

GENERAL DRAINAGE STRATEGY

- FOUL WATER DRAINAGE TO BE PUMPED VIA ONSITE PACKAGE PUMPING STATION INTO EXISTING ONSITE FOUL WATER MANHOLE. EXISTING CONNECTION INTO WELSH WATER SEWERS TO BE RE-USED.

- SURFACE WATER DRAINAGE TO DRAIN VIA SOAK-AWAY ONSITE. SOAK-AWAY TANK SIZED FOR 1 IN 100 YEAR STORM EVENT PLUS CLIMATE CHANGE.

Foul water pumping station to be sized based on a preliminary estimate of

- 63 bedrooms (2 person per room)
- 170 covers (Befeater restaurant)
- 118 covers (restaurant 1)
- 150 covers (restaurant 2)

24 Hour storage to be provided

Flows from development to be approved by local water authority.

70.4m² of cellular storage/soak-away crates 11 x 8 x 0.8m (95% void ratio) to provide infiltration at a rate of 0.38m/h. To cater for storms up to 1 in 100 years plus 30% climate change.

Intesio Wavin Aquacell core units for use in HGV areas with minimum 750mm cover.

Please note, a new soakaway test to BRE365 is advised in the vicinity of the storage crates to verify the infiltration rate.

Existing combined manhole location to be confirmed. CL 4.68 IL 2.19

Foul flows from site to utilise existing connection from site into existing 600Ø combined sewer. Existing combined manhole location and invert to be confirmed.

Assumed to be existing SW manhole. Invert level to be confirmed.

Proposed foul water to be pumped into existing foul water manhole onsite.

Gullies situated at entrance to stop water discharging onto highway

A preliminary foundation design has been taken into account when designing this drainage

All pipework beneath building to be minimum 150Ø laid no shallower than 1 in 60 gradient.

Proposed RWP's to enter proposed surface water drainage through the light well air space as per existing.

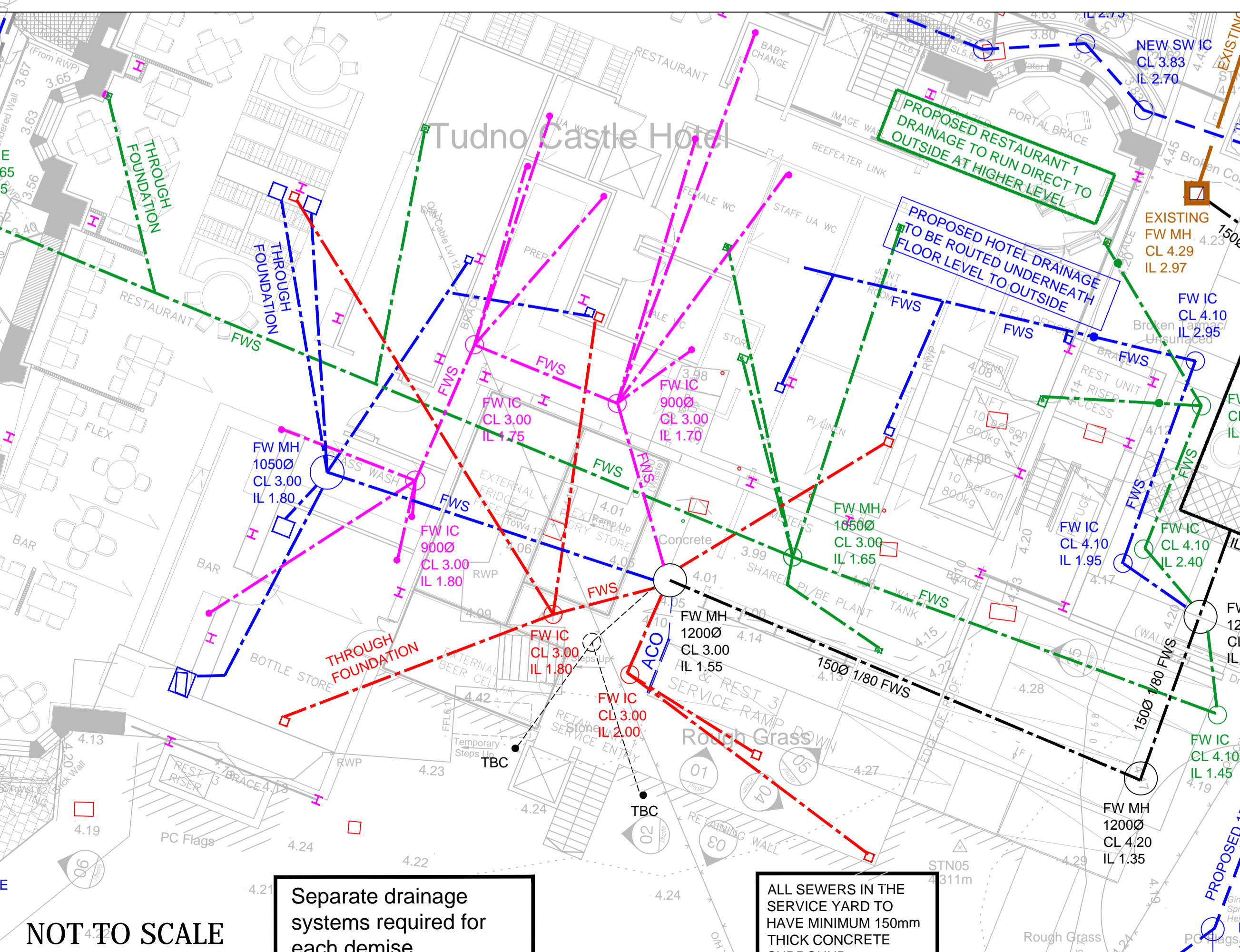
RWP SVP and drainage point locations to be confirmed

Separate drainage systems required for each demise

RWP, SVP and drainage point locations to be confirmed

RWP's To be picked up by proposed surface water sewer.

- DRAINAGE FROM PREMIER INN
- DRAINAGE FROM RESTAURANT 1
- DRAINAGE FROM RESTAURANT 2
- DRAINAGE FROM GROUND FLOOR BEEFEATER



NOT TO SCALE

Separate drainage systems required for each demise

ALL SEWERS IN THE SERVICE YARD TO HAVE MINIMUM 150mm THICK CONCRETE SURROUND

NOTES

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Drainage Notes

- All works and materials to be in accordance with 'Sewers for adoption' 7th edition 2012.
- All manhole cover levels to be confirmed by Architect.
- All rain / surface water pipes to be 100mmØ laid at a gradient not flatter than 1:80 UNO.
- All foul water pipes to be 100mmØ. At a gradient not flatter than 1:40 UNO.
- All manholes to be 1200Ø precast concrete with 150mm concrete surround UNO. Manhole covers to D400 class UNO.
- Clay pipes to be flexibly jointed and comply with the requirements of BS EN 295.
- Concrete pipes to be flexibly jointed and comply with the requirements of BS EN 1916 and BS 5911.
- Plastic pipes (PVC-U) to be flexibly jointed and comply with the requirements of BS EN 1401-1 1998.
- Where cover to pipes is less than 1200mm in roads and hardstandings or 900mm elsewhere, concrete surround is to be provided in accordance with the details drawing 12118-510.
- Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special precautions.
- Pipes and fittings are to be laid in accordance with the manufacturers recommendations.
- All Manholes should be Manhole Type 2, as shown on details drawing 12118-510.
- All RWP positions TBC by Architect.
- For setting out of all pop-up positions refer to Architect's details.
- Civil engineering contractor to arrange for:
 - Own services and temporary supplies
 - Pathway & partial closure as deemed required by their method statement. Including costs.
 - Temporary adequate over pumping as deemed required by civil engineers method of construction.
- Type 2 rodding access is to be provided at all pop-ups and internal rwp outlets.

PRELIMINARY

REV	DATE	REVISION DETAILS	INITIALS
P4	16.01.16	Minor amendments	SM
P3	21.01.16	Further amendments	SM
P2	20.01.16	No. of inspection chambers reduced	SM
P1	19.01.16	Preliminary issue	SM

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PROJECT:
Tudno Castle Hotel
Llandudno

TITLE:
Drainage GA

SCALE @ A1: 1:200
DRAWN: SM
DATE: JAN 2016

JOB No: 12118
DRAWING No: 501
REVISION: P4