



REFERENCE DRAWING
(CONSTRUCTION)

SP-YUMN-00-CEC-332-CC-0001 CONCRETE WORKS - GENERAL NOTES
 SP-YUMN-00-CEC-332-CC-0002 CONCRETE WORKS - STANDARD DETAILS (ENGINEERING)

1. SP-YUMN-00-CEM-E15-MA-0001 PLOT PLAN
 2. SP-YUMN-00-CEM-103-MK-0001 TO DECK FOUNDATION PLAN
 3. SP-YUMN-00-CEM-103-MB-0001 GENERAL ARRANGEMENT POWER HOUSE BUILDING EL+0.00 ROOM LVL.

SPECIAL NOTE:
 SBC FOUNDATION LEVEL SHALL BE TESTED AND ENSURED IF IS NOT LESS THAN 300 MM² IF SBC IS NOT AVAILABLE, EXCAVATION SHALL CONTINUE TO A LOWER DEPTH AND THE GAP BETWEEN THE ACTUAL EXCAVATION LEVEL AND FOUNDING LEVEL (EL(+3.500)) SHALL BE FILLED WITH PCC.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH
 DWG NO. - SP-YUMN-00-CEC-308-CC-0002
 DWG NO. - SP-YUMN-00-CEC-308-CC-0003
 DWG NO. - SP-YUMN-00-CEC-308-CC-0004

NO.	DATE	REVISION DESCRIPTION	DESIGNED	CHECKED	APPROVED	SUPPLIER'S ENGINEER	SUPPLIER
R2	31.05.18	REVISED AS MARKED					
R1	23.05.18	REVISED AS PER SBC COMMENTS DATED 18/11/2017 & HE SUBMITTED FOR APPROVAL					
R0	27.10.17	FOR APPROVAL					

- GENERAL**
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS, & CONDITIONS SPECIFICATION & SCHEDULE OF ITEMS.
 - ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 - ALL ELEVATIONS ARE REFERRED TO FINISHED FLOOR LEVEL OF STB BUILDING.
 - ELEVATIONS WHICH CORRESPOND TO EL+0.00 ONLY.
 - GRADE OF CONCRETE SHALL BE C30/37 WITH OPC ONLY (CYLINDER STRENGTH) / CURS STRENGTH WITH 20MM FINE GRADED AGGREGATES.
 - ALL REINFORCEMENT SHALL BE OF HOT ROLLED STEEL, HIGH YIELD STRENGTH DEFORMED STEEL BARS & SHALL CONFORM TO BS 4449-2002.
 - LAP LENGTH (Ld) FOR REINFORCEMENT REFER STANDARD DRAWING.
 - CLEAR COVER TO CONCRETE SHALL BE AS FOLLOWS:

DESCRIPTION	TOP	BOTTOM	SIDES
FOUNDATION	50	75	25
 - REINFORCEMENT IS CALLED UP AS THIS:

BAR MARK	BAR SPACING (CENTERS)	NUMBER OF BARS
T12 @ 200		
T12 - 24		
 - NET SAFE BEARING CAPACITY OF FOUNDATIONS ARE CONSIDERED AS 300 KV/M² AT FOUNDING LEVEL AT EL(-3.500M)
 ACTUAL MAXIMUM BEARING PRESSURE ON SOIL AT FOUNDING LEVEL 275 KV/M²
- JOINTS**
 - THE STEAM TURBINE GENERATOR FOUNDATION SHALL BE SEPARATED FROM THE SURROUNDING BUILDING FOUNDATION/GRADE SLAB BY PROVIDING AN ISOLATION JOINT 50 MM WIDE ALL AROUND.
- TOLERANCE**
 - TOLERANCE OF STEEL PIPES MEASURED FROM CENTRE LINE CROSS SHALL BE ±5 MM (HORIZONTAL) & ±2 MM (VERTICAL).
 - TOLERANCE OF EMBEDDED PVC PIPES SHALL BE ±5 MM / CABLE LINES.
 - TOLERANCE OF ANCHOR BOLT MEASURED FROM CENTRE LINE CROSS SHALL BE ±5 MM (HORIZONTAL) & ±2 MM (VERTICAL).
- EMBEDDED PARTS**
 - ALL EMBEDDED PARTS SHALL BE FLUSH WITH THE FACE OF CONCRETE, UNLESS OTHERWISE SPECIFIED.
 - ALL EMBEDDED PARTS EXCEPT (P-1) ARE TO BE SUPPLIED BY THE STB SUPPLIER.
 - EMBEDDED PARTS SHALL BE PROTECTED FROM DAMAGE BY THE ADJACENT EPS.
 - EXPOSED SURFACES OF EMBEDDED PARTS SHALL BE PROTECTED AGAINST CORROSION BY SUITABLE (80 micron) BEFORE THEIR INSTALLATION. ALL WELD DAMAGED COATING AREAS TO BE REPAIRED.
 - ALL ANCHOR HOLES MUST BE SCABBED WITH A SMOOTHING DEPTH OF MIN. 5-10mm.
 - ALL INSERTS WHICH SHALL BE EMBEDDED INTO CONCRETE SHALL BE THOROUGHLY ME BRUSHED AND CORROSION INHIBITED PRIOR TO POSITIONING IN FOUNDATION.
 - LOCATION OF ALL EMBEDDED PARTS, OPENINGS & EXTENT OF GRouting SHALL BE CHECKED & CLEARED BY STB SUPPLIER REPRESENTATIVE BEFORE CONCRETING.
 - ALL EMBEDDED PIPE SLEEVE SHALL BE VERTICAL. SLEEVES & OTHER EMBEDMENTS MAY BE TACK WELDED WITH REINFORCEMENT BEFORE POURING OF CONCRETE TO KEEP THEM IN POSITION DURING CONCRETE.
- STEAM TURBINE - FOUNDATION CONCRETE POURING**
 - NO CONSTRUCTION JOINTS WILL BE PERMITTED.
 - ENTIRE CONCRETING TO BE DONE IN ONE POUR.
- CONCRETE TEMPERATURE**
 - THE PLANT-MADE FRESH CONCRETE SHALL HAVE A TEMPERATURE BETWEEN +21C
 - THE MAXIMUM MATURING HEAT OF THE FRESH CONCRETE SHALL NOT EXCEED 60°C
 - ADEQUATE TEMPERATURE MONITORING SYSTEM SHALL BE PROVIDED HOIST THE CONCRETE.
 - TEMPERATURE DIFFERENCE WITHIN THE SAME COMPONENT SHALL BE LIMITED TO 20C BETWEEN ANY TWO POINTS. THE EXPECTED WEATHER CONDITION(HUMIDITY/TEMPERATURE) FOR THE DAY OF POURING SHALL BE CONSIDERED ACCORDINGLY.
 - THE THICKNESS OF A FRESHLY PLACED CONCRETE LAYER SHALL NOT EXCEED 400 MM AND THE SUBSEQUENT LAYER SHALL BE PLACED WHILE THE PRECEDING LAYER IS STILL FRESH TO AVOID COOL JOINTS. GOOD COMPACTOR SHALL BE USED. THE FORMWORK SHALL HAVE THE REQUIRED STRENGTH TO CONTAIN THE NET CONCRETE AND SHALL BE SUBSTITUTED TO PREVENT LOSS OF CONCRETE BY LEAKING.
 - CONCRETE SHALL BE PROTECTED FROM HARMFUL EFFECTS SUCH AS SEVERE HEATING OR COOLING, PREMATURE DRYING OUT (INCLUDING BY WIND), LEAKING OUT BY FALLING RAIN OR FLOWING WATER, CHEMICAL ATTACK OR VIBRATION AND IMPACT WHICH MAY DISRUPT THE CONCRETE OR INTERFERE WITH ITS BOARD TO THE REINFORCEMENT.
- OTHER REQUIREMENTS**
 - REFER TO DRAWING SP-YUMN-00-CEC-332-CC-0001 FOR OTHER GENERAL REQUIREMENTS.
 - CIVIL CONTRACTOR IS TO PROVIDE A METHOD STATEMENT COVERING CONCRETING INCLUDING TEMPERATURE CONTROL, TOLERANCES.
 - EQUIPMENT ERECTOR CONTRACTOR IS TO SUBMIT A METHOD STATEMENT FOR APPROVAL BY THE OWNER'S ENGINEER. DETAILED PROPOSALS FOR EQUIPMENT ALIGNMENT, LEVELLING & GRouting METHOD AND ADDRESSING HOW THE GROUT WILL BE POURED, CURED AND TESTED PRIOR TO ANY GRouting OF SLAB/PLATES.
 - NON SHRINK FINE FLOW GROUT (SBSF MASTERFLOW 928 OR EQUIVALENT) BELOW THE BASE PLATE SHALL BE DONE AS PER SPECIFICATION, GRouting CONCRETE ARE IN ERECTOR CONTRACTOR'S SCOPE.

LEGEND

BOC	: BOTTOM OF CONCRETE	TOC	: TOP OF CONCRETE
EL	: ELEVATION IN METRES	AND	: UNLESS NOTED OTHERWISE
FLL	: FINISHED FLOOR LEVEL	TOP	: TOP OF PAVING
FGL	: FORMED GROUND LEVEL	FLL	: FINISHED FLOOR LEVEL
IP	: INSERT PLATES		

AS BUILT
 (THIS DRAWING IS TO BE USED FOR CONSTRUCTION)