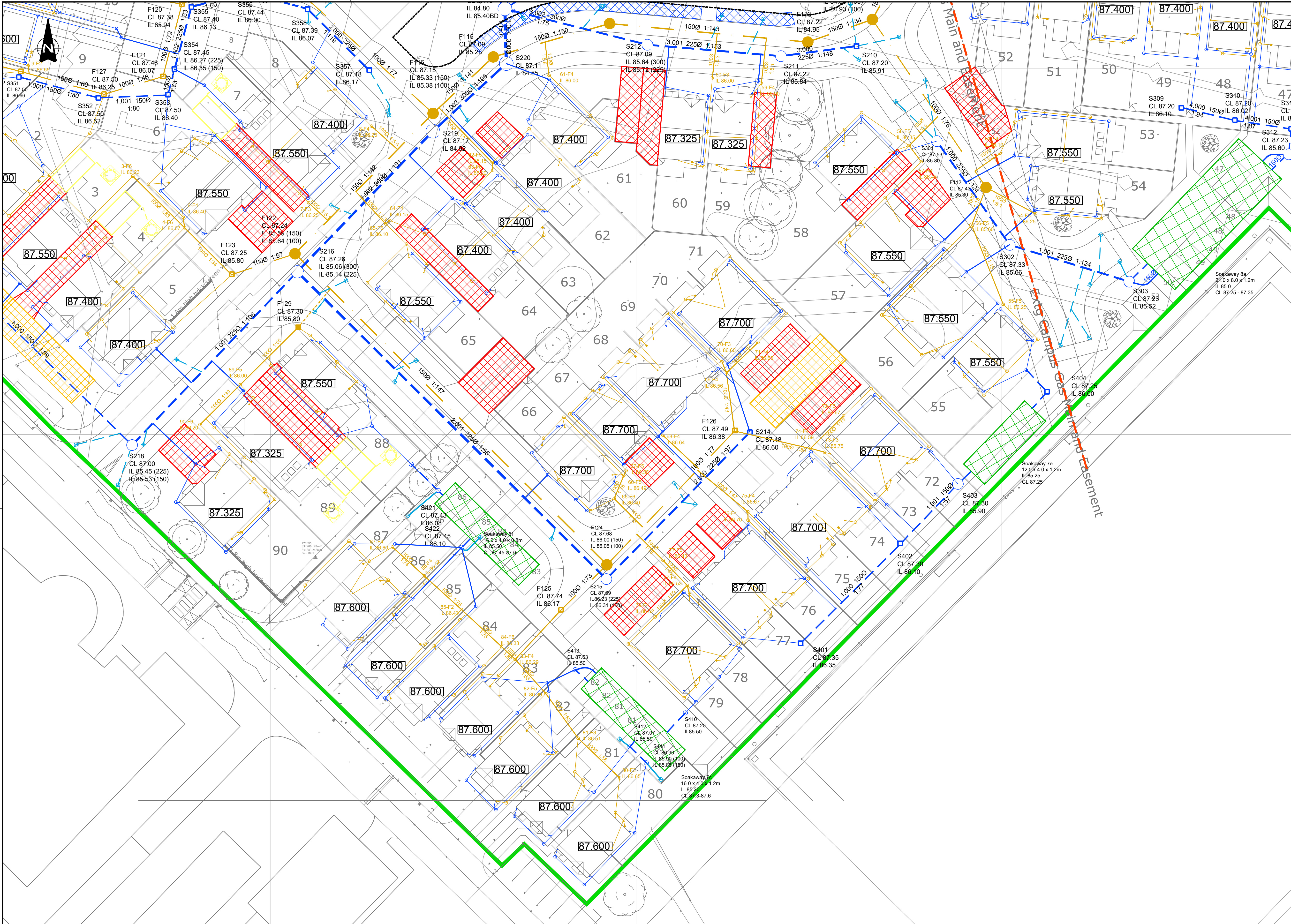




- NOTES:
1. Do not scale from this drawing. If in doubt refer to the Engineer for clarification.
 2. All levels in mAAD unless otherwise specified. All dimensions in metres unless otherwise specified.
 3. Scheme layout from DS Jones & Co drawing DSJ10408.10.
 4. Drainage works adoptable by Dwr Cymru shall comply with *The Welsh Ministers standards for new gravity foul sewers and lateral drains and Sewers for Adoption 7th Edition (SfA)* as appropriate.
 5. Private drainage works shall comply with the *Building Standards part H*.
 6. Highway drainage shall comply with SHW and with WCCB requirements as appropriate.
 7. Private drainage layouts are shown on dwgs 109540-521 - 532.
 8. Drainage construction details are shown on dwgs 109540-510 - 514.
 9. Trunk-sewer long sections are shown on dwgs 109540-533 - 537.
 10. Manhole cover levels are listed to match the wearing-course finished surface. Where new roads are constructed initially to base-course, gully gratings and manhole covers shall be set to match (40mm lower than shown) unless instructed otherwise.
 11. All mortar, in-situ or precast concrete must use sulphate-resisting Portland cement or alternative as per clause E2.9 (SA). The BRE SD1 ratings are DS-1 and AC-1.
 12. Manhole covers for adoptable manholes in estate roads to be rated at D400 (to BS EN124) and kile-marked. Covers to inspection chambers in driveways or other off-road areas to be rated at B125 and kile-marked.
 13. All pre-cast concrete manholes to be to BS EN1916:2002 / BS 5911-1:2002 and kile-marked.
 14. Manhole cover frames shall be seated on between 2-4 courses of Class B engineering brickwork or pre-cast concrete seating rings to regulate the height between the cover surface and the underside of the cover slab. Mortar to cover frames shall be a polyester resin mortar (cl. E5.7, SFA) in all roads except residential cul-de-sacs, for which cement/sand (1:3) mortar may be used.
 15. Manhole covers and access openings shall be orientated to ensure adequate chamber access in relation to the manhole's internal layout.
 16. All Vitrified Clay pipes to be to BS EN 256 and kile-marked. VC pipe strength class to be minimum S400 in accordance with Table 5, BS EN256-1 for pipes up to 150 dia.
 17. All concrete pipes to be to BS EN1916 and BS5911-1 and kile-marked. Concrete pipe strength to be Class 120 in accordance with Table 8 BS5911-1.
 18. PE and PVCu pipes to comply with *Sewers for Adoption 7th Edition*.
 19. Bedding fill for Type S bed & surround to be mixed gravel in accordance with WIS 4-08-01, sized as below:
Pipe Dia Aggregate size
100 10mm (single-size)
150 5 - 14mm
225-300 5 - 14 / 20mm
 20. Sewers beneath roads and communal parking areas to be backfilled above the bed & surround with Type 1 or Type 2 granular fill laid and compacted in layers not exceeding 0.3m thick up to the underside of the pavement construction. Sewer lengths beneath landscaped areas may be backfilled with selected excavated fill laid and compacted in layers to suit the material, subject to the Engineer's prior approval of the proposed backfill material.
 21. PE and PVCu pipes and fittings shall comply as appropriate with the relevant provisions of BS EN 1401-1, BS EN 1552 and BS EN 12666-1. PE structured-wall pipes shall comply with the relevant provisions of BS EN 13476-1, WIS 4-35-01 and BS EN 13476-2 or 13476-3 as appropriate. Pipes shall be kile-marked or have equivalent third-party certification. PE structured-wall pipes less than or equal to 500mm diameter shall have nominal short term ring stiffness not less than 8 kN/m² (SN8). Maximum length of structured-wall pipes for laying is 3m unless welded joints are used.
 22. Any and all proposed landscaping arrangements and design must conform to cl. B3.1.13 of SFA 7th Edition.

- KEY
- Proposed main s/w drains
 - Proposed main f/w drains
 - Proposed soakaway features using cellular storage system
 - Proposed minor accesses with permeable block paving
 - Proposed permeable block-paved driveway construction
 - Proposed road-side swales 1.8m wide, 0.15m deep
 - Proposed road gully & connection
 - Existing gas main

Finished floor level		87.500	
Rev.	Date	Revised details	Drawn
P03	09/11/2021	Private drains added to dig, labelling updated	Rev.
P02	09/11/2021	Customer notes were updated. Design updated according to Dwr Cymru's comments	Rev.
P01	09/10/2021	Manhole locations, gully locations and drainage layout were updated. Added to drawing, private, SFA, drainage and gully details	Rev.

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Client

Edwards Homes Ltd

Project

Plas Coch North Quarter
Glyndwr University, Wrexham

Title

Proposed Trunk Drainage layout
Sheet 3 of 3

Drawn	T Dawe	Checked	G Pellegrino	Approved	D Weir
Original dtp. size	A1	Date	Nov 2021	Scale	1:250
Drawing Status	Approval	Drawing Number	109540-506	Rev.	P03

Not approved for construction