



**LEGEND**

- SITE BOUNDARY
- FOUL WATER DRAIN WITH SIZE, GRADIENT AND DIRECTION. DISTANCE AND DROP GIVEN BETWEEN CENTRES OF MANHOLES.
- FOUL WATER DRAIN WITH SIZE, GRADIENT AND DIRECTION. DISTANCE AND DROP GIVEN BETWEEN CENTRES OF MANHOLES.
- NUISANCE WATER DRAIN WITH SIZE, GRADIENT AND DIRECTION. DISTANCE AND DROP GIVEN BETWEEN CENTRES OF MANHOLES.
- COMBINED WATER DRAIN WITH SIZE, GRADIENT AND DIRECTION. DISTANCE AND DROP GIVEN BETWEEN CENTRES OF MANHOLES. PIPE TO BE VITRIFIED CLAY.
- EXISTING FLEET TRUNK SEWER
- EXISTING TRUNK SEWER LATERAL
- PRECAST CONCRETE RING MANHOLE WITH SIZE, COVER AND INVERT LEVELS. REFER TO DETAIL 9 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0216.
- FORGE NON-RETURN FLOOD VALVE WITHIN PRECAST CONCRETE RING MANHOLE WITH SIZE, COVER AND INVERT LEVELS. REFER TO DETAIL 10 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0216.
- POLYPROPYLENE INSPECTION CHAMBER WITH SIZE, COVER AND INVERT LEVELS. REFER TO DETAIL 6 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.
- YARD GULLY WITH COVER LEVEL. REFER TO DETAIL 7 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.
- NON-RETURN VALVE. REFER TO DETAIL 7 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.
- RAIN WATER DOWN PIPE WITH DIAMETER AND INVERT LEVEL.
- SOIL VENTILATION DOWN PIPE WITH DIAMETER AND INVERT LEVEL.
- STUB-STACK DOWN PIPE WITH DIAMETER AND INVERT LEVEL.
- PIPE CAST IN PILE CAP. REFER TO DETAIL 3 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.
- PIPE CAST THROUGH PILE CAP. REFER TO DETAIL 6 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.
- PIPE ABOVE PILE CAP.
- Y-BRANCH. REFER TO DETAIL 7 IN DRAWING CSP-PPL-ZZ-XX-DR-C-0215.

**GENERAL NOTES**

1. THIS DRAWING IS COPYRIGHT AND SHOULD NOT BE REPRODUCED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF PATRICK PARSONS LTD.
  2. DO NOT SCALE FROM THIS DRAWING.
  3. ALL DIMENSIONS TO BE CHECKED ON SITE AND CO-ORDINATE WITH RELEVANT ARCHITECT'S DRAWINGS. ANY DISCREPANCIES TO BE REPORTED TO ENGINEER PRIOR TO CONSTRUCTION.
  4. ALL DIMENSIONS IN mm UNLESS NOTED OTHERWISE.
  5. ALL LEVELS IN METERS.
  6. STRUCTURAL SIZES HEREON SHALL NOT BE MODIFIED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS & SPECIFICATIONS.
- NOTES**
- 1) THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS.
  - 2) THE COVERS SHALL BE SET TO SAME LEVEL AND FALL AS ADJACENT GROUND.
  - 3) ALL CONSTRUCTION SHALL BE TO CURRENT RELEVANT CODES OF PRACTICE INCLUDING BS EN 752, BS EN 12056, BUILDING REGULATIONS AND MANUFACTURERS RECOMMENDATIONS.
  - 4) ALL BELOW GROUND BRANCH PIPES TO MAIN RUNS SHALL BE 100mm DIAMETER FOUL AND SURFACE WATER LATERAL PIPES SHALL HAVE A MINIMUM FALL OF 1:80 AND 1:100 RESPECTIVELY (UNLESS STATED OTHERWISE), WHERE NECESSARY, AND TO MINIMISE EXCAVATION, LATERAL CONNECTIONS MAY BE LAID TO NOMINAL FALLS INDICATED AND RAMP AT 45 DEGREES TO MANHOLE INVERT OR PIPE JUNCTION.
  - 5) DOWNPIPES, BENDS AND LATERALS SHALL BE CAST WITHIN PILECAPS OR SLABS WHERE INDICATED. ALL PIPEWORK CAST WITHIN CONCRETE AND WHERE COVER IS LESS THAN 600mm BELOW A SLAB, SHALL BE CAST IRON AND SHALL BE INSTALLED AVOIDING REINFORCEMENT.
  - 6) ALL PIPEWORK NOT CAST WITHIN CONCRETE AND GREATER THAN 600mm BELOW SLABS SHALL BE UPVC IN ACCORDANCE WITH ALL RELEVANT MANUFACTURING STANDARDS, WITH A 150mm SHINGLE SURROUND, EXCEPT SEWER CONNECTIONS THAT SHALL BE VITRIFIED CLAY PIPES IN ACCORDANCE WITH BS EN 252.
  - 7) ALL CAST IRON DRAINAGE WITHIN CONCRETE SHALL BE AIR TESTED BEFORE CONCRETE IS POURED TO ENSURE THAT THE SYSTEM IS AIR TIGHT AND ADEQUATELY SEALED.
  - 8) MANHOLE COVERS AND FRAMES SHALL BE IN ACCORDANCE WITH BS EN 124. ALL COVERS WITHIN CAR PARK SHALL BE GRADE C250. ALL ADAPTABLE DRAINAGE COVERS SHALL BE GRADE D400. FOUL WATER MANHOLE COVERS SHALL HAVE A DOUBLE SEAL OR PUSH FIT SEAL PLATE TO PREVENT EGRESS OF ODOUR. REFER TO MANHOLE SCHEDULE FOR STRENGTH CLASS, CLEAR OPENING SIZE AND SPECIFICATIONS. MANHOLE COVERS IN PAVED LANDSCAPED AREAS SHALL HAVE RECESSED COVERS.
  - 9) ALL GULLIES SHALL BE TRAPPED AND ROADABLE (REFER TO DETAILS).
  - 10) THE CONTRACTOR SHALL CHECK AND CONFIRM TO THE ENGINEER ASSUMED SIZES, DEPTHS, LEVELS AND LOCATIONS OF EXISTING SEWERS AND MANHOLES PRIOR TO CONSTRUCTION COMMENCING.

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**MURPHY**  
WORLD-CLASS INFRASTRUCTURE

Project  
**140 - 146 CAMDEN STREET**

Drawing  
**BELOW GROUND DRAINAGE LAYOUT SHEET 1 OF 1**

Drawn JA	Date 30/06/20
Patrick Parsons Project No. L19065A	Scale @ A1 1:100m

Status Description <b>REVIEW &amp; COMMENT</b>	Status <b>S3</b>
Drawing No. (project originator-volume-level-type-number) CSP-PPL-ZZ-XX-DR-C-0210	Revision <b>P01</b>

**CONSTRUCTION WORKS AROUND FLEET TRUNK SEWER**

1. EXTREME CAUTION MUST BE USED WHEN CARRYING OUT ANY DEMOLITION OR CONSTRUCTION WORKS NEAR THE FLEET TRUNK SEWER TO ENSURE THE SEWER IS NOT DAMAGED.
2. A TWOSA PERMIT MUST BE OBTAINED BY THAMES WATER PRIOR TO CONSTRUCTION WORKS COMMENCING.
3. ONCE CONSTRUCTION WORKS HAVE CONCLUDED, A POST-CONSTRUCTION CCTV SURVEY IS REQUIRED TO BE SUBMITTED TO THAMES WATER TO CONFIRM THAT THE SEWER HAS NOT BEEN DAMAGED DURING THE COURSE OF THE CONSTRUCTION WORKS.
4. IF ANY POTENTIAL DAMAGE TO THE SEWER IS IDENTIFIED, THAMES WATER MUST BE CONTACTED IMMEDIATELY.
5. IT MUST BE ENSURED THAT EXCESSIVE LOADINGS ARE NOT EXERTED ON TOP OF THE TRUNK SEWER. REFER TO THE STRUCTURAL ENGINEERS GUIDANCE FOR FURTHER INFORMATION ON ALLOWABLE LOADINGS.