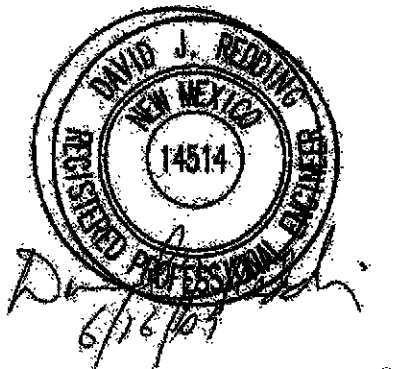


SEAL / CERTIFICATION



ENGINEERS

ABQ Engineering, Inc.
 Engineers • Planners
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 8738 Academy Rd. NE, Suite 130
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 505-255-7802 FAX 505-255-7902
 ABQ Project Number: 28176

PROJECT NAME

**Chinle Valley School Group Homes
 Chinle, Arizona**

CLIENT NAME

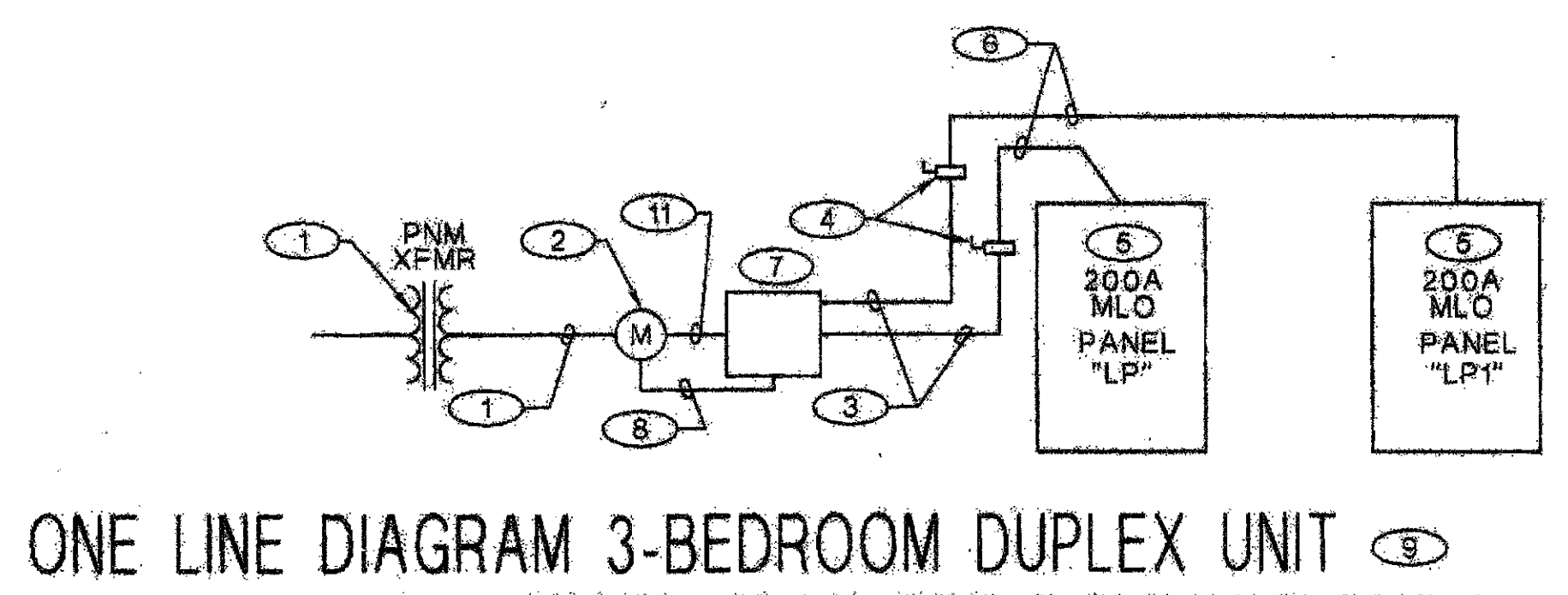
Navajo Housing Authority
 P.O. Box 4880
 Window Rock, Arizona, 86515
 Tel: (505) 871-2800
 Fax: (505) 871-2804

No.	Description	Date

ELECTRICAL DETAILS & ONE-LINE DIAGRAMS

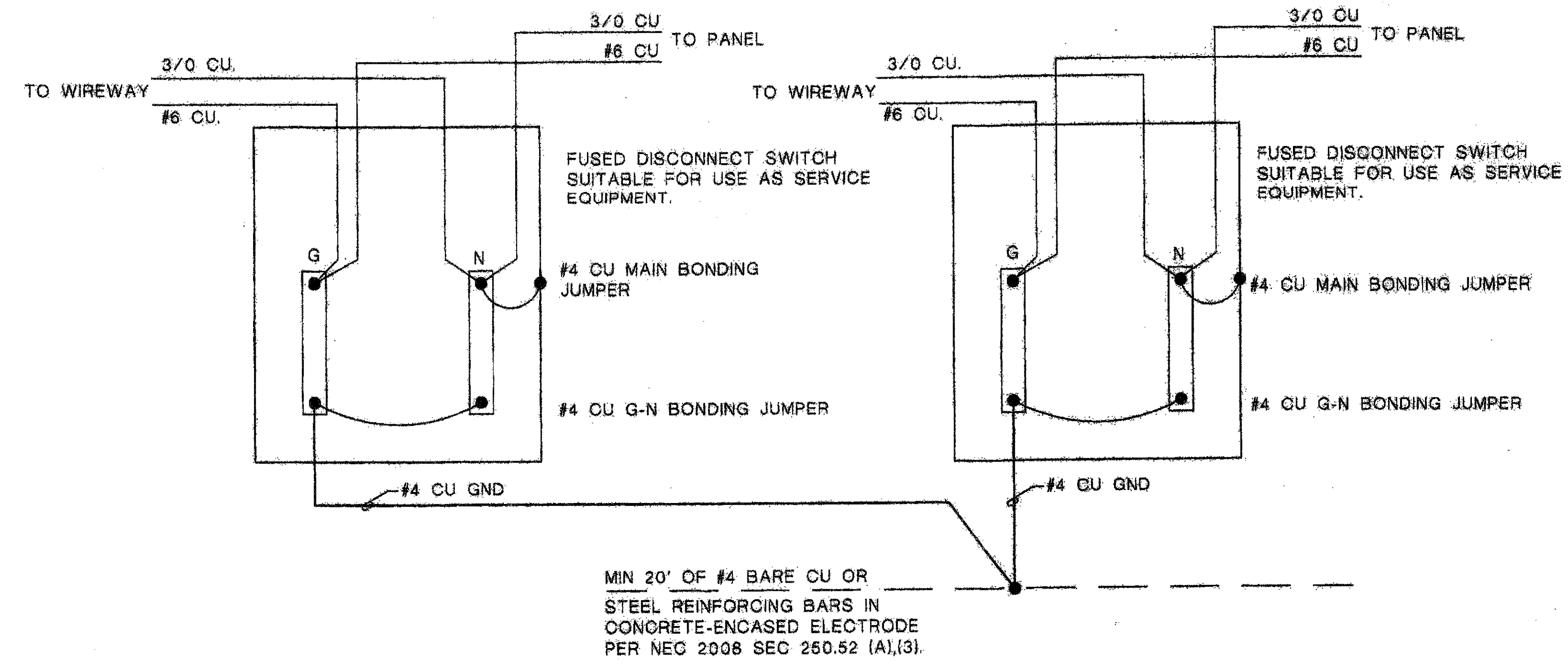
D.SLOAN ARCHITECTS, P.C. COPYRIGHT 2008
 Project number 08-04
 Date 6/10/08
 Drawn by JB
 Checked by AS

E-602



ONE LINE DIAGRAM 3-BEDROOM DUPLEX UNIT

SCALE: NONE



3-BEDROOM DUPLEX UNIT GROUNDING DETAIL

SCALE: NONE

Short Circuit Calculations

MAXIMUM FAULT CURRENT IS LESS THAN 65KA FOR 167KVA 120/240V TRANSFORMER (BASED ON Z=1.1% FROM BUSSMAN ELECTRICAL PROTECTION HAND BOOK) VERIFY TRANSFORMER SIZE AND IMPEDANCE WITH UTILITY.

General Notes

- A. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL SYSTEMS IN ACCORDANCE WITH THE PLANS AND ASSOCIATED NOTES, NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES, UTILITY AUTHORITY STANDARDS, AND IN A WORKMAN LIKE MANNER.
- B. COORDINATE SERVICE WITH NTUA AND COMPLY WITH ALL APPLICABLE NTUA STANDARDS. SERVICE TO BE 120/240V SINGLE PHASE.

Keyed Notes

1. NTUA TRANSFORMER, CONTRACTOR TO PROVIDE SERVICE TO METER, SEE SHEET C-103.
2. ARRANGE FOR NEW 400A, 120/240V, 3W, 1PH RESIDENTIAL SERVICE. METER AND CT CAN. (FOR 3-BEDROOM DUPLEX). COMPLY WITH ALL NTUA STANDARDS.
3. 3~3/0 CU, 1~#6 CU, EGC IN 2" EMT NIPPLE.
4. 200A FUSED DISCONNECT SWITCH FUSED WITH 200A RK TYPE FUSES IN NEMA 3R ENCLOSURE, SUITABLE FOR USES AS SERVICE EQUIPMENT.
5. 200 AMP, 10KAIC, MLO PANEL IN NEMA 1 ENCLOSURE.
6. 3~3/0 CU 1~#6 CU EGC IN 2" EMT CONDUIT. MAXIMUM CONDUCTOR LENGTH OF 200 FT.
7. 6"x8"x3" NEMA 3R WIRE WAY.
8. #3 CU BONDED, METER TO WIREWAY.
9. SEE E-603 FOR ANCHOR OF MAST RISERS, ELECTRIC AND GAS METER DETAILS.
10. CONDUIT SIZE PER 2008 NEC TABLE C.1 FOR EMT, USE OF ALTERNATE CONDUIT WILL REQUIRE RESIZING.
11. 3~500 KCMIL CU, 1~#3 CU EGC IN 3" EMT NIPPLE.

CONDUIT AND CONDUCTOR SCHEDULE
 (FEEDER LENGTH NOT TO EXCEED 100')

CIRCUIT	*CONDUCTORS CU	EMT CONDUIT SIZE
20A 1P	2 #12, 1 #12 EGC	1/2"
30A 1P	2 #10, 1 #10 EGC	1/2"
20A 2P	2 #12, 1 #12 EGC	3/4"
30A 2P	2 #10, 1 #10 EGC	1/2"
40A 2P	2 #8, 1 #10 EGC	1"
20A 3P	3 #12, 1 #12 EGC	1/2"
25A 3P	3 #10, 1 #10 EGC	3/4"
30A 3P	3 #10, 1 #10 EGC	1/2"
35A 3P	3 #8, 1 #10 EGC	1"
40A 3P	3 #8, 1 #10 EGC	1"
45A 3P	3 #8, 1 #10 EGC	1"
50A 3P	3 #8, 1 #10 EGC	1"
60A 3P	3 #6, 1 #10 EGC	1"
75A 3P	3 #4, 1 #8 EGC	1 1/4"
80A 3P	3 #4, 1 #8 EGC	1 1/4"
100A 3P	3 #3, 1 #8 EGC	1 1/2"
110A 3P	3 #2, 1 #8 EGC	1 1/2"
125A 3P	3 #1, 1 #6 EGC	2"

*ADD ADDITIONAL CONDUCTOR IF NEUTRAL IS REQUIRED ON 2P & 3P CIRCUITS