- PROPOSED CONTOURS
- PROPOSED FOUL RISING MAIN
- SITE BOUNDARY

LEVELS KEY:

- FL=1.45 PROPOSED FLOOR LEVEL
- 1/200 PROPOSED GRADIENT
- 150 GR PROPOSED GRAVEL BOARD RETENTION
- TOW=3.85 PROPOSED RETAINING WALL

NOTES:

- This drawing is not to be scaled.
- Drawing based on Persimmon Homes Thames Valley Architect's 'Site Layout' drawing reference 545_PL_101, received on 04/06/2020.

FOR INFORMATION NOT FOR CONSTRUCTION

P11	Pipe gradients and manhole reference numbers updated. Gully's cover and invert levels added. (IC)	SF	01/09/21
P10	Surface water pipe from SW-S2 to SW-S7 (approx. 110m) increased from 225dia to 300dia in order to remove simulated flooding for the 1in100yr climate change event. (Clouded) (TC)	SF	20/04/21
P9	Note added about the Tree Root Barrier around the attenuation tank. (Clouded) (TC)	SF	13/04/21
P8	Footpath in clouded area amended to match revised Architect's layout received on 26/03/2021. Red line boundary amended. (IC)	SF	30/03/21
P7	Surface water manhole reference SW-S6 moved in order to reduce length of pipe in the verge and facilitate positioning of proposed trees. (SF)	SF	07/01/21
P6	Attenuation tank 01A and 01B lowered and depth increased. (SF)	SF	05/01/21
P5	Microdrainage pipe labels added. (TC)	SF	22/12/20
P4	Drawing updated following revised layout. Key Updated (TC)	SF	02/10/20
P3	Surface Water Attenuation updated, note about Phase 2 overflow added, outfall swale and CWA ditch added, Exceedence flows arrows added. (SF)	SF	06/07/20
P2	Drawing updated following revised layout. (TC)	SF	05/06/2020
P1	Initial Issue. (TC)	SF	04/06/2020

rev.	amendment	checked	date
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Mayer Brown Limited
Lion House, Oriental Road, Woking, Surrey GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client

PERSIMMON HOMES THAMES VALLEY

project

PHASE 4
LITTLEHAMPTON

scale
1:250

drawn by
TC

checked by
SF

date
FEBRUARY 2020

cad file
20.DWG

title

DRAINAGE AND LEVELS
GENERAL ARRANGEMENT DRAWING
(SHEET 2 OF 3)

Mayer Brown Limited jobcode
suitability
revision
P11

drawing number

PHLITTLE P4-20-2

ATTENUATION TANK 01A
 Total Catchment Area = 8,570m²
 Impermeable Area = 4,350m²
 Critical Storm: 1in100yr+30%CC, 240min duration
 CL(min)= 3.50m (min) AOD
 IL= 1.25m AOD
 Soffit= 2.75m AOD
 Min cover above tank= 0.75m
 Plan Area= 150m²
 30m (l) x 5m (w) x 1.5m (dp) x 95% Void Ratio
 Usable Volume= 214m³

Tree Root Barrier: Suitable root barrier to be installed around attenuation tanks as per ICOSA water services recommendations. Exact specification to be agreed with ICOSA water when the full S104 technical submission and subsequent S104 approval is obtained that will enable ICOSA Water to adopt the drainage & attenuation tanks, under a S104 agreement

GROUND LEVEL UNALTERED
(Existing Levels Range 1.7m to 2.1m)

GROUND LEVEL UNALTERED
(Existing Levels Range 1.7m to 2.1m)

Indictive location of Community Centre
- Subject to change

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	PROPOSED SURFACE WATER SEWER AND MANHOLE
	PROPOSED FOUL WATER SEWER AND MANHOLE
	PROPOSED FOUL WATER BACKDROP
	PROPOSED SURFACE WATER SEWER AND INSPECTION CHAMBER
	PROPOSED FOUL WATER SEWER AND INSPECTION CHAMBER
	PROPOSED ROAD GULLY
	PROPOSED RODDING EYE
	PROPOSED SURFACE WATER OUTFALL
	PROPOSED ATTENUATION TANK
	PROPOSED PERMEABLE PAVING & FIN DRAIN
	EXCEEDENCE FLOW ARROWS
	PROPOSED CONTOURS
	PROPOSED FOUL RISING MAIN
	SITE BOUNDARY

FL=1.45 PROPOSED FLOOR LEVEL

1/200 PROPOSED GRADIENT

150 GB PROPOSED GRAVEL BOARD RETENTION

TOW=3.85 PROPOSED RETAINING WALL

NOTES:

1. This drawing is not to be scaled.
2. Drawing based on Persimmon Homes Thames Valley Architect's 'Site Layout' drawing reference 545 PL 101, received on 04/06/2020.

FOR INFORMATION
NOT FOR CONSTRUCTION

P8	Pipe gradients and manhole reference numbers updated. Gully's cover and invert levels added. (C)	SF	01/09/21
P7	Permeable paving and fin drain amended to suit parking bays. (clouded) (TC)	SF	20/04/21
P6	Note added about the Tres Root Barrier around the attenuation tank. (clouded) (TC)	SF	13/04/21
P5	Microdrainage pipe labels added. (TC)	SF	22/12/20
P4	Drawing updated following revised layout. Key Updated. (TC)	SF	02/10/20
P3	Exceedence Flow arrows and permeable paving added. (SF)	SF	06/07/20
P2	Drawing updated following revised layout. (TC)	SF	05/06/20
P1	Initial Issue. (TC)	SF	04/06/2020

rev.	amendment	checked	date
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Mayer Brown Limited
Lion House Oriental Road Woking Surrey GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client

PERSIMMON HOMES THAMES VALLEY

project

PHASE 4
LITTLEHAMPTON

scale	drawn by	checked by
1:250	TC	SF

date	cad file
FEBRUARY 2020	20.DWG

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DRAINAGE AND LEVELS
GENERAL ARRANGEMENT DRAWING
(SHEET 3 OF 3)

Mayer Brown Limited jobcode	suitability	revision
	-	P8

drawing number

PHLITTLE P4-20-3

A2 ORIGINAL

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KEY

- EXISTING GROUND PROFILE
- PROPOSED ROAD PROFILE
- SURFACE WATER SEWER PROFILE

NOTES:

- This drawing is not to be scaled.
- The drawing is to be read in conjunction with Mayer Brown "Drainage General Arrangement" drawing series PHLITTLE-P4-20.
- 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 INFORMATION
NOT FOR CONSTRUCTION

P2	Manhole references adjusted and long sections updated. (IC)	SF	01/09/21
P1	Initial issue. (TC)	SF	04/06/20

rev.	amendment	checked	date
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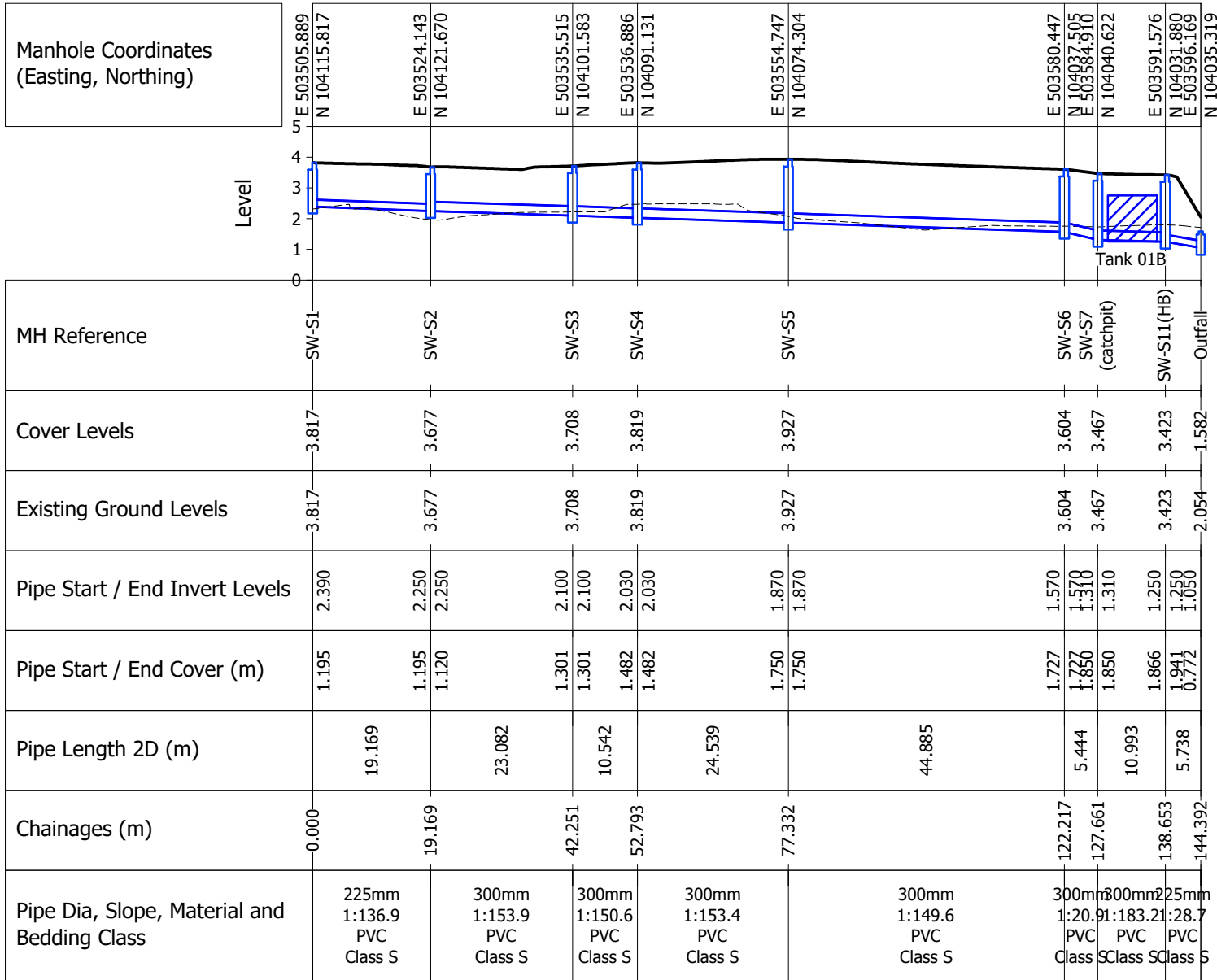
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Mayer Brown Limited
Lion House, Oriental Road, Woking, Surrey, GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

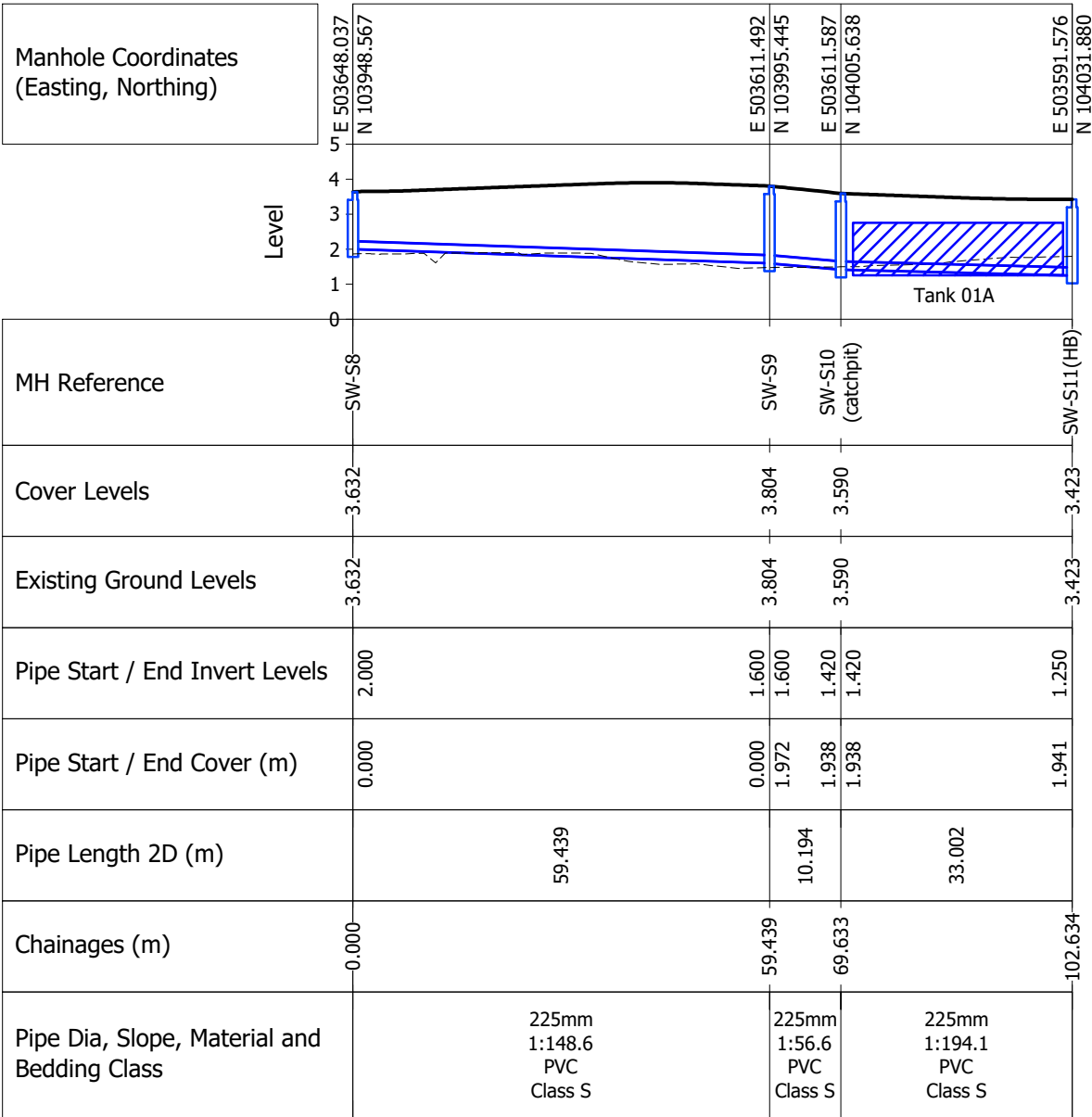
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project		
PHASE 4 LITTLEHAMPTON		
scale	drawn by	checked by
H=1:1000 V=200	TC	SF
date	cad file	
JUNE 2020	40.DWG	
title		
PROPOSED SURFACE WATER DRAINAGE LONGITUDINAL SECTIONS		
Mayer Brown Limited jobcode	suitability	revision
	-	P2
drawing number		

PHLITTLE-P4-40-1

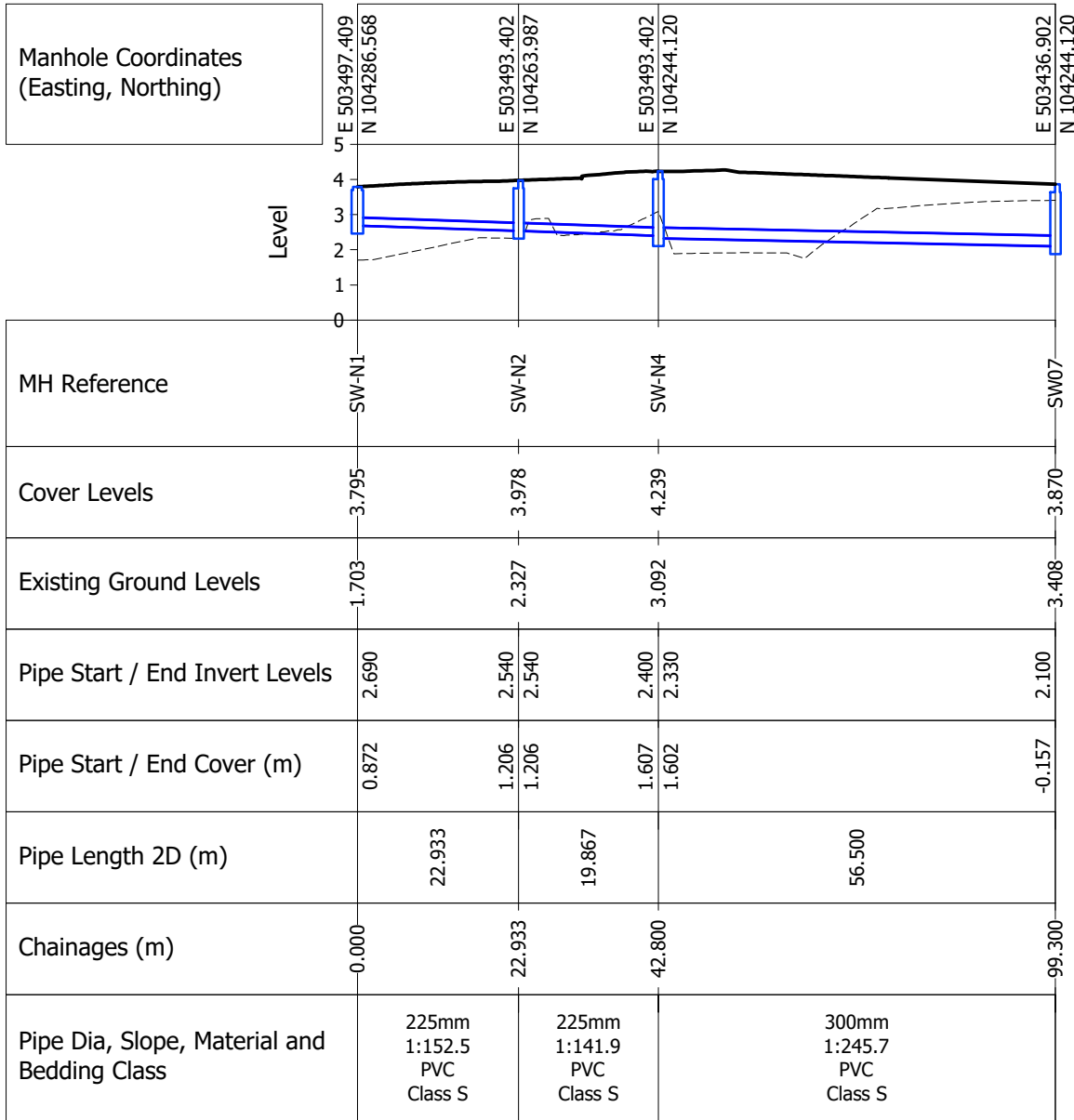
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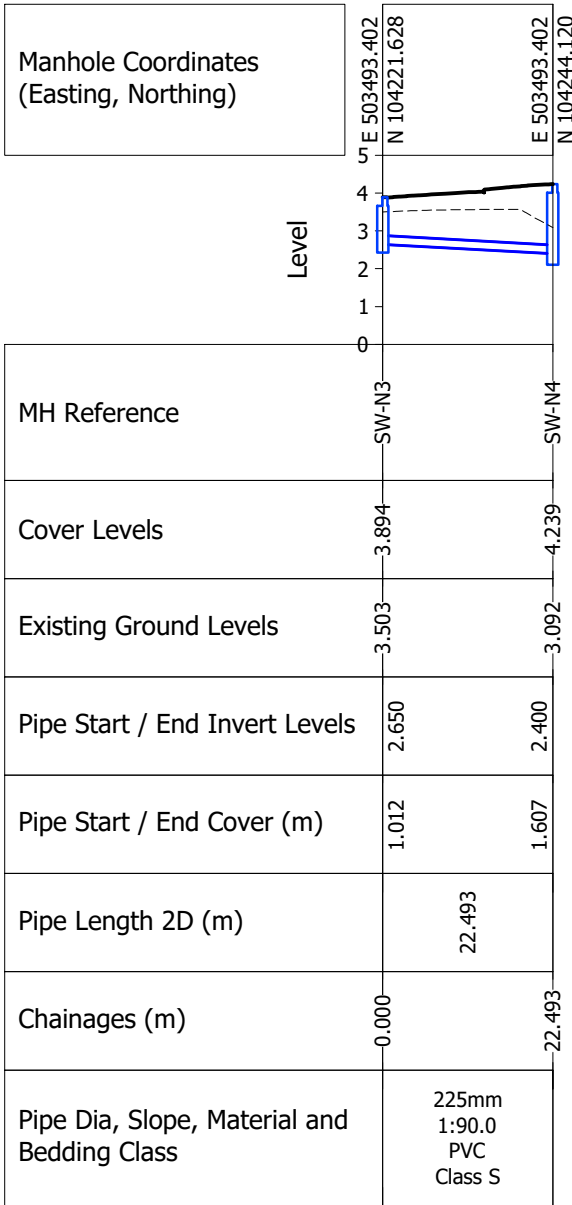
SW-S8 to SW-S11(HB)
Scale= H 1:1000, V 1:200



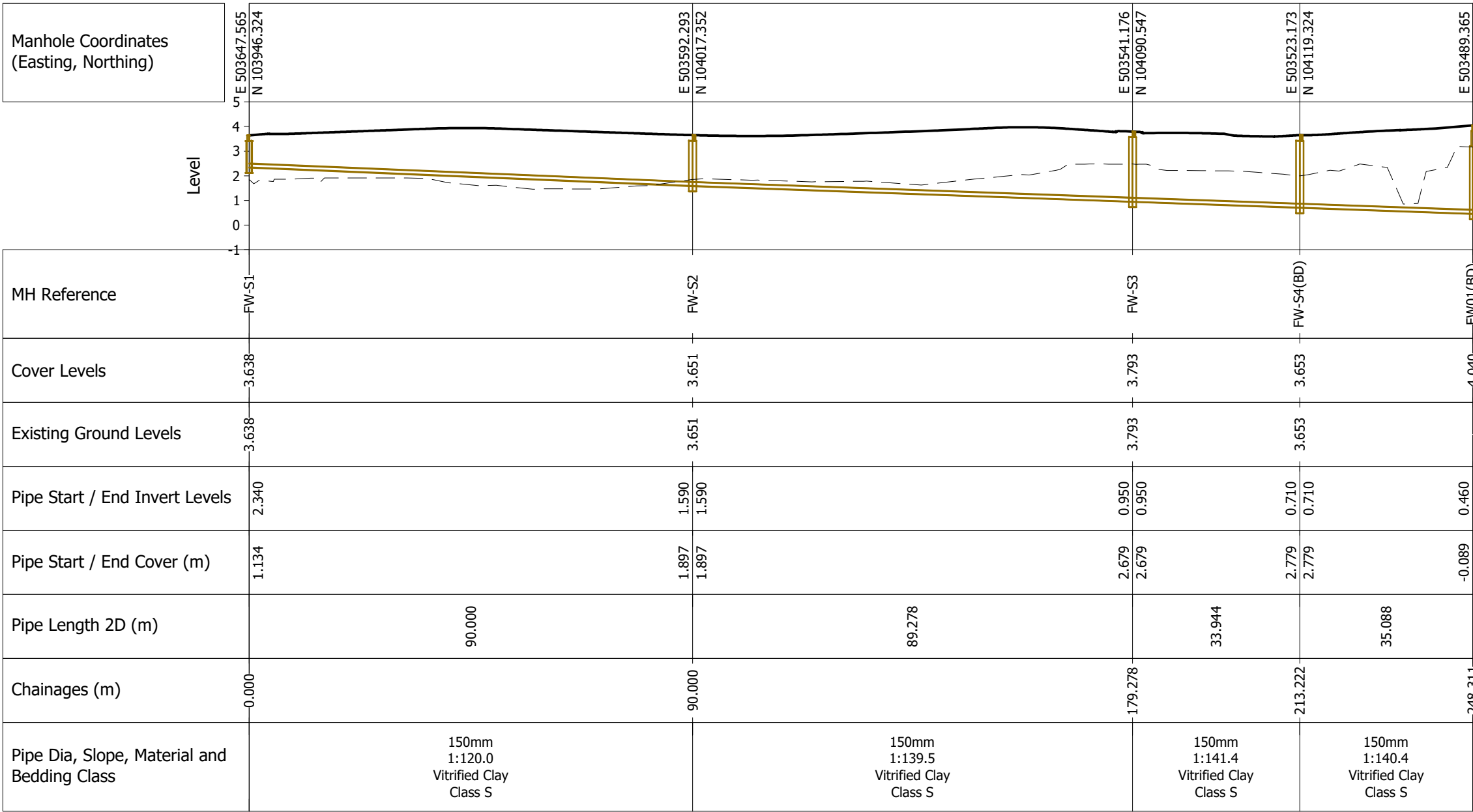
SW-N1 to SW07
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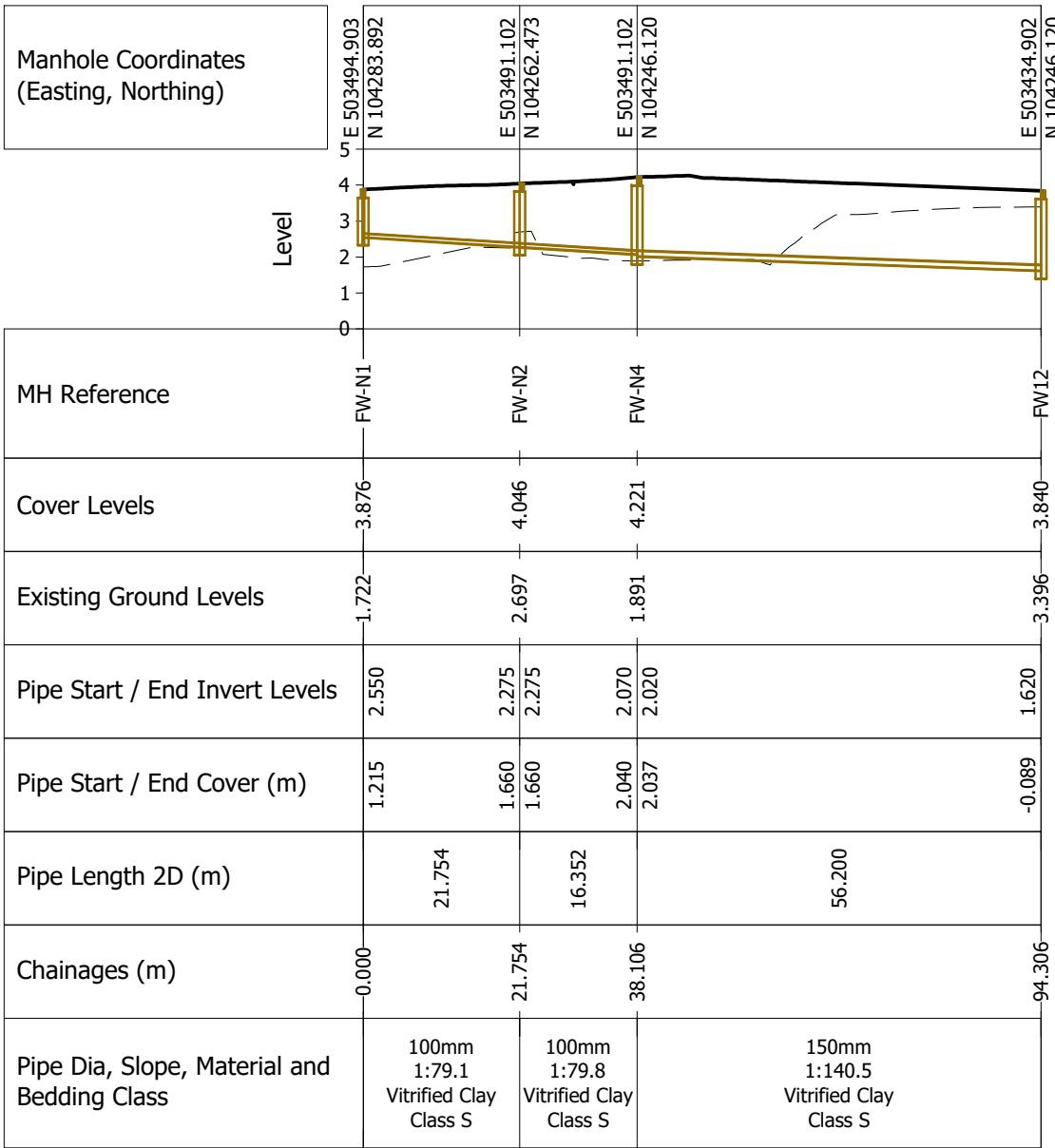
SW-N3 to SW-N4
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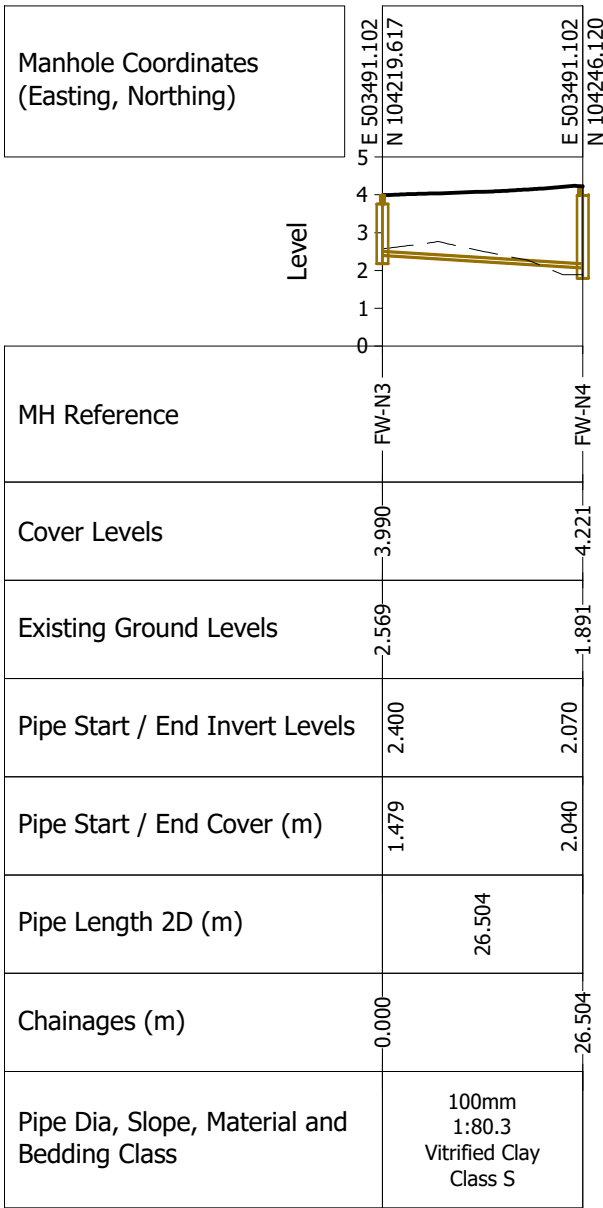
FW-S1 to FW01(BD)



FW-N1 to FW12



FW-N3 to FW-N4



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KEY

- EXISTING GROUND PROFILE
- PROPOSED ROAD PROFILE
- FOUL WATER SEWER PROFILE

NOTES:

- This drawing is not to be scaled.
- The drawing is to be read in conjunction with Mayer Brown "Drainage General Arrangement" drawing series PHLITTLE-P4-20.
- 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.

PRELIMINARY
NOT FOR CONSTRUCTION

P1	Initial issue. (TC)	SF	04/06/20
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rev.	amendment	checked	date
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Mayer Brown Limited
Lion House, Oriental Road, Woking, Surrey GU22 8AR
Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client
PERSIMMON HOMES THAMES VALLEY

project
PHASE 4
LITTLEHAMPTON

scale
H=1:1000 V=200

drawn by
TC

checked by
SF

date
JUNE 2020

cad file
40.DWG

title
PROPOSED FOUL WATER DRAINAGE
LONGITUDINAL SECTIONS

Mayer Brown Limited jobcode

suitability
-

revision
P1

drawing number
PHLITTLE-P4-41-1