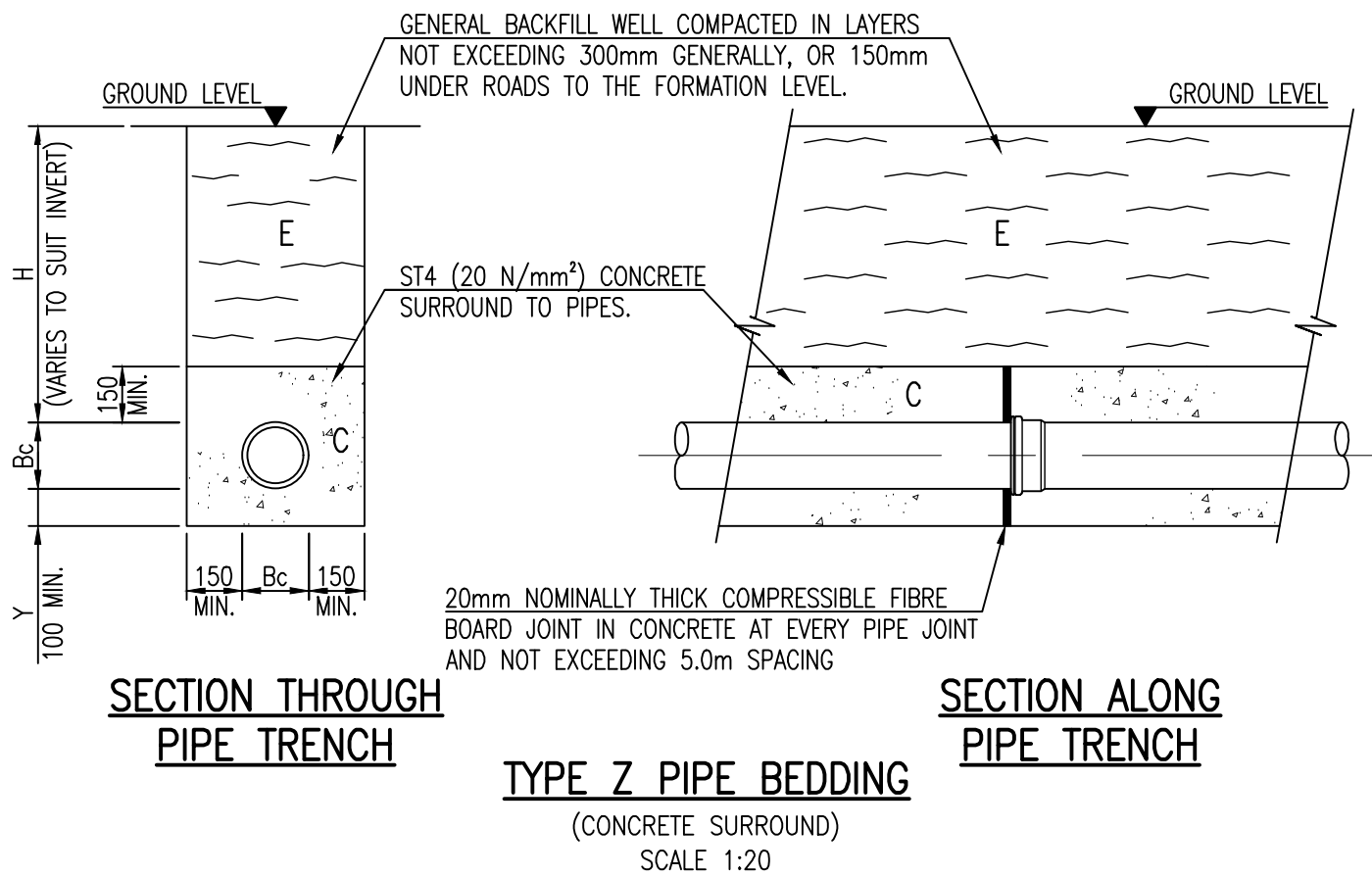
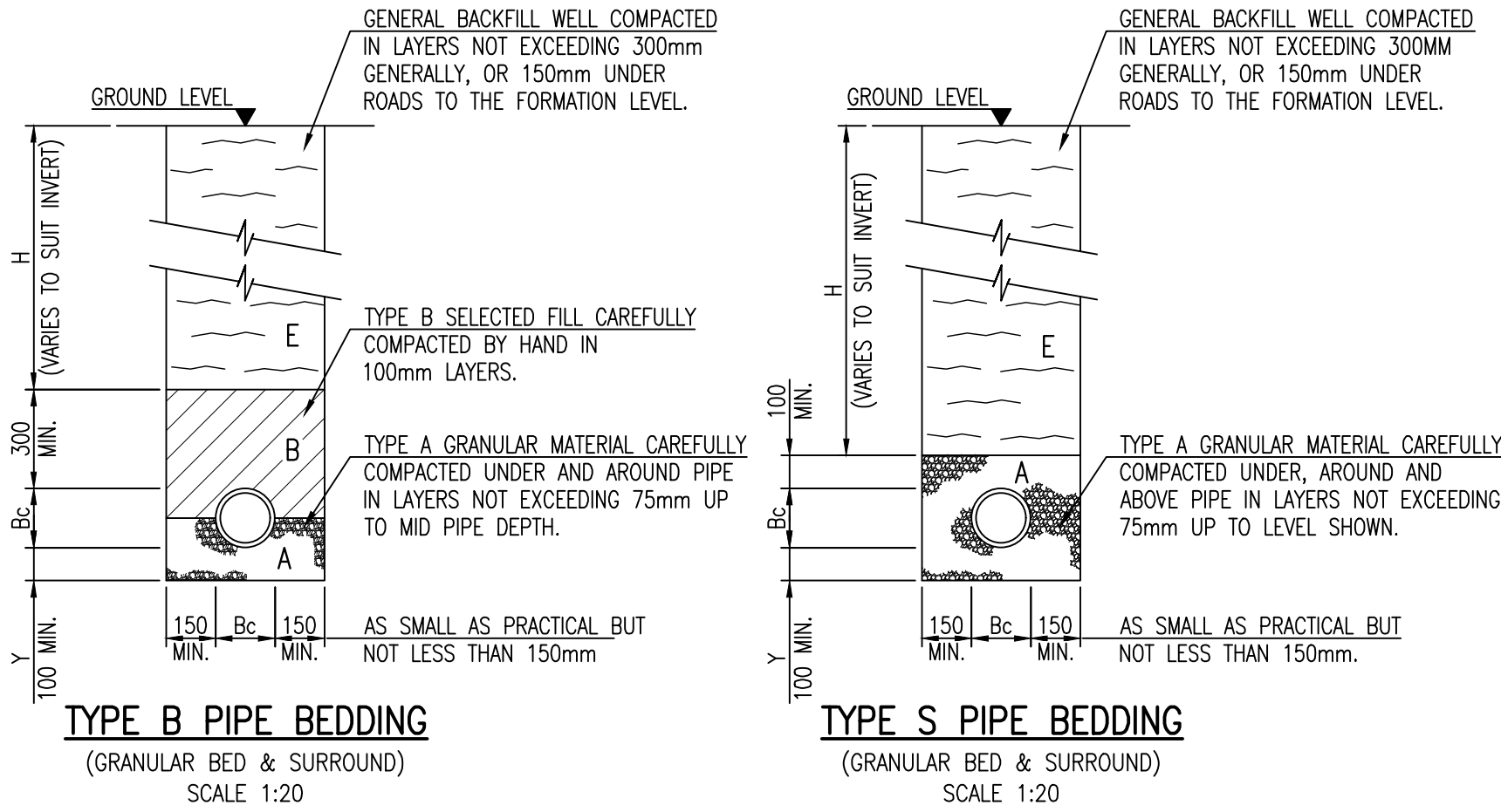


| PERMITTED PIPE/BEDDING TYPES |                                                                                                                                  |                                                                                                                                     |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| PIPE BEDDING                 | DEPTH OF COVER WITHIN LIGHTLY TRAFFICKED AREAS                                                                                   |                                                                                                                                     |
|                              | 1.2m–3.5m                                                                                                                        | 0.9m–3.5m                                                                                                                           |
| PIPE BEDDING                 | TYPE B                                                                                                                           | TYPE S                                                                                                                              |
| PIPE TYPE                    | VITRIFIED CLAY TO BS:65, WITH FLEXIBLE JOINTS SUPER STRENGTH CLASS FOR 225 AND 300mmØ. EXTRA STRENGTH CLASS FOR ALL OTHER SIZES. | THERMOPLASTIC: UPVC TO BS EN 1404+ PP TO BS EN 1852+ STRUCTURE WALL PLASTIC PIPE TO BS EN 13476 ALL WITH NOMINAL RING STIFFNESS SN4 |
| COVER DEPTH                  | <1.2m                                                                                                                            | <0.9m                                                                                                                               |
| PIPE BEDDING                 | TYPE Z                                                                                                                           | TYPE Z                                                                                                                              |
| PIPE TYPE                    | VITRIFIED CLAY TO BS:65, WITH FLEXIBLE JOINTS SUPER STRENGTH CLASS FOR 225 AND 300mmØ. EXTRA STRENGTH CLASS FOR ALL OTHER SIZES. | THERMOPLASTIC: UPVC TO BS EN 1404+ PP TO BS EN 1852+ STRUCTURE WALL PLASTIC PIPE TO BS EN 13476 ALL WITH NOMINAL RING STIFFNESS SN4 |

TABLE A  
GRANULAR BEDDING AND SIDEFILL MATERIAL FOR VITRIFIED CLAY PIPES

| PIPE SIZE DN (mm) | MAX. PARTICLE SIZE (mm) | NOMINAL SINGLE SIZE (mm) | GRADED SIZE (mm) | MAXIMUM CFE VALUE FOR AS-DUG |
|-------------------|-------------------------|--------------------------|------------------|------------------------------|
| 110               | 10                      | 10                       | NOT PERMITTED    | 0.15                         |
| OVER 110 to 160   | 15                      | 10 or 14                 | 14 to 5          | 0.15                         |
| OVER 160 to 300   | 20                      | 10,14 or 20              | 14 or 20 to 5    | 0.15                         |
| OVER 300 to 600   | 20                      | 14 or 20                 | 14 or 20 to 5    | 0.15                         |



PLEASE REFER TO ARCHITECTS DRAWINGS FOR  
CONFIRMATION OF ALL WALL/SETTING OUT  
DIMENSIONS PRIOR TO COMMENCING OF WORKS

THIS DRAWING MUST BE READ IN CONJUNCTION  
WITH ALL RELEVANT DRAWINGS & STRUCTURAL  
CALCULATIONS

### NOTES ON BEDDING DETAILS

GENERALLY VITRIFIED CLAY DRAINAGE PIPEWORK SHOULD BE LAID IN ACCORDANCE WITH BS 65 AND BS 8301.

A-TYPE A GRANULAR MATERIAL SHALL COMPLY WITH WIS NO. 4-08-01 AND SHALL BE:-

(A) IMPORTED SINGLE SIZE OR GRADED AGGREGATE IN ACCORDANCE WITH BS 882 AS SHOWN IN THE TABLE A.

(B) SELECTED AS-DUG GRANULAR BEDDING AND SIDEFILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER, COMBUSTABLE MATERIALS, FROZEN SOIL, CLAY LUMPS LARGER THAN 75mm AND STONES LARGER THAN THE MAXIMUM PERMITTED PARTICLE SIZE SPECIFIED IN TABLE A DEPENDING ON PIPE SIZE. THE SELECTED MATERIAL SHALL BE EVALUATED USING THE COMPACTION FRACTION TEST DETAILED IN APPENDIX A OF WIS NO. 4-08-01.

MATERIAL EXCAVATED FROM TRENCHES DUG THROUGH LAND CONTAMINATED WITH DOMESTIC, BUILDING OR INDUSTRIAL WASTE SHOULD NOT BE USED.

B-TYPE B SELECTED FILL SHALL BE:  
UNIFORM READILY COMPACTABLE MATERIAL WHICH IS FREE FROM TREE ROOTS, VEGETABLE MATTER, BUILDING RUBBISH, FROZEN SOIL, CLAY LUMPS AND MATERIAL RETAINED ON A 40mm SIEVE.

C-CONCRETE PROTECTION TO PIPE. FOR CONCRETE GRADE REFER TO NOTE 4 AND CONCRETE MIX SPECIFICATION

E-GENERAL BACKFILL SHALL BE:  
SUITABLE EXCAVATED MATERIAL FROM THE TRENCH (OR IMPORTED) EXCLUDING BOULDERS, LUMPS OF CONCRETE, TIMBER AND VEGETABLE MATTER. DO NOT USE HEAVY COMPACTORS BEFORE THERE IS 600MM COVER OF MATERIAL OVER THE PIPES.

Bc-EXTERNAL DIAMETER OF PIPE.

H-WHEN 'H' (DEPTH OF COVER) IS LESS THAN 0.9m BELOW THE FINISHED SURFACE OF A ROAD OR LESS THAN 0.3m ELSEWHERE USE BEDDING CLASS A OR Z AS APPROPRIATE FOR THE MATERIAL BEING USED, OR; ELSEWHERE USE BEDDING CLASS B OR P AS APPROPRIATE FOR THE PIPE BEING USED. PROVIDE TEMPORARY PROTECTION DURING CONSTRUCTION AGAINST MECHANICAL DAMAGE AND FROST.

Y-DEPTH OF GRANULAR BEDDING Y SHALL BE NOT LESS THAN 100mm BENEATH PIPE BARRELS AND SHALL BE GREATER IN SOFT OR WET CONDITIONS OR WHERE THE TRENCH BOTTOM IS IRREGULAR.



|      |                                |      |      |          |
|------|--------------------------------|------|------|----------|
|      |                                |      |      |          |
| -    | FIRST ISSUE - FOR INFORMATION. | MP   | APW  | 31.10.24 |
| REV. | DESCRIPTION                    | DRN. | APP. | DATE     |

**SHIELDS WILSON**  
e: info@shieldswilson.co.uk t: 01775 729252  
STRUCTURAL AND CIVIL ENGINEERING

STATUS  
FOR INFORMATION

CLIENT  
STAGECOACH SERVICES LTD. / VSA

PROJECT  
PROPOSED SITE RE-DEVELOPMENTS AT  
STAGECOACH - SPALDING DEPOT  
WARDENTREE PARK, PINCHBECK, PE11 3UG

TITLE  
PROPOSED DRAINAGE DETAILS  
SHEET 2 OF 2

| DATE  | OCT. '24 | SCALE 1:20 | DRAWING NO.  | REV. |
|-------|----------|------------|--------------|------|
| DRAWN | MP       |            | SW24-219-141 | -    |