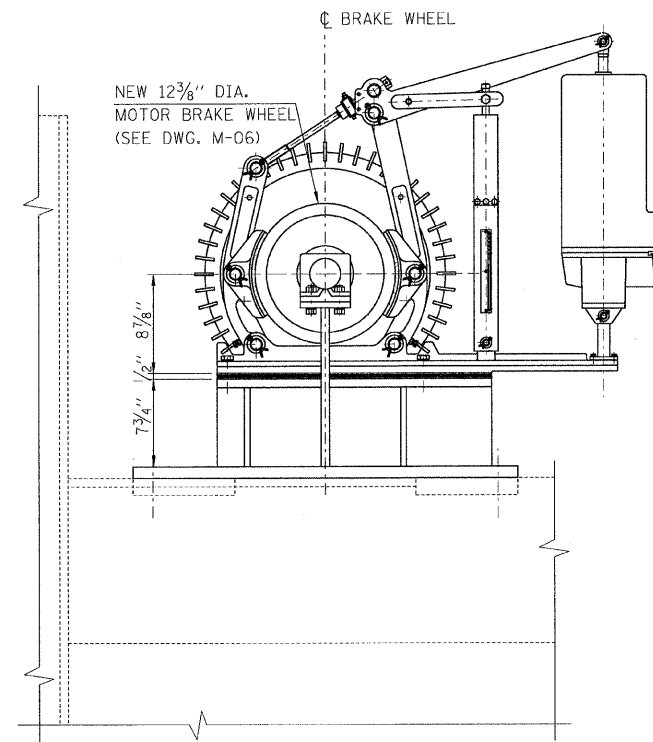
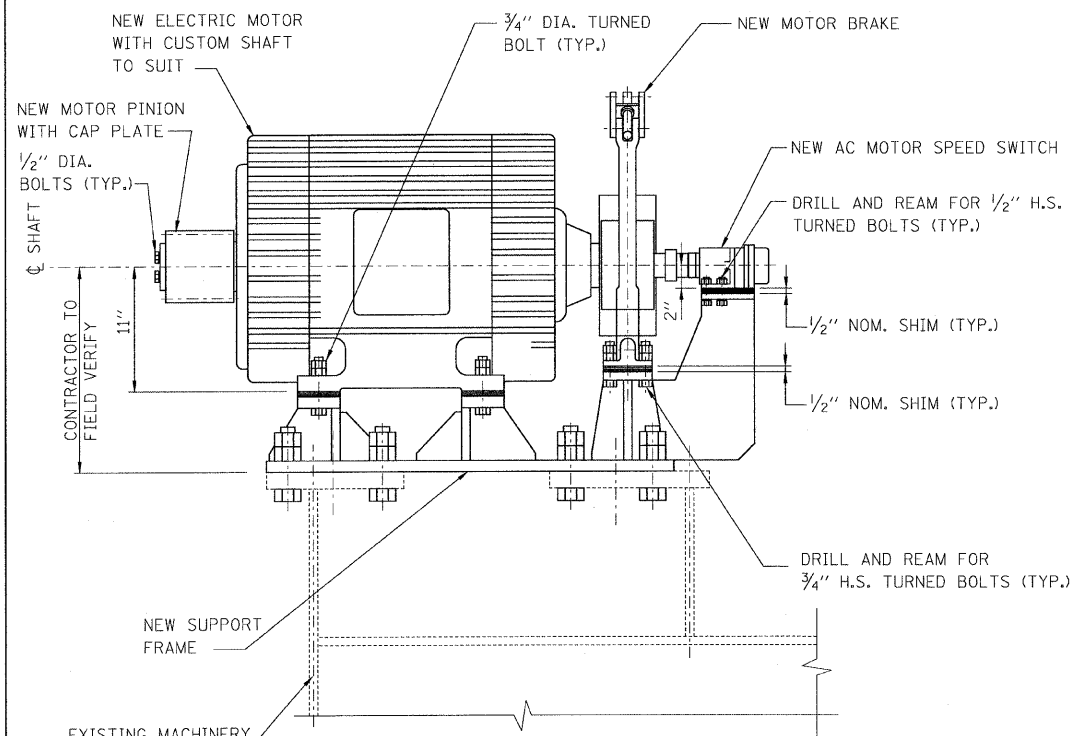


NEW ELECTRIC MOTOR, BRAKE AND SPEED SWITCH
ASSEMBLY PLAN
SCALE: 1/2"=1'-0"

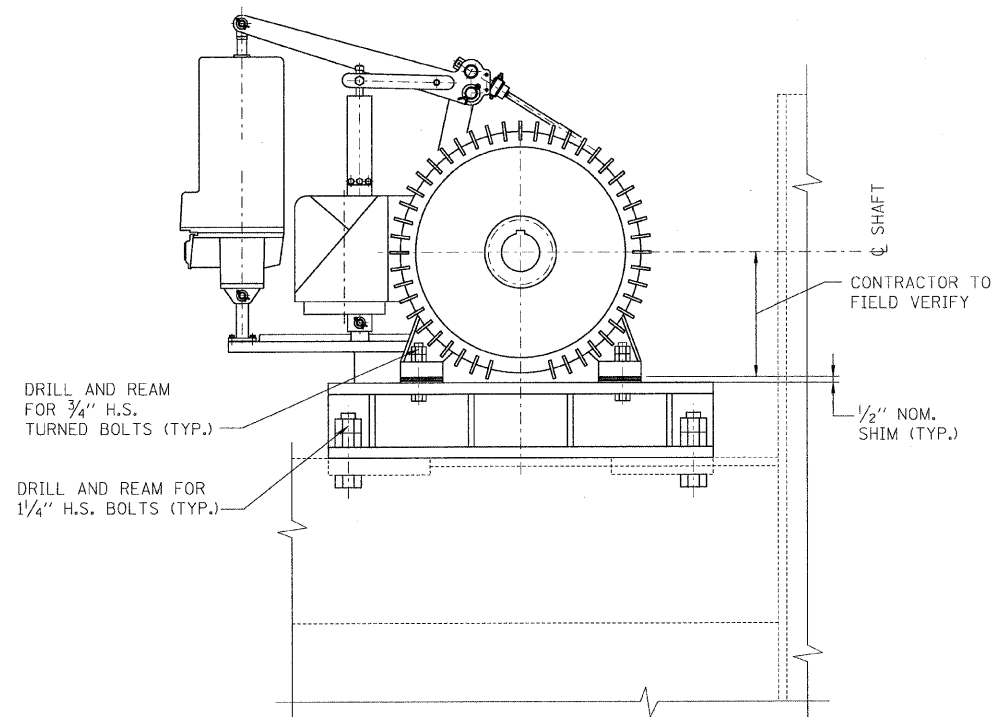


SECTION C-C
SCALE: 1/2"=1'-0"

QTY.	ITEM	DESCRIPTION
8	MAIN MOTOR	75 HP ELECTRIC AC MOTOR, 404 RPM, FRAME 444T BY MAGNETEK OR APPROVED EQUAL
8	THRUSTOR BRAKE	13" DIA., TYPE 315-8036 WITH MANUAL RELEASE HANDLE AND LIMIT SWITCHES OR APPROVED EQUAL
8	AC MOTOR SPEED SWITCH	
AS REQUIRED	SHIMS	STAINLESS STEEL, ASTM A240 TYPE 316/304
64	1/4" DIA. H.S. BOLT	HEAVY HEX BOLTS, ASTM A325
128	1/4" DIA. NUT	HEAVY HEX NUTS, ASTM A563
64	3/4" DIA. TURNED BOLT	HIGH STRENGTH TURNED BOLTS, ASTM A490
128	3/4" DIA. NUT	HEAVY HEX NUTS, ASTM A563
32	1/2" DIA. TURNED BOLT	HIGH STRENGTH TURNED BOLTS, ASTM A490
32	1/2" DIA. NUT	HEAVY HEX NUTS, ASTM A563
48	1/2" DIA. WASHER	HARDENED STEEL WASHERS, ASTM F436
16	1/2" DIA. CAP BOLT	HIGH STRENGTH TURNED BOLTS, ASTM A490
8	COUPLING	LOVEJOY JAW IN-SHEAR TYPE, SIZE LS095 STYLE 1, WITH 3/4" BORE OR APPROVED EQUAL



SECTION A-A
SCALE: 1/2"=1'-0"



SECTION B-B
SCALE: 1/2"=1'-0"

LEGEND:

- EXISTING MEMBER TO REMAIN
- NEW MEMBER

NOTES:

1. FOR GENERAL NOTES, SEE SHEET M-01.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS.
3. WORK THIS DWG WITH SHEETS M-06 AND M-07.
4. UNLESS THERE IS SEVERE INTERFERENCE WITH NEW MACHINERY, EXISTING BOLT HOLES SHALL BE FILLED BY ROUND-HEADED BLIND RIVETS OR FLAT HEADED SELF-TAPPING SCREWS SET INTO COUNTERSUNK HOLES. PLUG WELDS SHALL ONLY BE PERMITTED UPON WRITTEN APPROVAL OF THE ENGINEER.
5. DRILLING AND REAMING SHALL OCCUR AFTER FINAL ALIGNMENT.

▲ JULY 27, 2009

PB Americas, Inc.
230 WEST MONROE STREET,
SUITE 900
CHICAGO, IL. 60606

USER NAME = sharma
FILE NAME = D168d61-sht-mec-05.dgn
PLOT SCALE = NONE
PLOT DATE = 5/7/2009

DESIGNED - V. LEVIT
DRAWN - V. LEVIT
CHECKED - J. BONSLU/D. NYARKO
DATE - MAY 8, 2009

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

OPERATING MACHINERY DETAILS - I

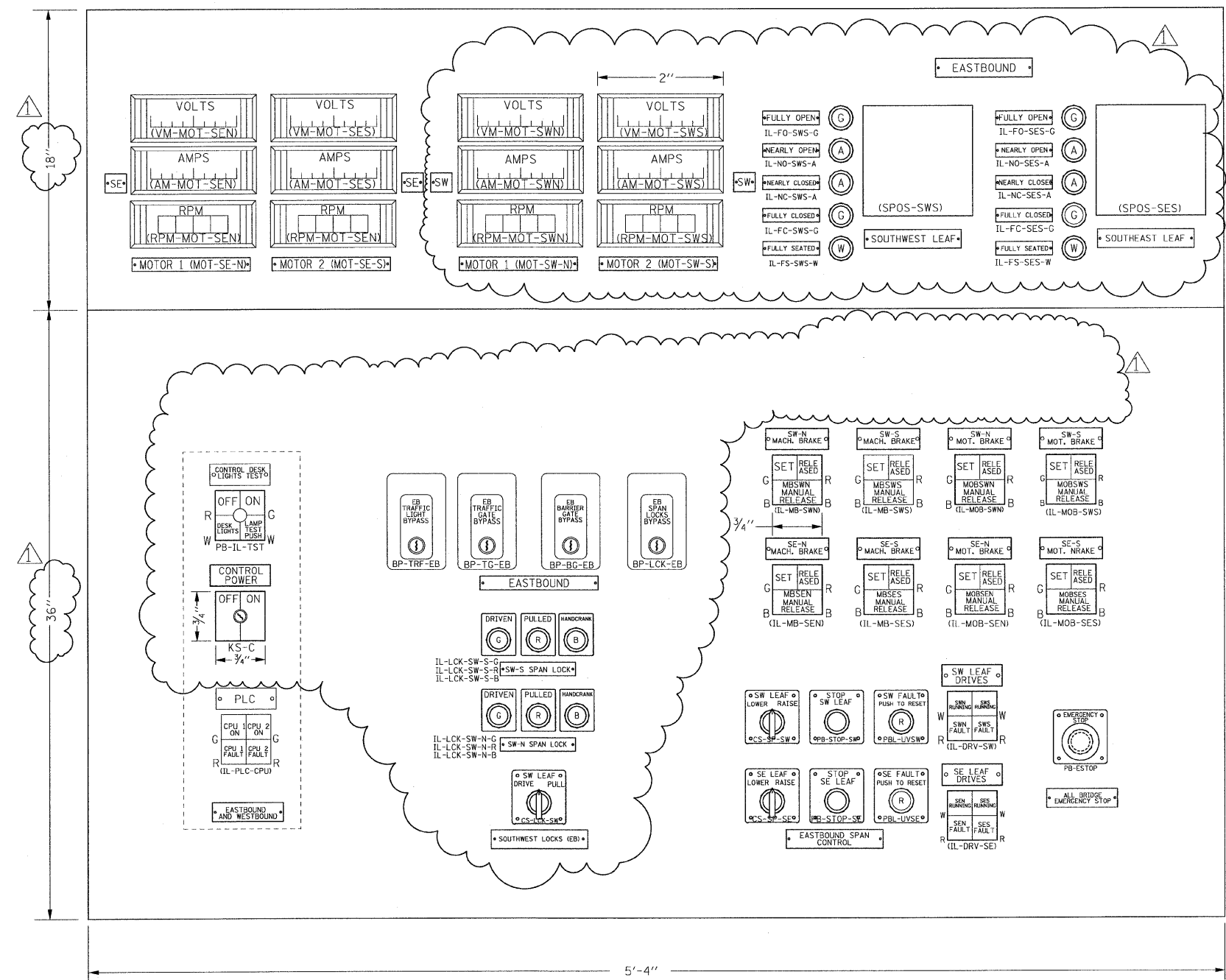
SCALE: AS SHOWN SHEET NO. M-05 OF M-27 SHEETS STA. 379+06.09 TO STA. 382+45.28

F.A.P. RTE. 389	SECTION 2424-2B-R	COUNTY COOK	TOTAL SHEETS 398	SHEET NO. 249
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60D61	

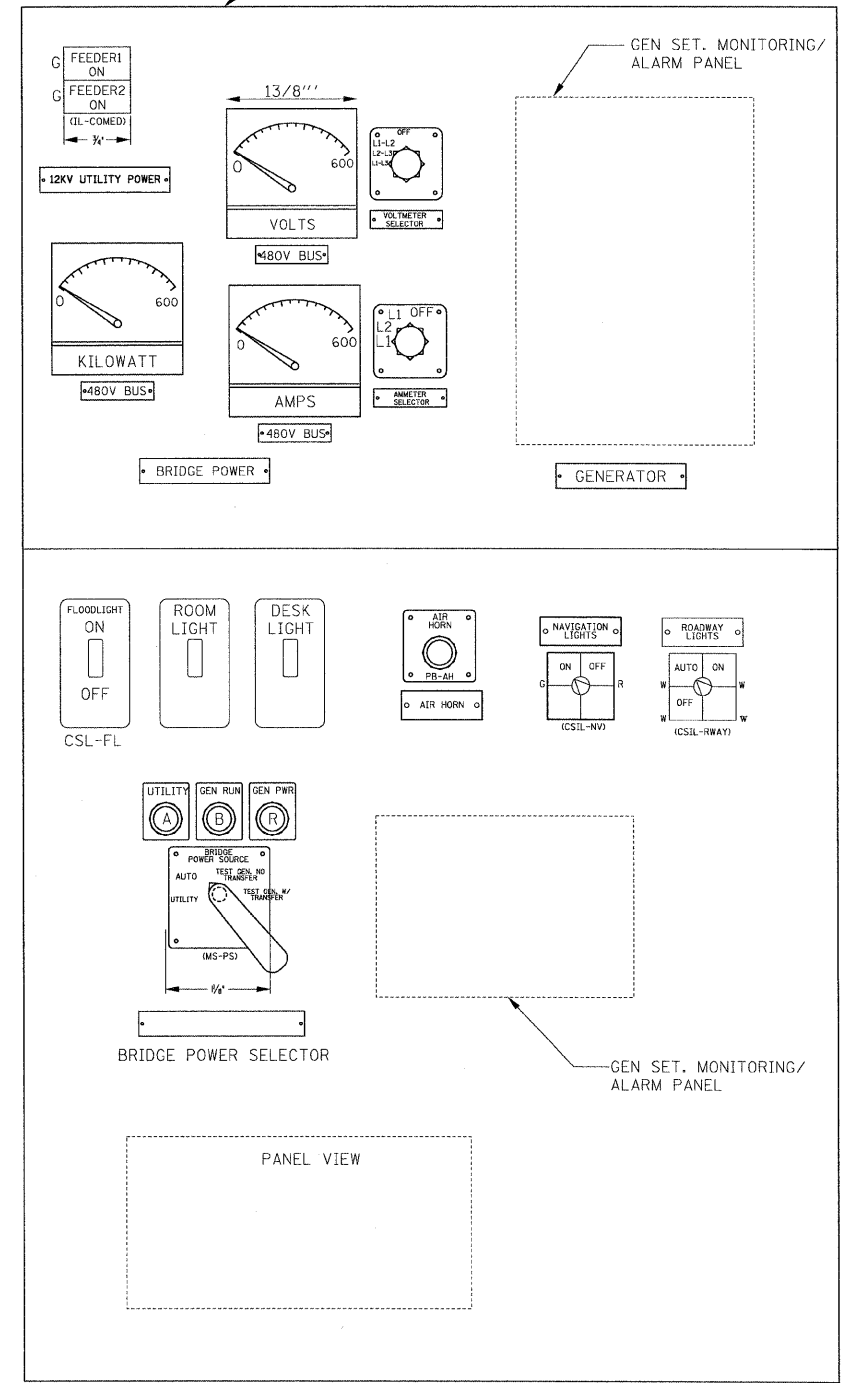
NOTES:

- FOR DRAWING SYMBOLS, LEGEND AND ABBREVIATIONS SEE DRAWINGS E-04, E-05 AND E-06.
- PROVIDE SHIPPING SPLIT(S) FOR EASE OF INSTALLATION IN OPERATORS ROOM.

DESK DIMS TO FIT ROOM, PREFERRED ALL DESKS SAME HEIGHT, SAME DEPTH (TYP)



CONTROL DESK LAYOUT
EASTBOUND CONTROL CONSOLE E-CC-1
LAYOUT
N.T.S.



BRIDGE POWER, LIGHTING & CCTV CONTROL DESK LAYOUT
N.T.S.

▲ JULY 27, 2009

PB Americas, Inc.
230 WEST MONROE STREET,
SUITE 900
CHICAGO, IL. 60606

USER NAME = sharma	DESIGNED - B. CROUTHAM	REVISED -
FILE NAME = D180d61-sht-elc-76.dgn	DRAWN - S. SHARMA	REVISED -
PLOT SCALE = NONE	CHECKED - S. STERN	REVISED -
PLOT DATE = 5/7/2009	DATE - MAY 8, 2009	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

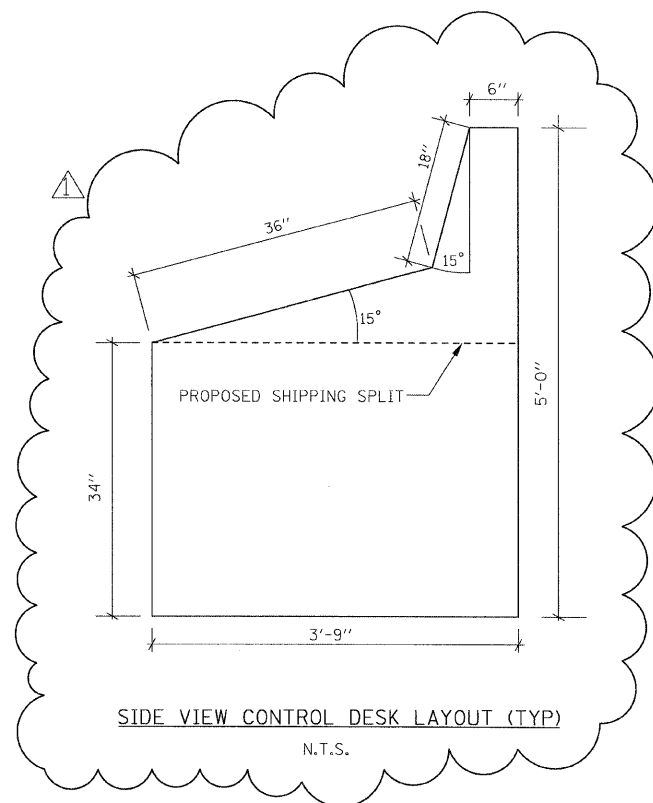
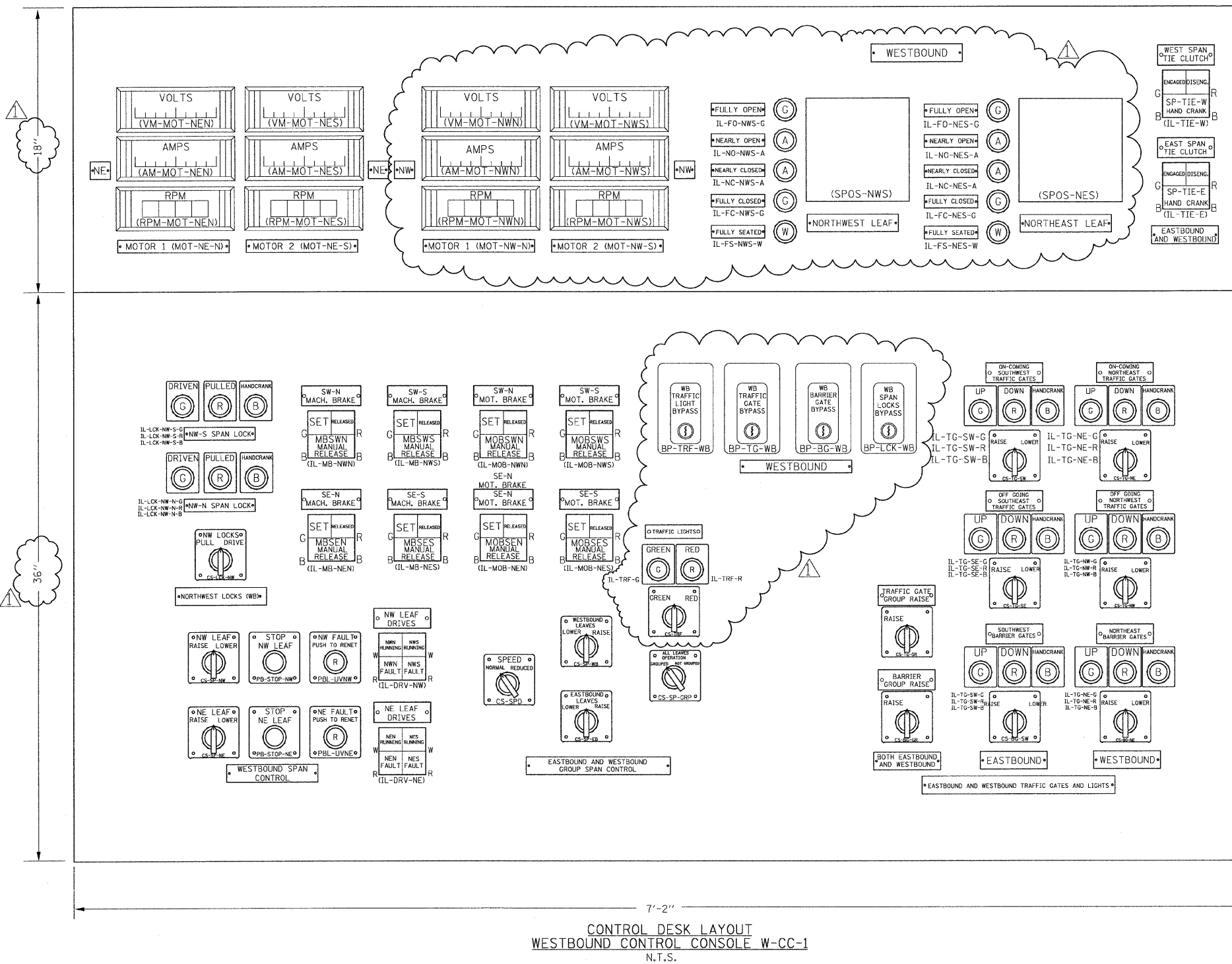
**CONTROL DESK LAYOUT
SHEET 1**

SCALE: AS SHOWN SHEET NO. E-76 OF E-125 SHEETS STA. 379+06.09 TO STA. 382+45.28

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389	2424-2B-R	COOK	398	347
CONTRACT NO. 60D61				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOTES:

- FOR DRAWING SYMBOLS, LEGEND AND ABBREVIATIONS SEE DRAWINGS E-04, E-05 AND E-06.
- PROVIDE SHIPPING SPLIT(S) FOR EASE OF INSTALLATION IN OPERATORS ROOM.



JULY 27, 2009

PB Americas, Inc.
230 WEST MONROE STREET,
SUITE 900
CHICAGO, IL. 60606

USER NAME = sha.rma
FILE NAME = D160d61-sht-elc-77.dgn
PLOT SCALE = NONE
PLOT DATE = 5/7/2009

DESIGNED - B. CROUTHAM/ S. STERN
DRAWN - S. SHARMA
CHECKED - M. INTATANO
DATE - MAY 8, 2009

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONTROL DESK LAYOUT
SHEET 2**

SCALE: AS SHOWN SHEET NO. E-77 OF E-125 SHEETS STA. 379+06.09 TO STA. 382+45.28

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389	2424-2B-R	COOK	398	348
FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60D61	