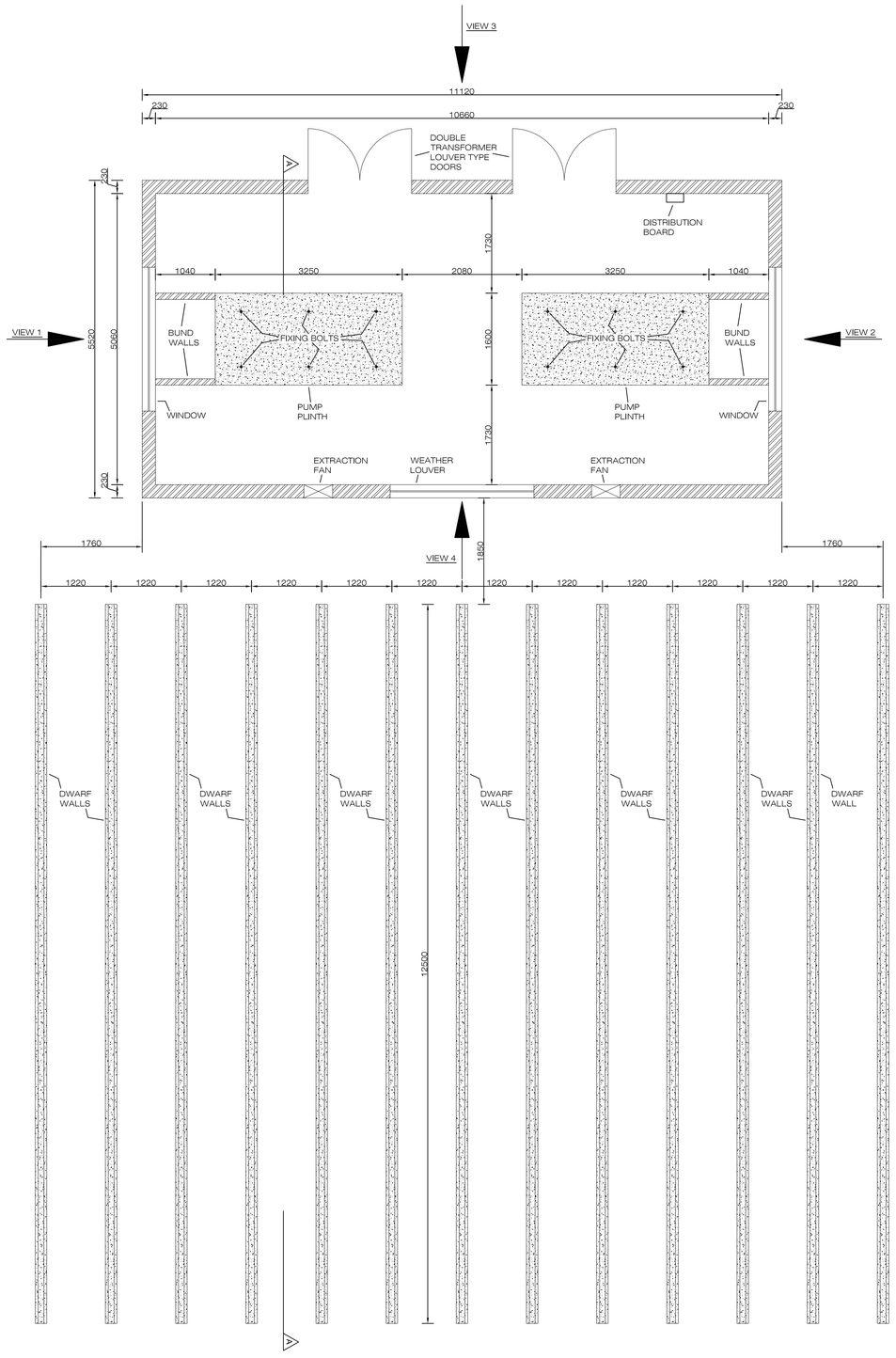


PLAN VIEW
SCALE 1:50

PUMP ROOM ELECTRICAL REQUIREMENTS
FOR 2x DIESEL / ANNUNCIATOR AND
JOCKEY CONTROLLERS:

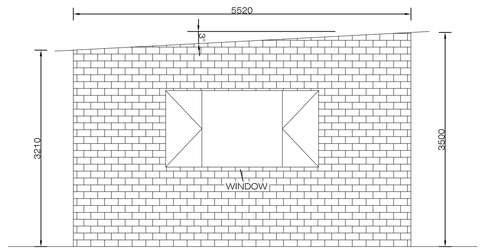
DISTRIBUTION BOARD TO BE SUPPLIED BY CLIENT WITH THE FOLLOWING EQUIPMENT:

2x DIESEL CONTROLLER	-	2x 20Amp, Single pole, 220V
1x 20 Zone ANNUNCIATOR	-	1x 10Amp Single pole, 220V
1x 1.1kW JOCKEY CONTROLLER	-	M&G BREAKER TYPE C45, T/P 20Amp, C CURVE
LIGHTING	-	5Amp, Single pole, 220V
EARTH LEAKAGE	-	32Amp Earth Leakage

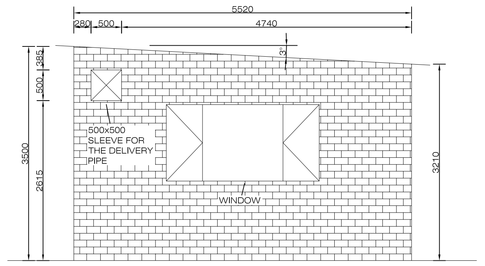
MAIN ISOLATOR TO BE RATED AT 87Amps.
LIGHTING AND PLUG INSTALLED BY CLIENT.
INCOMING CABLE TO BE 3 PHASE WITH EARTH AND NEUTRAL.

PUMP ROOM NOTES (AS PER ASIB 11TH EDITION RULES):-

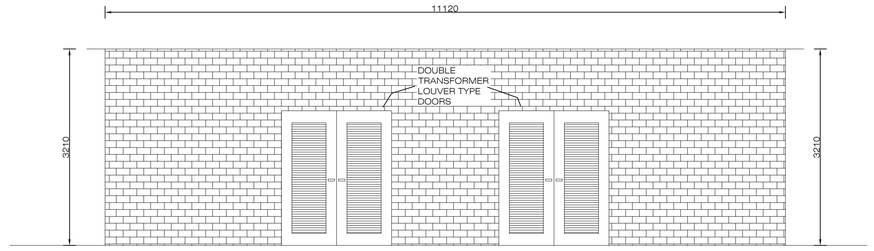
- THE TEMPERATURE OF THE PUMP ROOM SHALL BE MAINTAINED ABOVE 10°C WHERE COMPRESSION IGNITION TYPE ENGINES ARE USED.
- ADEQUATE VENTILATION MUST BE PROVIDED AND INCREASED IF NECESSARY TO LIMIT THE TEMPERATURE RISE IN THE PUMP ROOM TO NOT MORE THAN 10°C ABOVE THE AMBIENT TEMPERATURE UNDER STATIONARY TO FULL ENGINE LOAD CONDITIONS FOR A PERIOD OF NOT LESS THAN 6 HOURS.
- THE PUMP ROOM MUST BE LOCKED AT ALL TIMES AND A NOTICE STATING WHERE THE KEYS ARE OBTAINABLE MUST BE MOUNTED ON THE DOOR.
- THE ALARM SHALL BE IN AN APPROVED POSITION AT A RESPONSIBLY MANNED LOCATION IN THE PLANT OR ON THE PREMISES.
- SUFFICIENT NATURAL LIGHTING, (WHERE THE PUMP HOUSE IS LOCATED ABOVE GROUND), ARTIFICIAL AND EMERGENCY LIGHTING SHALL BE PROVIDED. LIGHTING LEVELS THROUGHOUT THE PUMP ROOM SHALL BE AT LEAST 500 LUX.
- ACCESS DOORS ARE NOT ACCEPTABLE FOR PROVIDING NATURAL LIGHTING.
- WHERE COMPRESSION IGNITION TYPE ENGINES ARE USED, THE PUMP ROOM MUST HAVE ADEQUATE NATURAL AND MECHANICAL VENTILATION FOR ENGINE ASPIRATION.
- MECHANICAL EXTRACTION SHALL BE POSITIONED AT HIGH LEVEL, CLOSE TO THE OR CEILING OF THE PUMP ROOM WHEREAS LOUVERS SHALL, WHERE POSSIBLE, BE POSITIONED AT A LOWER LEVEL IN ORDER TO DRAW AIR ACROSS THE DIESEL ENGINE.
- THE PUMP AND DRIVER MOUNTED ON THE COMMON BASE PLATE SHALL BE FIXED BY WAY OF FOUNDATION BOLTS TO A REINFORCED CONCRETE FOUNDATION PLINTH WHICH SHALL BE A FLOATING PLINTH (CAST AS A SEPARATE FOUNDATION, SET INTO THE PUMP ROOM FLOOR).
- THE FOUNDATION SHALL BE INSTALLED INDEPENDENT AND FREE OF EXPANSION JOINTS AND SHALL BE AT LEAST 300mm WIDER THAN THE PUMP SET ON ALL SIDES.
- THE MINIMUM HEIGHT THAT THE FOUNDATION SHALL PROJECT ABOVE THE FLOOR SHALL BE NOT LESS THAN 150mm BUT SHALL HAVE SUFFICIENT HEIGHT TO ACHIEVE THE NECESSARY WEIGHT, TO ACCOMMODATE THE POCKETS FOR FIXING BOLTS AND TO ENSURE THAT THE FOUNDATION BOLTS DO NOT COME INTO CONTACT WITH WATER. WHERE A FLOATING PLINTH IS USED IT SHALL BETWEEN 3 AND 5 TIMES THE WEIGHT OF THE UNIT IN ORDER TO ENSURE ALIGNMENT IS AMINTAINED AND VIBRATION IS TAKEN UP.
- THE FOUNDATION SHOULD PREFERABLY BE MADE OF REINFORCED CONCRETE THAT HAS BEEN POURED WITHOUT INTERRUPTION TO WITHIN 25mm OF THE FINISHED HEIGHT.
- THE TOP SURFACE SHALL BE WELL SCOURED AND GROOVED BEFORE THE CONCRETE SETS IN ORDER TO PROVIDE A BONDING SURFACE FOR THE GROUT.



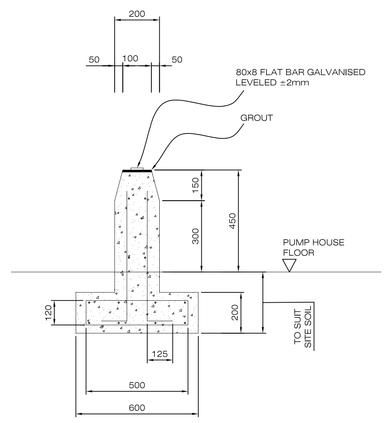
VIEW 1
SCALE 1:50



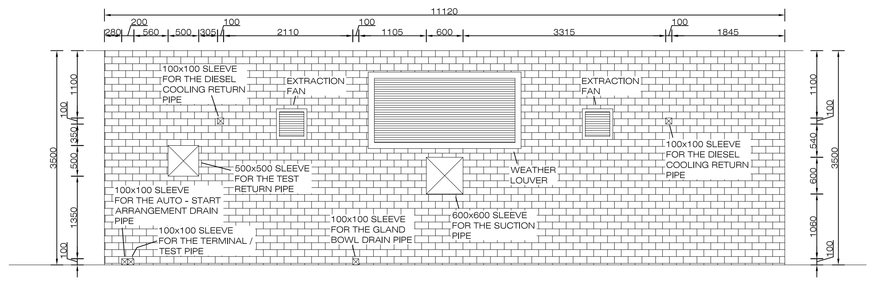
VIEW 2
SCALE 1:50



VIEW 3
SCALE 1:50

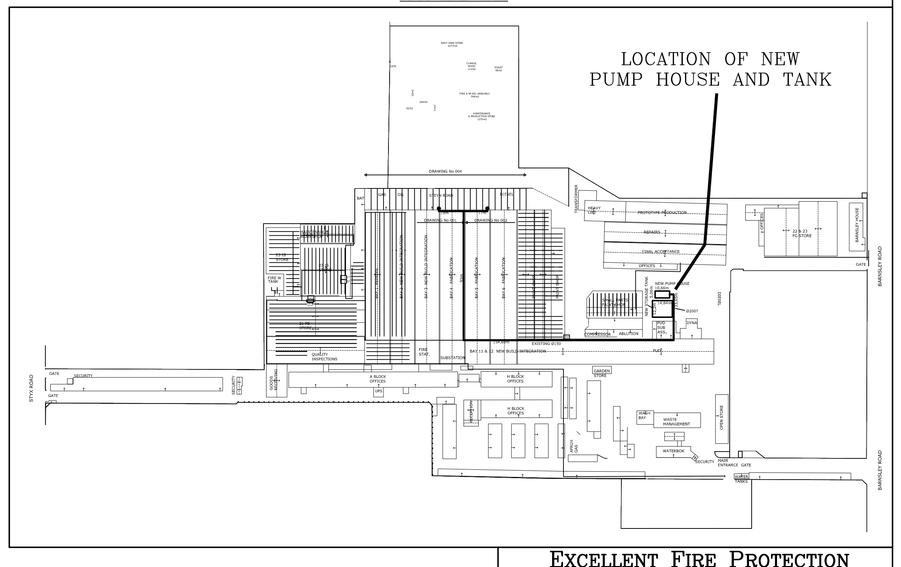


WATER STORAGE TANK
DWARF WALLS DETAIL
SCALE 1:15

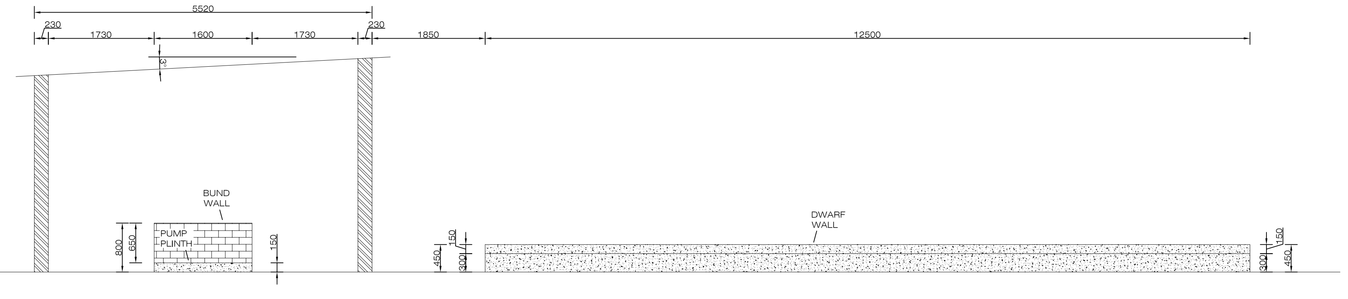


VIEW 4
SCALE 1:50

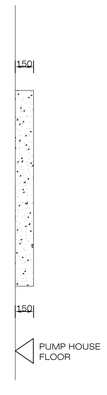
SITE PLAN:



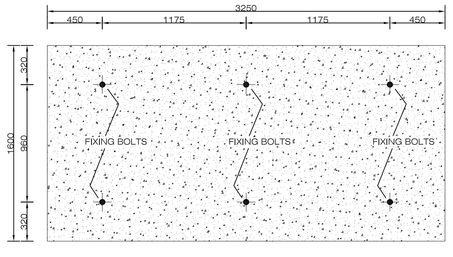
PUMP PLINTH DETAILS BELOW
ARE FOR BOTH PUMPS:



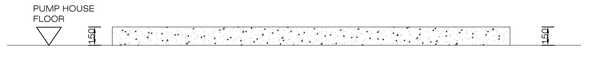
SECTION A–A
SCALE 1:50



FRONT VIEW
OF PUMP PLINTH
SCALE 1:25



PLAN VIEW
OF PUMP PLINTH
SCALE 1:25



SIDE VIEW
OF PUMP PLINTH
SCALE 1:25

NOTE:
1). FOR PUMP HOUSE MECHANICAL LAYOUT SEE DRAWING NO. PH–01.
2). THE PUMP HOUSE AND WATER STORAGE TANKS TO COMPLY WITH ASIB 11TH EDITION RULES.

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P.O. Box 4550
Atlas Park
1465

PROJECT:
BAE LAND SYSTEMS
12 BARNSLEY ROAD
BENONI SOUTH INDUSTRIAL AREA

DESCRIPTION:
NEW FIRE SPRINKLER WATER PUMP HOUSE AND WATER STORAGE TANK INSTALLATION BUILDERS LAYOUT

DATE:	SCALE:	DRAWING NO:
28/07/2015	1 – 50	PH–02
DRAWN BY: A.B.	APPROVED BY: P.D.S	REV. A