

SECTION 1.04 NOTES:-

- EXISTING SEWER LAYOUT TAKEN FROM TOPOGRAPHICAL SURVEY PROVIDED BY CLIENT. ALL SEWER MAIN POSITIONS, SIZES, LEVELS AND/OR CONSTRUCTION DETAILS TO BE CONFIRMED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS AND/OR ORDERING OF MATERIALS.
- ALL R/W'S TO BE FITTED WITH ROADABLE GULLIES AT JUNCTIONS W/RT GROUND.
- MINIMUM BELOW GROUND PIPE Ø 100mm.
- MINIMUM DEPTH OF COVER FROM G.L. TO CROWN OF PIPE) TO BE > 1.2m IN ALL AREAS ACCESSIBLE TO VEHICLES.
- ALL WORKS TO CONFORM TO BUILDING REGULATIONS 2010 04.
- ALL CHAMBERS TO BE FITTED WITH HOCKER PIPES AND IN ACCORDANCE WITH DOWM SPECIFICATION.
- ALL RENOVATION WORKS TO THE SEWERS ARE TO BE INDUSTRY RECOGNISED CONTRACTOR QUALIFIED TO WORK ON LIVE EFFLUENT.
- THE SYSTEM WILL REQUIRE INSPECTION AND TESTING PRIOR TO THE CONCRETE SURROUND BEING LAD AND A FULL CAMERA SURVEY TO BE CARRIED OUT PRIOR TO BACKFILLING THE TRENCHES.
- THE DEVELOPER MUST SELF-TEST AND CERTIFY THAT THE DESIGN criteria, MATERIAL STANDARDS AND CONSTRUCTION DETAILS ARE IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING STANDARDS WITH THOSE SET OUT IN SEWERS FOR ADOPTION 7TH EDITION, THE WATSON MANAGERS STANDARDS AND THE REQUIREMENTS OF BS DOWM AS THE STATUTORY SEWERAGE UNDERPART.
- A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO DOWM, THE DEVELOPER SHALL GIVE 21 DAYS NOTICE PRIOR TO CONNECTION AND THE WORKS MUST BE UNDERKEN BY A SS1P ACCREDITED CONTRACTOR.

NOTE REGARDING GRADIENTS OF FOUL SEWERS:-

AS TO SRA 7th Ed. 84 RELIABILITY P4 9:
WHERE THE DESIGN FLOW IS LESS THAN 0.75m³ AT ONE THIRD DESIGN FLOW, THE SELF-CLEANING CRITERION WOULD BE CONSIDERED TO BE SATISFIED IF:
a) A 150mm NOMINAL INTERNAL DIAMETER GRAVITY SEWER IS LAD TO GRAVITY NOT FLATTER THAN 1:150 WHERE THERE ARE AT LEAST TEN DWELLINGS UNITS CONNECTED; OR
b) A SEWER OR LATERAL DRAIN WITH A NOMINAL INTERNAL DIAMETER OF 100mm OR A LATERAL DRAIN WITH A NOMINAL INTERNAL DIAMETER OF 75mm IS LAD TO GRAVITY NOT FLATTER THAN 1:150 WHERE THERE IS AT LEAST ONE WC CONNECTED AND 140 IF THERE IS NO WC CONNECTED.
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DRAINAGE NOTES:-

- MANHOLE COVERS AND FRAMES TO BS EN 124
GROUP 2 - CAST PAVING GULLY CLASS B125
GROUP 1 - SOFT LANDSCAPING AND FOOTWAYS (CLASS A15)
- PIPE MATERIAL: MATERIAL AS SPECIFICATION
- CONNECTIONS TO BE UNDERGARD SUBJECT TO THE PROVISION OF SECTION 1.06 OF THE WATER INDUSTRY ACT 1991 TO SEWERAGE UNDERTAKERS APPROVAL.
- ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CUT/ SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER, THE GRADIENTS INDICATED AGAINST THE DRAWINGS ARE APPROXIMATE ONLY.
- THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN FOR EACH MANHOLE OR OTHER INDICATED POSITION. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS LATEST DRAWINGS, TOGETHER WITH THE LATEST SPECIFICATION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AS SOON AS POSSIBLE.

ABANDONMENT OF SEWERS

- ALL RENOVATION WORKS TO THE SEWERS ARE TO BE INDUSTRY RECOGNISED CONTRACTOR QUALIFIED TO WORK ON LIVE EFFLUENT.
- NO SEWER SHALL BE ABANDONED UNTIL THE CONTRACTOR HAS CONFIRMED THAT THERE ARE NO LIVE CONNECTIONS REMAINING.
- NO CONSTRUCTION WORKS SHALL COMMENCE OVER OR WITHIN 6.0m OF ANY SEWER THAT IS TO BE ABANDONED UNTIL THE SEWER HAS BEEN FILLED AND SEALED AS SPECIFIED IN THE TABLE TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE COST OF REMOVING ANY GROUND PLANT AND CONSTRUCTION WORKS OR OTHERWISE AFFEDED BY AN SEWER MAIN THAT IS NOT TO BE ABANDONED.
- ENDS OF SEWERS SHALL BE SEALED WITH 225mm THICK BRICKWORK WALLS WITH SUITABLE FIRE BRICKS/ BRICKS.
- SEWERS/DRAINS LESS THAN 1.0m MAY BE SCRUBBED UP AND REMOVED.
- ALL PIPES TO BE LAD TO THE INVERTS SHOWN, PIPES TO BE LAD SOFFIT TO SOFFIT.

PIPE ALTERNATIVES

- PRE-CAST CONCRETE PIPE CLASS B1
- PVC ULTRARIB OR POLYPIPE POLYSEWER UP TO 300mmØ
- A CONTRACTOR WHO IS ACCREDITED TO THE BRITISH WATER'S REGISTRATION - PLASTIC PIPES GROUP MUST UNDERAKE THE INSTALLATION OF STRUCTURAL WALL POLYESTER PIPES.

BEDDING CLASSIFICATION

- CLASS 1: FOR PIPES WITH 1.2m OR GREATER
- CLASS B: FOR PIPES WITH 1.2m OR GREATER

- CHAMBER GROUTS:
 - RELEVANT PROPORTIONS INDICATED IN THE FOLLOWING TABLE, USING THE MINIMUM QUANTITY OF WATER TO ENSURE THE NECESSARY FLUIDITY AND TO RENDER IT CAPABLE OF PENETRATING THE WORK.

CLASS	NOMINAL MAX. BR. MASS	CEMENT	SAND	FWA
G3	1	10	—	—
G4	1	—	10	—

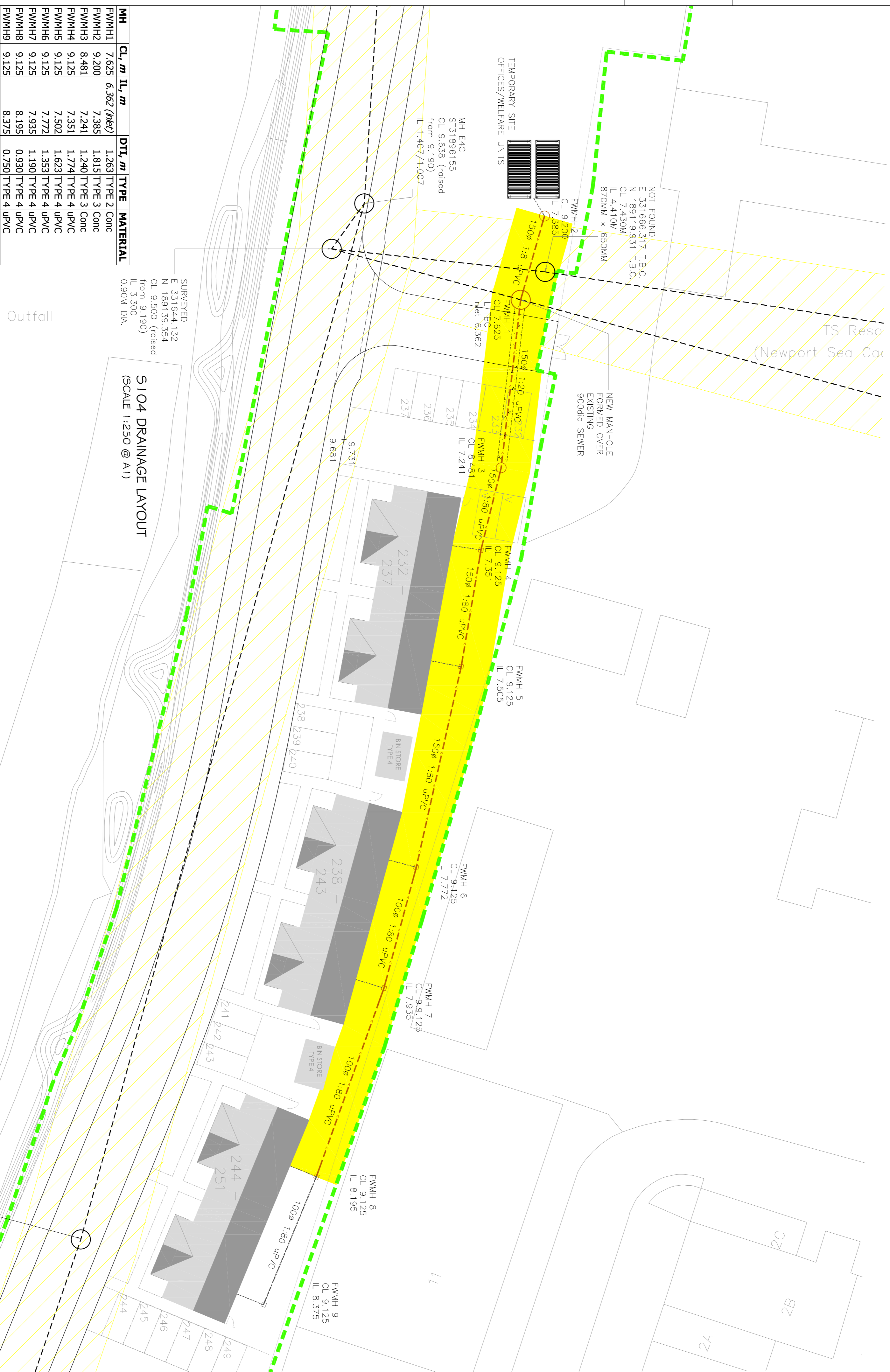
CHAMBER GROUT SHALL BE USED WITHIN 1 HOUR OF MIXING SURFACED RESSING CONCRETE CHAMBER GROUT FOR THE FINISH INVERTS AND BELOW PLANT BASES SHALL INCLUDE EITHER AN EXPANDING OR NON-SPRINK ADITIVE.

NOTE:-

PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS THE CONTRACTOR SHALL DETERMINE THE PRECISE SIZE, LOCATION, DEPTH AND CONDITION OF ALL EXISTING AND PROPOSED SEWERS AND MANHOLES AND RECORD THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND THE SITE BOUNDARIES WHICH ARE LIKELY TO AFFECT THE WORKS OR BE AFFECTED BY THE WORKS AND PRESENT HIS FINDINGS TO THE ENGINEER.

- SITE BOUNDARY
- PROPOSED FOUL SEWER
- PROPOSED FOUL LATERAL
- PROPOSED PRIVATE FOUL DRAIN
- EXISTING DOWM SEWER
- TYPE 4: UP/CMP/PE FLEXIBLE CHAMBER
- TYPE 3 (1050 Ø), PRE-CAST CONC. RING
- TYPE 2 (2000 Ø), PRE-CAST CONC. RING

- AREA OF SEWERS REQUIRING PROTECTION (E.G. CONCRETE HUNCHING FROM VEHICLE LOADINGS, MIN DEPTH TO CROWN OF PIPE > 1.2m)
- EXISTING DRAININGS
- PROPOSED DRAININGS



Outfall

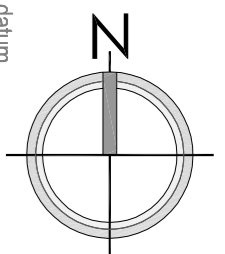
S104 DRAINAGE LAYOUT
(SCALE 1:250 @ A1)

S104

LOCATION PLAN
(SCALE 1:2500 @ A1)

General Notes :

- Do not scale from this drawing.
- All dimensions are in millimetres.
- All levels are in metres relative to datum.
- All dimensions stated are to be confirmed on site prior to commencement of any works and any discrepancies found are to be reported to Steve Morgan Associates Limited immediately.



Client: **Keepmoat**
 Project Description: **PROPOSED HOUSING DEVELOPMENT, HERBERT ROAD NEWPORT**
 Drawing Title: **S104 DRAINAGE LAYOUT (PHASE 1)**

Drawn	TJU	Date	25/01/16
Checked		Date	
Drawing Status	PRELIMINARY		
Scales	1:250 @ A1		

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 Drawing Number: **S104**