



KEYED NOTES:

- 1 SEE TABLE A FOR NUMBER OF ANCHORS REQUIRED AROUND PERIMETER. PLACE CORNER ANCHORS WITH SPECIFIED 4" COVER, THEN EQUALLY SPACE REMAINING ANCHORS ALONG SIDES (APPROXIMATELY 8" O.C.).
- 2 1/2" Ø ASTM 193 GRADE B7 THREADED TROD HILTI HIT-RE 500-V3 ADHESIVE ANCHOR, ONE PER MANUFACTURER PROVIDED HOLE.

GENERAL NOTES:

- A. IF THIS SHEET IS NOT 24"x36" USE GRAPHIC SCALE ACCORDINGLY.
- B. THIS DETAIL SHALL NOT BE USED FOR ANCHORAGE FOR LESS THAN TWO SCHNEIDER MODEL 6 MCC UNITS.
- C. ADHESIVE ANCHORS:
 - 1/2" Ø ASTM 193 GRADE B7 THREADED ROD HILTI HIT-RE 500 V3 ADHESIVE ANCHORS WITH 2-3/4" MINIMUM EFFECTIVE EMBEDMENT. INSTALL ANCHORS PER MPII AND ICC-ESR-3814.
 - ESTABLISH THE EXISTING REBAR PATTERN W/ GPR AROUND CONCRETE ANCHORS TO PROVIDE A MINIMUM OF 1-1/2" CLEAR TO AVOID CONFLICT WITH EXISTING REINFORCING WHEN INSTALLING POST INSTALLED ANCHORS.
- C. MINIMUM ANCHOR LAYOUT:
 - MINIMUM SPACING = 3".
 - MINIMUM CONCRETE EDGE DISTANCE = 8".
- D. MINIMUM CONCRETE PROPERTIES FOR ANCHORS:
 - CONCRETE TO BE NORMAL WEIGHT.
 - CONCRETE COMPRESSIVE STRENGTH F'C = 2500 PSI.
 - MINIMUM PAD THICKNESS = 4".
- E. ALL SPECIAL INSPECTIONS FOR ANCHORS SHALL BE COMPLETED PER THE STATEMENT OF SPECIAL INSPECTIONS.

NOTES FOR EOR:
(DO NOT INCLUDE ON CONSTRUCTION DRAWING)

1. EDIT TO BE PROJECT SPECIFIC.
2. COMPLY WITH CURRENT EDITION OF LANL CAD STANDARDS MANUAL.
3. ASSIGN AN APPROPRIATE SHEET & DRAWING NUMBER PER THE CURRENT LANL CAD STANDARDS MANUAL.
4. ADHESIVE ANCHORS PER LANL MASTER SPEC FOR NORMAL CONFIDENCE POST-INSTALLED ANCHORS.
5. ADHESIVE ANCHORS SHALL BE INSTALLED IN COMPLIANCE WITH THE MPII AND ICC-ESR 3814.

TABLE A: MCC TO HOUSEKEEPING PAD ANCHORAGE

MOTOR CONTROL CENTER										ANCHORAGE / UNIT
MANUFACTURER	W ¹ (IN.)	H (IN.)	A (IN.)	WT. (KIP)	B (IN.)	C (IN.)	D (IN.)	E ² (IN.)	F (IN.)	
SCHNEIDER (MODEL 6 MCC)	40 - 240	90	5	0.7 - 8.4	10	10	14.98	6	20	(4) 1/2" HILTI HIT-RE 500 V3 ANCHOR
GENERAL ELECTRIC (E9000 MCC)	20 - 240	90	2.09	0.7 - 8.4	15.82	4.18	15.73	6	20	(4) 1/2" HILTI HIT-RE 500 V3 ANCHOR
SIEMENS (TIASTAR MCC)	20 - 240	90	2.25	0.7 - 8.4	14.5	5.5	16.69	6	20	(4) 1/2" HILTI HIT-RE 500 V3 ANCHOR
EATON (FREEDOM 2100 MCC)	20 - 240	90	2	0.7 - 8.4	8	4	18.36	6	20	(6) 1/2" HILTI HIT-RE 500 V3 ANCHOR
ALLEN-BRADLEY (CENTERLINE 2100 MCC)	20 - 240	90	2	0.7 - 8.4	9.25	3	11.56	6	20	(6) 1/2" HILTI HIT-RE 500 V3 ANCHOR
GENERIC (USER MCC)	20 - 240	90	2	0.7 - 8.4	10	13	11	6	20	(4) 1/2" HILTI HIT-RE 500 V3 ANCHOR

¹ WIDTH OF ONE MCC UNIT IS 20". W IS THE WIDTH OF ONE UNIT MULTIPLIED BY THE NUMBER OF UNITS. e.g., THE 40" SHOWN FOR SCHNEIDER IS BASED ON 20" WIDTH x 2 UNITS, etc.

² THE DIMENSION E REFERS TO THE DISTANCE FROM THE TOP OF THE MCC TO THE CENTER OF GRAVITY. THIS IS BASED ON THE WEIGHT OF MCC UNITS CONTAINING A SINGLE BUCKET PER UNIT. TO USE THIS DESIGN FOR MCCs WITH MULTIPLE BUCKETS PER UNIT, USE $E \geq (\text{AVG. \# OF 12" BUCKETS PER UNIT}) * 6"$

00% REVIEW
NOT FOR CONSTRUCTION

1	03/08/18	UNCLASS		UPDATED CALCS & DRAWINGS TO IBC 2015 & TO CAD STDS MANUAL REV 5. CHANGED SHEET # FROM S-4000.	BW	BW	JS	GP	TO
NO	DATE	CLASS REV	DC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP

ENGINEERING STANDARDS

STRUCTURAL

**MOTOR CONTROL CENTER ANCHORAGE
MCC TO HOUSEKEEPING PAD ANCHORAGE**

TA-XX BLDG XXXX

DISCIPLINE POC: DOUGLAS VOLKMAN APPROVED FOR RELEASE STANDARDS MANAGER: TOBIN ORUCH

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D.C.: UNCLASSIFIED REVIEWER: E.J.SEAWALT DATE: 1/2/2013

PROJECT ID: CHAPTER 5 DRAWING NO: ST-D5020-3 SHEET 2 OF 3 REV 1