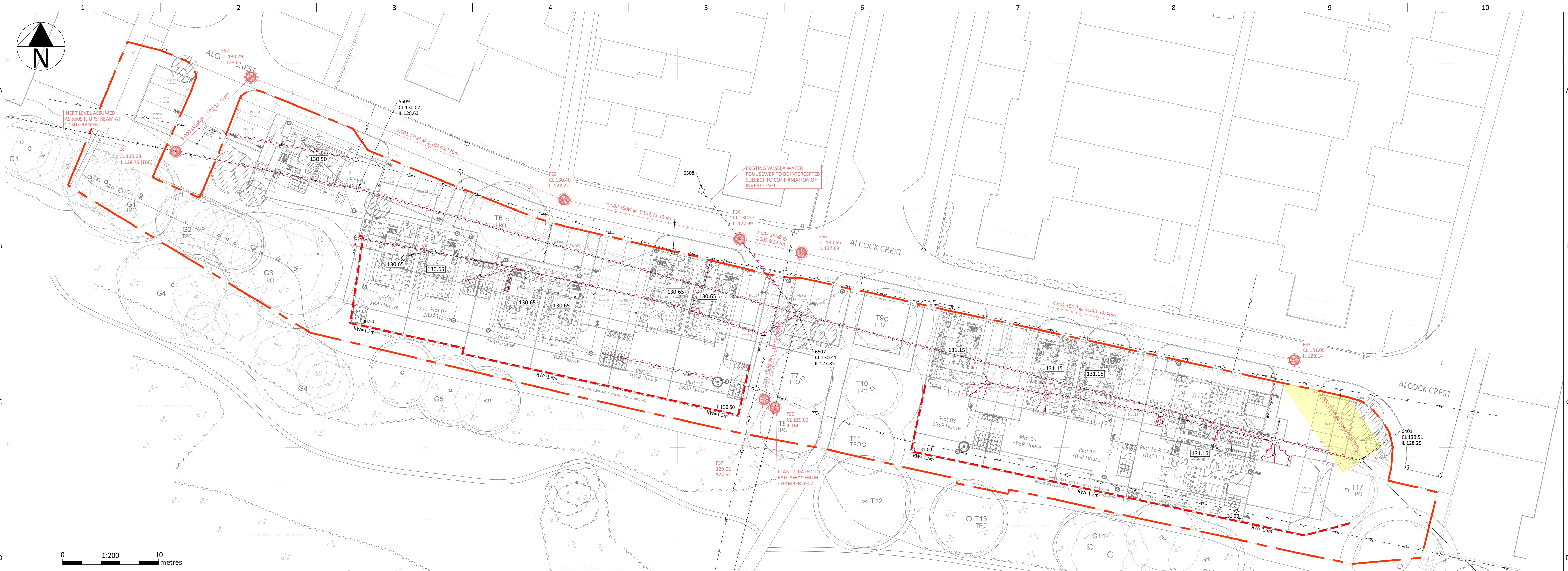




PIPE BEDDING DETAILS

NOTES

- ALL WORKS TO BE IN ACCORDANCE WITH THE RELEVANT PROVISIONS OF THE SPECIFICATION DOCUMENT SEWERS FOR ADOPTION 7TH EDITION.
- PIPE BEDDING CLASSIFICATIONS ARE DERIVED FROM T.R.R.L. DOCUMENT 'SIMPLIFIED TABLE OF EXTERNAL LOADS ON BURIED PIPELINES'
- TOP SOIL THICKNESS TO BE AS EXISTING, BUT NOT LESS THAN 150

KEY

- SUITABLE BACKFILL MATERIAL
- SELECTED SOFFIT AND SURROUND: CLASS B LOWER TRENCH FILL TABLE 6/1 SHW
- SINGLE SIZE GRANULAR MATERIAL TABLE 5/7 SHW TO BS 1342 COARSE AGGREGATE CLASS 4.3.2
- GEN3 CONCRETE BED AND SURROUND

DN = NOMINAL INTERNAL DIAMETER OF PIPE
BC = OUTSIDE DIAMETER OF PIPE

CLASS	MACHINE DUG UNDERSOIL	ROCK OR MIXED SOILS
S	NOTE (i)	NOTE (ii)
Z	NOTE (iii)	NOTE (iv)

(i) 1/4 BC/L WITH MIN 100 UNDER BARRELS (50 FOR SLEEVE JOINTED) AND MIN 50 UNDER SOCKETS, WHICHEVER IS THE GREATER, WITH MAX OF 400.

(ii) 1/4 BC/L WITH MIN 200 UNDER BARRELS (150 FOR SLEEVE JOINTED) AND MIN 150 UNDER SOCKETS, WHICHEVER IS THE GREATER, WITH A MAX OF 400.

(iii) 1/4 BC/L WITH MIN 200 UNDER BARRELS (150 FOR SLEEVE JOINTED) AND MIN 150 UNDER SOCKETS, WHICHEVER IS THE GREATER, WITH A MAX OF 400.

MANHOLE DETAIL - TYPE C

(DEPTH TO SOFFIT LESS THAN 1.5M. MAX PIPE SIZE 450MM Ø)

1220x685 MULTIPLE DUCTILE IRON COVER, COVER COMPLYING WITH CLAUSE E2.31

MORTAR BEDDING AND HAUNCHING TO COVER AND FRAME TO CLAUSE E2.31

BRICKWORK OR CONCRETE BLOCKS TO BE CORBELLED CONCRETE COVER FRAME SEATING RINGS 675 MM MAXIMUM TO FIRST STEP RUNS FROM COVER LEVEL

PRECAST CONCRETE CHAMBER SECTIONS COMPLYING WITH CLAUSE E2.29 JOINTED WITH MORTAR, ELASTOMERIC OR PLASTOMERIC SEALS. CHAMBER WALL TO BE MINIMUM 125MM

HIGH STRENGTH CONCRETE TOPPING MIN. 20 THICK COMPLYING WITH CLAUSE E4.3 AND E4.5 NEATLY SHAPED AND FINISHED TO ALL BRANCH CONNECTIONS. CONCRETE BENCHING SLOPE TO BE BETWEEN 1:10 AND 1:30.

IN-SITU GEN3 CONCRETE COMPLYING WITH CLAUSE E4.1 AND BRE SPECIAL DIGEST 1

INVERT TO BE FORMED USING CHANNEL PIECES

JOINT TO BE AS CLOSE AS POSSIBLE TO FACE OF MANHOLE TO PERMIT SATISFACTORY JOINT AND SUBSEQUENT MOVEMENT.

MINIMUM WIDTH OF BENCHING TO BE 225MM

DOUBLE STEP RUNS COMPLYING WITH CLAUSE E2.33

450MM MIN FROM EDGE OF STEPPING (SEE CLAUSE BS 2.29)

SEE FIGURE B.13 AND CLAUSE E6.6.2 FOR ROCKER PIPE DETAILS

NOTE

- INTERNAL DIMENSIONS OF MANHOLE NORMALLY 1350MM BUT MANHOLE DIAMETER SHOULD BE INCREASED OR PIPES LARGER THAN 450MM DIAMETER TO ONE 225MM BENCHING IN ACCORDANCE WITH BS 2.29.
- THE USE OF PRECAST CONCRETE CHAMBER UNITS TO E2.29 WITH 150MM GEN3 IN-SITU CONCRETE COMPLYING WITH E4.1 AND BRE SPECIAL DIGEST 1 IN PLACE OF BRICKWORK CONSTRUCTION IS PERMITTED

MANHOLE DETAIL - TYPE B

(DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 1.5 M TO 3.0 M)

COVER COMPLYING WITH CLAUSE E2.32 600 MM X 600 MM CLEAR OPENING

PRECAST CONCRETE SLAB COMPLYING WITH E2.30

MINIMUM CLEAR ACCESS 600 MM

PRECAST CONCRETE CHAMBER SECTIONS COMPLYING WITH CLAUSE E2.29 JOINTED WITH MORTAR, ELASTOMERIC OR PLASTOMERIC SEALS. CHAMBER WALL TO BE MINIMUM 125MM

150 MM CONCRETE SURROUND

CHAMBER HEIGHT (NOT LESS THAN 900 MM)

BENCHING SLOPE TO BE 1:10 TO 1:30

THE BOTTOM PRECAST MANHOLE RING TO BE BUILT INTO BASE CONCRETE MINIMUM 75 MM

DISTANCE BETWEEN TOP OF PIPE AND UNDERSIDE OF PRECAST SECTION TO BE MINIMUM 50 MM TO MAXIMUM 300 MM

IN-SITU GEN3 CONCRETE COMPLYING WITH E4.1 AND BRE SPECIAL DIGEST 1

225 MM TO UNDERSIDE OF CHANNEL

SEE FIGURE B.13 AND CLAUSE E6.6.2 FOR ROCKER PIPE DETAILS

MINIMUM WIDTH OF BENCHING TO BE 225 MM

MINIMUM FROM EDGE OF STEPPING (SEE CLAUSE BS 2.29)

GENERAL NOTES

- ACCESS COVER GRADES (DEPTH OF FRAME TO SUIT LOCATION AND HIGHWAY CATEGORY). BS EN 124 CLASS B200 - CARRIAGEWAY AND PARKING AREAS CLASS B 125 - FOOTWAYS ETC
- ACCESS COVERS FOR TYPE A AND B MANHOLES TO HAVE A MINIMUM CLEAR OPENING OF 675mm SQ.
- PERMISSIBLE CHAMBER DIAMETERS FOR MANHOLE TYPES A AND B

DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	CHAMBER SECTION DIAMETER (mm)
LESS THAN 375	1200
375 - 700	1500
700 - 900	1800
975 - 1050	2100
1200 - 1350	2400
1400 - 1500	2700
1600 - 1800	3000

NOMINAL DIAMETER (mm)	EFFECTIVE LENGTH (m)
150 - 600	0.60
601 - 750	1.00
OVER 750	1.25

- ALL PIPES ENTERING AT THE BOTTOM OF THE MANHOLE TO HAVE SAME SOFFIT LEVEL
- THE CHANNEL MAY BE PERFORMED HALF ROUND CHANNEL
- WHERE A FUTURE CONNECTION IS SHOWN IN THE MANHOLE SCHEDULE THE PIPE SHALL BE SUPPLIED WITH A STOPPED
- MANHOLES WITH OUTGOING PIPES GREATER THAN OR EQUAL TO 600mm DIA SHALL HAVE HOOKS FITTED FOR REMOVABLE SAFETY CHAIN. REFER TO DWS 270/202
- REDUCTION SHAFT IS OPTIONAL FOR MANHOLES GREATER THAN 30m DEPTH. REDUCTION SHAFT ONLY ON MANHOLES 1800 OR GREATER DIAMETER
- ROCKERS SHALL BE EITHER STAINLESS STEEL OR GRP. FIXINGS TO BE STAINLESS
- STEP RUNS SHALL BE DOUBLE POLYPROPYLENE ENCAPSULATED.
- ALL IN-SITU CONCRETE TO HAVE 50-75mm SLUMP AND TO BE VIBRATED TO FORM DENSE WATER TIGHT SEAL WITH PRECAST SECTIONS
- BENCHING TO BE C28/35 OR GRANULITIC TO FORM DENSE SMOOTH FINISH
- IN-FILL COVERS OF ANY TYPE SHALL NOT BE USED, WHERE COVER IS LOCATED IN AN AREA OF BLOCK PAVING THE FRAME SHALL BE 150mm DEEP
- FRAMES FOR MANHOLE COVERS SHALL BE BEDDED IN A POLYESTER RESIN BEDDING MORTAR IN ALL SITUATIONS WHERE COVERS ARE SITED IN INNSWA ROAD CATEGORIES 1, 2 OR 3
- DOUBLE RING STEP RING ALSO ACCEPTABLE
- ACCESS OPENING TO BE LOCATED CENTRALLY OVER 900mm SHAFT, AND OFFSET APPROX 100mm FOR 1500mm SHAFT WITH RUNGS/LADDER

NOT TO SCALE

KEY:

- EXISTING PRIVATE SURFACE WATER DRAIN
- EXISTING FOUL WATER SEWER
- EXISTING PRIVATE FOUL DRAIN
- TO BE ABANDONED
- PROPOSED SEWER DIVERSION
- PROPOSED SHARED PRIVATE SURFACE WATER DRAIN
- PROPOSED PRIVATE FOUL DRAIN
- PROPOSED PRIVATE SURFACE WATER DRAIN

DESIGN BY:

tumu

DATE: 01.04.25

REV: A

FIRST ISSUE

DESCRIPTION

DATE

BY

CHK

RP

SW

DRAWING STATUS: PLANNING APPLICATION

CLIENT:

SELWOOD HOUSING

SCALE @ A1: AS SHOWN

PROJECT: ALCOCK CREST, WARMINSTER

TITLE: SEWER DIVERSION

PROJECT NO: 19847

DRAWING NO: 19847-TUM-PL-XXX-0220

REV: A