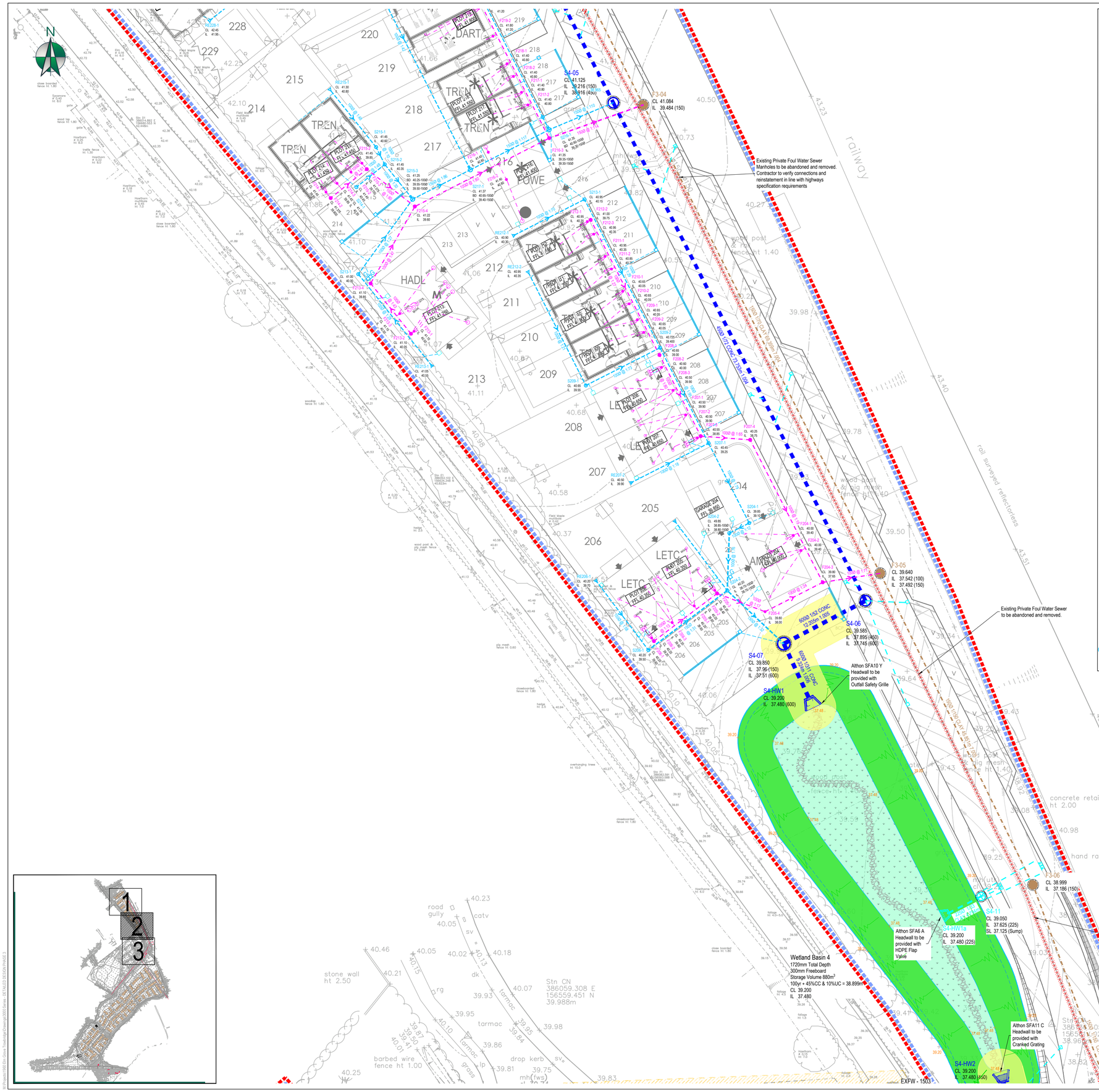

- Site boundary
- Phase 3 boundary
- Existing public foul sewer
  Contractor to verify levels, locations and S106 connection approvals prior to commencement of works
- Existing public surface sewer
  Contractor to verify levels, locations and S106 connection approvals prior to commencement of works
- Proposed S185 Adoptable foul sewer diversion
- Proposed S185 adoptable precast concrete foul manhole
  Refer to annotation and manhole schedule for size and type.
- Proposed S104 adoptable foul sewer
- Proposed S104 adoptable precast concrete foul manhole
  Refer to annotation and manhole schedule for size and type.
- Proposed S104 adoptable storm sewer
- Proposed S104 adoptable precast concrete storm manhole
  Refer to annotation and manhole schedule for size and type.
- Proposed S104 adoptable headwall (Inlet - Cranked Grating)
  Althon Headwall to be installed, refer to standard detail
- Proposed S104 adoptable headwall (Outlet - Safety Grille or Flap Valve)
  Althon Headwall to be installed, refer to standard detail
- Section 104 easement
- Proposed S38/S278 adoptable storm sewer
- Proposed S38/S278 adoptable storm manhole
  Refer to annotation and manhole schedule for size and type.
- Proposed S38/S278 adoptable storm gully & spur
  Standard highway gully to be offered for adoption by the local highway authority, gullies to have pedestrian safe gratings.
- Proposed private foul drain
  To be constructed in solid walled PVC-u pipe to to BS EN 1401 (non vehicle loading) and structured walled PVC-u pipe (vehicle loaded) in a Class S bed and surround, unless otherwise noted.

  Pipe sizes to be: 100mm dia for drains serving less than 10 properties
  150mm dia for drains serving 10 properties or more, unless otherwise noted.
- Proposed private foul non-access inspection chambers
  To be constructed in 300mm or 450mm internal diameter polypropylene units. Unless annotated otherwise size to be 450mm Ø.

  Where IC 300Ø are specified for out coming drain runs from plots they are to be 600mm deep.

  Backdrops where shown and detailed.
- Proposed private storm drain
  To be constructed in solid walled PVC-u pipe to to BS EN 1401 (non vehicle loading) and structured walled PVC-u pipe (vehicle loaded) in a Class S bed and surround, unless otherwise noted.

  Pipe sizes to be: 100mm dia for drains serving less than 5 properties
  150mm dia for drains serving 5 properties or more, unless otherwise noted.
- Proposed private storm non-access inspection chambers
  To be constructed in 300mm or 450mm internal diameter polypropylene units. Unless annotated otherwise size to be 450mm Ø.
- Proposed private storm rodding eye
  To be constructed in structured walled PVC-u pipe.
- Proposed private storm linear drainage channel
  With sump unit and rodding access.
- Proposed private storm level threshold
  Refer to standard detail.
- Rainwater down pipe with roddable gully
- Foul connection (roddable)
- Proposed private sewer with concrete surround
- Proposed private storm gully
- Existing Private Drain to be Abandoned & Removed

CDM: Significant Hazards

Health and Safety hazards are identified by the designer as abnormal in pursuance of the current Construction Design and Management regulations. It is assumed that all works will be carried out by competent & adequately resourced contractor(s) working to safe systems of work.

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General Notes

1. DO NOT SCALE FROM THIS DRAWING FOR CONSTRUCTION. Scaling from this drawing or obtaining dimensions electronically may not provide accurate information and should be avoided, therefore work only from figured dimensions and contact JRC Consulting Engineers.
2. This drawing is to be read in conjunction with all other relevant Architect's, Engineers & Specialist drawings, details, Specification and the relevant Health and Safety Plan (as appropriate to the project). All discrepancies to be reported to the Engineer immediately for verification.

Drainage Notes

1. The planning, design and construction of sewers shall be in accordance with Sewers Sector Guidance (SSG) a design and construction guide for developers.
2. The minimum size of sewer where guide bars, safety chains, or other safety devices are required in manholes shall be 375mm diameter.
3. All type A & B manholes should have a concrete surround. Concrete rings shall be sealed using 'tokstrip' and lifting eyes pointed with resin modified mortar.
4. Compliance with health & safety matters on any trench/manhole is obligatory and a permit to enter a confined space is required when connecting site drainage to the existing public sewerage system. A permit to enter a confined space will be obtained from SWW ltd prior to the works commencing on any public sewerage system.
5. Where the proposed site drainage connects to the public sewerage system either by new junction, new manhole or at an existing manhole, it will require the submission of an application for sewer connection form to SWW ltd prior to works commencing.
6. MH covers and frames shall be ductile iron with a minimum square opening of 675x675mm. Covers shall be double triangle for 675mm square openings and be provided with loose bolted connections. Frame depth shall be 150mm. Covers to PPIC'S shall be in accordance with SSG. Type C manholes to be provided with 1220 x 685mm covers and opening.
7. The use of ladders or steps in manholes, wet wells and valve chambers shall comply with the following: steel plastic encapsulated MH single steps shall not be used in MHS of a greater depth than 1.0m. Steel plastic encapsulated double steps may be provided in MHS up to 3.0m deep. Ladders shall be provided in accordance with BS 4211 in MHS between 3.0m & 6.0m deep. MHS greater than 6.0m deep shall be specially designed and have intermediate landings. Access holes in intermediate landings shall be provided with galvanised mild steel gratings to prevent persons falling through. The design of deep manholes shall permit the use of a winch or lifting gear mounted at ground level in case of emergencies.
8. Only low carbon steel or stainless-steel ladders for vertical fixing to manholes will be acceptable.
9. Proposed adoptable sewers are only permitted to have other sewer/gully connections and other services laid at an angle of between 45 degrees and 90 degrees across the line with a vertical clearance more than 300mm.
10. All ironwork to be kite marked by BSI or certified by equal inspection authority.
11. Red coloured plastic marker tape at least 150mm wide shall be laid at a minimum of 200mm above the soffit of the pipe. The tape shall be printed with the words 'gravity sewer' in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes.
12. Minimum backdrop height shall be 1m.
13. On new drainage schemes, the first manhole upstream from the connection to the existing foul water sewer shall be fitted with a suitable screen, which will remain in place until the new sewer becomes live.

Drainage Notes - DCG

1. Drawings to be read in conjuction with all design drawings and building regulations
2. All levels are to Ordnance Survey datum levels.
3. All materials used in connection with this design must:
   - Not be detrimental to health & safety or adversely affect durability of the construction.
   - Where applicable, be compliant to current British/European Standards, Codes of Practice and good building practice.
4. The planning, design and construction of sewers shall be in accordance with Design and Construction Guidance (DCG) for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies in England.
5. The minimum size of sewer where guide bars, safety chains, or other safety devices are required in manholes shall be 375mm diameter.
6. All type A & B manholes should have a concrete surround. Concrete rings shall be sealed using 'tokstrip' and lifting eyes pointed with resin modified mortar. PPIC'S should be installed in accordance with The DCG.
7. Compliance with health & safety matters on any trench/manhole is obligatory and a permit to enter a confined space is required when connecting site drainage to the existing public sewerage system. A permit to enter a confined space will be obtained from the local water company prior to the works commencing on any public sewerage system.
8. Where the proposed site drainage connects to the public sewerage system either by new junction, new manhole or at an existing manhole, it will require the submission of an application for sewer connection form to the local water company prior to works commencing.
9. MH covers and frames shall be ductile iron with a minimum square opening of 675x675mm. Covers shall be double triangle for 675mm square openings and be provided with loose bolted connections. Frame depth shall be 150mm. Covers to PPIC'S shall be in accordance with the DCG.
10. The use of ladders or steps in manholes, wet wells and valve chambers shall comply with the following: steel plastic encapsulated MH single steps shall not be used in MHS of a greater depth than 1.0m. Steel plastic encapsulated double steps may be provided in MHS up to 3.0m deep. Ladders shall be provided in accordance with BS 4211 in MHS between 3.0m & 6.0m deep. MHS greater than 6.0m deep shall be specially designed and have intermediate landings. Access holes in intermediate landings shall be provided with galvanised mild steel gratings to prevent persons falling through. The design of deep manholes shall permit the use of a winch or lifting gear mounted at ground level in case of emergencies.
11. Only low carbon steel or stainless-steel ladders for vertical fixing to manholes will be acceptable.
12. Proposed adoptable sewers are only permitted to have other sewer/gully connections and other services laid at an angle of between 45 degrees and 90 degrees across the line with a vertical clearance more than 300mm.
13. All ironwork to be kite marked by BSI or certified by equal inspection authority.
14. Red coloured plastic marker tape at least 150mm wide shall be laid at a minimum of 200mm above the soffit of the pipe. The tape shall be printed with the words 'gravity sewer' in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes.
15. Minimum backdrop height shall be 1m.
16. On new drainage schemes, the first manhole upstream from the connection to the existing foul water sewer shall be fitted with a suitable screen, which will remain in place until the new sewer becomes live. For type 3 manholes, outlet to be bunged with suitable stopper and chain which can be removed on completion of work.
17. Adopted pipework bed/surround:

Vehicular access:	<1200 cover	Class Z concrete
	>1200 cover	Class S granular
Non-vehicular access:	<900 Cover	Class Z concrete
	>900 Cover	Class S granular

REV.	DATE	DETAILS	BY	CKD.
TA2	17.06.26	ANNOTATIONS MOVED FOR VISIBILITY, DRAINAGE ADDED TO BAYS 207-225, SPOT LEVELS ADDED TO BASIN	GBM	JDC
TA1	31.03.26	FIRST ISSUE	JDC	DWJP

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DRAWING STATUS
FOR TECHNICAL APPROVAL

PROJECT
ELM GROVE
TROWBRIDGE

CLIENT
REDROW

DRAWING TITLE
DRAINAGE LAYOUT
PHASE 3
SHEET 2

SCALE @ A1	SIZE	DATE
0m 1:250 10m	A1	MAR 26

PROJECT NUMBER	DRAWING NUMBER	REVISION
1960	3502	TA2

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