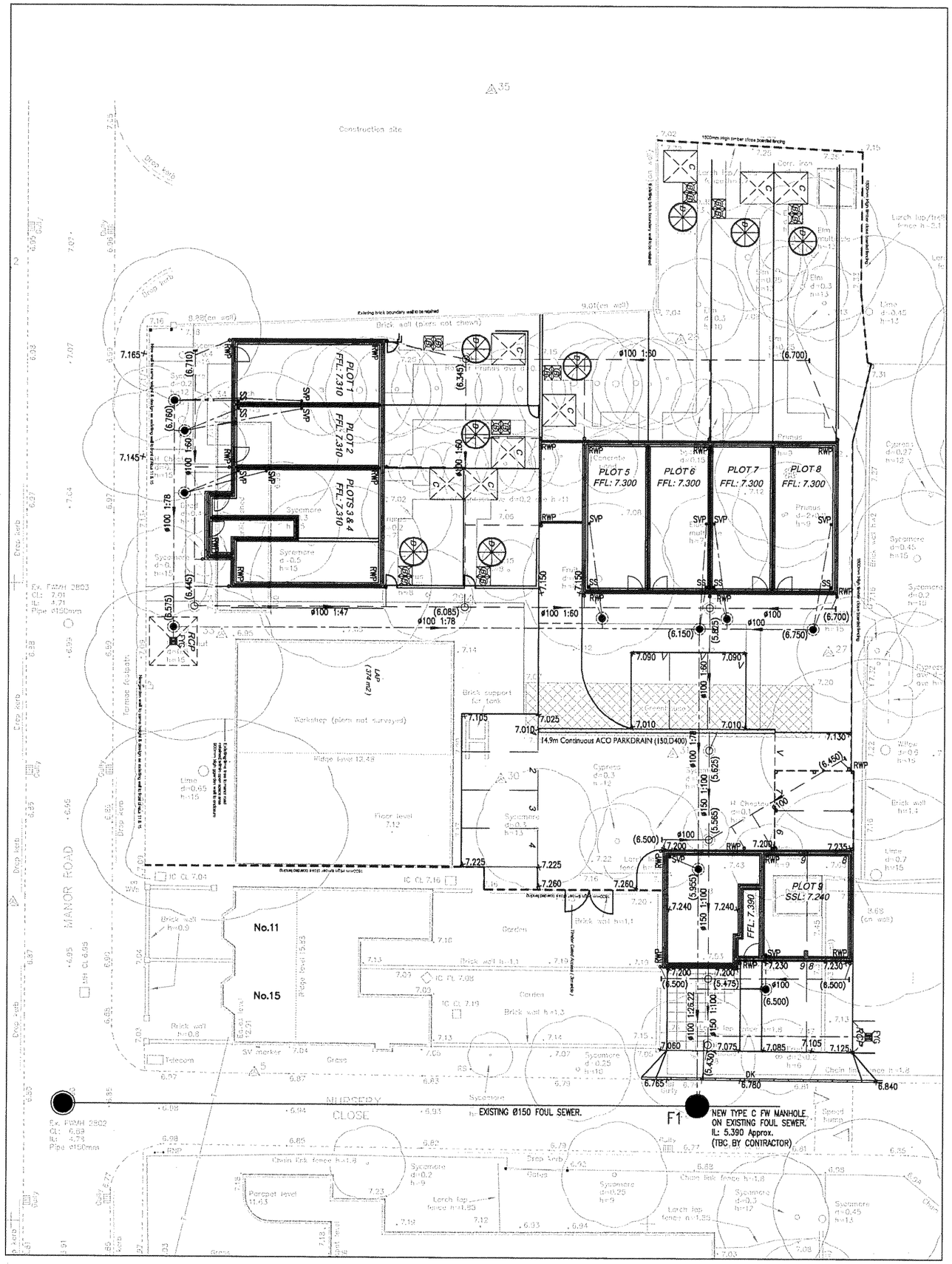


LEGEND:

- EXISTING FOUL OR STORM MANHOLE
- F1 — PROPOSED FOUL MANHOLE ON EXISTING SEWER
- (74.975) — PROPOSED 480Ø FOUL INSPECTION CHAMBER WITH INVERT LEVEL ON PRIVATE SEWER
- (74.975) — PROPOSED 480Ø STORM INSPECTION CHAMBER WITH INVERT LEVEL ON PRIVATE SEWER
- (74.975) — PROPOSED STORM RODDING EYE WITH INVERT LEVEL ON PRIVATE SEWER
- ×17.015 — PROPOSED SPOT LEVEL
- 1:50 — PROPOSED GRADIENT
- PROPOSED THRESHOLD DRAIN (TO ARCHITECT'S SPECIFICATION)

STANDARD NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER OPUS DRAWINGS, AND WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND SPECIFICATION.
2. NO DIMENSIONS ARE TO BE SCALED FROM THIS DRAWING. UNLESS NOTED OTHERWISE ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METRES FROM THE SITE DATUM.
3. ALL DIMENSIONS TO BE CHECKED ON SITE. ALL DETAILS AND DIMENSIONS RELATING TO SUB-CONTRACTORS WORK MUST BE CHECKED AND AGREED BETWEEN THE SUB-CONTRACTOR OR SUPPLIER AND THE GENERAL CONTRACTOR.
4. THE ELECTRONIC INFORMATION FROM THIS DRAWING CAN NOT BE GUARANTEED AS DIMENSIONALLY DRAWN EXACT. FIGURED DIMENSIONS MUST BE USED FOR SETTING OUT AND DETAILING. OPUS LOGOS AND COMPANY INFORMATION MUST BE REMOVED FROM COPIES IF INFORMATION IS RE-USED."
5. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.
6. THE MAIN CONTRACTOR IS RESPONSIBLE FOR ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.
7. ANY INFORMATION GIVEN REGARDING EXISTING UNDERGROUND SERVICES IS GIVEN IN GOOD FAITH AFTER CONSULTATION WITH THE RELEVANT AUTHORITY, HOWEVER ACCURACY IS NOT CERTAIN. THE MAIN CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL INFORMATION ON SITE PRIOR TO WORK COMMENCING AND TAKING DUE CARE AND ATTENTION WHILST UNDERTAKING THE WORKS.
8. THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.

DRAINAGE NOTES:

1. ALL WORKS TO BE CONSTRUCTED IN STRICT ACCORDANCE WITH SPECIFICATION OF THE LOCAL AUTHORITY, BS8301 1985 & BSEN.752-I.
2. ALL PIPE RUNS NEAR BUILDINGS TO COMPLY WITH THE BUILDING REGULATIONS 2002 PART H1. WHERE A PIPE IS WITHIN 1M OF A FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION. WHERE THE TRENCH IS FURTHER THAN 1M FROM THE FOUNDATION, THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE FOUNDATION EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150MM. IN BOTH CASES THE PIPE SHALL BE BEDDED AND SURROUNDED IN 150MM THICK CLASS GEN3 CONCRETE.
3. WHERE PIPES, EXTERNAL TO THE STRUCTURES, HAVE A DEPTH TO SOFFIT FROM GROUND LEVEL OF LESS THAN 450MM THEY SHALL HAVE A CLASS GEN3 CONCRETE ENCASEMENT (150MM THICK).
4. WHERE A PIPE, UNDER A CARRIAGEWAY, HAS A DEPTH OF COVER OF LESS THAN 1.2M THE PIPE SHALL BE LAID IN A CLASS Z BEDDING.
5. IN ANY CIRCUMSTANCES WHERE PIPES ARE BEDDED AND SURROUNDED IN CONCRETE FLEXIBLE JOINTS SHOULD BE PROVIDED. COMPRESSIBLE BOARDS (FIBREBOARD OR POLYSTYRENE) SHALL BE PROVIDED AT A MAXIMUM OF 8M CENTRES (COINCIDING WITH PIPE JOINTS). THE BOARDS SHALL BE PRE-CUT TO PIPE DIAMETER AND TO A HEIGHT AND WIDTH EQUAL TO THE CONCRETE CROSS SECTION. A BOARD THICKNESS OF 18MM FOR PIPES UP TO 450MM NOMINAL DIAMETER AND 36MM FOR PIPES OVER 450MM NOMINAL DIAMETER.
6. ALL PRIVATE BUILDING DRAINAGE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH BSEN.752-I. UNLESS OTHERWISE SPECIFIED BUILDING DRAINAGE SHALL BE 100MM DIAMETER AND SHALL BE LAID AT A MINIMUM GRADIENT OF (<IL/SEC = 1 IN 40?IL/SEC = 1 IN 60) FOR FOUL DRAINS AND 1 IN 60 FOR SURFACE WATER DRAINS. ALL BUILDING DRAINS SHALL BE LAID IN CONJUNCTION WITH 'NON ADOPTIVE BEDDING DETAILS' (CLASS D, N OR B) UNLESS OTHERWISE SPECIFIED.
7. ALL PIPES, BENDS AND JUNCTION MATERIALS SHALL BE VITRIFIED CLAY, EXTRA STRENGTH OR SUPER STRENGTH TO BSEN295:1991, WITH FLEXIBLE JOINTS AND KITEMARK CERTIFIED. ALTERNATIVELY ALL PIPES AND FITTINGS CAN BE UPVC CONFORMING TO BS4660 AND BS5481:1989 AS APPROPRIATE AND SHALL BE LAID IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. IF UPVC PIPES ARE TO BE USED THEN THE MANUFACTURER SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
8. ALL GULLIES TO BE RODDABLE OR CONNECTED TO INSPECTION CHAMBERS.
9. ALL GULLY CONNECTIONS OTHER THAN AT MANHOLES TO BE 'Y' JUNCTIONS.
10. GULLIES COINCIDENT WITH PEDESTRIAN/DRIVE CROSSINGS TO HAVE PEDESTRIAN TYPE GULLY COVERS.
11. ALL ROAD GULLY CONNECTIONS TO BE 150MM DIAMETER.
12. ALL STUB STACKS TO BE FITTED WITH AIR ADMITTANCE VALVES WHERE BRANCH DRAIN EXCEEDS 12M EXCEPT AT THE HEAD OF A RUN TO BE INSTALLED WITH ROOF TILE VENT.
13. ALL CONNECTIONS TO BE SOFFIT TO SOFFIT.
14. TRENCH TEMPORARY FORMWORK IS REQUIRED TO ALL EXCAVATIONS EXCEEDING 1.2M DEPTH TO PROVIDE ADEQUATE SUPPORT AND STABILITY AT ALL TIMES.
15. SEWERS EXCEEDING 1.2M DEPTH TO BE CONSTRUCTED IN SINGLE SECTIONS BETWEEN MANHOLES ONLY. TRENCHES TO BE BACKFILLED PRIOR TO EXCAVATING THE SUCCEEDING SEWER RUN.
16. ALL CONCRETE AND CONCRETE PRODUCTS TO BE IN ACCORDANCE WITH BRE 363 FOR SULPHATES.
17. WHERE SEWER OR DRAINS ARE TO BE ABANDONED THEY SHALL BE REMOVED OR INFILLED BY GROUTING IN ACCORDANCE WITH THE CIVIL ENGINEER SPECIFICATION FOR THE WATER INDUSTRY 6TH EDITION, CLAUSE S.23.

Rev.	Description	Date	Drawn	Reviewed
P2	CROSSOVER ARNGMT AMENDED. RCP AT PL 3 & 4 RELOCATED. FOUL YARD GULLIES ADDED. ISSUED FOR APPROVAL	24.07.2009	DLS	APT
P1	FIRST ISSUE	16.07.2009	DLS	APT

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Scale: 1:200	Drawn: DLS	Reviewed: APT	
Status: FOR APPROVAL		Date: 16.07.2009	
Proj.No: E-G7468	Drg No: 200		Rev: P2