

Notes:-

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Health and Safety Note:
The details on this drawing have been prepared on the assumption that a competent contractor will be carrying out the works. If the contractor(s) considers that there is insufficient Health and Safety information on this drawing, this should immediately be brought to the attention of the designer.

Legend

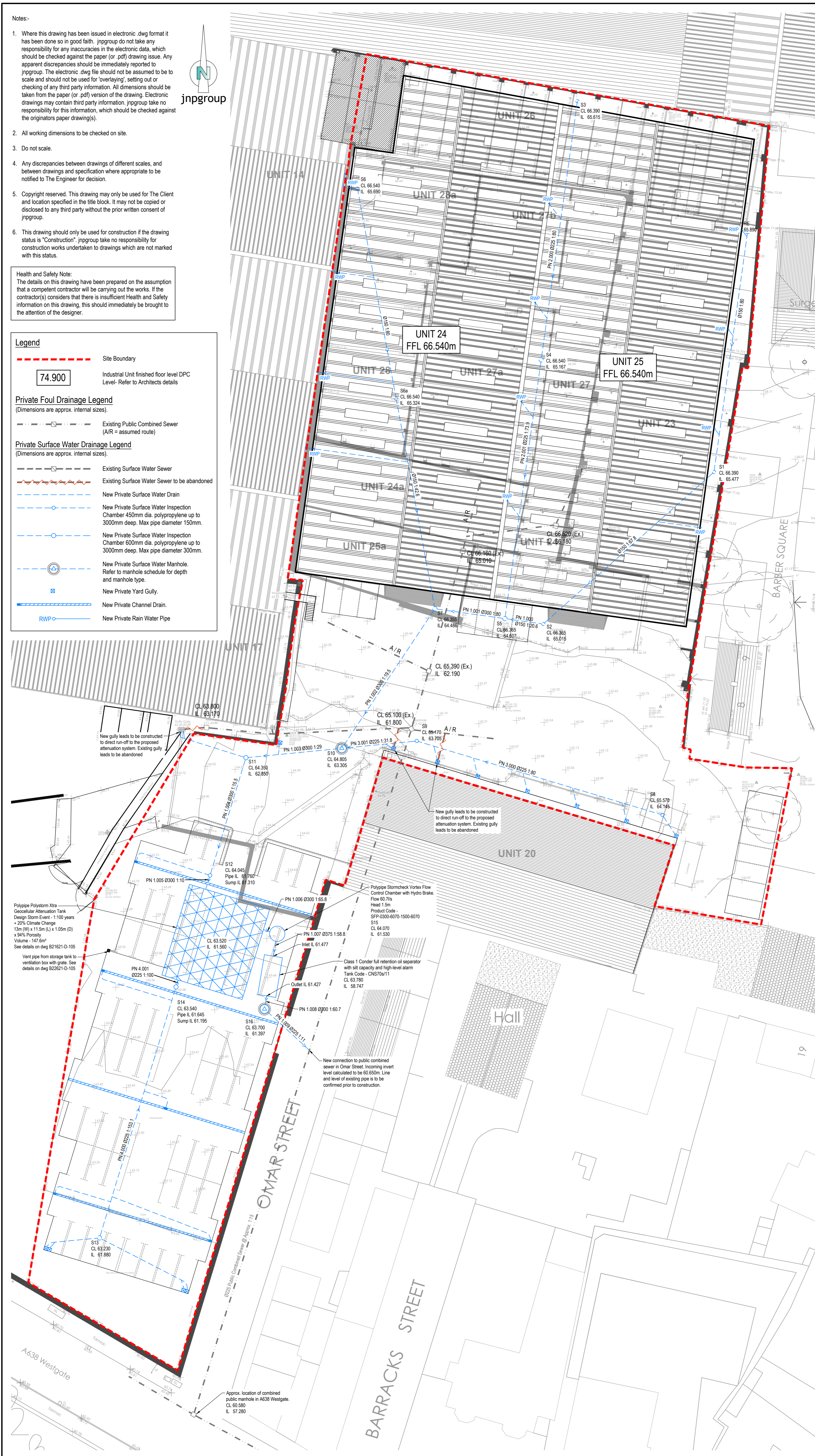
- Site Boundary
- Industrial Unit finished floor level DPC Level- Refer to Architects details
- 74.900

Private Foul Drainage Legend
(Dimensions are approx. internal sizes).

- Existing Public Combined Sewer (A/R = assumed route)

Private Surface Water Drainage Legend
(Dimensions are approx. internal sizes).

- Existing Surface Water Sewer
- Existing Surface Water Sewer to be abandoned
- New Private Surface Water Drain
- New Private Surface Water Inspection Chamber 450mm dia. polypropylene up to 3000mm deep. Max pipe diameter 150mm.
- New Private Surface Water Inspection Chamber 600mm dia. polypropylene up to 3000mm deep. Max pipe diameter 300mm.
- New Private Surface Water Manhole. Refer to manhole schedule for depth and manhole type.
- New Private Yard Gully.
- New Private Channel Drain.
- New Private Rain Water Pipe



PRIVATE DRAINAGE NOTES

- This drawing is to be read in conjunction with and checked against all other drawings, engineering details, specification and any structural, geotechnical or other specialist documents provided.
- All pipes to be vitrified clay or UPVC and shall be 100mm dia laid to a fall of 1:80 unless noted otherwise or indicated by size and invert levels. All connections when laid shall be plugged, protected as necessary and marked with a stake for future use.
- Building drainage shall comply with BS EN 752 and Building Regulations Part H. Inspection chambers located within buildings to have double seal bolt down covers.
- Gully top and manhole cover specification to be in accordance with BS EN 124 and located in accordance with the intended use and loading classification as described within groups 1-6:
- This drawing is schematic for clarity only, positions of pipe runs and manholes may vary on site due to site conditions.
- Cover and invert levels are indicative and may vary on site. In any case the following minimum cover to depth of cover to the crown of pipes without protection shall be as follows:
 - Pathways without any possibility of vehicular access - 0.35m
 - Other highways and parking areas with unrestricted access to vehicles with a gross weight in excess of 7.5 tonnes - 1.2m
 Note: any protection required where drainage does not comply with a-b above shall be as follows:-
 - Vitrified clay pipes - provide a 100 mm min. thick concrete bed and surround (instead of class 'S' bedding) and a 13 mm thick compressible filler at each joint.
 - UPVC pipes - provide a concrete bedding (in addition to class 'S' bedding) in accordance with appendix A15, Building Regulations part 'H'.
 Note: in-situ concrete used in connection with a) and b) above shall be standard mix CEN3 in accordance with BS 5328.
- Where pipes pass under buildings, they are to be surrounded in concrete.
- All branch drains, or connections, are to discharge to the collectors obliquely, and in the direction of the main flow.
- Finished Floor Levels (FFL's), assumed to be typically a minimum of 150mm above finished ground level outside. Refer to architects drawing for details.
- All rodding eyes shown without cover levels (CL) shall be assumed to be at external ground level.
- All low spots on hardstanding areas to have double gullies.
- Pipe bedding to be Class 'S' Bedding (100mm granular bed and surround).
- Excavations for manholes, pipe runs etc located within a 45 degree load distribution splay from any adjoining existing foundations, are to be adequately supported for the duration of the works and building drainage protected.
- For foundations adjacent to pipe runs or manholes, refer to 'Pipe Bedding Adjacent to Foundations' on drawing B22621-D-105.
- Where excavations for pipe runs are parallel and in close proximity to each other and/or other service trenches, the contractor shall ensure that adequate safety measures, including temporary shoring, are provided in line with current Health & Safety Legislation and good practice. Particular attention is to be paid to adjacent trenches of differing invert levels.
- All existing drainage found on site during the works shall be investigated, its operational status confirmed, and the following applied:-
 - Inoperative drainage shall be cut back and pipe runs filled with concrete grout.
 - 'Live' drainage shall be temporarily re-routed to allow the new drainage to be constructed.
- Where existing drainage is to be re-used including road, building and external drainage systems, the contractor shall ensure that all chambers and drainage runs are cleaned, de-silted and made good.
- Covers to existing chambers to be re-used shall be replaced where necessary to suit proposed development loading class, see note 5. Chamber covers shall also be adjusted to suit final ground levels as necessary.
- Where necessary, existing chambers shall be re-benched to suit new pipework arrangement.
- Existing manholes with cover levels noted 'Ex', shall be re-constructed to suit proposed levels.
- There is no foul water drainage created by this development.

IMPORTANT DRAINAGE NOTES:

- Prior to installation of any new drainage the contractor shall:
- Confirm line and level of all outfall pipes. Where the depths of these pipes are insufficiently deep for a new connection from the site, the engineer shall be informed immediately.
 - Ensure all relevant consents for sewer connections are in place:
 - YORKSHIRE WATER S106 sewer connections
 - Confirm line and level of existing drainage outfalls. Level of connection subject to confirmation that no clashing occurs with any of the existing sewers or services, contractor to re-level if necessary.

Rev	Date	Amendment	By	Chk.
B	08.06.2021	Outfall amended to combined sewer with discharge rate reverted back to 60.7 l/s. Gradient of combined sewer confirmed.	NE	
A	07.02.2020	Outfall amended to culverted watercourse. Drainage design amended to meet 5.0 l/s discharge rate.	NE	BP

Status: For Approval

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Client	CLECKHEATON CONSTRUCTION LTD
Job	UNIT 24/25 FLUSH MILLS HECKMONDWIKE
Title	PROPOSED DRAINAGE LAYOUT
Scale	1:250 @ A1
Date	NOVEMBER 2018
Drawn by	NE
Checked by	STS
Approved by	
BMTRADA	HAS Accredited Contractor
Constructionline	Supplier No. 000034
Drawing No.	B22621-D-103
Rev.	B