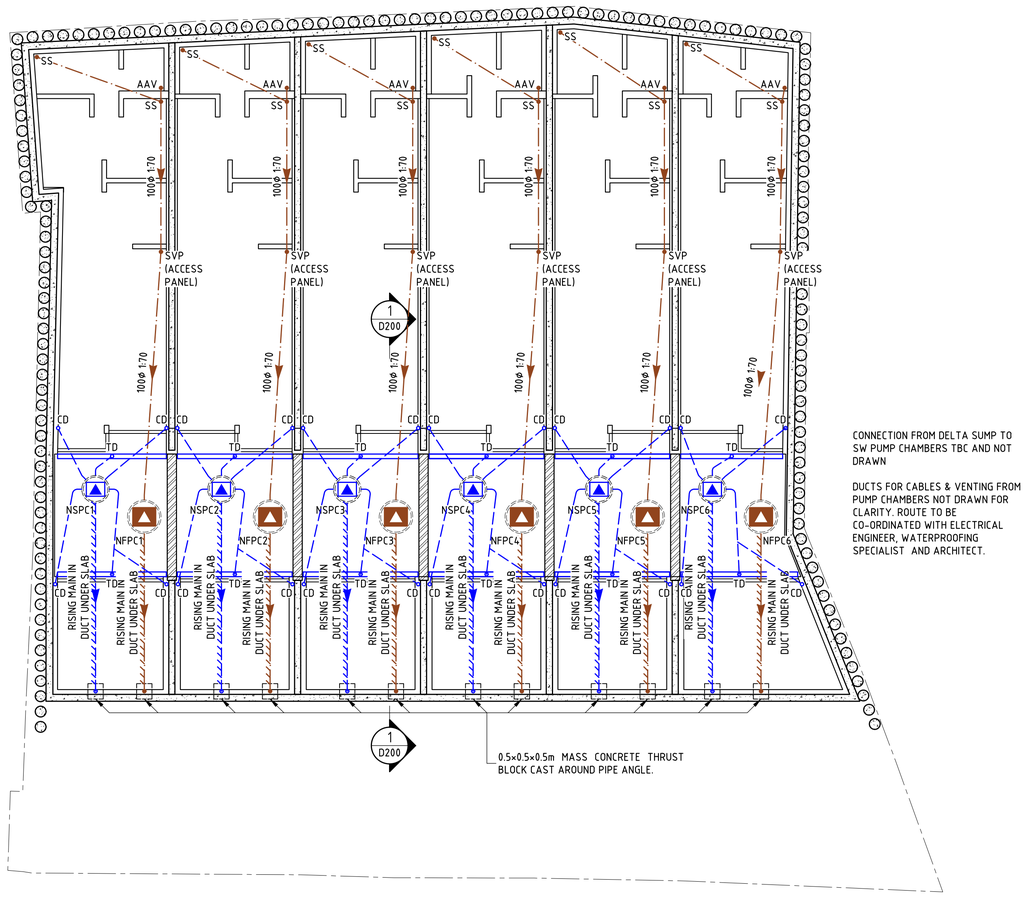
BASEMENT FLOOR DRAINAGE

1:100 @ A1/1:200 @ A3

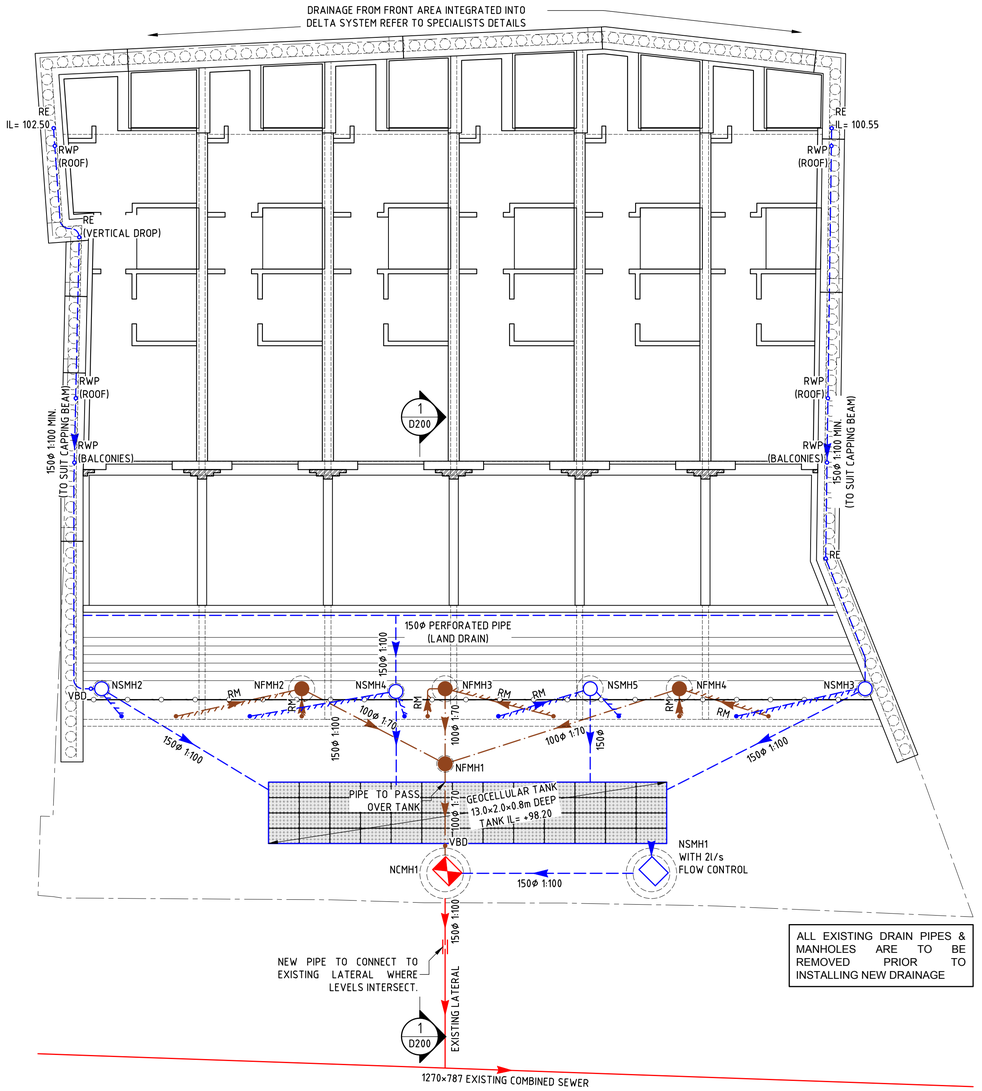


CONNECTION FROM DELTA SUMP TO SW PUMP CHAMBERS TBC AND NOT DRAWN

DUCTS FOR CABLES & VENTING FROM PUMP CHAMBERS NOT DRAWN FOR CLARITY. ROUTE TO BE CO-ORDINATED WITH ELECTRICAL ENGINEER, WATERPROOFING SPECIALIST AND ARCHITECT.

LOWER GROUND FLOOR DRAINAGE

1:100 @ A1/1:200 @ A3



MANHOLE SCHEDULE

MANHOLE No.	APPROX. COVER LEVEL	INVERT LEVEL IN	INVERT LEVEL OUT	DEPTH (mm)	PIPE SIZE OUT (mm)	GRADIENT OUT	TYPE/COMMENT		COVER
							SIZE/DIA.	TYPE	
NCMH1	100.53	98.05	98.05	2480	150ø	1:100 MINIMUM	1200ø	P.C. RING (DETAIL 1)	750×600 DUCTILE IRON 'C250'
NSMH1	100.53	98.15	98.15	2380	150ø	1:100	1200ø	P.C. RING WITH FLOW CONTROL (DETAIL 1a)	750×600 DUCTILE IRON 'C250'
NSMH2	99.99	98.86	98.86	1130	150ø	1:100	450ø	UIC (DETAIL 3)	450ø PLASTIC 'B125'
NSMH3	99.99	99.54	99.54	450	150ø	1:10	450ø	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	450ø PLASTIC 'B125'
NSMH4	99.99	99.14	99.14	1150	150ø	1:100	450ø	UIC (DETAIL 3a)	450ø PLASTIC 'B125'
NSMH5	99.99	99.54	99.54	450	150ø	1:4	450ø	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	450ø PLASTIC 'B125'
NFMH1	100.59	99.44	99.44	1150	100ø	1:70	450ø	UIC (DETAIL 3)	450ø PLASTIC 'B125'
NFMH2	99.99	99.54	99.54	450	100ø	1:70	450ø	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	450ø PLASTIC 'B125'
NFMH3	99.99	99.54	99.54	450	100ø	1:70	450ø	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	450ø PLASTIC 'B125'
NFMH4	99.99	99.54	99.54	450	100ø	1:70	450ø	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	450ø PLASTIC 'B125'

ANNOTATIONS		MANHOLE COVERS TO BS EN 124		
UIC	UNIVERSAL INSPECTION CHAMBER	CLASS A	LIGHT DUTY	PEDESTRIAN ONLY
NEIC	NON-ENTRY INSPECTION CHAMBER	CLASS B	MEDIUM DUTY	LIGHT VEHICLES
TRAD./ P.C. RING	TRADITIONAL BRICK OR PRECAST CONCRETE CHAMBER CONSTRUCTION	CLASS C	HEAVY DUTY	CARRIAGEWAY <0.5m FROM KERB
		CLASS D	HEAVY DUTY	CARRIAGEWAY & HARD SHOULDERS
NOTE:	ALL DETAIL 4 CATCHPIT MANHOLES ARE 300mm DEEPER THAN INVERT LEVELS SHOWN TO ALLOW FOR SILT PIT			

PUMP CHAMBER SCHEDULE

TANK N°	STORAGE CAPACITY (l)	PUMP CAPACITY (l/s)	APPROX. RISE (m)	SIZE (mm)	COVER & FRAME NOT BY DELTA	NOTES
NFPC1	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	SUPPLIED BY WATERPROOFING SPECIALIST CABLE DUCT AND VENT 110 ø PIPE INLETS 110 ø PIPES OUTLET CONNECTION FEMALE 2" BSP THREAD
NFPC2	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	
NFPC3	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	
NFPC4	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	
NFPC5	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	
NFPC6	1100	4.5	4.5	1000ø ×2000 DEEP	750×600 DOUBLE SEALED	
NSPC1	600	2.75	4.5	800ø ×1300 DEEP	450×600	SUPPLIED BY WATERPROOFING SPECIALIST CABLE DUCT AND VENT 50mm SPIGOT FOR WASTE PIPE INLETS 110 ø PIPES OUTLET CONNECTION FEMALE 2" BSP THREAD
NSPC2	600	2.75	4.5	800ø ×1300 DEEP	450×600	
NSPC3	600	2.75	4.5	800ø ×1300 DEEP	450×600	
NSPC4	600	2.75	4.5	800ø ×1300 DEEP	450×600	
NSPC5	600	2.75	4.5	800ø ×1300 DEEP	450×600	
NSPC6	600	2.75	4.5	800ø ×1300 DEEP	450×600	

EXACT LOCATION OF PUMP CHAMBERS TO BE CO-ORDINATED BETWEEN ARCHITECT AND WATERPROOFING SPECIALIST ADVISE ENGINEER OF LOCATIONS FOR AS BUILT DRAWINGS.

ARCHITECT TO CONFIRM IF RECESSED COVERS ARE REQUIRED AND TO COORDINATE SET OUT WITH PAVING SET OUT.

DRAWING NOTES

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4. ALL MATERIALS AND WORKMANSHIP ARE TO COMPLY WITH THE RELEVANT CURRENT BRITISH STANDARDS' AND, WHERE REQUIRED BY THE EMPLOYER, TO NHBC STANDARDS.

DRAINAGE NOTES

NOTATION KEY

- COMBINED WATER PIPE RUN
- COMBINED WATER MANHOLE OR INSPECTION CHAMBER
- FOUL WATER PIPE RUN
- FOUL WATER RISING MAIN
- FOUL WATER MANHOLE OR INSPECTION CHAMBER
- FOUL WATER PUMPING CHAMBER
- SURFACE WATER PIPE RUN
- SURFACE WATER RISING MAIN
- SURFACE WATER MANHOLE OR INSPECTION CHAMBER
- SURFACE WATER PUMPING CHAMBER

SVP:	SOIL AND VENT PIPE
RWP:	RAIN WATER PIPE
SS:	STUB STACK
AAV:	AIR ADMITTANCE VALVE
YG:	YARD GULLY
RE:	RODDING EYE
TD:	THRESHOLD DRAIN
CD:	CAVITY DRAIN CHANNEL DISCHARGE (DELTA)
VBD:	VERTICAL BACKDROP
NFMH:	NEW FOUL WATER MANHOLE
NSMH:	NEW SURFACE WATER MANHOLE
NCMH:	NEW COMBINED WATER MANHOLE
NFPC:	NEW FOUL WATER PUMP CHAMBER
NSPC:	NEW SURFACE WATER PUMP CHAMBER

SPECIFICATION

1. FOUL DRAINS ARE TO BE 100mm NOMINAL DIAMETER LAID AT A GRADIENT NOT FLATTER THAN 1:70. U.N.O.
2. DRAINS ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS 65 OR FLEXIBLE UPVC PIPES TO BS4660 WITH FLEXIBLE JOINTS BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND BS 8301.
3. 100mm RIGID PIPES WITH LESS THAN 300mm COVER OR PIPES OF 150mm OR GREATER DIAMETER WITH LESS THAN 600mm COVER ARE TO BE SURROUNDED BY 150mm OF CONCRETE WITH MOVEMENT JOINTS PROVIDED AT EVERY PIPE JOINT.
4. FLEXIBLE PIPES WITH LESS THAN 600mm COVER ARE TO BE SURROUNDED WITH CONCRETE OR TO HAVE CONCRETE PAVING SLABS LAID AS BRIDGING ABOVE THE PIPE. PIPES UNDER BUILDINGS ARE TO BE SURROUNDED WITH 100mm MIN. OF GRANULAR MATERIAL.
5. ACCESS TO DRAINS MAY PROVIDED BY VITRIFIED CLAY, GRP OR POLYPROPYLENE INSPECTION CHAMBERS TO BS 7158, OR MANHOLES CONSTRUCTED USING CLASS B ENGINEERING BRICKS TO BS 3921, OR PRECAST CONCRETE SECTIONS TO BS 5911, SURROUNDED WITH 150mm OF CONCRETE MINIMUM DIMENSIONS TO CONFORM TO TABLE 8 OF BS 8301. COVERS AND FRAMES FOR MANHOLES/INSPECTION CHAMBERS MUST COMPLY WITH THE APPROPRIATE LOADING GRADE OF BS 497 OR BS 5911.
6. PROVIDE GULLIES AND RWP'S WITH RODDABLE ACCESS.
7. ALL PIPES THAT CONNECT TO MAIN RUN DRAINAGE MANHOLES TO BE FIXED 'CROWNS ADJACENT'
8. CONCRETE BEDDING & SURROUND TO BE MIX TYPE GEN 1 TO TABLE 6 OF BS 5328-PART 2 U.N.O. IF A DIFFERENT 'GEN' MIX IS SPECIFIED IT WILL BE TO THE ABOVE TABLE.
9. ALL RWP'S TO CONNECT INTO RODDABLE GULLIES.

REV	DETAIL	DATE
C2	Basement courtyard drainage revised and Delta cavity discharge points added	25/06/20
C1	Pumps rev'd to DELTA quote Gullies removed from front area. NK	05/05/20
T2	Revised as clouded	17/10/19
T1	Tender	05/08/19

Status: CONSTRUCTION

Client: Space Free Ltd.

Project: 138-140 Highgate Road, London, NW5 1PB

Title: Drainage G.A. Sheet 1

Project N°: 18035 | Drawing N°: D100 | Rev: C2

Date: Jul 2019

Scale @A1: 1:100

Drawn: JL

Engineer: NK

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