



SITE ELECTRICAL PLAN



- NOTES (THIS SHEET ONLY):**
- 1. EXISTING 120/240V 60HZ 3P DISTRIBUTION PANEL. ACCESS AS REQUIRED TO INSTALL NEW PANELS AND CONDUITS WITH NEWER WIRING. REFER TO THE ELECTRICAL SCHEDULE FOR THE REQUIRED CONDUIT SIZES AND FEEDER REQUIREMENTS. ONE LINE DIAGRAM ON SHEET E2 FOR BREAKER AND FEEDER REQUIREMENTS.
  - 2. RUN NEW FEEDERS PER ONE LINE DIAGRAM ON SHEET E2.
  - 3. RUN FEEDER SURFACE DOWN LHM ON EXTERIOR FACE OF BUILDING. TYPICAL.
  - 4. PROVIDE A POWER SURTAGE BOX (FEEDER TAP) AT BACK OF EACH BLDG. 10' X 10' X 6" MIN. W.P. TYPICAL.
  - 5. EXISTING MAIN SUPPLY RATED 277/480V 1000 AMP. REFER TO ONE LINE DIAGRAM FOR MAIN REQUIREMENTS. RUN NEW FEEDER OUT TOP OF SHED UP TO WALK OVER.
  - 6. NEW OR TRANSFORMER TAP AND DISTRIBUTION PANEL. REFER TO DETAIL FOR WALK OVER AND ONE LINE DIAGRAM. LOCATE AS DIRECTED BY OWNER PRIOR TO ANY WORK.
  - 7. RUN CONDUITS ON TOP OF WALK COVER PER DETAIL W/2. VERIFY EXACT ROUTING WITH OWNER PRIOR TO INSTALLING.
  - 8. RUN CONDUITS FROM WALK COVER DOWN STEEL COLUMNS STRAIGHT TO COLUMNS. VERIFY EXACT ROUTING WITH OWNER.
  - 9. RUN CONDUITS FROM WALK COVER DOWN STEEL COLUMNS STRAIGHT TO COLUMNS. VERIFY EXACT ROUTING WITH OWNER.
  - 10. EXISTING FIREFIGHT 200 AMP. PROVIDE ALL NECESSARY MODULES REQUIRED TO HOOP UP THE NEW BUILDINGS. REFER TO FA RISER DIAGRAM ON SHEET E3.
  - 11. RUN 1" - 4 #12 + 4 #14 CONCRETE THRU ATTIC SPACE WITH IN BUILDING. THE BLDG MANUFACTURER USE AN AVAILABLE CONDUIT TO FALL IN IN TRANSIT.
  - 12. INSTALL A SIGNAL CABINET PER DETAIL W/2.
  - 13. RUN FLEX BETWEEN BUILDING SEPARATIONS - TYPICAL.
  - 14. RUN 3/4" - 2 #14 + 2 #12 - TYPICAL. TO ALL FA DEVICES U.O.N.
  - 15. VERIFY EXACT LOCATION OF EQUIPMENT MASTER CABINET. PROVIDE ALL INCREASE IN WALK COVER AND PROVIDE ALL NECESSARY CONDUITS TO THE NEW BUILDING INTO THE EXISTING INTERCOMMUNICATIONS SYSTEM.
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  - 17. RUN 2" - 3 INTERCOM CABLES TO SIGNAL CABINET TYP. AT THE NEW BUILDINGS. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER.
  - 18. INSTALL INTERCOM PHONE AND WALL SPEAKER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER. VERIFY EXACT LOCATION WITH OWNER.
  - 19. RUN 1/2" - 10 IC CABLES. RUN CONCRETE UP THRU ATTIC SPACE.
  - 20. RUN 1/2" + 1 IC CABLE DOWN TO EACH CLASSROOM PHONE - TYPICAL.
  - 21. RUN 1/2" + SEPARATE 1C CABLE TO THE EXTERIOR SPEAKER.
  - 22. 1/2" - 6 IC CABLES + 1" - 4 #14, #12. RUN CONCRETE UP THRU ATTIC SPACE.
  - 23. NOT USED.
  - 24. STUB 3 - 2" C SLEEVES BETWEEN ATTIC SPACES OF ADJACENT BUILDINGS TYPICAL.
  - 25. STUB 3 - 2" C FROM CABINET UP INTO ATTIC SPACE.
  - 26. RUN TWO 2" C SPACES TO TCI. FOLLOW SAME ROUTING AS FIRE ALARM AND INTERCOM. STUB INTO ATTIC SPACE AT ADMIN BLDG. TO LOCATION AS DIRECTED BY OWNER.
  - 27. INSTALL NEW FA SIGNAL EXPANDER PANEL NEXT TO THE EXISTING FA MASTER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO INSTALLING. CONNECT TO THE SAME 20V CIRCUIT FROM THE EXISTING MASTER PANEL.
  - 28. PULL NEW SIGNAL WIRING BACK TO THE EXISTING MASTER EQUIPMENT THROUGH EXISTING CONDUITS. VERIFY ROUTING AS SITE. RECALL EXISTING WIRING AS REQUIRED.
  - 29. 1/2" - 10 INTERCOM CABLES + 1/2" - 4 #12 + 4 #14.
  - 30. 1/2" - 35 INTERCOM CABLES + 1/2" - 4 #12 - 4 #12 + 4 #14.
  - 31. VERIFY ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION. NOT USED.
  - 32. RUN 1" - 4 #14, #12, 1" - 4 #14, #12.
  - 33. NOT USED.

**DIVISION OF THE STATE ARCHITECT APPLICABLE CODES AND STANDARDS**

**CODES:**

- 1980 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 2, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 3, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 4, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 5, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 6, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 7, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 8, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 9, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 10, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 11, TITLE 24 C.C.R.
- 1980 CALIFORNIA BUILDING CODE (C.B.C.), PART 12, TITLE 24 C.C.R.
- 1980 CALIFORNIA REFERENCED STANDARDS CODE (C.R.S.C.), PART 12.
- 1980 TITLE 14 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS AND ORDINANCES.
- NEFA 17 (CALIFORNIA AMENDED) - NATIONAL FIRE ALARM CODES, 1980 EDITION.

**STANDARDS AND GUIDES:**

- NEFA 17 (CALIFORNIA AMENDED) - NATIONAL FIRE ALARM CODES, 1980 EDITION.
- POLICY #5-03, FIRE AND LIFE SAFETY, DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES.

**SEISMIC ANCHORAGE REQUIREMENTS**

ALL ELECTRICAL EQUIPMENT SHALL BE ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:

1. **EQUIPMENT ON STRUCTURE:**

- TO COMPLY WITH 1980 CBC, SECTION 1903.2.2, TITLE 24, SECTION 1903.2.2.
- FOR SIMILARITIES USE 1/2" HORIZONTAL FORCE.
- THE ABOVE VALUES ARE FOR AN IMPACT FACTOR OF 1 + 1.0 AND SEISMIC ZONE 2, 0.4.
- FOR OTHER BUILDINGS, PRESUMED OR OPERATING WEIGHT SHALL BE 125% OF VALUES LISTED ABOVE.
- WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD ENGINEER SHALL VERIFY THE ANCHORAGE DETAILS WITH THE FIELD ENGINEER AND THE REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.

2. **FP SHALL NOT BE LESS THAN 0.15 G AND 0.30 Wp, AND FP NEED NOT EXCEED 2.0 G AND 2.0 Wp = 1.1 Wp. 1.4**

3. **THE DESIGN FORCES FOR SHALLOW OR EXPANSION ANCHORS FOR EQUIPMENT ON VIBRATION ISOLATORS SHALL BE MULTIPLIED BY AN ADDITIONAL FACTOR OF 2.0.**

4. **FOR LOAD COMBINATIONS, SEE 1980 CBC, 1612A.3, WELDED, BOLTED, OR OTHER CONNECTIONS SUCH AS ANGLES SHALL NOT BE ALLOWED.**

5. **PREPARED POWER EQUIPMENT SHALL BE DESIGNED FOR A SIMILAR VERTICAL VIBRATION SEISMIC FORCE EQUAL TO 0.75 OF THE HORIZONTAL FORCE. FP.**

6. **WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD ENGINEER SHALL VERIFY THE ANCHORAGE DETAILS WITH THE FIELD ENGINEER AND THE REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.**

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MARK	DATE	REVISIONS
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**BEFORE PROCEEDING WITH THE WORK, REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.B.C.**

**RESTROOM BUILDING**  
**RELOCATABLE CLASSROOMS**  
 1015 NOBLE AVE.  
 FOR  
**MYRA A. NOBLE SCHOOL**  
 BAKERSFIELD, KERN COUNTY, CALIFORNIA

REGISTRATION STATE OF CALIFORNIA  
 OFFICE OF REGULATION SERVICES  
 APR-03-104224  
 APR-15-06  
 DATE: 12/19/00

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**SITE ELECTRICAL PLAN**

JOB NO. 976  
 DRAWN: [Signature]  
 CHECKED: [Signature]  
 DATE: 12/19/00

**1**  
 16 OF 18 SHEETS

**COMPLETE MANUAL FIRE ALARM PLAN SUBMITTAL**

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE ARCHITECT. THE ARCHITECT'S APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN ENDORSEMENT OF THE SYSTEM OR THE ARCHITECT'S LIABILITY FOR THE SYSTEM. THE ARCHITECT'S APPROVAL DOES NOT CONSTITUTE AN ENDORSEMENT OF THE SYSTEM OR THE ARCHITECT'S LIABILITY FOR THE SYSTEM.