

FOUL WATER MANHOLE SCHEDULE

| REF. | COVER LEVEL | INVERT LEVEL | REMARKS |
|------|-------------|----------------------|------------------------------|
| F1.0 | +161.900 | +160.475 | |
| F1.1 | +160.775 | +159.677 +158.418 | IN FROM F1.0 IN FROM F2.0 |
| F1.2 | +158.640 | +157.027 | |
| F1.3 | +158.140 | +156.737 +155.782 | IN FROM F1.2 OUT |
| F1.4 | +156.750 | +155.025 +154.056 | IN FROM F1.3 OUT |
| F1.5 | +154.800 | +153.430 | |
| F2.0 | +161.085 | +160.565 | |
| C1.0 | +154.300 | +159.746 | NEW COMBINED MH |

COVER LEVELS SHOWN ARE INDICATIVE ONLY AND ARE TO BE SET TO MATCH ADJACENT FINISHED GROUND LEVEL

SOAKAWAY WITH MIN. VOLUME OF 54m³ (10.0m x 5.0m x 1.2m) AQUACELL (OR SIMILAR) CRATES ON 300mm TYPE 4 20mm CLEAN ANGULAR STONE LAYER, WRAPPED IN NON-WOVEN PERMEABLE GEOTEXTILE.

SURFACE WATER MANHOLE SCHEDULE

| REF. | COVER LEVEL | INVERT LEVEL | REMARKS |
|------|-------------|----------------------|---|
| S1.0 | +161.900 | +160.565 | |
| S1.1 | +160.000 | +158.875 +158.343 | IN FROM S1.0 OUT |
| S1.2 | +158.640 | +157.515 +156.278 | IN FROM S1.1 OUT |
| S1.3 | +158.140 | +157.015 +156.367 | IN FROM S1.2 OUT |
| S1.4 | +156.750 | +155.625 +155.060 | IN FROM S1.3 OUT |
| S1.5 | +155.800 | +154.675 +153.625 | IN FROM S1.5 IN FROM S2.0 (SILT TRAP MH) |
| S2.0 | +154.800 | +160.565 | |
| S3.0 | +160.300 | +159.190 | |
| S3.1 | +160.800 | +159.027 | SILT TRAP MH |
| S4.0 | +161.085 | +159.746 | |

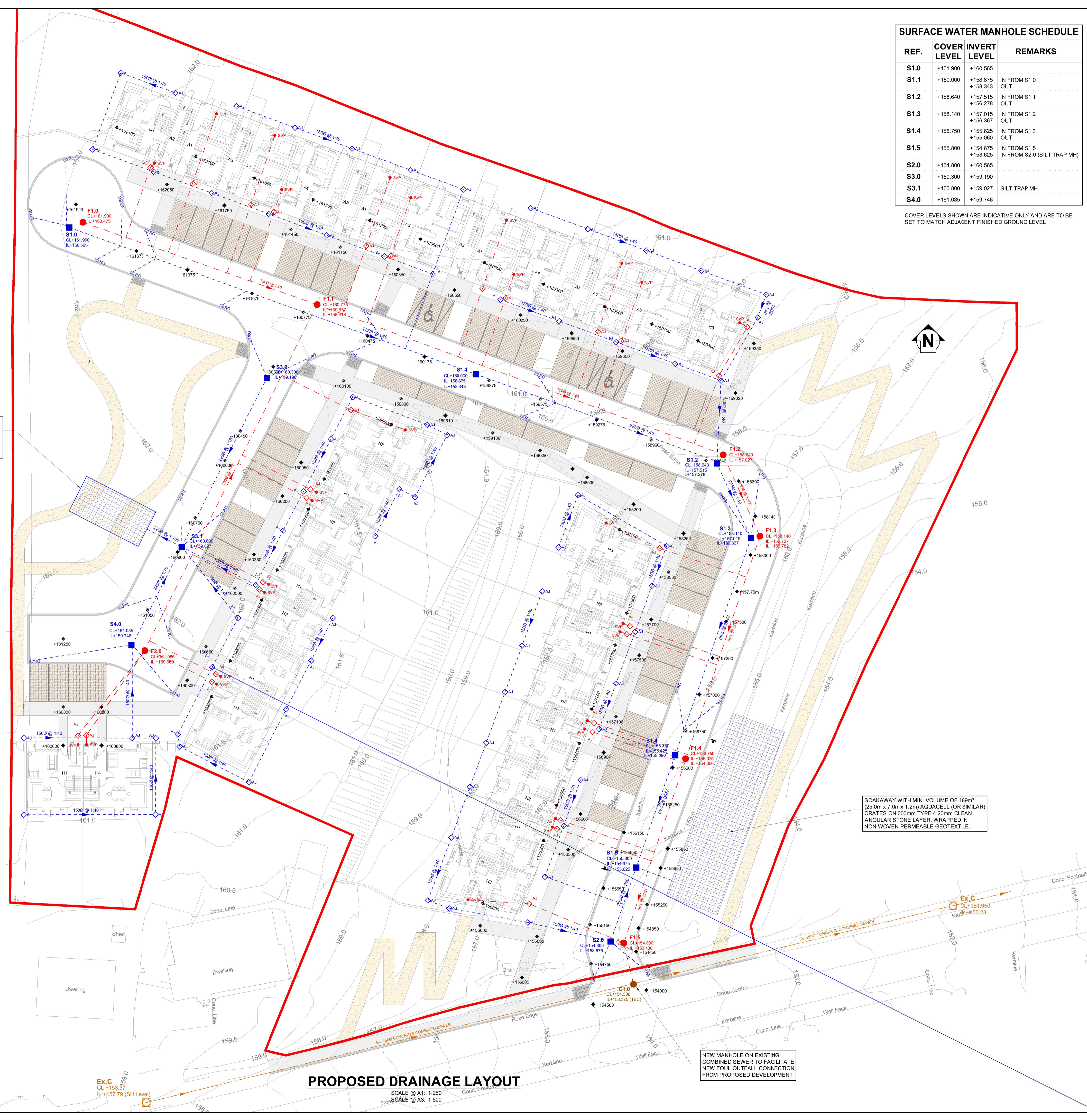
COVER LEVELS SHOWN ARE INDICATIVE ONLY AND ARE TO BE SET TO MATCH ADJACENT FINISHED GROUND LEVEL

NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL ENGINEERS & ARCHITECTS DRAWINGS. FIGURED DIMENSIONS ONLY (NOT SCALING) TO BE USED. WHERE A CONFLICT OF INFORMATION EXISTS OR IF IN ANY DOUBT - 'ASK'.
- CONSULTANTS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.

CIVIL LEGEND

| | | |
|-----------------------------|------------------|---------|
| EX. FOUL MANHOLE | Ex.F | ○ |
| EX. FOUL PIPE | PIPE DESCRIPTION | --- |
| NEW FOUL MANHOLE | F | ● |
| NEW FOUL PIPE | PIPE DESCRIPTION | --- |
| EX. SURFACE WATER MANHOLE | Ex.S | □ |
| EX. SURFACE WATER PIPE | PIPE DESCRIPTION | --- |
| NEW SURFACE WATER MANHOLE | S | ■ |
| NEW SURFACE WATER PIPE | PIPE DESCRIPTION | --- |
| EX. COMBINED MANHOLE | Ex.C | □ |
| EX. COMBINED PIPE | PIPE DESCRIPTION | --- |
| NEW COMBINED MANHOLE | C | ■ |
| NEW COMBINED PIPE | PIPE DESCRIPTION | --- |
| NEW RISING MAIN | PIPE DESCRIPTION | --- |
| PIPE CROSSOVER | PIPE DESCRIPTION | --- |
| EX. ROOF RAIN WATER MANHOLE | Ex.R | ○ |
| EX. ROOF RAIN WATER PIPE | PIPE DESCRIPTION | --- |
| NEW ROOF RAIN WATER MANHOLE | R | ■ |
| NEW ROOF RAIN WATER PIPE | PIPE DESCRIPTION | --- |
| DECOMMISSIONED LINE | PIPE DESCRIPTION | X X X X |
| FOUL ACCESS JUNCTION | AJ | ◇ |
| SURFACE ACCESS JUNCTION | AJ | ◇ |
| RAINWATER PIPE | RWP | ○ |
| SOIL VENT PIPE | SVP | ● |
| ROAD GULLEY | RG | ■ |
| BACK INLET GULLEY TRAP | BIGT | ◇ |
| FOUL RODDING EYE | RE | ◇ |
| SURFACE RODDING EYE | RE | ◇ |
| GULLEY TRAP | GT | ■ |



Ex.C
CL+158.37
IL+157.79 (Silt Level)

SOAKAWAY WITH MIN. VOLUME OF 189m³ (25.0m x 7.0m x 1.2m) AQUACELL (OR SIMILAR) CRATES ON 300mm TYPE 4 20mm CLEAN ANGULAR STONE LAYER, WRAPPED IN NON-WOVEN PERMEABLE GEOTEXTILE.

NEW MANHOLE ON EXISTING COMBINED SEWER TO FACILITATE NEW FOUL OUTFALL CONNECTION FROM PROPOSED DEVELOPMENT

PROPOSED DRAINAGE LAYOUT

SCALE @ A1: 1:250
SCALE @ A3: 1:500

| ISSUE | DATE | DESCRIPTION | DRN | P.E. |
|-------|----------|--------------------|-----|---------|
| P3 | 20.07.17 | ISSUED FOR COMMENT | SB | P.D. BM |
| P2 | 16.09.16 | ISSUED FOR COMMENT | SB | P.D. BM |
| P1 | 31.08.16 | ISSUED FOR COMMENT | SB | P.D. BM |

| ISSUE STATUS | DESCRIPTION | FOR CONSTRUCTION |
|-------------------------------------|-------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | PRELIMINARY (P1, P2, P3 etc.) | <input type="checkbox"/> |
| <input type="checkbox"/> | TENDER (T1, T2, T3 etc.) | <input type="checkbox"/> |
| <input type="checkbox"/> | PLANNING (PL1, PL2, PL3 etc.) | <input type="checkbox"/> |
| <input type="checkbox"/> | FOR CONSTRUCTION (0, 1, etc.) | <input type="checkbox"/> |

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The Institution of Structural Engineers
The Institution of Consulting Engineers Ireland
FIDIC
International Federation of Consulting Engineers

CLIENT
KILKENNY COUNTY COUNCIL

PROJECT TITLE
CASTLECOMER HOUSING SCHEME

DRAWING TITLE
PROPOSED FOUL & SURFACE WATER DRAINAGE LAYOUT

| PROJECT No. | DRAWING No. | ISSUE | STATUS |
|-------------|-------------|-------|-------------|
| 16134 | C1000 | P3 | PRELIMINARY |