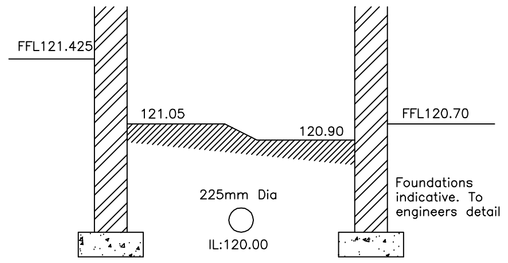
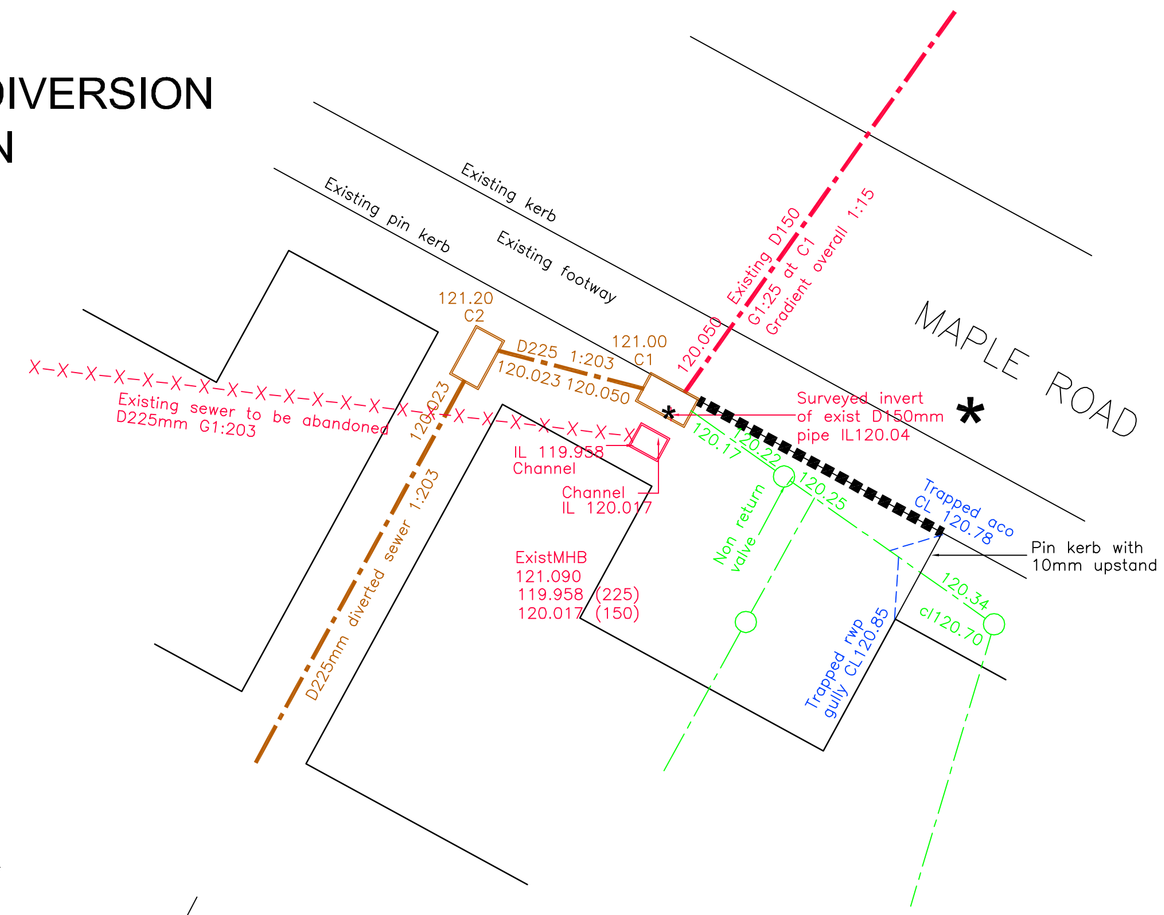
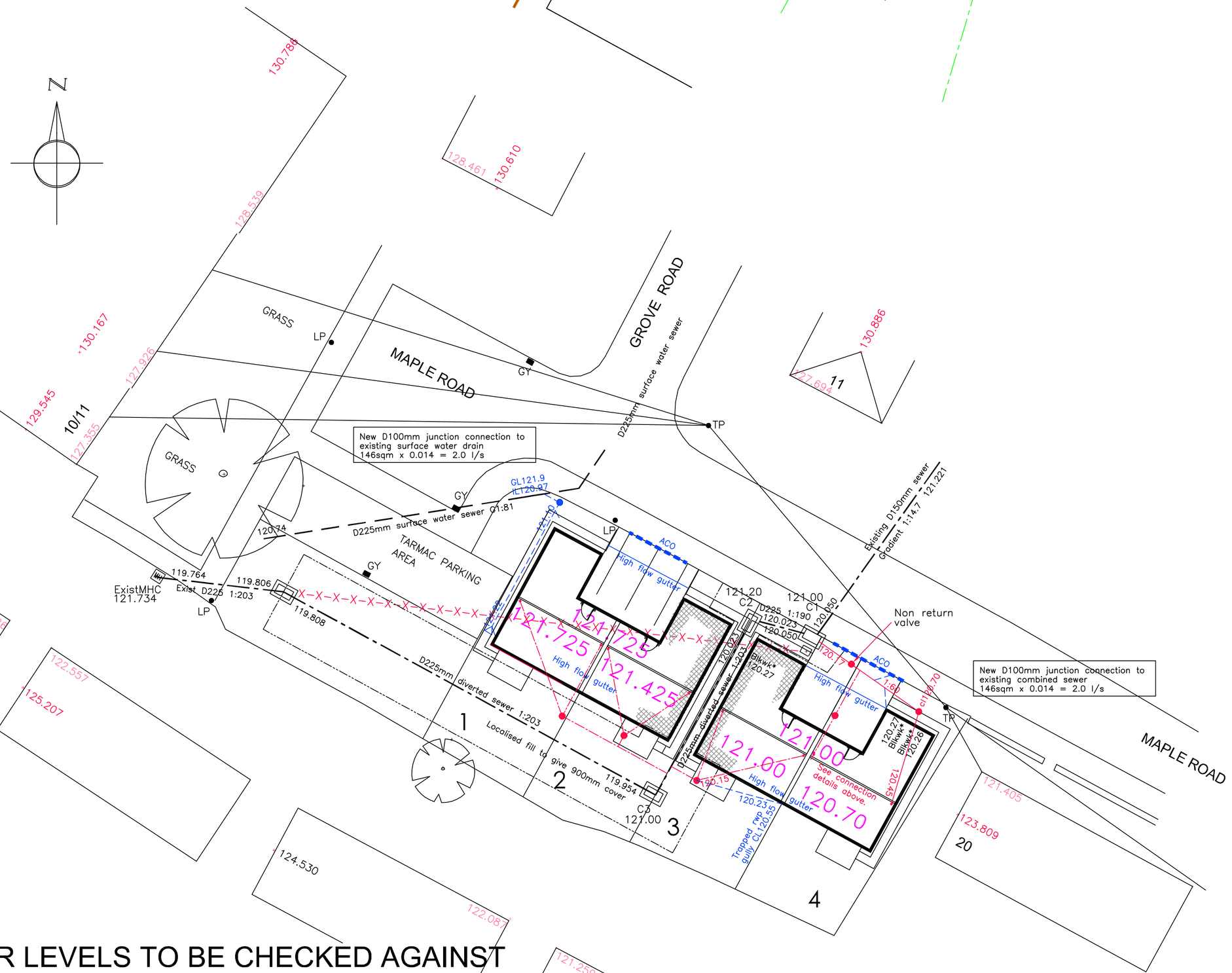
# UPSTREAM DIVERSION CONNECTION




Proposed Sewer Diversion

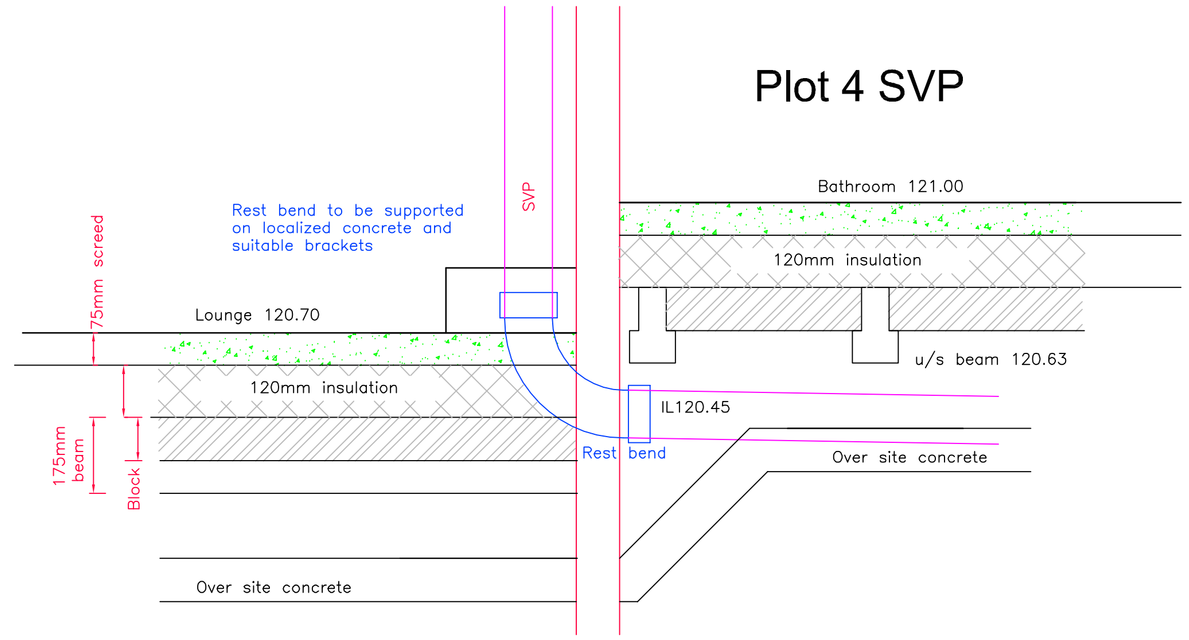
Foundations taken below proposed sewer invert level



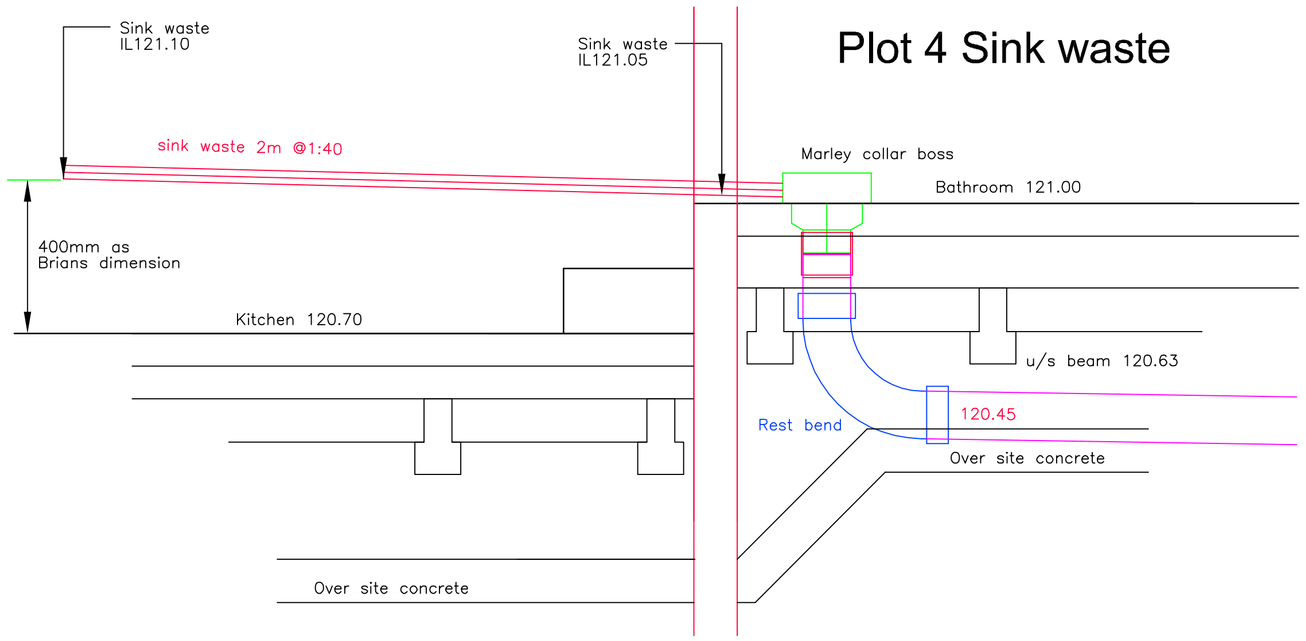




FLOOR LEVELS TO BE CHECKED AGAINST INVERT LEVEL OF C1 AND RELATIVE BACK EDGE LEVEL (PIN KERB). PLOT 3/4 FLOOR LEVEL TO BE MIN 960mm ABOVE BROKEN PIPE INVERT NEAR PLOT 3 *

## Plot 4 SVP




## Plot 4 Sink waste




PRIVATE DRAINAGE

All drainage to comply with BS8301
100mm drains to be laid at minimum gradient 1 : 80. 150mm drains to be laid at minimum gradient 1 : 150.
All drainage to be 100mm diameter, unless otherwise stated. All final connections to main sewer to be 150mm diameter. All connections joints to remain flexible.
Drains passing under buildings to be retained flexible with a bed and surround of pea gravel. All drains to be bridged over with concrete lintels when passing through walls.
All foundations to be taken below invert level of localized drains where within 1.00m of foundations.
All sink wastes not connected to an inspection chamber or manhole to be connected via a raddable gully.
225mm dia inspection chambers to be laid at a maximum depth of 600mm below finished ground level.
450mm dia inspection chambers to be laid at a maximum depth of 1200mm below finished ground level.
1200 x 1000mm pc concrete sections to BS 5911 to be laid at a maximum depth of 3.00m below finished ground level.

▷ – – – – Rodding eye

Ground investigation has proven that infiltration is not possible. The SW sewer has been located adjacent plot 1 however this is very shallow and in that plot 3/4 is set at its max hieght (part M) this will not drain via gravity to this sewer therefore it is intended to connect to the existing/ diverted combined sewer via trapped connections
Plots 1/2 has been lifted as high as possible (part M) and will connect to to the existing SW sewer
SW flow to each sewer approx 2 l/s

CCTV survey to be carried out to confirm any existing live connections. These will be reconnected to diverted sewer, existing flow to be uninterrupted Redundant sewer and manholes to be grubbed up following completion of diversion.

Manhole construction – refer to CPA technical bulletin Sept 2001 outlining changes to relevent Britishe Product Standards BS5911–200:1994.
All precast concret products are to be kitemarked or they will be rejected as part of an adoptable system. Manhole cover slabs to BS5911
Manhole covers to have a clear opening of 600 x 600mm and shall be class D400 to BSEN124 with 150mm deep frames.
Filled ground must be filled and consolidated under the supervision of YW before any sewer works are carried out.
All adoptable sewers to be BSI kitemarked, (certified to WIS–4–35–01)

Plastic channels are not acceptable

All custom built ironwork to be hot dipped galvanised prior to final fitting.

Adoptable sewer pipes to be laid in max 3m lengths unless there is a specific operational need to lay longer lengths.

Yorkshire water are not obliged to accept filter drain / land drainagerunoff into the public sewer network or adoptable drainage network (directly or indirectly). An alternative method of disposal of land drainage runoff will therefore be required.

Cover slabs must carry the BSI kitemark or will be rejected by YW inspector. Where the clear opening of a kitmarked product is differant to that of the cover and frame a load bearing slab should be fitted bove the cover slab to bring the size down to 600x600mm for YWA specified cover size. Please refer to CPSA technical bullitan Autumn 2004 for kitemarked cover slab opening sizes.

Sulphate resistant cement (C20–DC2) and precast concrete productes must be used or a laboratory report provided proving that such precautions are not nessesary.

Sewers to be laid in class S bedding (150mm graular bed and surround. Where depth of cover is less then 1.2m in highways and verges (or less then 900mm in non vehile access areas) then a concrete slab should be provided above the granular bed and surround.

All adoptable sewer works and materials to be in accordance with Sewers for Adoption 6th edition. The relevant British / European anf Yorkshire Water standards / requirements / addendum & kitemarked

Sewers must have 5m clearance from trees and hedges see SfA6 for restrictions on tree planting / types

Bedding and backfill material to conform with the Water Industry specification 4–08–02 (table A2)

E. Floor levels and steps in block as instructed by client, external works and private drainage revised. Sewer diversion revised subject to YW approval 17–10–17
D. Private drainage revised following site investigation 29–3–17
C. Private drainage added 27–2–17
B. Foundation detail added 08–02–17
A. Revised following further site investigation 27–1–17


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Engineering layout

DRAWN BY rab

SCALE 1:200 DATE Jan17

DRAWING No 1078-1 REV E

PRELIMINARY ONLY