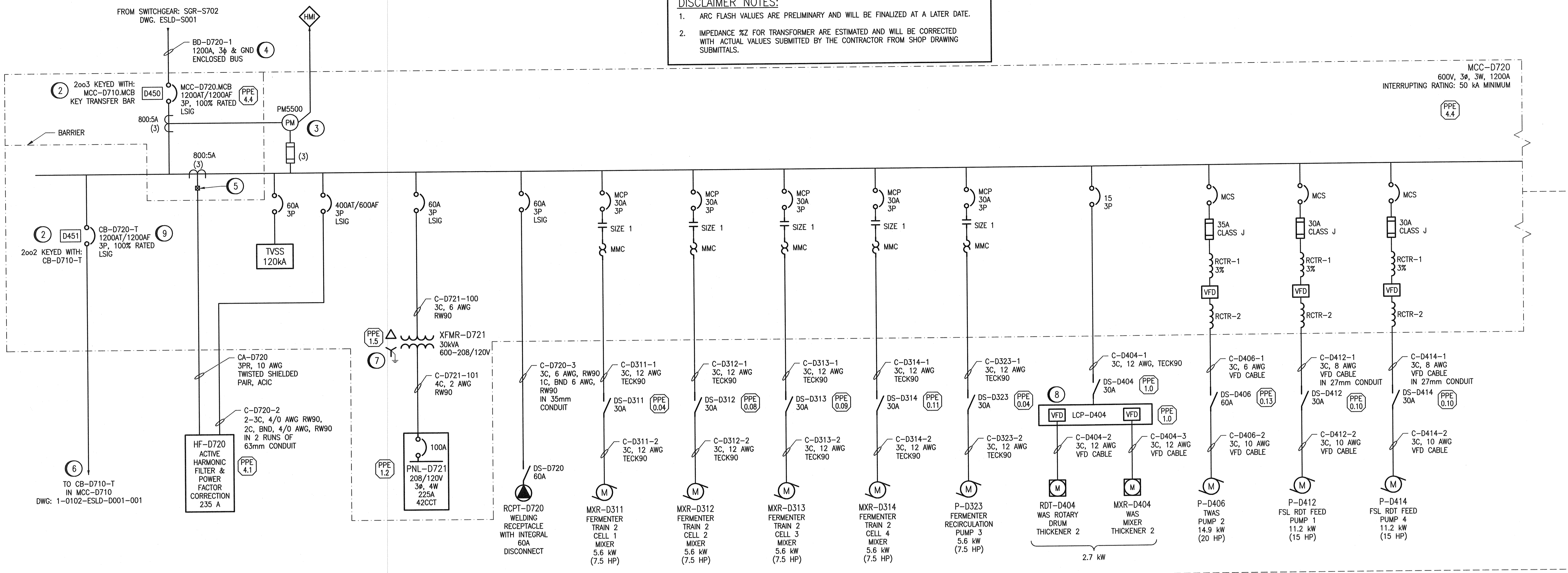


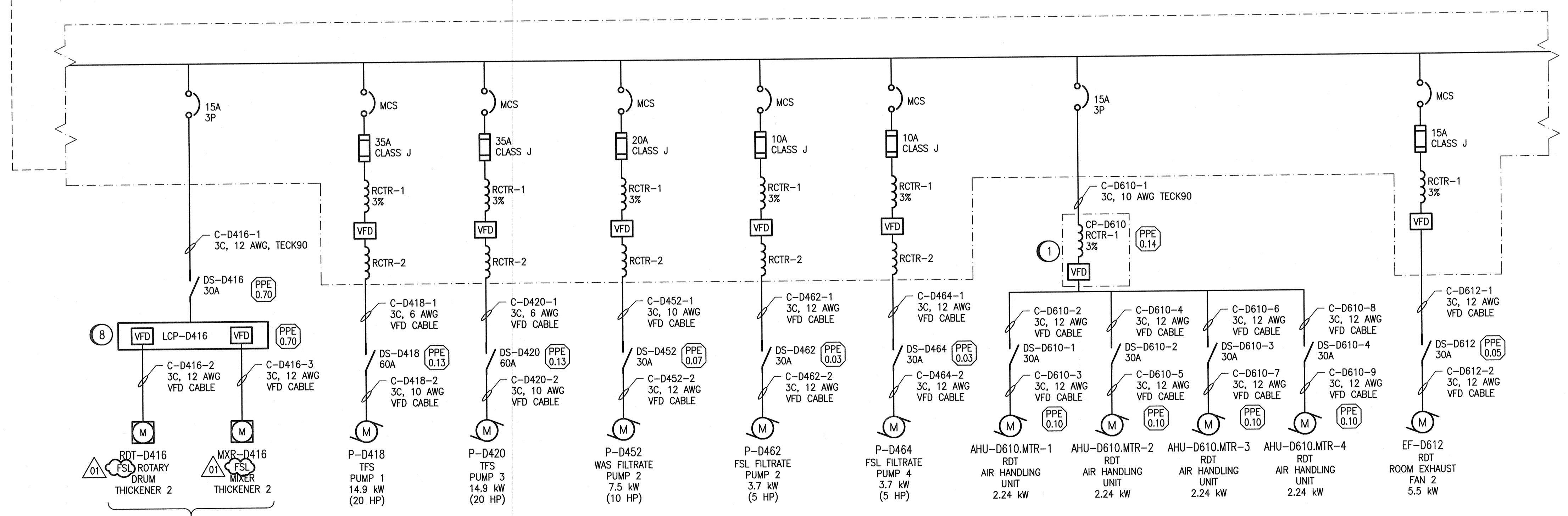
A1 SIZE - 594mm x 841mm

DISCLAIMER NOTES:

- ARC FLASH VALUES ARE PRELIMINARY AND WILL BE FINALIZED AT A LATER DATE.
- IMPEDANCE %Z FOR TRANSFORMER ARE ESTIMATED AND WILL BE CORRECTED WITH ACTUAL VALUES SUBMITTED BY THE CONTRACTOR FROM SHOP DRAWING SUBMITTALS.



- GENERAL NOTES**
- REFER TO DRAWING 1-0102-ESLD-D001-001 FOR GENERAL NOTES.
- SPECIFIC NOTES**
- VFD TO BE SUPPLIED BY THE AIR HANDLING UNIT VENDOR AS PART OF A PACKAGE SYSTEM. VFD TO BE IN A SEPARATE ENCLOSURE, WALL MOUNTED, E.C TO WIRE AND CONNECT SYSTEM COMPLETE WITH ALL INTERLOCKS AND CONTROLS.
 - PROVIDE KIRK KEY INTERLOCKS BETWEEN MAIN MCC BREAKERS AND THE BREAKERS TO PREVENT CLOSING OF THE BREAKERS WHEN 2 SEPARATE UTILITY SOURCES ARE FEEDING THE MCCS.
 - PROVIDE POWER TO POWER METERS FROM PNL-6S, C.T. 26. REFER TO AGAD-S001.
 - PERFORM CUSTOM MODIFICATION AND EXTENSION OF EXISTING COPPER BUSWORK, AND BUSWORK ENCLOSURES. CUT, MODIFY, AND EXTEND WESTINGHOUSE LoZ 1200A BUSWORK TO CONNECT THE BUSWORK INTO THE NEW MCC. PROVIDE NEW 3Φ, COPPER, SCHNEIDER I-LINE BUSWAY AND BUSWAY TRANSITIONS, FOR ENTRY INTO MCC.
 - PROVIDE SHORTING TERMINAL BLOCKS FOR CURRENT TRANSFORMER CONNECTION TO ACTIVE HARMONIC FILTER.
 - CONDUIT / WIRING INTO THE BREAKERS SHALL BE SIDE ENTRY INTO THE BOTTOM TIE BREAKER CELL.
 - PROVIDE SEPARATE 6 AWG RW90, GREEN INSULATED CONDUCTOR (RUN IN CONDUIT) FROM THE TRANSFORMER XO TERMINAL TO THE SYSTEM GROUND.
 - WIRE AND CONNECT SYSTEM IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. REVIEW REQUIREMENTS ON SHOPDRAWINGS.
 - SET THE LONG TIME TRIP TO 0.7 X 1200AT = 840AT.



MAXIMUM LOAD ESTIMATE			
	CONNECTED LOAD (A)	DEMAND FACTOR	DEMAND LOAD (A)
LIGHTING	0	1	0
HVAC	42	0.8	33.6
MISC.	15	0.5	7.5
PROCESS	381	0.8	305
TOTAL	438		346

APCGM
Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
01	ISSUED FOR ADDENDUM 3 - 976-2016	2017/06/23	WE	DEB
00	ISSUED FOR CONSTRUCTION - 976-2016	2017/04/05	WE	DEB

CH2MHILL
SNC-Lavalin
DESIGNED BY: V. ELIMBAN
CHECKED BY: E. RYCZKOWSKI
DRAWN BY: M.J. PERSSON
APPROVED BY: D. BECKER
SCALE: NTS
ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2014/02/16
DATE: 2017/04/05
CONSULTANT NO.: 474248

ENGINEER'S SEAL
PROVINCE OF MANITOBA
D.E. BECKER
Member
23646
June 21 2017

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPPC UPGRADING/EXPANSION PROJECT
ELECTRICAL - SINGLE LINE DIAGRAM
FERMENTERS/THICKENERS
MOTOR CONTROL CENTRE MCC-D720
CITY DRAWING NUMBER: 1-0102-ESLD-D002
SHEET: 001
REV: 01
SIZE: A1

LAST SAVE: 2017/06/21 - 11:42am
PATH: C:\pwworking\ch2mhill\wg\03561331\1-0102-ESLD-D002-001.dwg

1-0102-ECBD-D002 ELECTRICAL, MCC-D720 LAYOUT AND SCHEDULE
1-0102-EAAA-A001 ELECTRICAL, LEGEND AND DETAILS
REFERENCE DRAWINGS DESCRIPTION