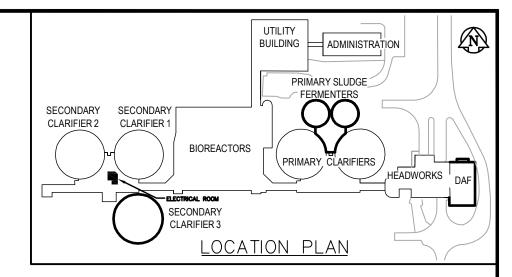


		F	PANE				ULE				
					nel S						
DESCRIPTION	LOAD	BKR	CCT	Α	В	С	CCT	BKR	LOAD	DESCRIPTION	
Receptacle	2	15A	1	*			2	15		Glycol Feed Tank S776-GFT	
Receptacle	2	15	3		*		4	20		Natural Gas Blower S760-GH	
Receptacle	3	15	5			*	6	20		Natural Gas Blower S765-GH	
Receptacle	3	15	7	*			8	15		Supply Fan S780-SF	
Flow Transmitter S820-FIT		15	9		*		10	15		Flow Transmitter S720-FIT	
Flow Transmitter S540-FIT		15	11			*	12	15		Flow Transmitter S740-FIT	
Flow Transmitter S710-FIT		15	13	*			14	15		Flow Transmitter S821-FIT	
Spare		15	15		*		16	-		Space	
Spare		15	17			*	18	-		Space	
Spare		15	19	*			20	-		Space	
Spare		15	21		*		22	-		Space	
Spare		15	23			*	24	-		Space	
Motorized Dampers for 750-AHU		15	25	*			26	-		Space	
Motorized Dampers for 780-SF		15	27		*		28	-		Space	
Control Valve for 750-AHU		15	29			*	30	-		Space	
Space		-	31	*			32	-		Space	
Space		-	33		*		34	-		Space	
Space		-	35			*	36	-		Space	
Space		-	37	*			38	-		Space	
Space		-	39		*		40	-		Space	
		-	41			*	42	-		Space	
Voltage:   120/208V/3Ø/4 wire					Feeder:				4/C#3 TECK		
Mains: 225A					Main Breaker:			cer.	N/A		
IVIGITIO. ZZO/ (					1416	uii L	Ji Gar	<b>.</b>	1 4 / 7		
Location: Secondary Clarifier Electrical Room					Power Source:			rce:	Transfromer XFMR-SB		
Mounting: Surface											



FLOOR PLAN
SCALE: 1:25

NEW SECTION		MCC -	- 1S		<b>-</b>	NEW SECTION		
6	S210-FWP MCP SIZE 1 SEC. CLAR. EFFL. WATER PUMP 5.6 kW	S600-MUA 40A-3P BREAKER ELECTRIC SEC. CLAR. MAKE UP AIR UNIT 0.75 kW	S605-AEF MCP SIZE 1 SEC. CLAR. AXIAL EX. FAN 7.5 kW	S695-EF MCP SIZE 1 SEC. CLAR. EX. FAN 1.5 kW (15A-3P BREAKER????)	S220-FWP MCP SIZE 3 SEC. CLAR. EFFL. WATER PUMP 22.4 kW	S629-UH S632-SMP 15A-3P S633-SMP BREAKER 20A-3P ELECTRIC BREAKER ROTORK SUBMER. ACTUATOR SUMP 0.75 kW PUMP 5.6 kW	S655-AFF MCP SIZE - - kW	6
	S510-CM MCP SIZE 1 SEC. CLAR. DRIVE #1 0.75 kW	S636-SMP S641-UH S637-SMP 15A-3P BREAKER MIX, LIQ. SUBMERS. UNIT SUMP HEATER PUMP 3.73 kW		S770-GP MCP SIZE 1 GLYCOL CIRC. PUMP 3.75 kW	S520-CM MCP SIZE 1 SEC. CLAR.	S634-SMP S650-MUA S635-SMP 40A-3P 15A-3P BREAKER BREAKER SEC CLAR. SUBMER. MAKE UP SUMP AIR UNIT PUMP 3.73 kW		
	SPACE	S710-RAP 70A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW SPARE S730-RAP 80A-3P BREAKER RETURN ACT. 2 SLUDGE PUMP 22.4 kW	80A-3P BREAKER RETURN ACT. (8) SLUDGE PUMP 22.4 kW	SPACE	DRIVE #2 0.75 kW  S330-DWP MCP SIZE DEWATERING PUMP kW	S720-RAP 70A-3P BREAKER RETURN ACT. SLUDGE PUMP 22.4 kW	SPARE (7) MCP SIZE 1  S750-RAP XFMR-SB	
	MOLDED CASE	MCP SIZE 1	50A-3P BREAKER MAKE UP AIR UNIT SUPPLY FAN 15 kW  50A-3P BREAKER MAKE UP AIR UNIT EXHAUST FAN 15 kW	MOLDED CASE	MOLDED CASE	MCP SIZE 1	80A-3P BREAKER RETURN ACT. 8 SLUDGE PUMP 22.4 kW	
	SWITCH 400A, 600V (EXISTING LUG CONNECTION)	S230-FWP 200A-3P BREAKER SEC. CLAR. EFFL. WATER PUMP 64kW	SPARE 7 MCP SIZE 1  S530-CM MCP SIZE 1 SECONDARY	TIE SWITCH 400A, 600V	SWITCH 400A, 600V (EXISTING LUG CONNECTION)	S240-FP MCP SIZE 4 SEC. CLAR. FIRE PUMP 75 kW	S775-GP MCP SIZE 1 GLYCOL FEED PUMP 3.75 kW	
			SECONDARY CLARIFIER 3 DRIVE 0.75 kW					

## DRAWING NOTES

MOTOR CONTROL CENTRES 1S & 2S

- SIZE 1 STARTERS FOR WAS ACTIVATED SLUDGE PUMPS S810-WAP AND S820-WAP SHALL BE DISCONNECTED AND LEFT IN PLACE AS SPARES. EXISTING PUMPS S810-WAP AND S820-WAP SHALL BE DISCONNECTED AND ALL WIRING FROM EXISTING STARTERS TO BE REMOVED. (REFER TO DRAWING SE3.02) MODIFY STARTER LABELS TO SUIT REVISED EQUIPMENT. MODIFY WRAPPER DOOR AS REQUIRED.
- 2 REMOVE BREAKER (MCC-1S) FOR EXISTING PUMP S730-RAP. REPLACE BREAKER WITH NEW 80A-3P, 600V BREAKER. RECONNECT EXISTING WIRING. REFER TO DRAWING SE3.02.
- 3 SIZE 3 STARTER (MCC-1S) FOR FLUSHING WATER PUMP S230-FWP SHALL BE DISCONNECTED AND REMOVED. PROVIDE NEW MCC WRAPPER COMPLETE WITH 200A-3P BREAKER. REMOVE EXISTING WIRING FROM EXISTING STARTER TO EXISTING PUMP MOTOR. INSTALL NEW POWER WIRING TO NEW PUMP MOTOR (3/C#1 TECK CABLE). RECONNECT EXISTING CONTROL WIRING FOR S230-FWP AT NEW MOTOR STARTER.
- PROVIDE NEW STARTER AND BREAKER WRAPPERS IN EXISTING SPACES AS INDICATED ON MCC ELEVATION. MODIFY DOORS TO SUIT NEW STARTERS, CONTROL SWITCHES, INDICATING LIGHTS AND BREAKERS AS REQUIRED.
- (5) EXISTING MCC'S. REFER TO DETAIL FOR EXISTING DETAILS AND MODIFICATIONS.
- 6 PROVIDE ADDITIONAL VERTICAL CELL TO EACH END OF MCC. CONNECT TO EXISTING MCC BUS.
- 7 SIZE 1 STARTERS FOR WAS ACTIVATED SLUDGE PUMPS S850—SP AND S860—SP SHALL BE DISCONNECTED AND LEFT IN PLACE AS SPARES. EXISTING PUMPS S850—SP AND S860—SP SHALL BE DISCONNECTED AND ALL WIRING FROM EXISTING STARTERS TO BE REMOVED. (REFER TO DRAWING SE3.02) MODIFY STARTER LABELS TO SUIT REVISED EQUIPMENT. MODIFY WRAPPER DOOR AS REQUIRED.
- 8 PROVIDE NEW BREAKER WRAPPERS IN EXISTING SPACES AS INDICATED ON MCC ELEVATION FOR RETURN ACTIVATED SLUDGE PUMPS S740-RAP AND S750-RAP. PROVIDE NEW SIZE R5 VFD'S AS SHOWN ON FLOOR PLAN. INSTALL NEW POWER WIRING TO NEW VFD AND FROM VFD TO PUMP MOTOR (3/C#4 TECK CABLE WITH 100% GROUND WIRE).
- 9 PANEL SB INSTRUMENT CIRCUITS REFER TO INSTRUMENTATION AND CONTROL DRAWINGS FOR INSTRUMENTATION LOCATIONS. PROVIDE WIRE AND CABLE AS PER INSTRUMENT CABLE LIST.

## GENERAL NOTES

- 1. COORDINATE WITH OTHER TRADES TO PREVENT CONFLICTS.
- 2. USE PVC JACKETED HITECK CABLE FOR ALL POWER WIRING.
- 3. WIRING FOR LIGHTING, RECEPTACLES AND COMMUNICATIONS TO IN RGID ALUMINUM CONDUIT.
- 4. ALL CONDUIT TO BE 21mmø MINIMUM UNLESS OTHERWISE NOTED.



DETAIL - EXISTING MOTOR CONTROL CENTRE MODIFICATIONS

SCALE 1: 25

Certificate of Authorization
Earth Tech Canada Inc.
No. 730 Expiry: April 30, 2006

B.M ELE			9	Ear	thTech	
						ternational Ltd. Company
				DESIGNED BY	GSN	CHECKED PS
				DRAWN BY	ERC	APPROVED JEH
02	ISSUED FOR CONSTRUCTION 21-2006 ADDENDUM 3	06/09/22 06/09/15		HOR. SCALE:	NTS	RELEASED FOR CONSTRUCTION BY:

DATE | BY | DATE 2005/11/22

06/04/26 ERC

00 ISSUED FOR TENDER

NO. REVISIONS

ORIGINAL
SIGNED BY
P. STRYK
2006/04/26

CONSULTANT DRAWING NO.
SE4.01

J. VEILLEUX

DATE 2006/04/26

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WEWPCC

CITY FILE NUMBER

BIOLOGICAL NUTRIENT REMOVAL UPGRADE
CONTRACT 3

ELECTRICAL
AREA S - SECONDARY CLARIFIERS
EXISTING ELECTRICAL ROOM DETAILS