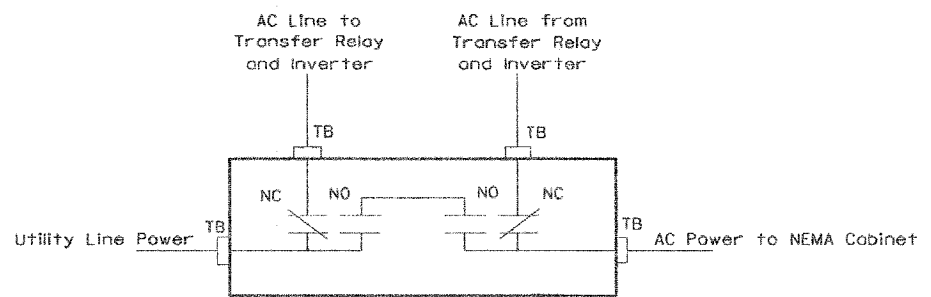
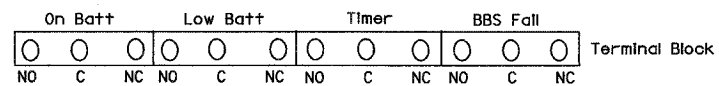


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1366	682
STA.		TO STA.		
FED. ROAD DIST. NO. -		ILLINOIS FED. AID PROJECT		

(a) Manual Bypass Switch (typical)

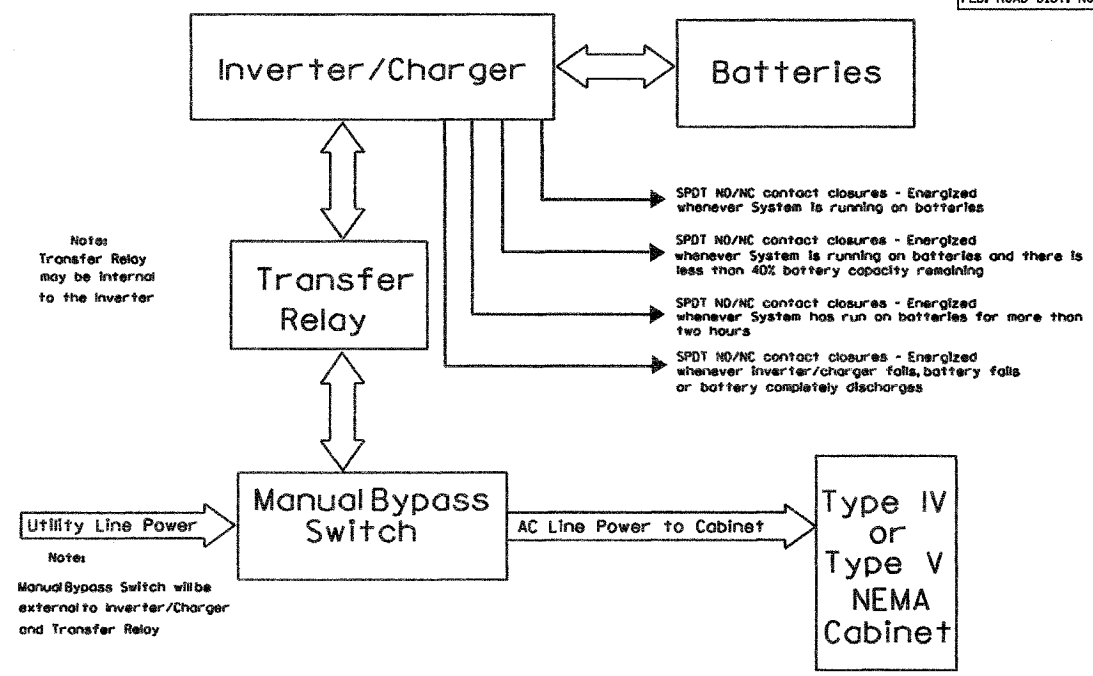


Notes:
 i) All toggle simultaneously
 ii) Manually operated switch.
 iii) shall only switch line.
 iv) Ground are not switched
 v) fed to NEMA Cabinet buses.



Notes:
 1. NO/NC contracts may either share or use separate commons.

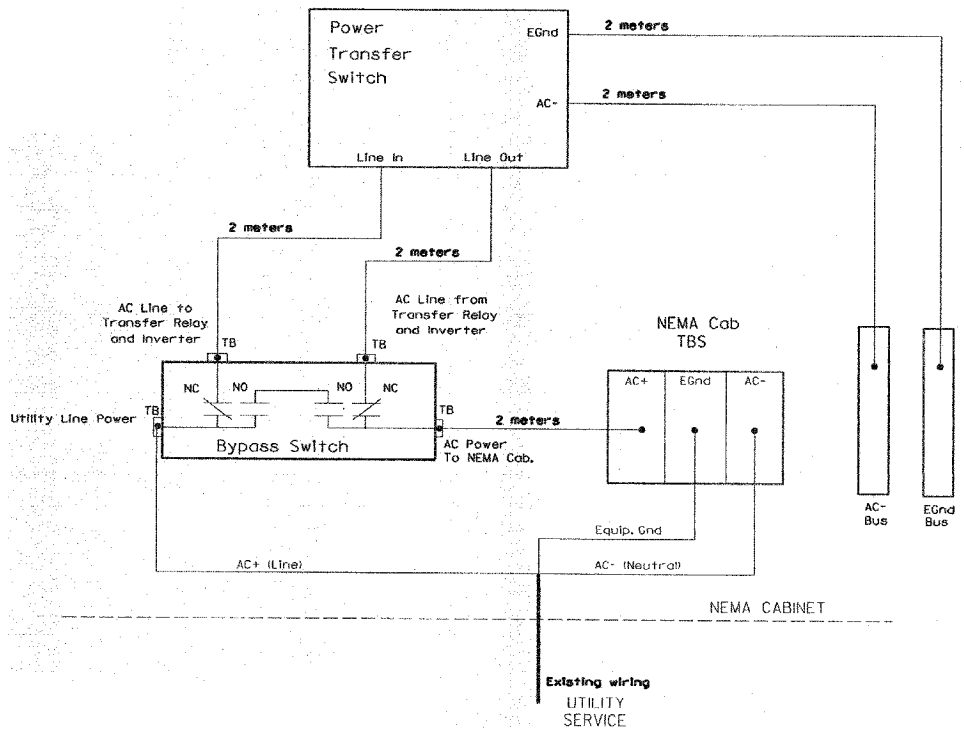
MANUAL BYPASS SWITCH RELAY CONTACTS



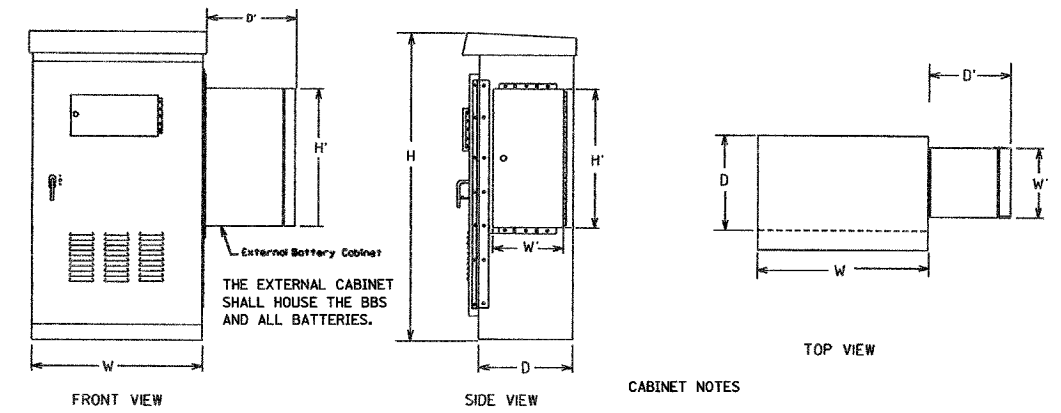
Notes:
 Transfer Relay may be internal to the Inverter

Notes:
 Manual Bypass Switch will be external to Inverter/Charger and Transfer Relay

BLOCK DIAGRAM



UTILITY POWER CONNECTION DIAGRAM



NEMA Standard TS 2 Sheet Aluminum Unpainted Cabinets Nominal Outline Dimensions

Mounting & Use	Cabinet Type & Size	Height H/H' inch	Width W/W' inch	Depth D/D' inch
• Wall Mounted	Type I / Size 1	26	17	15
	Housing Batteries	Type II / Size 2	30	18
Pad Mounted	Type III / Size 5	40	24	17
	Housing Signal Devices	Type IV / Size 6	55	44
	Type V / Size 7	77	44	26

* Police Compartment not provided.

CABINET DETAIL

CABINET NOTES

1. THE BOTTOM OF THE EXTERNAL BBS CABINET SHALL BE PLACED ON THE OUTER EDGE OF THE CABINET FOUNDATION FOR SUPPORT.
2. THE EXTERNAL BBS CABINET SHALL BE SECURELY FASTENED TO THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET IN A METHOD THAT IS APPROVED BY THE ENGINEER.
3. THE MANUAL BYPASS SWITCH SHALL BE MOUNTED IN THE EXISTING TRAFFIC SIGNAL CABINET.
4. ALL OTHER BATTERY BACKUP SYSTEM COMPONENTS SHALL BE INSTALLED IN THE EXTERNAL BBS CABINET.
5. THE EXTERNAL BBS CABINET MAY REQUIRE AN EQUIPMENT STAND FOR ADDITIONAL GROUND LEVEL SUPPORT. THE COST FOR THE EQUIPMENT STAND SHALL BE INCLUDED IN THE BID PRICE FOR THE BBS SYSTEM.

REVISIONS	
NAME	DATE
CABINET DETAIL	1/16/04

ILLINOIS DEPARTMENT OF TRANSPORTATION
 I-74 PROJECT STANDARD 857003-I74
 BATTERY BACKUP SYSTEM

DATE 8/25/03
 DRAWN BY
 CHECKED BY