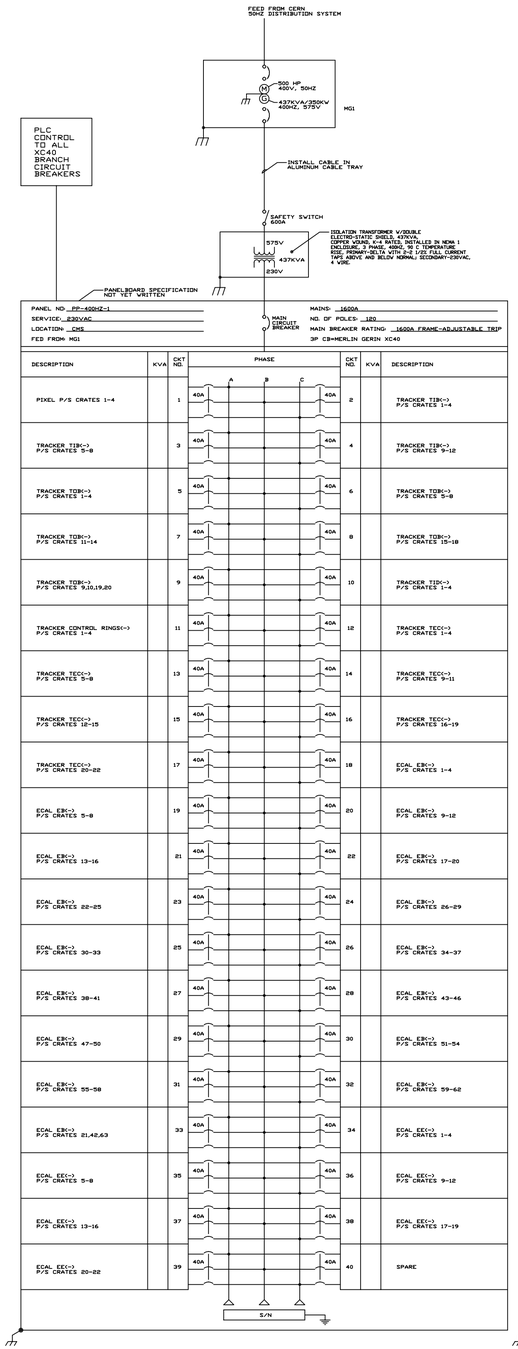
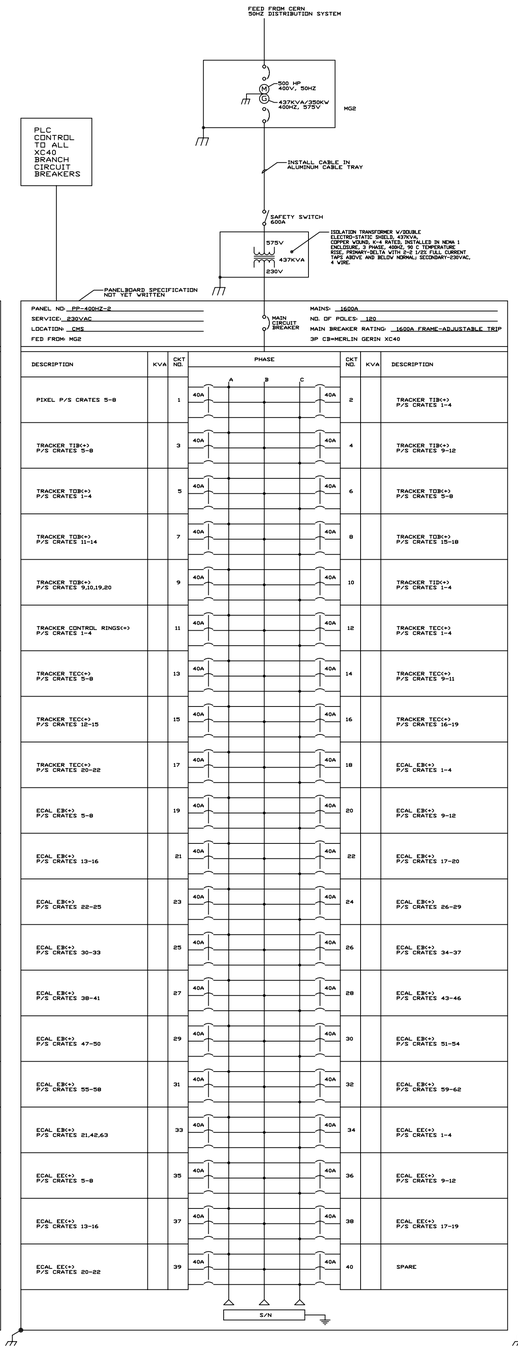
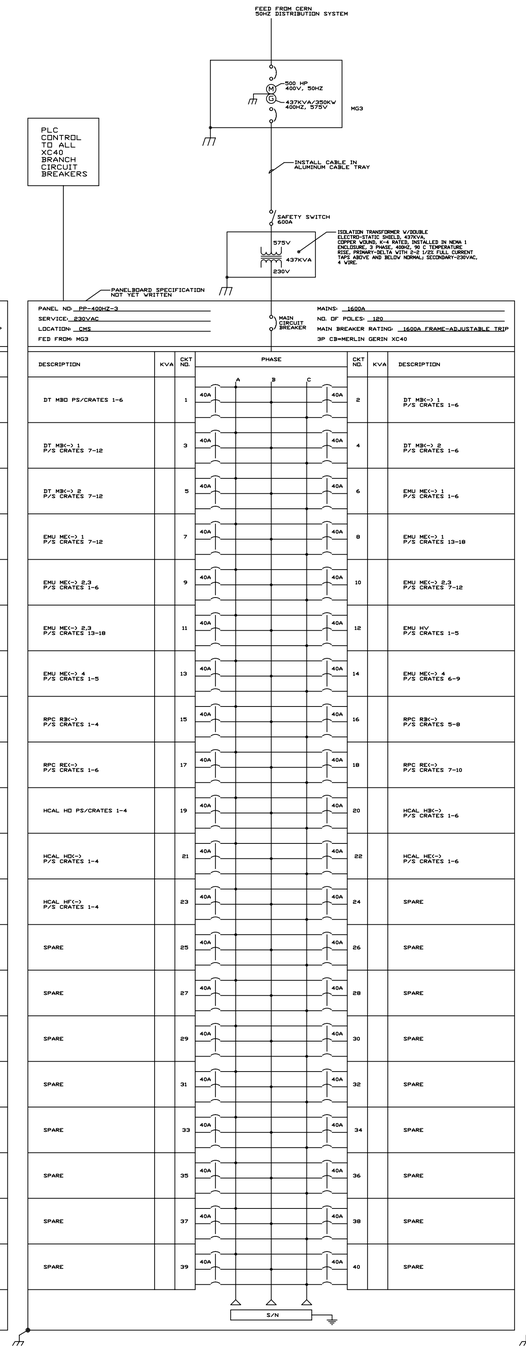
REV.	DESCRIPTION	DRAWN	DATE
		APPD.	DATE



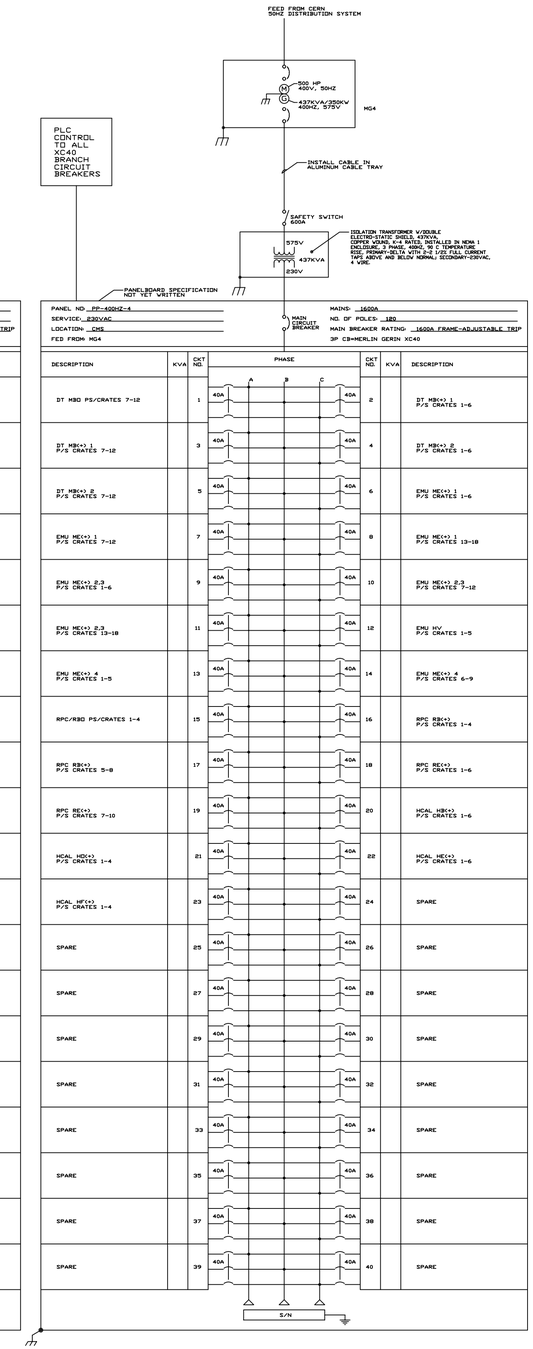
DESCRIPTION	KVA	CKT NO.	PHASE A	PHASE B	PHASE C	CKT NO.	KVA	DESCRIPTION
PIXEL P/S CRATES 1-4		1	40A		40A	2		TRACKER TIB(-) P/S CRATES 1-4
TRACKER TIB(-) P/S CRATES 5-8		3	40A		40A	4		TRACKER TIB(-) P/S CRATES 9-12
TRACKER TOB(-) P/S CRATES 1-4		5	40A		40A	6		TRACKER TOB(-) P/S CRATES 5-8
TRACKER TOB(-) P/S CRATES 11-14		7	40A		40A	8		TRACKER TOB(-) P/S CRATES 15-18
TRACKER TOB(-) P/S CRATES 9,10,19,20		9	40A		40A	10		TRACKER TID(-) P/S CRATES 1-4
TRACKER CONTROL RINGS(-) P/S CRATES 1-4		11	40A		40A	12		TRACKER TEC(-) P/S CRATES 1-4
TRACKER TEC(-) P/S CRATES 5-8		13	40A		40A	14		TRACKER TEC(-) P/S CRATES 9-11
TRACKER TEC(-) P/S CRATES 12-15		15	40A		40A	16		TRACKER TEC(-) P/S CRATES 16-19
TRACKER TEC(-) P/S CRATES 20-22		17	40A		40A	18		ECAL EB(-) P/S CRATES 1-4
ECAL EB(-) P/S CRATES 5-8		19	40A		40A	20		ECAL EB(-) P/S CRATES 9-12
ECAL EB(-) P/S CRATES 13-16		21	40A		40A	22		ECAL EB(-) P/S CRATES 17-20
ECAL EB(-) P/S CRATES 22-25		23	40A		40A	24		ECAL EB(-) P/S CRATES 26-29
ECAL EB(-) P/S CRATES 30-33		25	40A		40A	26		ECAL EB(-) P/S CRATES 34-37
ECAL EB(-) P/S CRATES 38-41		27	40A		40A	28		ECAL EB(-) P/S CRATES 43-46
ECAL EB(-) P/S CRATES 47-50		29	40A		40A	30		ECAL EB(-) P/S CRATES 51-54
ECAL EB(-) P/S CRATES 55-58		31	40A		40A	32		ECAL EB(-) P/S CRATES 59-62
ECAL EE(-) P/S CRATES 21,42,63		33	40A		40A	34		ECAL EE(-) P/S CRATES 1-4
ECAL EE(-) P/S CRATES 5-8		35	40A		40A	36		ECAL EE(-) P/S CRATES 9-12
ECAL EE(-) P/S CRATES 13-16		37	40A		40A	38		ECAL EE(-) P/S CRATES 17-19
ECAL EE(-) P/S CRATES 20-22		39	40A		40A	40		SPARE



DESCRIPTION	KVA	CKT NO.	PHASE A	PHASE B	PHASE C	CKT NO.	KVA	DESCRIPTION
PIXEL P/S CRATES 5-8		1	40A		40A	2		TRACKER TIB(+) P/S CRATES 1-4
TRACKER TIB(+) P/S CRATES 5-8		3	40A		40A	4		TRACKER TIB(+) P/S CRATES 9-12
TRACKER TOB(+) P/S CRATES 1-4		5	40A		40A	6		TRACKER TOB(+) P/S CRATES 5-8
TRACKER TOB(+) P/S CRATES 11-14		7	40A		40A	8		TRACKER TOB(+) P/S CRATES 15-18
TRACKER TOB(+) P/S CRATES 9,10,19,20		9	40A		40A	10		TRACKER TID(+) P/S CRATES 1-4
TRACKER CONTROL RINGS(+) P/S CRATES 1-4		11	40A		40A	12		TRACKER TEC(+) P/S CRATES 1-4
TRACKER TEC(+) P/S CRATES 5-8		13	40A		40A	14		TRACKER TEC(+) P/S CRATES 9-11
TRACKER TEC(+) P/S CRATES 12-15		15	40A		40A	16		TRACKER TEC(+) P/S CRATES 16-19
TRACKER TEC(+) P/S CRATES 20-22		17	40A		40A	18		ECAL EB(+) P/S CRATES 1-4
ECAL EB(+) P/S CRATES 5-8		19	40A		40A	20		ECAL EB(+) P/S CRATES 9-12
ECAL EB(+) P/S CRATES 13-16		21	40A		40A	22		ECAL EB(+) P/S CRATES 17-20
ECAL EB(+) P/S CRATES 22-25		23	40A		40A	24		ECAL EB(+) P/S CRATES 26-29
ECAL EB(+) P/S CRATES 30-33		25	40A		40A	26		ECAL EB(+) P/S CRATES 34-37
ECAL EB(+) P/S CRATES 38-41		27	40A		40A	28		ECAL EB(+) P/S CRATES 43-46
ECAL EB(+) P/S CRATES 47-50		29	40A		40A	30		ECAL EB(+) P/S CRATES 51-54
ECAL EB(+) P/S CRATES 55-58		31	40A		40A	32		ECAL EB(+) P/S CRATES 59-62
ECAL EE(+) P/S CRATES 21,42,63		33	40A		40A	34		ECAL EE(+) P/S CRATES 1-4
ECAL EE(+) P/S CRATES 5-8		35	40A		40A	36		ECAL EE(+) P/S CRATES 9-12
ECAL EE(+) P/S CRATES 13-16		37	40A		40A	38		ECAL EE(+) P/S CRATES 17-19
ECAL EE(+) P/S CRATES 20-22		39	40A		40A	40		SPARE



DESCRIPTION	KVA	CKT NO.	PHASE A	PHASE B	PHASE C	CKT NO.	KVA	DESCRIPTION
DT M3O PS/CRATES 1-6		1	40A		40A	2		DT M3(-) 1 P/S CRATES 1-6
DT M3(-) 1 P/S CRATES 7-12		3	40A		40A	4		DT M3(-) 2 P/S CRATES 1-6
DT M3(-) 2 P/S CRATES 7-12		5	40A		40A	6		EMU ME(-) 1 P/S CRATES 1-6
EMU ME(-) 1 P/S CRATES 7-12		7	40A		40A	8		EMU ME(-) 1 P/S CRATES 13-18
EMU ME(-) 2,3 P/S CRATES 1-6		9	40A		40A	10		EMU ME(-) 2,3 P/S CRATES 7-12
EMU ME(-) 2,3 P/S CRATES 13-18		11	40A		40A	12		EMU HV P/S CRATES 1-5
EMU ME(-) 4 P/S CRATES 1-5		13	40A		40A	14		EMU ME(-) 4 P/S CRATES 6-9
RPC RB(-) P/S CRATES 1-4		15	40A		40A	16		RPC RB(-) P/S CRATES 5-8
RPC RE(-) P/S CRATES 1-6		17	40A		40A	18		RPC RE(-) P/S CRATES 7-10
HCAL HO PS/CRATES 1-4		19	40A		40A	20		HCAL HB(-) P/S CRATES 1-6
HCAL HD(-) P/S CRATES 1-4		21	40A		40A	22		HCAL HE(-) P/S CRATES 1-6
HCAL HF(-) P/S CRATES 1-4		23	40A		40A	24		SPARE
SPARE		25	40A		40A	26		SPARE
SPARE		27	40A		40A	28		SPARE
SPARE		29	40A		40A	30		SPARE
SPARE		31	40A		40A	32		SPARE
SPARE		33	40A		40A	34		SPARE
SPARE		35	40A		40A	36		SPARE
SPARE		37	40A		40A	38		SPARE
SPARE		39	40A		40A	40		SPARE



DESCRIPTION	KVA	CKT NO.	PHASE A	PHASE B	PHASE C	CKT NO.	KVA	DESCRIPTION
DT M3O PS/CRATES 7-12		1	40A		40A	2		DT M3(+) 1 P/S CRATES 1-6
DT M3(+) 1 P/S CRATES 7-12		3	40A		40A	4		DT M3(+) 2 P/S CRATES 1-6
DT M3(+) 2 P/S CRATES 7-12		5	40A		40A	6		EMU ME(+) 1 P/S CRATES 1-6
EMU ME(+) 1 P/S CRATES 7-12		7	40A		40A	8		EMU ME(+) 1 P/S CRATES 13-18
EMU ME(+) 2,3 P/S CRATES 1-6		9	40A		40A	10		EMU ME(+) 2,3 P/S CRATES 7-12
EMU ME(+) 2,3 P/S CRATES 13-18		11	40A		40A	12		EMU HV P/S CRATES 1-5
EMU ME(+) 4 P/S CRATES 1-5		13	40A		40A	14		EMU ME(+) 4 P/S CRATES 6-9
RPC/R3O PS/CRATES 1-4		15	40A		40A	16		RPC RB(+) P/S CRATES 1-4
RPC RB(+) P/S CRATES 5-8		17	40A		40A	18		RPC RE(+) P/S CRATES 1-6
RPC RE(+) P/S CRATES 7-10		19	40A		40A	20		HCAL HB(+) P/S CRATES 1-6
HCAL HD(+) P/S CRATES 1-4		21	40A		40A	22		HCAL HE(+) P/S CRATES 1-6
HCAL HF(+) P/S CRATES 1-4		23	40A		40A	24		SPARE
SPARE		25	40A		40A	26		SPARE
SPARE		27	40A		40A	28		SPARE
SPARE		29	40A		40A	30		SPARE
SPARE		31	40A		40A	32		SPARE
SPARE		33	40A		40A	34		SPARE
SPARE		35	40A		40A	36		SPARE
SPARE		37	40A		40A	38		SPARE
SPARE		39	40A		40A	40		SPARE

NOTE #1: PP-400HZ-1 AND PP-400HZ-2 ALL BRANCH CIRCUIT LOADS ARE BASED UPON A 3000W POWER SUPPLY WITH AN INPUT CURRENT OF 8A @230VAC; BRANCH CIRCUIT CABLES (3 CONDUCTOR & GROUND) RANGE IN CONDUCTOR CROSS-SECTION FROM 10mm² TO 42mm², DEPENDING UPON CABLE LENGTH.

NOTE #2: PP-400HZ-3 AND PP-400HZ-4 DEPENDING UPON THE REQUIRED WATTAGE OUTPUT OF A PARTICULAR POWER SUPPLY, EACH BRANCH CIRCUIT MAY FEED UP TO 6 AC-DC CONVERTERS; BRANCH CIRCUIT CABLES (3 CONDUCTOR & GROUND) RANGE IN CONDUCTOR CROSS-SECTION FROM 6mm² TO 16mm², DEPENDING UPON CABLE LENGTH.

ORIGINATOR	BEVERLY	11/5/04	CHECKED	L. BEVERLY
DRAWN	N. CUNY	11/5/04	REVISION	

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

PARTICLE PHYSICS DIVISION
400 Hz AC DISTRIBUTION SYSTEM
03_Mar_05

SCALE	SOFTWARE	DRAWING NUMBER	REV.
NONE	AUTOCAD	~~2261-EE-172820~~	