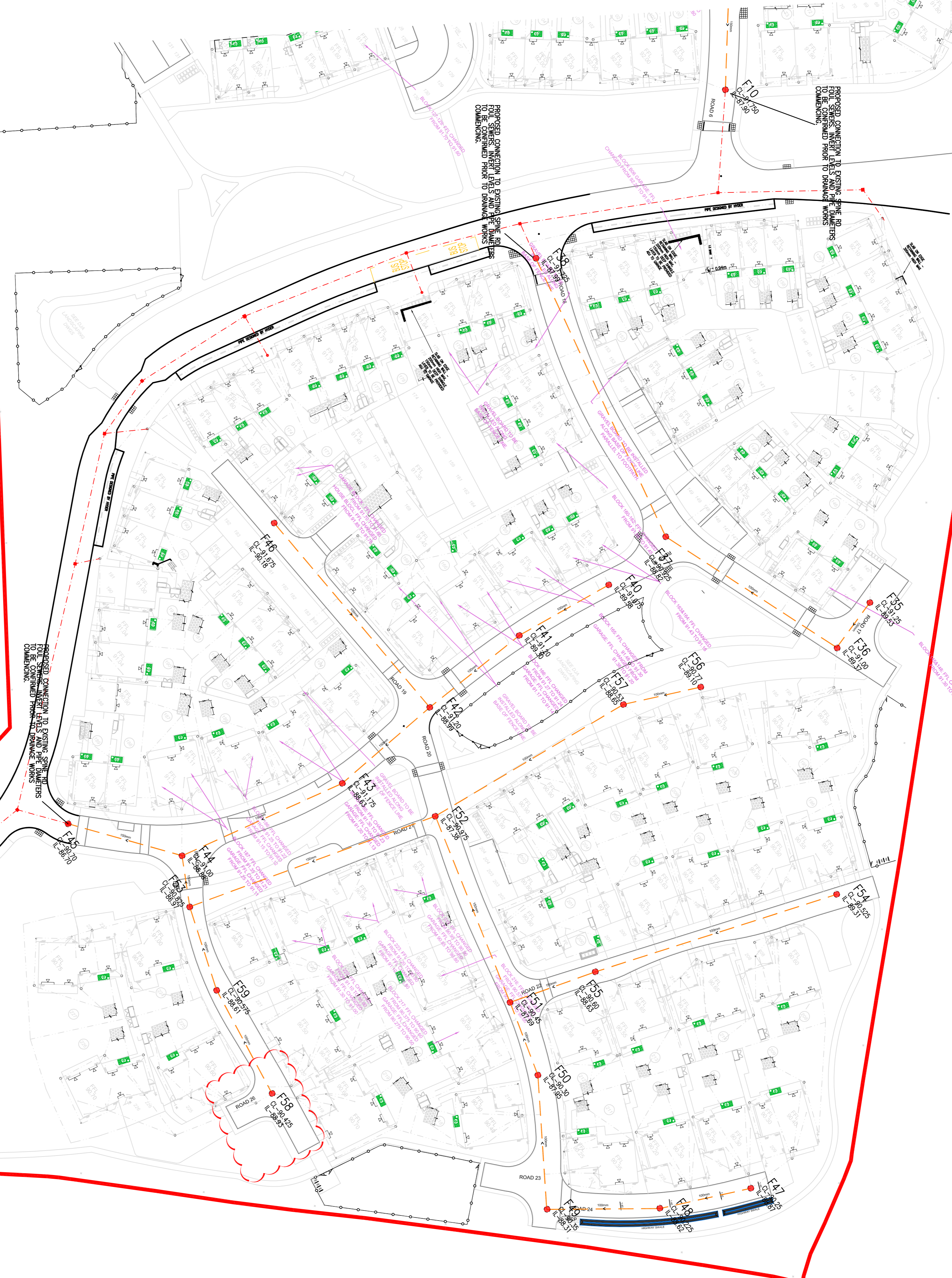


HEALTH & SAFETY:
ALL WORKS TO BE CARRIED OUT BY A CONTRACTOR COMPETENT TO UNDER TAKE THE CONSTRUCTION OF WORKS AS INDICATED ON THIS DRAWING. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE JOB SPECIFIC RISK ASSESSMENT. THE HAZARDS NOTED ARE IN ADDITION TO THE NORMAL HAZARDS AND RISKS FACED BY A COMPETENT CONTRACTOR WHEN DEALING WITH THE TYPE OF WORKS DETAILED ON THIS DRAWING.

NOTES

- 1 THIS DRAWING IS COPYRIGHT.
- 2 THE CONTRACTOR AND HIS SUBCONTRACTOR ARE TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO MAKING SHOP DRAWINGS OR COMMENCING MANUFACTURE.
- 3 DO NOT SCALE THIS DRAWING. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE ENGINEER ANY DISCREPANCIES CONTAINED IN THIS DRAWING PRIOR TO WORK COMMENCEMENT.
- 4 ALL 150mm AND 225mm DIAMETER PIPES TO BE EXTRA STRENGTH WINDRED CLAY PIPES (SEE NOTE 15).
- 5 ALL PIPES OF 300mm DIAMETER OR GREATER TO BE CLASS M CONCRETE.
- 6 ALL PIPE MATERIALS TO BE CONSISTENT BETWEEN MANHOLES.
- 7 ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION, THE SPECIFICATION FOR HIGHWAY WORKS 1998 AND ALL SUBSEQUENT AMENDMENTS AND LOCAL AUTHORITIES DESIGN GUIDE WHERE THERE IS CONFLICT BETWEEN THESE DOCUMENTS THE MATTER SHALL BE REFERRED TO THE ENGINEER.
- 8 FOR CONSTRUCTION DETAILS OF MANHOLES AND SEWERS REFER TO SEWERS FOR ADOPTION AND UNDERPASSES STANDARD DETAILS WHICH CAN BE OBTAINED FROM THE LOCAL OFFICE.
- 9 INVERT LEVELS OF EXISTING SEWERS TO BE CONFIRMED ON SITE BEFORE ANY SEWER WORK UNDER TAKEN, ANY DISCREPANCIES FOUND SHOULD BE NOTIFIED TO ENGINEERS.
- 10 WHERE SEWERS HAVE LESS THAN 1.2m OF COVER UNDER ROADS AND 0.9m COVER ELSEWHERE PIPES ARE TO HAVE A 150mm CONCRETE BED AND SURROUND.
- 11 PLASTIC CHAMBERS AND RINGS SHALL COMPLY WITH BS EN 13396-1 AND BS EN 13396-2 OR HAVE EQUIVALENT INDEPENDENT APPROVAL TO LABEL H1 OF APPROVED DOCUMENT H1 OF THE BUILDING REGULATIONS 2010.
- 12 WHERE HOUSE DRAINAGE IS TAKEN THROUGH BLOCK CARE IS TO BE TAKEN THAT FOUNDATION LEVELS AND DRAINAGE RIMS DO NOT CLASH.
- 13 ALL ADAPTABLE MANHOLES TO HAVE A MINIMUM CLEAR OPENING OF 675mmx75mm AND GRADE D40 UNO.
- 14 ALL BELOW GROUND DRAINAGE TO BE 100mm² UNLESS OTHERWISE INDICATED WITH A MIN. GRADIENT AS FOLLOWS:-
S.W. : 100mm Dia. : 1:100
S.W. : 150mm Dia. : 1:80
F.W. : 150mm Dia. : 1:50
F.W. : 150mm Dia. : 1:150
- 15 ALL ADAPTABLE DRAINAGE MATERIALS SHOULD COMPLY WITH THE REQUIREMENTS OF PART E CIVIL ENGINEERING SPECIFICATION INCLUDED WITH SEWERS FOR ADOPTION 7TH EDITION WHICH IS DRAWN FROM CESM 7TH EDITION BUT IS NOT A FULL REPRODUCTION.



- LEGEND**
- F1 - PROPOSED FOUL WATER MANHOLE
 - S₆ - PROPOSED SURFACE WATER ACCESS
 - R₆ - PROPOSED FOUL WATER ACCESS CHAMBER (250mm DIA)
 - W₆ - PROPOSED SURFACE WATER INSPECTION CHAMBER (450mm DIA)
 - ST - PROPOSED SUI TTRAP CHAMBER (450mm DIA)
 - ST₆ - DENOTES BELOW GROUND SURFACE DRAINAGE
 - ST₆ - DENOTES BELOW GROUND FOUL DRAINAGE
 - ST₆ - DENOTES EXISTING BELOW GROUND FOUL DRAINAGE AND MANHOLE (BY OTHERS)
 - ST₆ - DENOTES PROPOSED BELOW GROUND MAIN FOUL DRAINAGE
 - R₆ - DENOTES VERTICAL ETC
 - R₆ - DENOTES VERTICAL RAIN WATER STACK TO GROUND
 - R₆ - DENOTES VERTICAL FOUL STACK TO GROUND
 - SW - DENOTES SOKAWAY
 - SW - DENOTES RAINWATER HARVESTER

NOTES
1. THIS DRAWING IS COPYRIGHT.
2. DO NOT SCALE THIS DRAWING. THE CONTRACTOR IS TO BRING TO THE NOTICE OF THE ENGINEER ANY DISCREPANCIES CONTAINED IN THIS DRAWING PRIOR TO WORK COMMENCEMENT.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST SUB-CONTRACTORS DRAWINGS AND THE SPECIFICATION.
4. ALL SETTING OUT TO BE IN ACCORDANCE WITH THE ENGINEERS DRAWINGS. CONTRACTOR TO CHECK AND IDENTIFY ANY DISCREPANCIES TO ENGINEER. DIMENSIONS MUST NOT BE SCALED.
5. THIS DRAWING HAS BEEN PRODUCED BASED UPON LAYOUTS COMPILED AND SUPPLIED BY THE ARCHITECT AND HIGHWAYS ENGINEERS IN ELECTRONIC FORMAT. NO RESPONSIBILITY IS TAKEN FOR ANY INACCURACIES AND/OR OMISSIONS IN THE INFORMATION AS SUPPLIED.

TENDER
Drawings should be reviewed and approved by:
RETUBY & STAGG LTD.
CONSULTING CIVIL & STRUCTURAL ENGINEERS
Director: Jason Stagg
Tel: 01932 580 333
Fax: 01932 580 333
Email: jstagg@retubyandstagg.com
www.retubyandstagg.com

Project: Elmsbrook, Bigcester
Phase: 3 & 4
Main Drainage Layout
Sheet: 15 of 2
Scale: 1:500
Drawing No: 14790TA-3250

RISK SCHEDULE	
ITEM	DESCRIPTION OF RISK OF ACTION
▲	Specific health and safety risks associated with these works are highlighted with the caution symbol adjacent to the item of risk. Please refer to risk schedule contained on individual drawings.
▲	Unless highlighted there are no specific health and safety risks associated with these works, as a direct result of our design, apart from the common issues associated with construction that will need to be assessed by a competent contractor prior to the undertaking of any works.
▲	The contractor should be aware of construction near existing water courses which should be carried out in accordance with Environment Agency Pollution Prevention Guidelines.

