

LEGEND

- EXISTING PUBLIC FOUL WATER PIPE
- NEW FOUL WATER PIPE
- IC 0.45 NEW FOUL WATER INSPECTION CHAMBER
- F000 1.20 NEW FOUL WATER MANHOLE
- EXISTING COMBINED WATER PIPE
- EXISTING PUBLIC STORM WATER PIPE
- NEW STORM WATER PIPE
- S000 0.45 NEW STORM WATER INSPECTION CHAMBER
- S000 1.20 NEW STORM WATER MANHOLE
- S000 1.20 NEW STORM WATER CATCHPIT MANHOLE
- S000 1.20 NEW STORM WATER MANHOLE WITH BACKDROP
- EXISTING FW ABANDONED
- EXISTING SW ABANDONED
- CONCRETE SURROUND
- NEW SURFACE WATER PUMP
- RWP RAIN WATER DOWN PIPE
- PI PETROL INTERCEPTOR
- GU GULLY
- FG FOUL GULLY
- AB/OB LINEAR DRAINAGE CHANNEL (ACCESS BOX/ OUTLET BOX)
- FILTER DRAIN/ LAND DRAIN
- PROPOSED CELLULAR STORAGE
- SITE BOUNDARY

PETROL INTERCEPTOR (PI)

CONTRACTOR TO OBTAIN DESIGN/QUOTE FROM SUPPLIER BASED ON FOLLOWING PARAMETERS

AREA DRAINED 735m²
 MAX FLOW RATE 54.9 l/s
 IL IN 0225 @ 79.535m
 IL OUT 0225 @ 79.435m

ALLOW FOR CONCRETE SURROUND, POWER SUPPLY, CONTROL PANEL, VENTING AND HIGH LEVEL ALARM.

ATTENUATION TANK

CONTRACTOR TO OBTAIN DESIGN/QUOTE FROM SUPPLIER BASED ON FOLLOWING PARAMETERS

AREA DRAINED 3,410m²
 SIZE 21.50 x 9.00 x 1.20m (232m³)
 WATER VOLUME 221m³ (95% POROSITY)
 GROUND LEVEL 83.625m-83.490m
 TANK TOP 79.630m
 TANK BASE 78.430m

ALLOW FOR VENTING, BEDDING & SURROUND, MEMBRANE WITH WELDED JOINTS ALL CONNECTIONS INTO TANKS TO BE VIA MANIFOLD/REDUCERS TO SUIT MIN. 150 PIPE CONNECTION.

SURFACE WATER PUMP (PS)

CONTRACTOR TO OBTAIN DESIGN/QUOTE FROM SUPPLIER BASED ON FOLLOWING PARAMETERS

CHAMBER DIA 1.80m
 CHAMBER CL 83.474m
 LOWEST INLET LEVEL 78.417m
 SURFACE WATER PUMP WITH FLOW RATE OF 2.1l/s UP TO HEAD 0.90m AND 7.87l/s UPTO 1.30m HEAD.

RIISING MAIN L6.0m FROM 78.417m TO 81.807m
 ALLOW FOR A BACK UP PUMP IN CASE OF MAIN PUMP FAILURE.

*CHAMBER DIAMETER, BASE LEVEL AND RISING MAIN DIAMETER AND INVERT LEVELS SUBJECT TO SUPPLIER DESIGN.

LINEAR DRAINAGE CHANNEL (LDC) SCHEDULE

CHANNELS TO BE DESIGNED BY SPECIALIST BASED ON 50mm/hr RAINFALL INTENSITY, A 5yr RETURN PERIOD AND THE FOLLOWING PARAMETERS:

CHANNEL REFERENCE	LOCATION	AREA DRAINED	LENGTH	GROUND LEVEL BOX	OUTLET	PIPE	DUTY	PREFERENCE
A	FOOTPATH	24m ²	1.50m	79.872-79.833	1NO. END	1500	B125	GRATED
B	CAR PARK	710m ²	26.00m	83.454-83.431	2NO.	1500	D400	SLOT

NUMBER & SPACING OF ACCESS BOXES TO BE SPECIFIED BY SUPPLIER OUTLET BOXES TO BE SILT TRAP DEEP HEAVY DUTY. OUTFALL BOXES TO HAVE SUMP AS FIRST STAGE OF TREATMENT

DRAINAGE

- REFER TO CIVIL AND STRUCTURAL SPECIFICATION REPORT - PART R.
- CONTRACTOR SHOULD ENSURE THE LOCAL PLANNING AUTHORITY HAVE APPROVED THE DRAINAGE PROPOSALS PRIOR TO ORDERING MATERIAL OR INSTALLATION.

HYDRAULIC DESIGN:

- THE SURFACE WATER NETWORK, FLOW CONTROL AND ATTENUATION HAS BEEN DESIGNED USING MICRODRAINAGE SOFTWARE WITH FEH RAINFALL DATA.

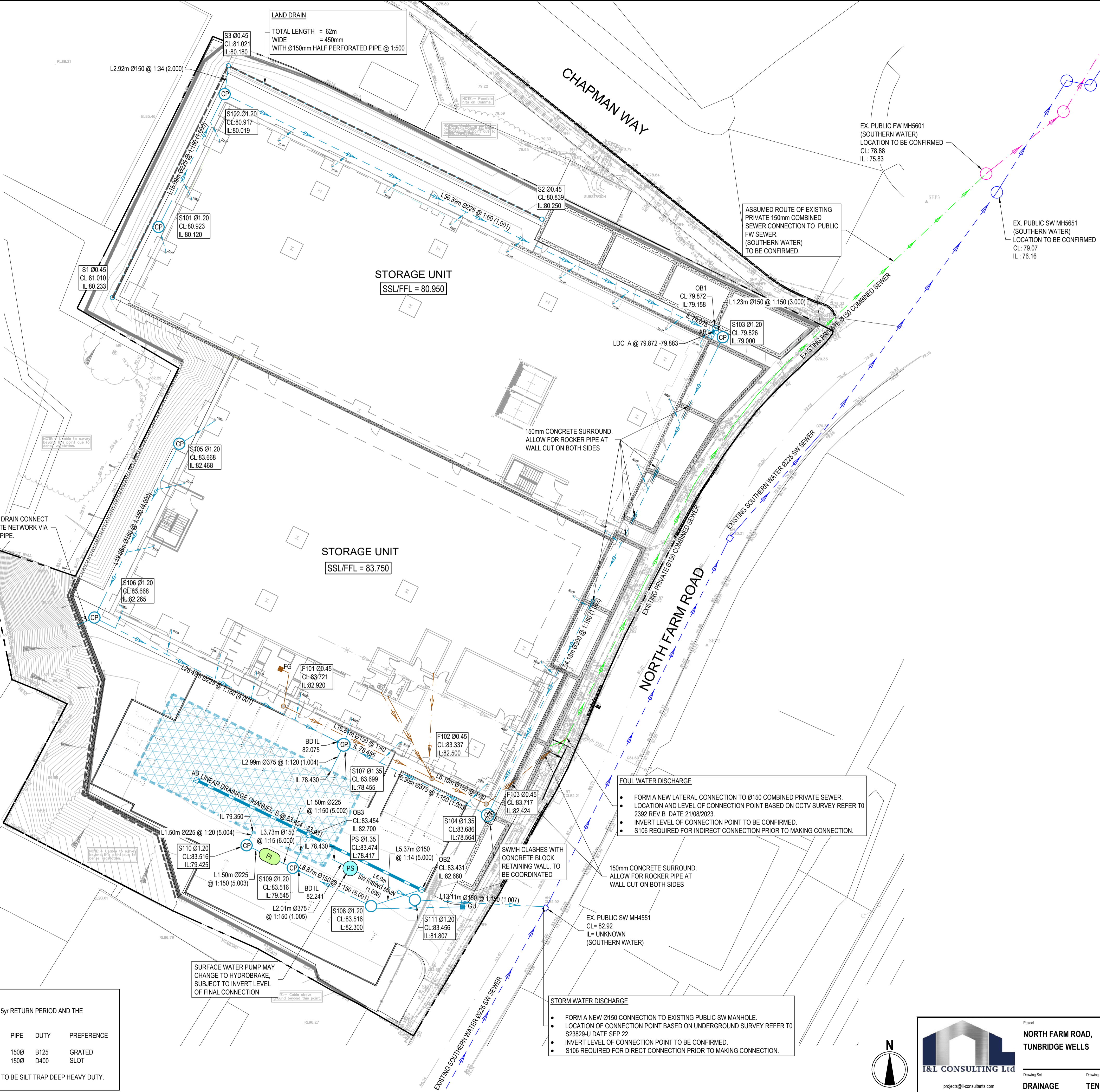
- STRATEGY:**
- DISCHARGE RATES WILL BE RESTRICTED TO THE RESPECTIVE 1 IN 2YRS, 1 IN 30YRS+35% CC AND 1 IN 100YRS+45% CC YEARS WILL BE 2.1L/S, 5.67L/S AND 7.87L/S. THIS IS BASED ON AN URBAN RATE CALCULATED USING IH124.
 - TOTAL ATTENUATION FOR 100YR+45% CLIMATE CHANGE BELOW GROUND = 221m³

- FINAL DRAINAGE CONNECTIONS:**
- WHERE THIRD PARTY APPROVAL IS REQUIRED THESE ARE NOTED AGAINST EACH DISCHARGE POINT ON THE DRAWING.
 - NO CONNECTION OR DISCHARGE SHOULD BE MADE UNTIL APPROVAL HAS BEEN RECEIVED. CHECK STATUS OF APPLICATION WITH ENGINEER.
 - CONTRACTOR SHOULD INVESTIGATE AND INSTALL FINAL DRAINAGE CONNECTIONS PRIOR TO INSTALLING ANY UPSTREAM DRAINAGE TO AVOID POTENTIAL LEVEL ISSUES.
 - EVERY EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION. HOWEVER, THE CONTRACTOR IS ADVISED TO CHECK ACTUAL CONDITIONS. I.E. THE LOCATION, ACCESSIBILITY, UNDERGROUND ROUTE, LEVELS, SIZES, CONDITION OF EXISTING SEWERS TO BE RE-USED AND/OR CONNECTED INTO.

- GENERALLY:**
- DO NOT SCALE FROM THIS DRAWING, WORK TO DIMENSIONS OR CO-ORDINATES PROVIDED.
 - REPORT CONFLICTS TO ENGINEER IMMEDIATELY.
 - EVERY EFFORT HAS BEEN MADE TO ASCERTAIN TYPE, LOCATION AND DEPTH OF BURIED SERVICES AND/OR OBSTRUCTIONS. HOWEVER, THE CONTRACTOR IS ADVISED TO CARRY OUT OWN INVESTIGATIONS TO ENSURE THERE ARE NO CLASHES WITH THE PROPOSED WORKS.
 - CONTRACTOR IS RESPONSIBLE FOR PROTECTING RETAINED SERVICES AND MAKING CONTACT WITH OWNERS OF APPARATUS TO OBTAIN NECESSARY CONSENT FOR EXCAVATION, PROTECTION AND/OR DIVERTING.
 - BURIED OBSTRUCTIONS ENCOUNTERED DURING EXCAVATION THAT CONFLICT WITH PROPOSED WORKS SHOULD BE BROKEN OUT AND REMOVED. RESIDUAL VOIDS TO BE BACKFILLED AND COMPACTED AS PER SPECIFICATION.

- NEW DRAINAGE:**
- INTERNAL FOUL POINTS ARE LOCATED AND SET OUT BY THE ARCHITECT.
 - TRADITIONAL RAINWATER DOWNPIPES ARE PROVIDED BY THE CLADDING CONTRACTOR AND COORDINATED WITH THE ARCHITECT.
 - DESIGN ASSUMES THAT ALL WORKS ARE NOT TO BE ADOPTED.
 - GRADIENTS OF PIPES ARE AVERAGED. PIPE CONNECTIONS SHOULD BE INSTALLED TO THE STATED INVERT LEVELS.
 - COVER LEVELS OF THE MANHOLES ARE AVERAGED. COVER AND FRAME SHOULD BE SET TO SUIT FINISHED GROUND LEVELS.
 - ALL PIPEWORK WITHIN MANHOLES ARE TO BE LAID SOFFIT TO SOFFIT (U.N.O), INCLUDING BACKDROP PIPEWORK, WHERE THE RODDING ACCESS LEVEL IS SPECIFIED.
 - FLAT LATERAL CONNECTION TO BE 135° Y JUNCTIONS (IE 45° OBLIQUE JUNCTIONS) RELATIVE TO MAIN RUN. TO BE USED ON FOUL OR SURFACE WATER RUNS. 90° OR 87° SQUARE JUNCTIONS SUITABLE FOR SURFACE WATER CONNECTIONS ONLY.
 - SADDLE CONNECTIONS TO LARGER PIPES SHOULD BE MADE SO THAT THE INVERT LEVEL OF THE SMALLER PIPE DOES NOT ADJOIN BELOW MID HEIGHT OF THE LARGER PIPE.
 - PIPES CROSSING WITHIN 200MM OF EACH OTHER ARE TO BE ISOLATED BY CONCRETE FOR A MINIMUM DISTANCE OF 1M BEYOND CROSSING POINT IN ALL DIRECTIONS.
 - A CCTV DRAINAGE SURVEY TO BE CARRIED OUT ON COMPLETION TO PROVE THE INTEGRITY OF THE AS-BUILT DRAINAGE SYSTEMS.

- ANCILLARY ITEMS:**
- WHERE PROPOSED CONTRACTOR MUST PROVIDE PROPOSALS FOR SUPPLY OF LINEAR DRAINAGE CHANNELS, KERB DRAINS, INTERCEPTORS, ATTENUATION, PUMPS, HYDROBRAKE, FILTER UNITS.
 - WHERE PROPOSED ALLOWANCE SHOULD BE MADE FOR POWER SUPPLY TO INTERCEPTORS AND PUMPS AND FOR INSTALLING CONTROL PANELS.

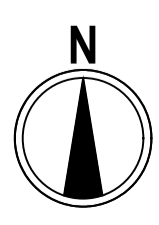


FOUL WATER DISCHARGE

- FORM A NEW LATERAL CONNECTION TO Ø150 COMBINED PRIVATE SEWER.
- LOCATION AND LEVEL OF CONNECTION POINT BASED ON CCTV SURVEY REFER TO 2392 REV B DATE 21/08/2023.
- INVERT LEVEL OF CONNECTION POINT TO BE CONFIRMED.
- S106 REQUIRED FOR INDIRECT CONNECTION PRIOR TO MAKING CONNECTION.

STORM WATER DISCHARGE

- FORM A NEW Ø150 CONNECTION TO EXISTING PUBLIC SW MANHOLE.
- LOCATION OF CONNECTION POINT BASED ON UNDERGROUND SURVEY REFER TO S23829-U DATE SEP 22.
- INVERT LEVEL OF CONNECTION POINT TO BE CONFIRMED.
- S106 REQUIRED FOR DIRECT CONNECTION PRIOR TO MAKING CONNECTION.



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**NORTH FARM ROAD,
TUNBRIDGE WELLS**

PROPOSED DRAINAGE PLAN

Rev	Date	Description	Technician	Reviewer
T1	25.08.23	TENDER ISSUE	AR	IL

Drawing Set: **DRAINAGE**

Drawing Status: **TENDER**

Scale: **1:200 @ A1
1:400 @ A3**

Project Number: **23-018-I&L**

Drawing Number: **D01**

Revision: **T1**