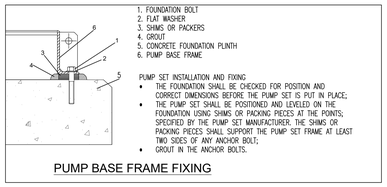
PUMP & TANK SPECIFICATION / BUILDERS NOTES

EFFECTIVE CAPACITY OF TANK, ALLOWING FOR 365mm FREEBOARD & 162mm DEADWATER = 728m³.
APPROXIMATE WEIGHT OF TANK AND CONTENTS = 800 TONNES.
REINFORCED CONCRETE FOUNDATIONS BY BUILDER. BUILDER TO ENSURE BASE IS CAPABLE OF SUPPORTING A VERTICAL LOAD OF 90kN/m² AND IS LEVEL TO WITHIN ±5mm.
BASE TO HAVE A SMOOTH POWER FLOAT FINISH.
CONCRETE IS TO BE ADEQUATELY VIBRATED AND CURED.

TANK BASE DESIGN SHOULD BE GENERALLY BE IN ACCORDANCE WITH B.S 8007.
TYPICAL CONCRETE GRADE C30 TO B.S 5328.
TYPICAL COVER TO ALL REINFORCEMENT TO BE 40mm MINIMUM.
MESH REINFORCEMENT TO HAVE TYPICAL MINIMUM OVERLAP OF 250mm (BTM.) AND 300mm (TOP).
TANK SHELL COMPRISES OF PRE-GALVANISED STEEL SHEETS TO BS EN 10346 GRADE S350. SHEETS OVER 5.0mm THICK ARE TO BE BS EN 10025-2 GRADE S355 AND ARE HOT DIP GALVANISED TO BS EN ISO 1461.
ALL GALVANISED STEEL ROOF CONSTRUCTION. COMPRISING Z PURLINS, BRACING STRIPS AND PVC COATED PROFILE ROOF SHEETS TO BS 2989.
ALL PIPEWORK MILD STEEL TO BS 1387 WITH BS 4504 (PN16) TERMINATING FLANGES AND HOT DIP GALVANISED TO BS EN ISO 1461.
ALL BOLTS SPUN GALVANISED.
MECHANICAL PROPERTIES TO BS EN ISO 898: PART I, DIMENSIONS TO BS EN 24014.
TANK LINED WITH PVC LINER.
M12 BOLTS TORQUED TO A MAX. OF 3.8kgfm (28lbft).
APPROXIMATE WEIGHT OF THE FIRE PUMPHOUSE WILL BE T.B.C KG.
SPRINKLER FIRE PUMP TO BE MOUNTED ON A FOUNDATION SUFFICIENTLY SUBSTANTIAL TO ABSORB ANY VIBRATION.
PLINTH SHOULD WEIGH AT LEAST 2x< TIMES THE SHIPPING WEIGHT OF THE PUMP & HAVE A MINIMUM HEIGHT OF 300mm. PLINTH SHOULD BE KEYED INTO FLOOR.
EACH DIESEL FIRE PUMP WEIGHS APPROXIMATELY 3000KG (INCLUDES FUEL TANK FULL).
PLINTH SHOULD BE LARGER BY AT LEAST 300mm THAN THE PUMP BASEPLATE AS SHOWN.
PUMP BASEPLATE SHOULD BE LEVELLED USING PACKING SHIMS. GAP BETWEEN PLINTH & PUMP BASEPLATE TO BE 25mm FOR GROUTING.
FOUNDATION BOLTS SHOULD BE FITTED FOLLOWING INSTALLATION OF FIRE PUMP.
FOUNDATION BOLTS SUPPLIED M20x250mm LONG.



PUMP SET INSTALLATION AND FIXING
- THE FOUNDATION SHALL BE CHECKED FOR POSITION AND CORRECT DIMENSIONS BEFORE THE PUMP SET IS PUT IN PLACE;
- THE PUMP SET SHALL BE POSITIONED AND LEVELLED ON THE FOUNDATION USING SHIMS OR PACKING PIECES AT THE POINTS; SPECIFIED BY THE PUMP SET MANUFACTURER. THE SHIMS OR PACKING PIECES SHALL SUPPORT THE PUMP SET FRAME AT LEAST TWO SIDES OF ANY ANCHOR BOLT;
- GROUT IN THE ANCHOR BOLTS.

PUMP BASE FRAME FIXING

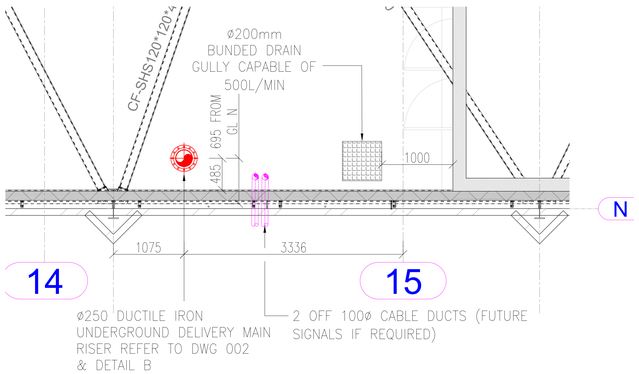
NOTE: ALL STRUCTURAL DETAILS TO BE VERIFIED BY STRUCTURAL ENGINEER

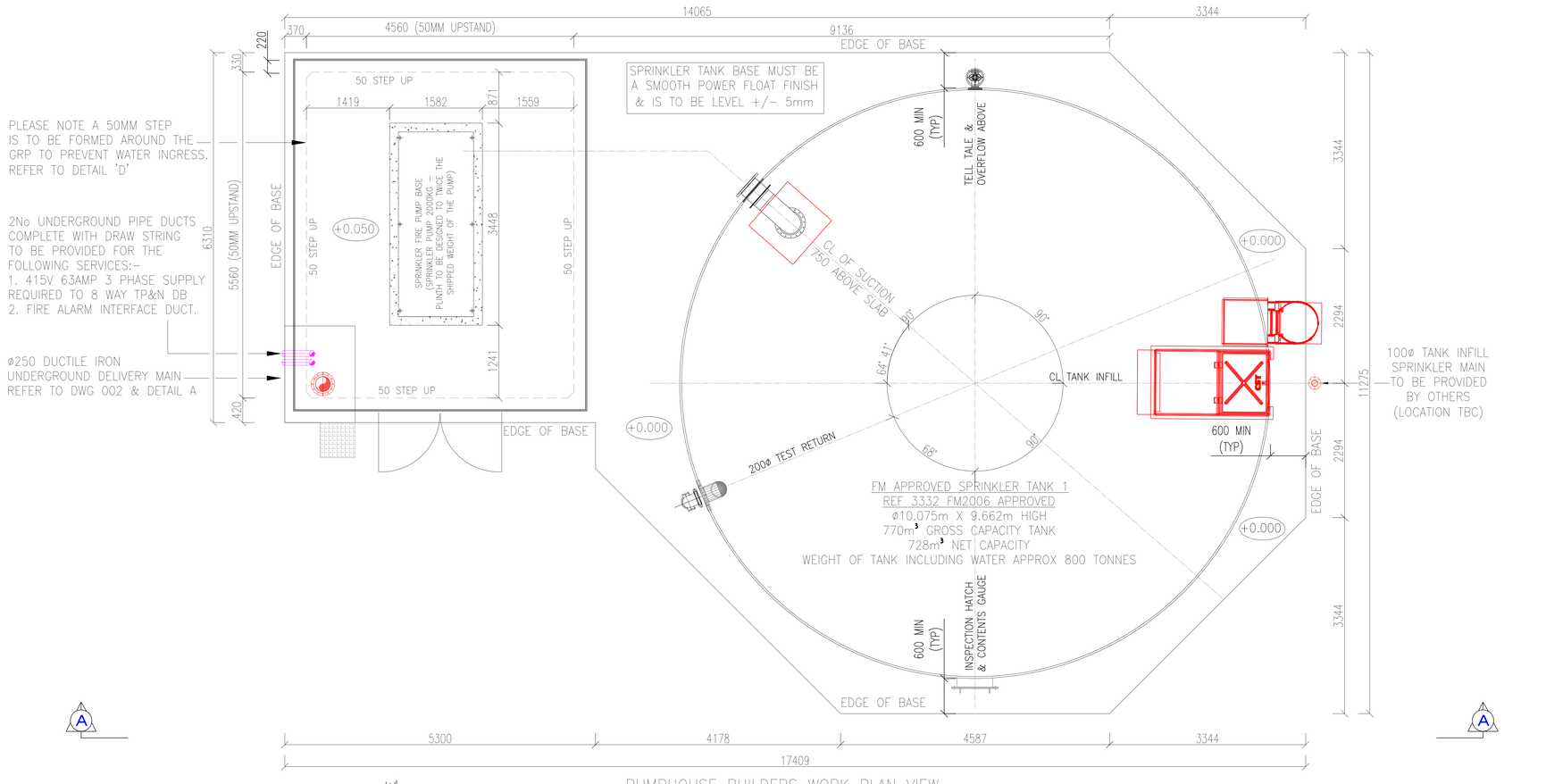
PLEASE NOTE BUILDER TO GROUT ALL FIRE PUMPS AND MAKE GOOD ONCE FIRE PUMPS HAVE BEEN FINALLY POSITIONED

NOTE FOR BUILDER

PLEASE NOTE ALL STRUCTURAL FOUNDATION DEPTHS DIMENSIONS ARE INDICATIVE AND ALL LOADING CALCULATIONS FOR PUMP HOUSE AND TANK BASE TO BE PRODUCED BY A STRUCTURAL ENGINEER TO RELEVANT STANDARDS

1no. NEW WATER STORAGE TANK WITH AN EFFECTIVE CAPACITY OF 728m³
10.075m DIA x 9.662m HIGH
(365mm FREEBOARD, 162mm DEADWATER)
60 MINUTE SUPPLY.
FM2006 APPROVED TANK.

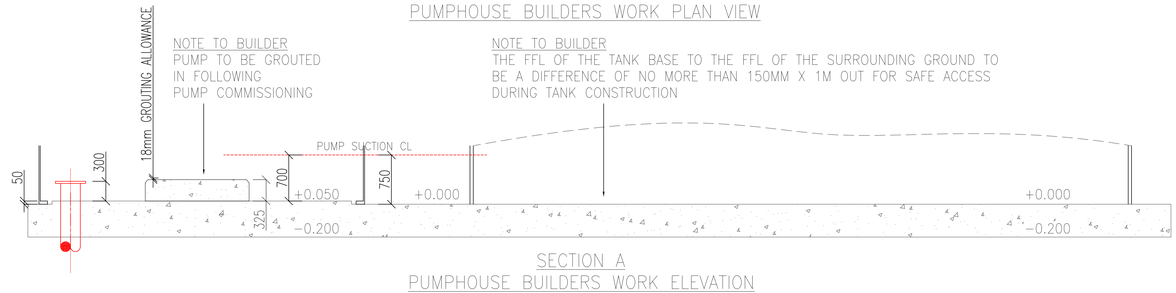




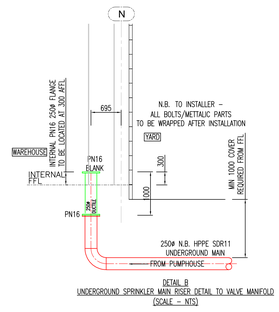
PUMPHOUSE BUILDERS WORK PLAN VIEW

NOTE TO BUILDER
PUMP TO BE GROUTED IN FOLLOWING PUMP COMMISSIONING

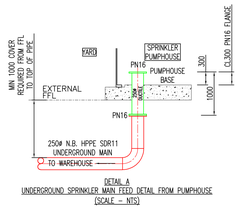
NOTE TO BUILDER
THE FFL OF THE TANK BASE TO THE FFL OF THE SURROUNDING GROUND TO BE A DIFFERENCE OF NO MORE THAN 150MM X 1M OUT FOR SAFE ACCESS DURING TANK CONSTRUCTION



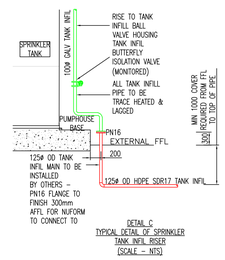
SECTION A
PUMPHOUSE BUILDERS WORK ELEVATION



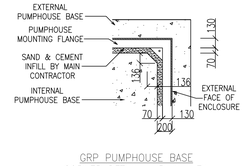
DETAIL B
UNDERGROUND SPRINKLER MAIN RISER DETAIL TO VALVE MANIFOLD
(SCALE - NTS)



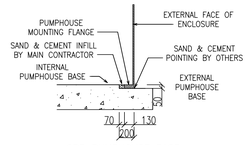
DETAIL A
UNDERGROUND SPRINKLER MAIN FED DETAIL FROM PUMPHOUSE
(SCALE - NTS)



DETAIL C
TYPICAL DETAIL OF SPRINKLER TANK INFIL RISER
(SCALE - NTS)

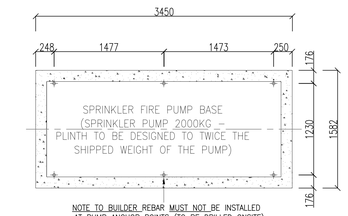


GRP PUMPHOUSE BASE
CORNER DETAIL - PLAN VIEW
NOT TO SCALE



GRP PUMPHOUSE BASE
CORNER DETAIL - SECTION VIEW
NOT TO SCALE

DETAIL D
TYPICAL GRP BASE STEP/GROUT DETAIL

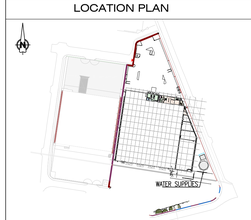


NOTE TO BUILDER REBAR MUST NOT BE INSTALLED AT PUMP ANCHOR POINTS (TO BE DRILLED ONSITE)

DETAIL E
TYPICAL PUMP PLINTH DETAIL

CONSTRUCTION ISSUE

LOCATION PLAN



GENERAL NOTES

1. THE SPRINKLER PIPING ABOVE INSTALLATION CONTROL VALVES WOULD BE BLACK MEDIUM SERIES TO BS EN 10255 WITH SCRD. FITTINGS TO BS 143 AND WELDED FITTINGS TO BS 1965 GROOVED MECHANICAL FITTINGS TO BE LPC LISTED & APPROVED
2. BELOW VALVES, THE PIPING WOULD BE IN ACCORDANCE WITH LOCAL WATER AUTHORITY REQUIREMENTS
3. UNDERGROUND MAINS WOULD BE LAID IN SPUN IRON SOCKET & SPIGOT PIPING TO BS4772 CLASS K9, OR PLASTIC MDPE/HDPE TO BS1972
4. PIPEWORK TO SLOPE TO DRAIN AS FOLLOWS. DRY, ALTERNATE AND PRE-ACTION INSTALLATIONS, RANGE PIPES SHALL HAVE A SLOPE TOWARDS THE DISTRIBUTION PIPE OF AT LEAST 4MM/M. 0.4% AND DISTRIBUTION PIPES SHALL HAVE A SLOPE TOWARDS THE APPROPRIATE DRAIN VALVE OF AT LEAST 2MM/M. 0.2%
5. SPRINKLER HEADS TO BE FITTED PERPENDICULAR TO THE ROOF/CEILING/FLOOR IN THE PENDANT OR UPRIGHT POSITION. YOKE ARMS SHALL BE PARALLEL WITH THE RANGE PIPEWORK.
6. WARNING: VALVES, CONTROLS, NOZZLES AND SPRINKLER HEADS MUST NOT BE PAINTED.
7. NU-FORM FIRE LTD., DO NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGE CAUSED BY FROST. CLIENTS SHOULD TAKE ADEQUATE PRECAUTIONS AGAINST THE WATER IN THE VALVES AND PIPES BELOW THE VALVES FREEZING DURING SEVERE WEATHER. CLIENTS SHOULD ALSO INFORM NU-FORM OF ANY AREAS WHERE THE AMBIENT TEMPERATURE MAY EXCEED 38DEG.C.
8. SPRINKLER PIPES MUST NOT HAVE ANY PLANT OR SERVICES ATTACHED TO, OR SUPPORTED FROM THE SPRINKLER SYSTEM.
9. CLIENTS MUST ENSURE THAT THE STRUCTURE IS CAPABLE OF CARRYING THE SPRINKLER PIPEWORK WHEN FILLED WITH WATER.
10. THIS DESIGN DETAIL HAS BEEN PRODUCED TO AVOID RISK TO HEALTH & SAFETY AS FAR AS IS REASONABLY PRACTICABLE. FOR FURTHER H & S INFORMATION REFER TO SEPARATE RISK ASSESSMENT & METHOD STATEMENTS
11. INSTALLERS NOTE:
ALL SPRINKLER HEADS MUST BE INSTALLED IN SITU. THE HEAD MANUFACTURERS SPRINKLER WRENCH MUST BE UTILISED.

REFERENCE DRAWINGS

AUTHOR	DRAWING NUMBER	DESCRIPTION

NOTES FOR FABRICATION

ALL DIMENSIONS SHOWN ON DRAWING ARE CENTRE TO CENTRE. NO DEDUCTIONS HAVE BEEN MADE FOR ANY MALLEABLE IRON OR VICTAULIC FITTING.

ALL MATERIALS AND FABRICATION PRACTICES MUST CONFORM TO THE SYSTEM STANDARD

PIPEWORK FINISH
RED OXIDE / RAL 3000 / GALVANISED

LEGEND

- UPRIGHT SPRINKLER & PIPING
- PENDENT SPRINKLER & PIPING
- LOW LEVEL SPRINKLER & PIPING
- SPRINKLER ON RISE / DROP PIPE WITH REDUCING SOCKET
- BRACKET POSITION & TYPE
- EXISTING SPRINKLER
- SIDEWALL SPRINKLER
- GROOVED COUPLING

DESIGN SPECIFICATION

SYSTEM STANDARD	FM GLOBAL DATA SHEETS
HAZARD CLASS	--
MATERIAL CLASS	--
OCCUPANCY	--
STORAGE TYPE / MAX	--
DESIGN DENSITY	--
AREA OF OPERATION	--
DESIGN FLOW RATE	--
PIPEWORK TABLE	--
SPKR TYPE	--
SPRK SPACING	--
INSTN NO AND TYPE	INSTN NO.1 150MM WET
HIGHEST HEAD ABOVE ICV	--

SCHEDULE OF SPRINKLERS

LOCATION	DESIGN SPACING	CONSTN	TYPE	TEMP °C	QTY
			TOTAL NUMBER OF HEADS ON PLAN		--

REVISION OF DRAWING

REV	DATE	REV BY	CHKD BY	REVISION
-	07.10.25	JE	FP	FOR APPROVAL
A	03.11.25	JE	FP	PUMP HOUSE ORIENTATION REVISED TO SUIT SITE CONDITIONS AND CLIENT COMMENTS / INCOMING VALVE RISER DETAIL ADDED ON GL N/14-15 GRP LOCATION REVISED TO SUIT LATEST ARCHITECTS COMMENTS/DRAWING
B	01.04.26	FP	JE	RAISED TO CONSTRUCTION ISSUE

CLIENT: KHANJRA INTERNATIONAL FOODS
GREENBANK BUSINESS PARK
BLAKEWATER ROAD
BLACKBURN BB1 3HU

CONTRACT: KHANJRA INTERNATIONAL FOODS
WHITWORTH STREET EAST
MANCHESTER M11 2WJ

DESCRIPTION: SPRINKLER SYSTEM PUMPHOUSE & TANK WATER SUPPLIES BUILDERS WORK LAYOUT

NU-FORM FIRE UK
Nu-FORM FIRE UK LTD.
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COLLINROD
BURY
BL9 5NB
TEL: 01706 825111
E-Mail: info@nuformfire.com
LPS1046-1
Approved Sprinkler Contractor
Certificate No. ASC-040

CONSTRUCTION ISSUE

DO NOT SCALE DRAWING. COPYRIGHT RESERVED

DRAWING NO	REV
CL5603-BW-01	B

SCALE	DRAWN	CHECKED	DATE	PROJECT IDENTIFIER	
1:336.1 @A0	JE	FP	07.10.25	5603-NFF-ZZ-ZZ-DR-Y-01	C01