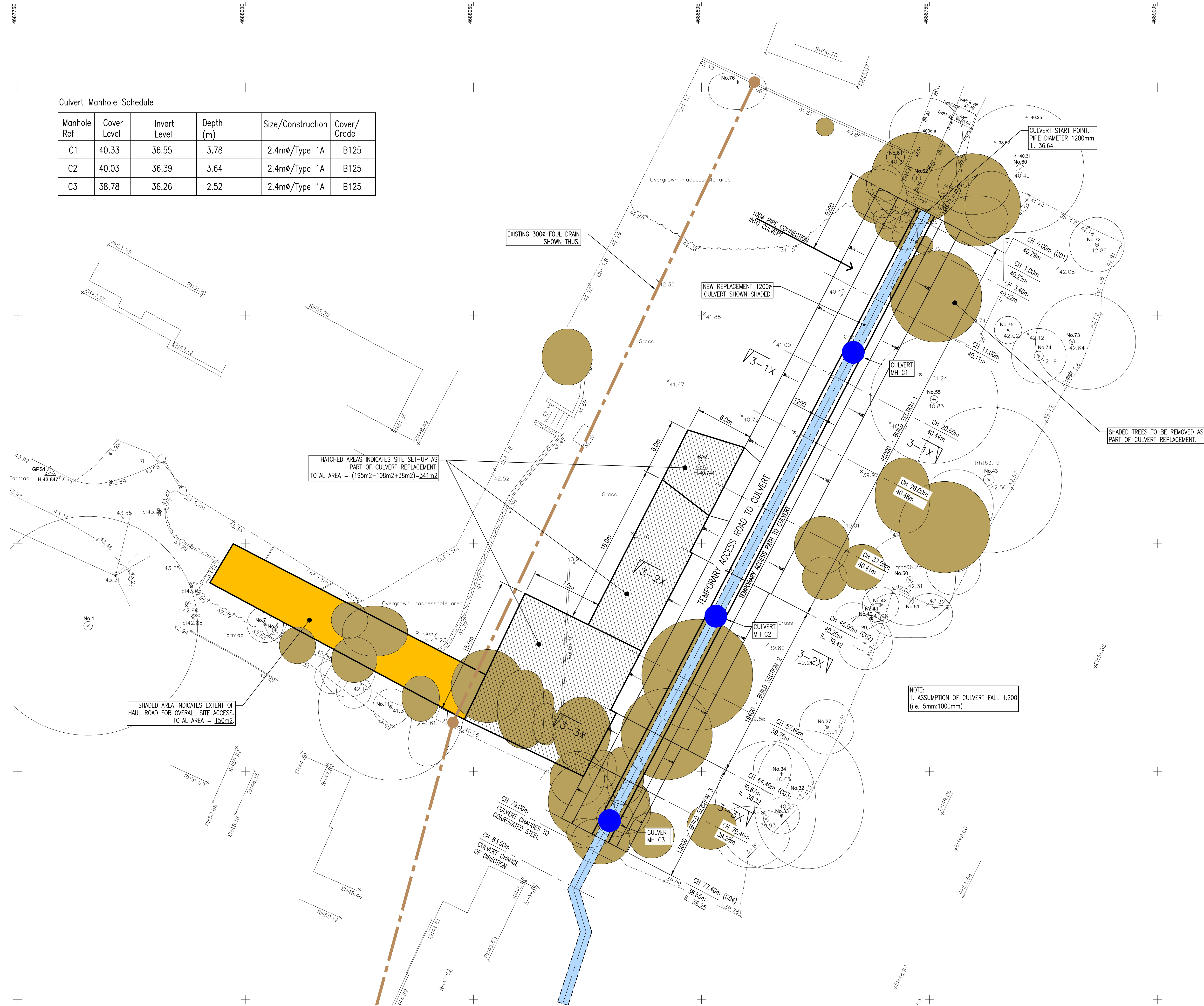


Culvert Manhole Schedule

| Manhole Ref | Cover Level | Invert Level | Depth (m) | Size/Construction | Cover/Grade |
|-------------|-------------|--------------|-----------|-------------------|-------------|
| C1          | 40.33       | 36.55        | 3.78      | 2.4mØ/Type 1A     | B125        |
| C2          | 40.03       | 36.39        | 3.64      | 2.4mØ/Type 1A     | B125        |
| C3          | 38.78       | 36.26        | 2.52      | 2.4mØ/Type 1A     | B125        |



NOTES:

1. THIS DRAWING IS COPYRIGHT AND SHOULD NOT BE REPRODUCED WITHOUT APPROVAL.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF BOTH PARTIES IMMEDIATELY.
3. ANY DIMENSIONS/LEVELS INDICATED 'ref.' REFER TO ASSUMED/EXISTING DIMENSIONS WHICH ARE TO BE SITE CHECKED PRIOR TO THE COMMENCEMENT OF ANY WORK.

DRAINAGE NOTES:

- D1. INVERT LEVELS AND POSITIONS OF EXISTING DRAINS /CHAMBERS /SEWERS WHERE NEW CONNECTIONS ARE TO BE MADE MUST BE CHECKED AND CONFIRMED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- D2. ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY, ENVIRONMENT AGENCY AND IN CONJUNCTION WITH ALL RELEVANT BRITISH STANDARDS, CODES OF PRACTICE AS APPROPRIATE.
- D3. ALL DRAINAGE SHALL COMPLY WITH THE TYPICAL DETAILS AND THE REQUIREMENTS OF BS EN 752.
- D4. REFER TO MANHOLE SCHEDULE OR DRAWINGS FOR MANHOLE TYPES, SIZE, DEPTHS AND SPECIFIC REQUIREMENTS.
- D5. FOR SETTING OUT DIMENSIONS OF SVP'S, RWP'S ETC. REFER TO ARCHITECT'S DRAWINGS.
- D6. ALL PIPES UP TO 300mm DIAMETER TO BE VITRIFIED CLAY, EXTRA STRENGTH TO BSEN 295 OR BS 65 WITH PLAIN ENDED SLEEVED OR SOCKETED FLEXIBLE JOINTS. ALL PIPES OF 375mm DIAMETER AND OVER, TO BE SULPHATE RESISTING CONCRETE CLASS M WITH SOCKETED FLEXIBLE JOINTS.
- D7. INVERTS OF INCOMING BRANCHES SHALL BE AT SPRINGING LEVEL TO THE MAIN PIPE AND FORMED GENERALLY USING CHANNEL PIPES AND SLIPPER BENDS, CUT TO SUIT.
- D8. ALL GULLY AND DRAINAGE CHANNEL CONNECTIONS SHALL BE 150mm DIAMETER AND TRAPPED UNLESS OTHERWISE SPECIFIED.
- D9. ALL FOUL AND RWP CONNECTIONS SHALL BE 100MM DIAMETER UNLESS OTHERWISE SPECIFIED.
- D10. ALL PRE-CAST CONCRETE UNITS IN THE DRAINAGE WORKS SHALL BE MANUFACTURED USING SULPHATE RESISTING CEMENT.
- D11. MANHOLE COVERS AND FRAMES SHALL BE TO BSEN 124 AND KITEMARKED. COVER AND FRAMES SHALL BE HEAVY DUTY D400 IN CARRIAGEWAYS AND VEHICULAR AREAS AND MEDIUM DUTY B125 IN FOOTWAYS AND SOFT LANDSCAPING. IN BLOCK PAVED AREAS COVERS SHALL BE RECESSED FABRICATED STEEL.
- D12. REFER TO STRUCTURAL DRAWINGS FOR DETAILS OF MANHOLES AND DRAINS CONSTRUCTED WITHIN FLOOR SLABS AND FOUNDATIONS.
- D13. COVER LEVELS ARE TO BE ADJUSTED LOCALLY TO SUIT FINISHED GROUND LEVELS.
- D14. HEALTH & SAFETY: THE WORKS SHALL BE CARRIED OUT BY SPECIALIST COMPETENT AND EXPERIENCED CONTRACTORS WHO ARE MEMBERS OF A RECOGNISED NATIONAL ORGANISATION. OPERATIVES SHALL HAVE RECEIVED FULL AND APPROPRIATE TRAINING FOR THE OPERATION THEY ARE TO UNDERTAKE. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL PERTINENT HEALTH AND SAFETY REGULATIONS.
- D15. PIPES TO BE LAID TO A MINIMUM GRADIENT OF 1:150 UNLESS NOTED OTHERWISE.

ALL WORKS IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION.

ALL EXISTING LATERAL PIPE CONNECTIONS TO EXISTING CULVERT TO BE REINSTATED WITH NEW PROPOSED CULVERT.

PRELIMINARY

|                            |             |                     |                     |                      |
|----------------------------|-------------|---------------------|---------------------|----------------------|
| P3                         | PRELIMINARY | HDL/01.18           | HDL/01.18           | HDL/01.18            |
| P2                         | PRELIMINARY | HDL/06.17           | HDL/06.17           | HDL/06.17            |
| P1                         | PRELIMINARY | HDL/06.17           | HDL/06.17           | HDL/06.17            |
| Version                    | Amendment   | Revised by and date | Checked by and date | Approved by and date |
| ORIGINAL DRAWING SIZE - A1 |             | X-REFS:             |                     |                      |
| CAD REF.                   |             |                     |                     |                      |

|                                                                                                                                                             |               |                                  |           |                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------|-----------|------------------|
| <br>HAMILL DAVIES LIMITED<br>Consulting Civil and Structural Engineers | Client        | PAUL HARVEY                      |           |                  |
|                                                                                                                                                             | Project       | 15 BILLETT AVENUE, WATERLOOVILLE |           |                  |
|                                                                                                                                                             | Drawing Title | CULVERT WORKS PROPOSED LAYOUT    |           |                  |
|                                                                                                                                                             | Purpose       | PRELIMINARY                      | Drawn HDL | Scale 1:200 @ A1 |
| Issuing Office SWANMORE                                                                                                                                     |               | Designed                         | Drawn     | Version          |
| Telephone 01489 893 596                                                                                                                                     |               | 16-2654-2101                     | P3        |                  |