



PRIMARY CHW PUMPS
 DUTY :
 (P1) 60.0 1/4 ● 20.0m
 (P2) 50.0 1/4 ● 21.0m
 (P3) 60.0 1/4 ● 20.0m

AMBIENT DESIGN CONDITIONS
 SUMMER: 30.0 °CDB, 22.0 °CWB
 WINTER: 3.0 °CDB

ITEM	LOAD	FLOW	TEMP RANGE	DIFF
	KWR	Litres/s	IN/OUT °C	°C
TOTAL	5350.0	280.0	3.0 / 8.0	5.0

CHILLER	COOLING CAPACITY	TEMP RANGE	DIFF
	KWR	IN/OUT °C	°C
No. 1	900	8.0 / 3.0	5.0
No. 2	70	8.0 / 3.0	5.0
No. 3	500	8.0 / 2.0	6.0
No. 4	800	8.0 / 2.0	6.0
TOTAL	6750.0	300.0	8.0 / 2.5

ALL DATA SHOWN TO BE READ AS INDICATIVE ONLY

TYPICAL INDUSTRIAL CHILLED WATER GENERATION AND DISTRIBUTION SYSTEM IN THE FOOD & BEVERAGE INDUSTRY, WITH MULTIPLE CHILLERS AND TWIN CHW STORAGE TANKS, AMMONIA REFRIGERATION SYSTEM WITH HEAT REJECTION USING AVAILABLE RAW WATER FACILITIES COMBINED WITH EVAPORATIVE CONDENSERS OR ALTERNATIVELY AIR COOLED CONDENSING UNITS. CHILLED WATER IS PRODUCED IN PRIMARY WATER CIRCULATION SYSTEMS AND SUPPLIED TO THE PROCESSING FACILITY BY MEANS OF SECONDARY CHW CIRCULATION SYSTEMS

THE PRIMARY AND SECONDARY CHW CIRCULATION SYSTEMS TO FUNCTION AS A BALANCED UNIT

NOTE 1
 THE CHW FLOW RATE THROUGH VARIOUS PROCESSING CIRCUITS CONNECTED IN PARALLEL, REQUIRES FLOW BALANCING, IN ORDER TO MAINTAIN DIFFERENTIAL CONSTANT RETURN WATER TEMP. THIS IS AN ESSENTIAL REQUIREMENT FOR THE SUCCESSFUL OPERATION & PERFORMANCE OF THE SYSTEM.

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CLIENT: A ANOTHER
 CHW SYSTEM UPGRADE

TITLE: CHW SYSTEM SCHEMATIC LAYOUT

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SCALE:	A3	DRAWING No.:	AABBCC
	NTS		
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