ELECTRICAL SPECIFICATION SHEETS ARE INTENDED TO BE ALL-INCLUSIVE AND INCLUDE SPECIFICATION SECTIONS THAT MAY OR MAY NOT APPLY TO THIS PARTICULAR PROJECT. REFER TO THE DRAWINGS FOR SCOPE OF WORK.

DIVISION 26 - ELECTRICAL

GENERAL CONDITIONS:
A. THE REQUIREMENTS AS SET FORTH UNDER GENERAL CONDITIONS, INSTRUCTIONS TO BIDDERS AND GENERAL REQUIREMENTS ARE A PART OF THIS CONTRACT.
B. BIDS SHALL BE BASED ON A COMPLETE/FULL SET OF DRAWINGS.
C. CONTRACTOR MUST READ THE ENTIRE SPECIFICATIONS COVERING OTHER BRANCHES OF WORK AND IS RESPONSIBLE FOR COORDINATION OF THE WORK WITH WORK PERFORMED BY OTHER TRADES.

SCOPE OF WORK:
A. PROVIDE ALL LABOR, MATERIALS, TESTING, EQUIPMENT, INCIDENTALS AND TOOLS TO PERFORM WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION AND OPERABLE SYSTEM.
B. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND AS SUCH APPEAR ON THE UNDERWRITERS LABORATORIES LIST OF APPROVED ITEMS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND OTHER APPLICABLE CODES, WHICHEVER ARE MORE STRINGENT.
C. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
D. INCLUDE ANY LABOR AND MATERIALS NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO PROVIDE COMPLETE AND FULLY OPERATIVE SYSTEMS.

PERMITS:
A. SECURE AND PAY FOR ALL REQUIRED PERMITS, FEES, ASSESSMENTS AND INSPECTION CERTIFICATES THAT RELATE TO THE WORK.
B. PROVIDE APPROVED CERTIFICATE OF FINAL INSPECTION, AND PROVIDE TO OWNER AT COMPLETION OF PROJECT.

DRAWINGS AND SPECIFICATIONS:
A. PLANS ARE DIAGRAMMATIC, NOT SHOWING EVERY ITEM IN EXACT LOCATION OR DETAIL. MEASUREMENTS AND LOCATIONS MUST BE FIELD VERIFIED AND COORDINATED WITH ARCHITECTURAL, PLUMBING, HVAC, FIRE PROTECTION, STRUCTURAL AND OTHER WORK.

CONDUITS:
A. CONDUIT SHALL BE STANDARD STEEL RIGID, IMC OR EMT (THIN WALL) ACCORDING TO LOCAL CODE AND LANDLORD REQUIREMENTS. CONDUIT SHALL BE CONCEALED IN FINISHED AREAS, EXCEPT AS OTHERWISE APPROVED BY OWNER. EMT CONNECTIONS SHALL BE COMPRESSION OR SET SCREW TYPE.
B. FLEXIBLE METAL CONDUIT SHALL BE USED FOR FINAL CONNECTIONS TO LUMINAIRES, MOTORS AND VIBRATING EQUIPMENT ONLY; AND WHERE SO USED TO BE GROUNDED WITH A SEPARATE FULL SIZED GREEN GROUNDING CONDUCTOR. FINAL FLEXIBLE METAL CONDUIT CONNECTIONS SHALL BE LIMITED TO 5'-0" IN LENGTH. (ARRANGE CIRCUITS TO AVOID THE USE OF JUNCTION BOXES ABOVE DRYWALL CEILING AREAS. JUNCTION BOXES LOCATED ABOVE LAY IN CEILINGS ARE ACCEPTABLE).
   1. MINIMUM SIZES OF CONDUITS SHALL BE 3/4" FOR STANDARD CONDUIT, AND 1/2" FOR FLEXIBLE METAL CONDUIT (1/2" STANDARD CONDUIT MAY BE USED AS SPECIFIED ABOVE, IF ACCEPTABLE WITH LOCAL CODES. COORDINATE WITH INSPECTION AGENCIES PRIOR TO INSTALLATION). ELECTRIC METALLIC TUBING (EMT) SHALL BE GALVANIZED OR ELECTRO-GALVANIZED. FITTINGS SHALL BE SET SCREW OR COMPRESSION TYPE, FITTING SHALL BE AS MANUFACTURED BY REGEL, STEEL CITY, RACO, T & B, EFCOR OR EQUAL. EMT SHALL BE USED FOR FEEDERS AND BRANCH CIRCUITS RUN ABOVE SUSPENDED CEILINGS OR CONCEALED IN INTERIOR PARTITIONS.
   2. PAINT CONDUITS, ETC., TO MATCH SURROUNDING SURFACES WHERE EXPOSED TO PUBLIC VIEW.
C. THE USE OF NM, ROMEX, OR BX IS NOT PERMITTED.
D. MAXIMUM CONDUIT HANGER SPACING SHALL BE 8'-0" FOR 3/4" THRU 1 1/4" AND 10'-0" FOR 1-1/2" THRU 4" CONDUITS. DO NOT SUPPORT CONDUIT FROM CEILING SYSTEM.
E. PROVIDE NYLON PULL STRING IN ALL EMPTY CONDUITS.
F. SECURE ALL CONDUITS TO THE BUILDING STRUCTURE IN A RIGID AND SECURE MANNER, USING FASTENERS SUCH AS "CADDY CLIPS" OR EQUAL.
G. FLASH AND COUNTER FLASH ALL CONDUITS WHICH PENETRATE THE ROOF OR USE PITCH POCKETS. PENETRATIONS SHALL BE COMPLETELY WEATHERPROOF. ALL CONDUIT SYSTEMS EXPOSED TO WEATHER SHALL BE WEATHERPROOF.
H. SLAB OPENINGS FOR CONDUITS IN WET AREAS MUST BE SLEEVED 2" ABOVE FLOOR AND SEALED TO PROPER FLOOR WATERPROOFING SYSTEM PER B-2. X-RAY SLAB PRIOR TO CORE DRILLING.

WIRE:
A. WIRE SHALL BE SINGLE CONDUCTOR COPPER WITH 600 VOLT INSULATION. MINIMUM WIRE SIZE SHALL BE #12 AWG, ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES. ALL WIRING OF ANY TYPE SHALL BE IN CONDUIT. WHERE ALLOWED BY LOCAL CODES, TYPE MC CABLE IS ALLOWED. NO STRANDED WIRE ALLOWED FOR #10 AND #12 AWG SIZES. (INCREASE CONDUCTOR BY ONE SIZE FOR EVERY 150' INCREMENT OF DISTANCE FROM THE PANEL BOARD FOR ALL 120 VOLT CIRCUITS.)
   1. GENERAL WIRING SHALL BE COPPER THWN OR THHN.
B. WIRE CONNECTORS SHALL BE EQUAL TO SCOTCHLOCK FOR #8 AND SMALLER, AND EQUAL TO T & B "LOCK-TITE" FOR #6 AND LARGER.
C. CABLING IDENTIFICATION: FURNISH AND INSTALL VINYL CLIP -ON MARKERS AS FOLLOWS: EZCODE#SMC197 (12-10 AWG) AND SMC244 (8-6 AWG) AND THOMAS & BETTS STAINLESS STEEL I.D. TAG (#2-3/0 AWG).
D. ALL WIRING SHALL BE COLOR CODED AS FOLLOWS
   208/120 VOLT SYSTEM
   NEUTRAL - WHITE
   PHASE A OR L1-BLACK
   PHASE B OR L2-RED
   PHASE C OR L3-BLUE
   GROUND-GREEN

GROUNDING SYSTEM:
A. PROVIDE A COMPLETE WIRED GROUNDING SYSTEM FOR ELECTRICAL EQUIPMENT AND CIRCUITS AS SHOWN ON THE DRAWINGS AND DESCRIBED GENERALLY BELOW.
B. ALL GROUNDING CONDUCTORS SHALL BE GREEN, WHERE EXPOSED IN PANEL, SWITCHBOARD, OUTLET, BOXES, ETC.
C. ALL ENCLOSURES AND NON-CURRENT CARRYING METALS SHALL BE GROUNDED. ALL METAL CONDUIT SYSTEMS SHALL BE GROUNDED. ALL LOCK NUTS MUST CUT THROUGH ENAMELED OR PAINTED SURFACES ON ENCLOSURES. WHERE ENCLOSURES AND NON-CURRENT CARRYING METALS ARE ISOLATED FROM THE CONDUIT SYSTEM, USE BONDING JUMPERS WITH APPROVED CLAMPS.
D. RUN A SEPARATE GROUNDING CONDUCTOR IN EACH CONDUIT, #12 MINIMUM. FOR PANEL FEEDERS BOND THE GROUNDING CONDUCTOR TO THE CONDUIT, WHERE ENTERING AND LEAVING THE CONDUIT. ALL GROUND CLAMPS SHALL BE PENN-UNION OR EQUAL, SIMILAR TO "GPL" TYPE. CONDUIT GROUND BUSHINGS SHALL BE THOMAS & BETTS OR EQUAL, SIMILAR TO #3800 SERIES WITH NYLON INSULATED THROAT.
E. ALL DEVICES SHALL BE BONDED TO THE CONDUIT SYSTEM. USE A BONDING JUMPER BETWEEN THE OUTLET BOX AND THE DEVICE GROUNDING TERMINAL. METAL TO METAL CONTACT BETWEEN THE DEVICE YOKE AND THE OUTLET BOX IS NOT ACCEPTABLE AS A BOND FOR EITHER SURFACE MOUNTED BOXES OR FLUSH TYPE BOXES. ALL JUNCTION BOXES, OUTLET BOXES AND PULL BOXES SHALL BE BONDED TO THE CONDUIT SYSTEM. ALL FLEXIBLE CONDUIT SHALL BE JUMPERED WITH A GROUNDING CONDUCTOR.

WIRING DEVICES:
A. DEVICES AND COVERPLATES
   1. RECEPTACLES SHALL BE 20 AMP, 3-WIRE GROUNDING TYPE EQUAL TO HUBBELL 5362.
   2. SWITCHES SHALL BE 20 AMP SPECIFICATION GRADE, RATED AT 120 VOLT.
   3. SPECIAL DEVICES SHALL BE A SPECIFICATION GRADE.
   4. ALL DEVICES & COVER PLATES SHALL BE WHITE IN COLOR.
   5. EQUAL ALTERNATES = ARROW-HART, GENERAL ELECTRIC, BRYANT, PASS & SEYMOUR, OR SIERRA.

PANELBOARDS AND SAFETY SWITCHES:
A. PROVIDE BRANCH CIRCUIT PANEL BOARDS WHICH SHALL BE OF THE BOLTED CIRCUIT BREAKER TYPE WITH SOLID COPPER BUSSING FULL SIZED NEUTRAL, 100% GROUND BUSSING, OVERALL HINGED/LOCKABLE DOOR, AND TYPE-WRITTEN DIRECTORY INSIDE DOOR. ALL SERVICE ENTRANCE EQUIPMENT SHALL BEAR THE MANUFACTURER'S LABEL WHICH SHALL STATE THAT THE EQUIPMENT IS RATED FOR SERVICE ENTRANCE APPLICATION IN ACCORDANCE WITH N.E.C. #230-70. LOAD BALANCE ALL ELECTRICAL PHASES AT PANELS AND SWITCHBOARDS. TWO AND THREE POLE BREAKERS SHALL BE COMMON TRIP TYPE. WHEN USED AS SWITCHES IN 120V LIGHTING CIRCUITS, FURNISH TYPE "SWD" BREAKERS IN ACCORDANCE WITH N.E.C. #240-83B. SQUARE D OR EQUAL BY CUTLER-HAMMER, WESTINGHOUSE, OR GENERAL ELECTRIC (OR APPROVED EQUAL).
B. PROVIDE SAFETY AND DISCONNECT SWITCHES, FUSED OR NON-FUSED, AS INDICATED ON DRAWINGS AND AS REQUIRED BY CODE (FUSES AS MANUFACTURED BY BUSSMAN, CHASE SHAWMUT, WESTINGHOUSE, ECONOMY FUSE CO., OR LITTLE FUSE CO. ARE ACCEPTABLE). SWITCHES SHALL BE HEAVY DUTY, QUICK MAKE/QUICK BREAK TYPE, FUSIBLE OR NON-FUSIBLE, WEATHERPROOF AS INDICATED ON THE DRAWINGS, OR AS REQUIRED BY LOCAL CODES. LOAD AND HORSEPOWER RATED SWITCHES AS MANUFACTURED BY SQUARE D, CUTLER HAMMER, WESTINGHOUSE, OR GENERAL ELECTRIC (OR APPROVED EQUAL).
C. ALL HVAC EQUIPMENT SHALL BE PROVIDED WITH INTEGRAL SAFETY SWITCH AND CONVENIENCE OUTLET. VERIFY ALL MINIMUM CIRCUIT AMPACITIES AND MINIMUM OVERCURRENT PROTECTION WITH EQUIPMENT PROVIDED PRIOR TO INSTALLING FEEDERS TO EQUIPMENT.
D. EQUIPMENT IDENTIFICATION: FURNISH AND INSTALL ENGRAVED LAMINATED ACRYLIC LABELING (1.5W"X2.5"L).

BOXES:
A. OUTLET BOXES AND COVERS SHALL BE GALVANIZED, ONE PIECE PRESSED STEEL KNOCKOUT.
B. JUNCTION, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE SIZE.
C. INSTALL BOXES RIGIDLY ON BUILDING STRUCTURE AND SUPPORT INDEPENDENTLY OF CONDUIT SYSTEM. ALSO PROVIDE SUITABLE/PROPER BOX EXTENSIONS TO EXTEND BOXES TO FINISHED FACES OF WALLS ETC. ALL OUTLET BOXES TO HAVE SUITABLE BLOCKING BEHIND THEM TO MINIMIZE THE DEFLECTION THAT OCCURS WHEN PLUGGING/UNPLUGGING INTO THESE DEVICES.

SERVICES:
A. PROVIDE TEMPORARY SERVICE, LIGHTING, POWER AND WIRING AS REQUIRED TO FACILITATE APPLICABLE TEMPORARY NEEDS. ANY TEMPORARY WIRING, FUSES, ETC., SHALL BE REMOVED UPON COMPLETION OF THE PROJECT. PROVIDE GROUND FAULT PROTECTION AS REQUIRED BY NEC AND LOCAL CODES.
B. PROVIDE ELECTRICAL SERVICE AS SHOWN ON THE DRAWINGS, FIELD VERIFY ALL UTILITY REQUIREMENTS PRIOR TO BID. ALL WORK NOT SPECIFICALLY NOTED AS BEING BY THE UTILITY COMPANY SHALL BE PROVIDED BY THE CONTRACTOR. CLOSELY COORDINATE ENTIRE INSTALLATION WITH UTILITY COMPANY AS REQUIRED. PROVIDE EQUIPMENT THAT IS COMPATIBLE WITH AVAILABLE FAULT CURRENT LEVELS.
C. PROVIDE PROVISIONS FOR NEW TELEPHONE SERVICE AS REQUIRED, AND AS INDICATED ON THE DRAWINGS.
D. CONDUIT SYSTEM FOR TELEPHONE DISTRIBUTION WITHIN BUILDING SHALL BE PROVIDED AS REQUIRED FOR A COMPLETE TELEPHONE SYSTEM. OUTLET BOXES SHALL BE 4" SQUARE MINIMUM WITH SINGLE DEVICE COVER AND TELEPHONE PLATE.

FIRE ALARM SYSTEM
A. INTERFACE NEW FIRE ALARM DEVICES TO EXISTING FIRE ALARM CONTROL PANEL. THE DEVICES SHALL INCLUDE BUT IS NOT LIMITED TO HORN/STROBE, PULL STATIONS, AREA SMOKE DETECTORS, HEAT DETECTORS, DUCT SMOKE DETECTORS, TAMPER SWITCHES, FLOAT SWITCHES, REMOTE TEST STATIONS AND ANSUL SUPPRESSION SYSTEM INTERFACE COMPONENTS. ONLY THOSE DEVICES REQUIRED BY CODE SHALL BE INSTALLED. A LICENSED FIRE ALARM CONTRACTOR HIRED BY THE GENERAL CONTRACTOR AND DESIGNATED SHALL PREPARE AND SUBMIT A COMPLETE FIRE ALARM DRAWING AND MATERIAL LIST, PRIOR TO COMMENCING WORK.

INSTALLATION:
A. ALL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIRING. HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL SUCH AS CHANNELS, RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE FASTENED TO BUILDING STEEL, CONCRETE OR MASONRY, BUT NOT TO PIPING OR DUCTWORK. EXPOSED CONDUITS SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS AND SEPARATED AT LEAST 3 INCHES FROM WATER LINES WHEREVER THEY RUN ALONGSIDE OR ACROSS SUCH LINES.
B. PROVIDE ALL LINE VOLTAGE POWER AND CONTROL WIRING INCLUDING CONNECTIONS TO MOTORS, DAMPERS, INTERLOCKING, ETC. ALL LINE VOLTAGE WIRING, CONDUIT, AND FINAL CONNECTIONS FROM THE POWER SOURCE THRU THE STARTER/DISCONNECT ETC. TO THE MOTOR OR EQUIPMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
C. SLEEVES SHALL EXTEND AT LEAST TWO (2") INCHES ABOVE FINISHED FLOOR AND SHALL BE FIRE SEALED WITH CALCIUM SILICATE, SILICONE "RTV" FOAM, "3M" FIRE RATED SEALANTS OR EQUAL BY HILTI AFTER CONDUIT/CABLES INSTALLATION SO AS TO RETAIN THE FIRE RATING.
D. PANEL BOARDS, DISCONNECT/SAFTEY SWITCHES SHALL BE PROVIDED WITH ENGRAVED NAMEPLATE, APPROXIMATELY 1" X 2" IN SIZE AND BE FASTENED WITH POP RIVETS OR SCREWS.
E. THE LOCATION OF OUTLETS AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE AND THE OWNER REPRESENTATIVE SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ADDITIONAL COST.
F. CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN THE WORK AS THE JOB PROGRESSES, AND TURN THIS "AS BUILT" INFORMATION OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT.
G. CONTRACTOR SHALL PROTECT ALL EQUIPMENT AGAINST DAMAGE FROM LEAKS, ABUSE, ETC., AND PAY COST OF REPAIR OR REPLACEMENT OF EQUIPMENT MADE NECESSARY BY FAILURE TO PROVIDE SUITABLE SAFEGUARDS OR PROTECTION.
H. PROVIDE ALL FINAL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. AFTER ALL EQUIPMENT HAS BEEN INSPECTED AND APPROVED, THOROUGHLY CLEAN ALL EQUIPMENT PROVIDED UNDER THIS WORK JUST PRIOR TO COMPLETION OF PROJECT.

GUARANTEE:
A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT CONTRACTOR'S EXPENSE.
B. FOR THE SAME PERIOD, CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

FINALLY:
A. IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED.

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EDINBURG CISD
GORENA, CRAWFORD, RAMIREZ, AND FLORES - ZAPATA ELEMENTARY
HVAC KITCHEN UPGRADES
EDINBURG, TX

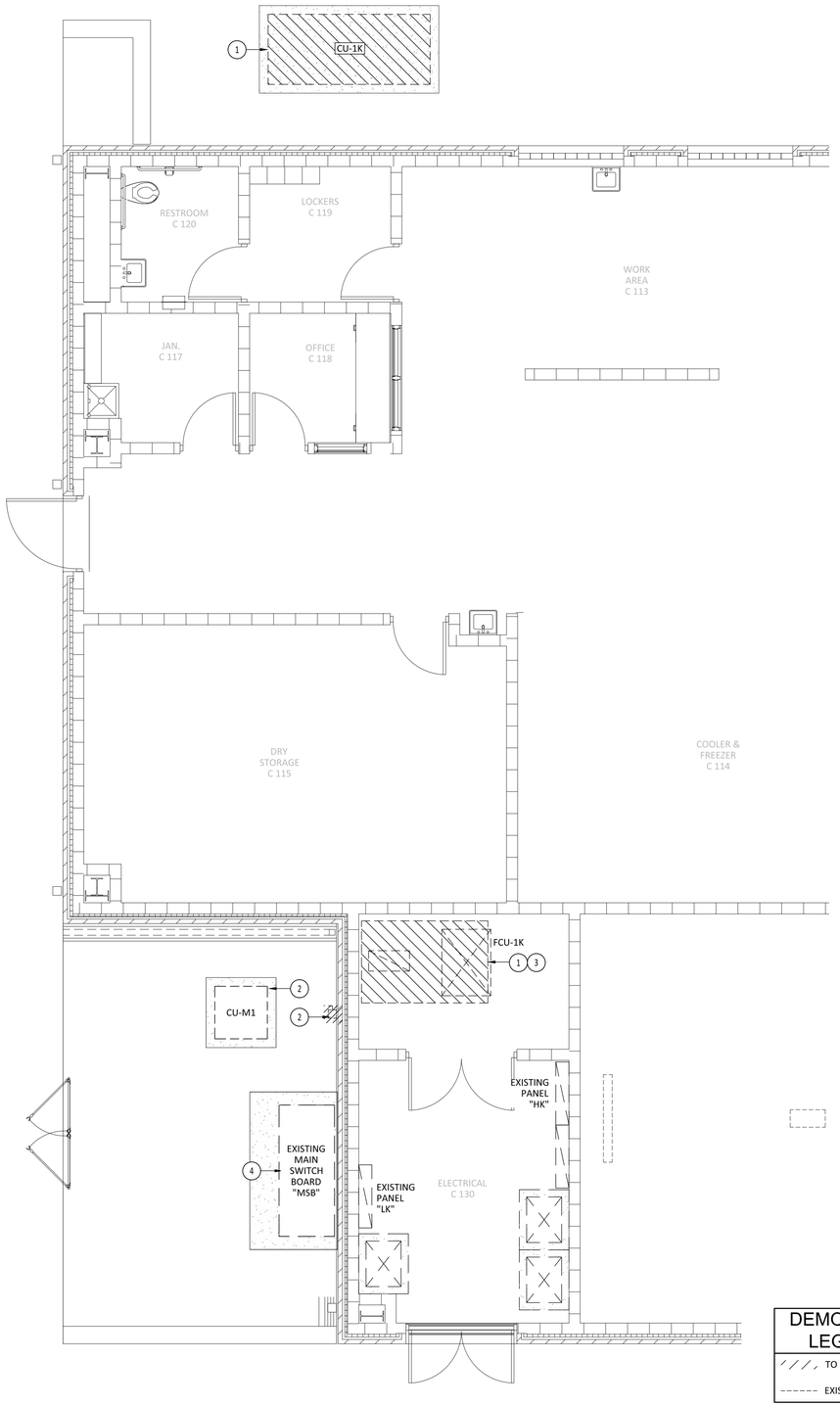
STATE OF TEXAS
JOSE ANTONIO NICANOR
108783
LICENSED PROFESSIONAL ENGINEER
12-16-2020

PROJECT NO.: 20007
ISSUED: 12/16/2020
REVISIONS:

NO.	DATE	DESCRIPTION

DRAWN BY: KA
CHECKED BY: JAN
SHEET TITLE:
ELECTRICAL SPECIFICATIONS

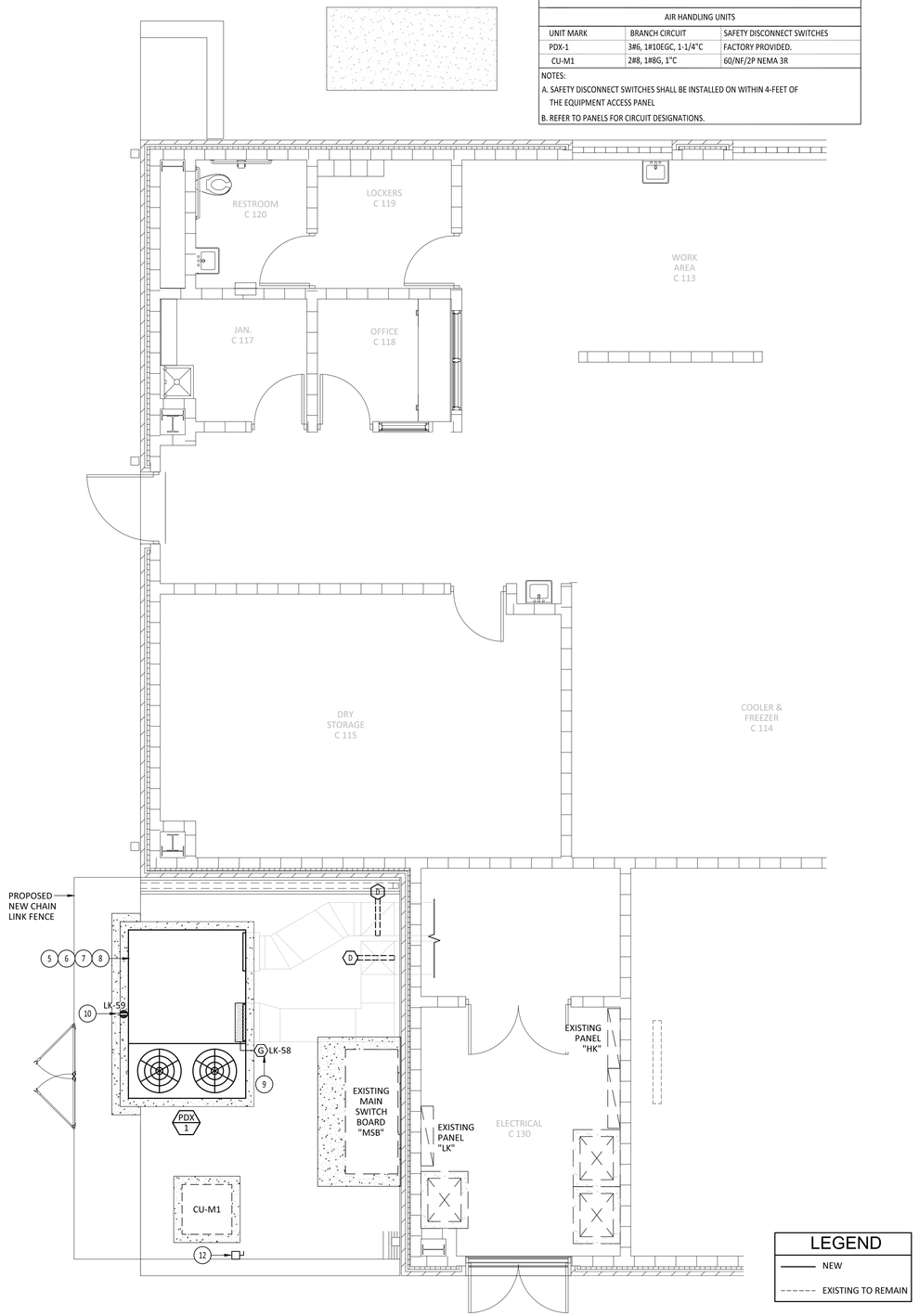
E-0.0



DEMOLITION LEGEND

- TO BE DEMOLISHED
- EXISTING TO REMAIN

1 ELECTRICAL DEMOLITION PLAN (GORENA ELEMENTARY)
SCALE:1/4"=1'-0"



LEGEND

- NEW
- EXISTING TO REMAIN

2 NEW ELECTRICAL POWER PLAN (GORENA ELEMENTARY)
SCALE:1/4"=1'-0"

MECHANICAL EQUIPMENT CONNECTION

AIR HANDLING UNITS		
UNIT MARK	BRANCH CIRCUIT	SAFETY DISCONNECT SWITCHES
PDX-1	3#6, 1#10EGC, 1-1/4"C	FACTORY PROVIDED.
CU-M1	2#8, 1#8G, 1"C	60/NF/2P NEMA 3R

NOTES:
A. SAFETY DISCONNECT SWITCHES SHALL BE INSTALLED ON WITHIN 4-FEET OF THE EQUIPMENT ACCESS PANEL
B. REFER TO PANELS FOR CIRCUIT DESIGNATIONS.

GENERAL NOTES:

A. REFER TO SHEET MEP-1.0 FOR GENERAL NOTES.

B. REFER TO PANEL SCHEDULES FOR EQUIPMENT BRANCH CIRCUITS.

KEY NOTES: (#)

1. EXISTING CONDESING UNIT "CU-1K AND SPLIT DX SYTEMS AIR HANDLING UNIT "FCU-1K" TO BE DEMOLISH. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO DISCONNECT EXISTING ELECTRICAL FEEDER AND BRANCH CIRCUIT.

2. EXISTING CONDENSING UNIT "CU-M1" TO BE RELOCATED. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO RECONNECT EXISTING CONDENSING UNIT TO ITS EXISTING BRANCH CIRCUIT AND DEMOLISHED EXISTING SAFETY DISCONNECT SWITCH. FURNISH AND INSTALL NEW CIRCUIT BREAKER AND SAFETY DISCONNECT SWITCH.

3. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO DEMOLISH EXISTING DUCT SMOKE DETECTORS. RETURN TO OWNER OR DISCARD AT THE OWNER'S REQUEST.

4. EXISTING MAIN SWITCH BOARD "MSB" TO REMAIN.

5. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO CONNECT NEW PACKAGED DX UNIT. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR ELECTRICAL FEEDER AND CONDUIT SIZES. FURNISH AND INSTALL NEW SMOKE DETECTORS; CONNECT SMOKE DETECTORS TO EXISTING FIRE ALARM SYSTEM. ALL FEEDERS AND CONTROL'S WIRING SHALL BE INSTALLED USING FLOOR SUPPORTED FOOTINGS, GALVANIZED METAL CONDUIT, WITH LFMC WHIP FROM CONDUIT TO PDX UNIT.

6. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO FURNISH AND INSTALL NEW PHASE FAILURE MONITORING DEVICE EQUAL TO POWER STANDARDS (PSL) MODEL # PQUBE3-PQ-E08N-PM-UPS1. INSTALL POWER MONITORING DEVICE INSIDE CONTROL ENCLOSURE.

7. FURNISH AND INSTALL NEW DATA DROP FOR INTERFACE WITH NEW POWER MONITORING DEVICE. ROUTE DATA DROP IN CONDUIT TO THE NEAREST IDF OR MDF ROOM. COORDINATE WITH ECISD-IT DEPARTMENT REGARDING CABLING STANDARDS.

8. FURNISH AND INSTALL NEW BRANCH CIRCUIT BREAKER 40AMP/3 POLE, 65KAIC WITH LONG TIME, SHORT TIME AND INSTANTANEOUS ELECTRONIC SETTINGS IN EXISTING ELECTRICAL PANEL"HK".

9. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR TO FURNISH AND INSTALL POWER FOR BIPOLAR IONIZATION DEVICE.

10. FURNISH AND INSTALL POWER FOR MAINTENANCE PURPOSE PACKAGED DX UNIT MOUNTED GFCI. CONTRACTOR SHALL INCLUDE IN HIS BID MATERIAL AND LABOR REQUIRED TO INSTALL POWER CONSISTING OF NEW BRANCH CIRCUIT WITH 2#12, 1#12 EGC, 1/2-INCH CONDUIT, AND 20/1-POLE BRANCH BREAKER. CONTRACTOR SHALL PROVIDE WARNING LABELS INDICATING THAT GFCI RECEPTACLE IS BEING SERVED BY A SEPARATE ELECTRICAL PANEL. ON THE WARNING LABEL, PROVIDE CIRCUIT AND ELECTRICAL PANEL IDENTIFICATION AND LOCATION. PACKAGED DX UNITS DUPLEX RECEPTACLES TO BE INSTALLED IN METAL FLEX CONDUIT WITHIN THE PACKAGE UNIT.

11. EXISTING WALL PACK LIGHT FIXTURE "WP" TO BE RELOCATED. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO RECONNECT EXISTING WALL PACK LIGHT FIXTURE "WP" TO ITS EXISTING BRANCH CIRCUIT. REFER TO NEW ELECTRICAL POWER PLAN FOR NEW LOCATION AND SHEETS MD-1.4 & MD-1.5 FOR ADDITIONAL REFERENCE.

12. APPROXIMATE LOCATION OF NEW SAFETY DISCONNECT SWITCH FOR EXISTING CONDENSING UNIT "CU-M1".

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DRAWN BY: KA
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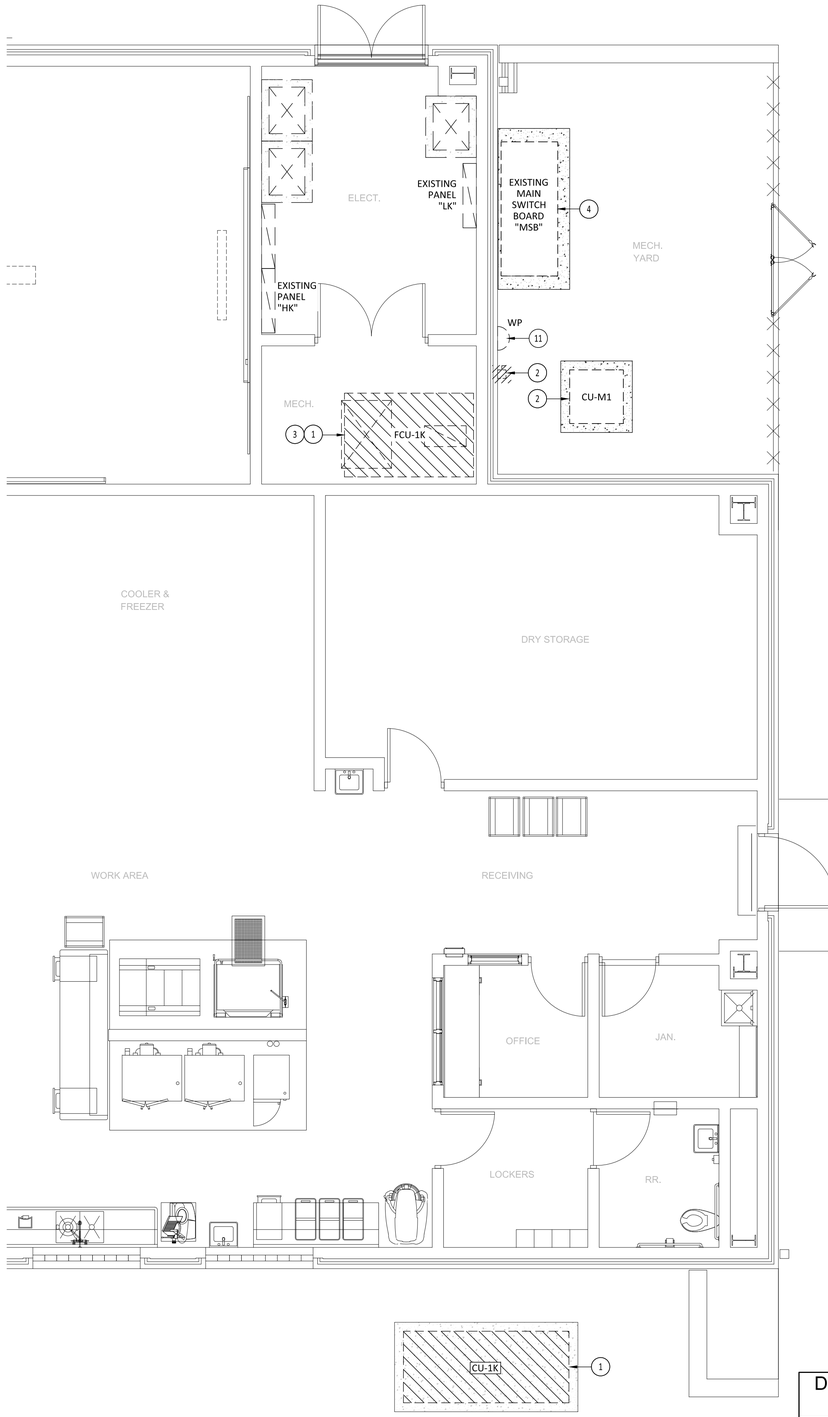

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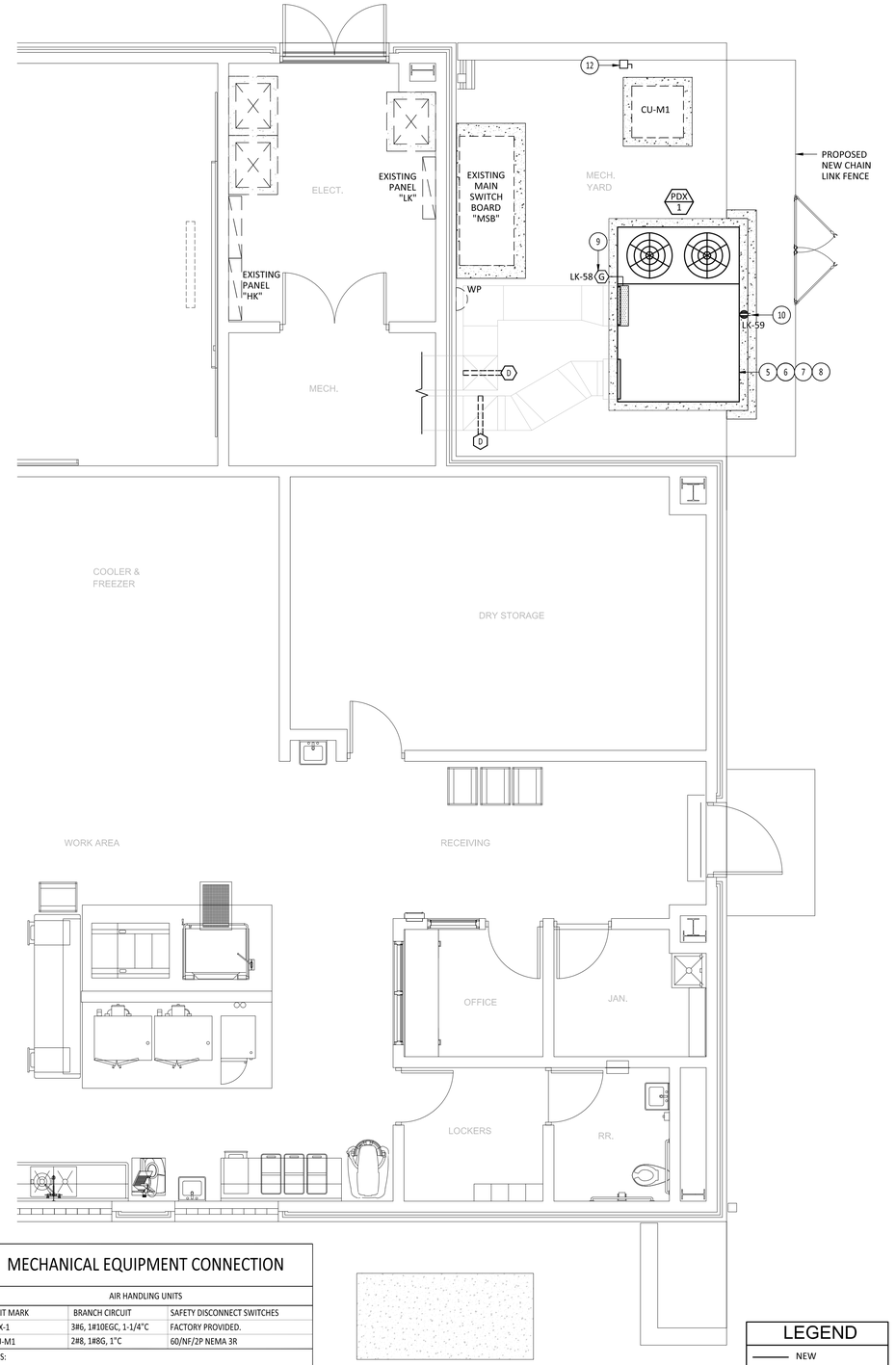
SCALE: 1/4"=1'-0"



MECHANICAL EQUIPMENT CONNECTION

AIR HANDLING UNITS		
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PDX-1	3#6, 1#10EGC, 1-1/4"C	FACTORY PROVIDED.
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NOTES:
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LEGEND

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- EXISTING TO REMAIN

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GENERAL NOTES:

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8. FURNISH AND INSTALL NEW BRANCH CIRCUIT BREAKER 40AMP/3 POLE, 65KAIC WITH LONG TIME, SHORT TIME AND INSTANTANEOUS ELECTRONIC SETTINGS IN EXISTING ELECTRICAL PANEL"HK".

9. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR TO FURNISH AND INSTALL POWER FOR BIPOLAR IONIZATION DEVICE.

10. FURNISH AND INSTALL POWER FOR MAINTENANCE PURPOSE PACKAGED DX UNIT MOUNTED GFCI. CONTRACTOR SHALL INCLUDE IN HIS BID MATERIAL AND LABOR REQUIRED TO INSTALL POWER CONSISTING OF NEW BRANCH CIRCUIT WITH 2#12, 1#12 EGC, 1/2-INCH CONDUIT, AND 20/1-POLE BRANCH BREAKER. CONTRACTOR SHALL PROVIDE WARNING LABELS INDICATING THAT GFCI RECEPTACLE IS BEING SERVED BY A SEPARATE ELECTRICAL PANEL. ON THE WARNING LABEL, PROVIDE CIRCUIT AND ELECTRICAL PANEL IDENTIFICATION AND LOCATION. PACKAGED DX UNITS DUPLEX RECEPTACLES TO BE INSTALLED IN METAL FLEX CONDUIT WITHIN THE PACKAGE UNIT.

11. EXISTING WALL PACK LIGHT FIXTURE "WP" TO BE RELOCATED. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO RECONNECT EXISTING WALL PACK LIGHT FIXTURE "WP" TO ITS EXISTING BRANCH CIRCUIT. REFER TO NEW ELECTRICAL POWER PLAN FOR NEW LOCATION AND SHEETS MD-1.4 & MD-1.5 FOR ADDITIONAL REFERENCE.

12. APPROXIMATE LOCATION OF NEW SAFETY DISCONNECT SWITCH FOR EXISTING CONDENSING UNIT "CU-M1".

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701 S. 15th Street
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EDINBURG CISD
GORENA, CRAWFORD, RAMIREZ, AND FLORES - ZAPATA ELEMENTARY
HVAC KITCHEN UPGRADES
EDINBURG, TX

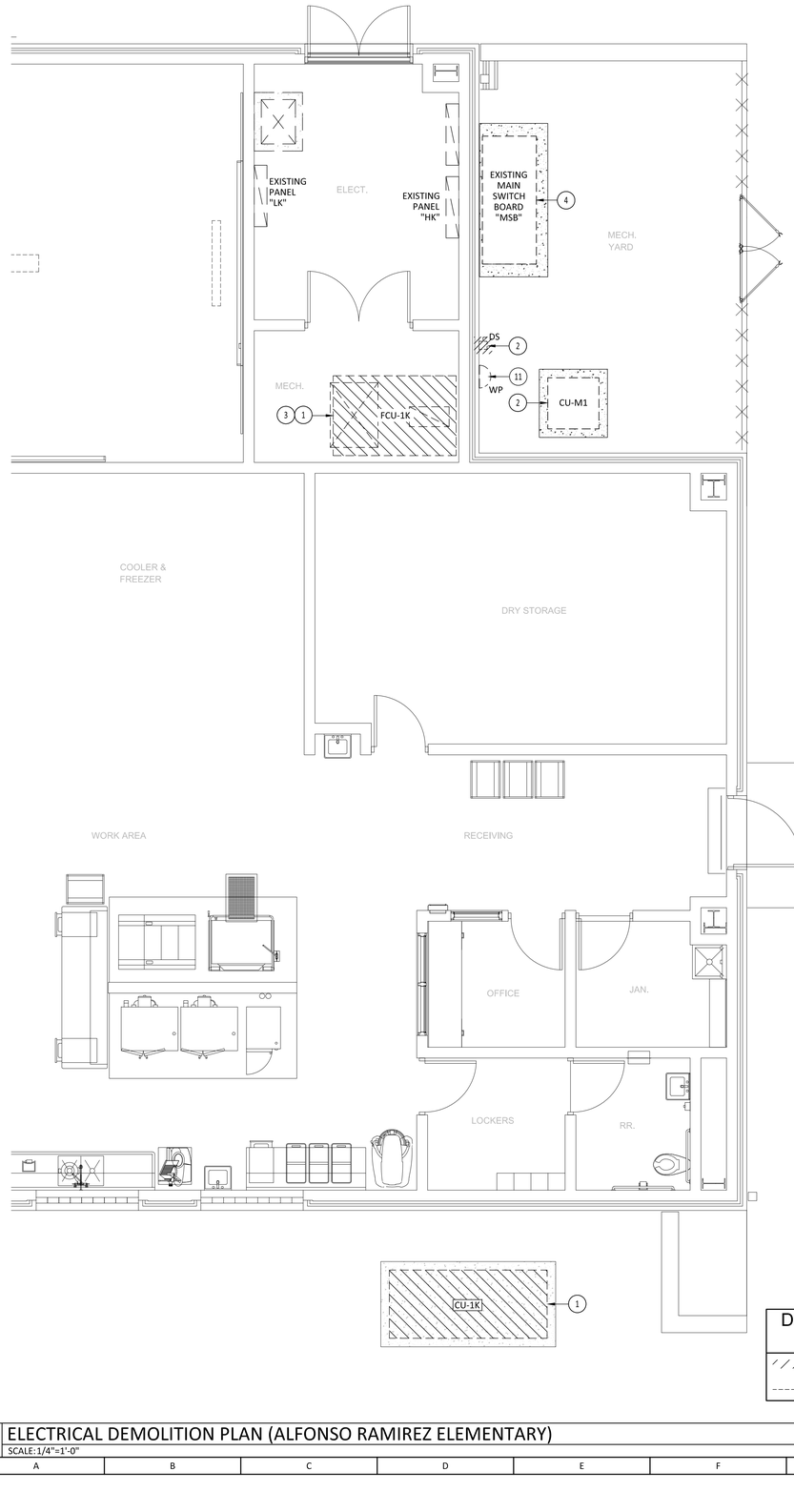
STATE OF TEXAS
JOSE ANTONIO NICANOR
108783
LICENSED PROFESSIONAL ENGINEER
12-16-2020

PROJECT NO.: 20007
ISSUED: 12/16/2020
REVISIONS:

NO.	DATE	DESCRIPTION

DRAWN BY: KA
CHECKED BY: JAN
SHEET TITLE:
ELECTRICAL PLAN

E-1.1

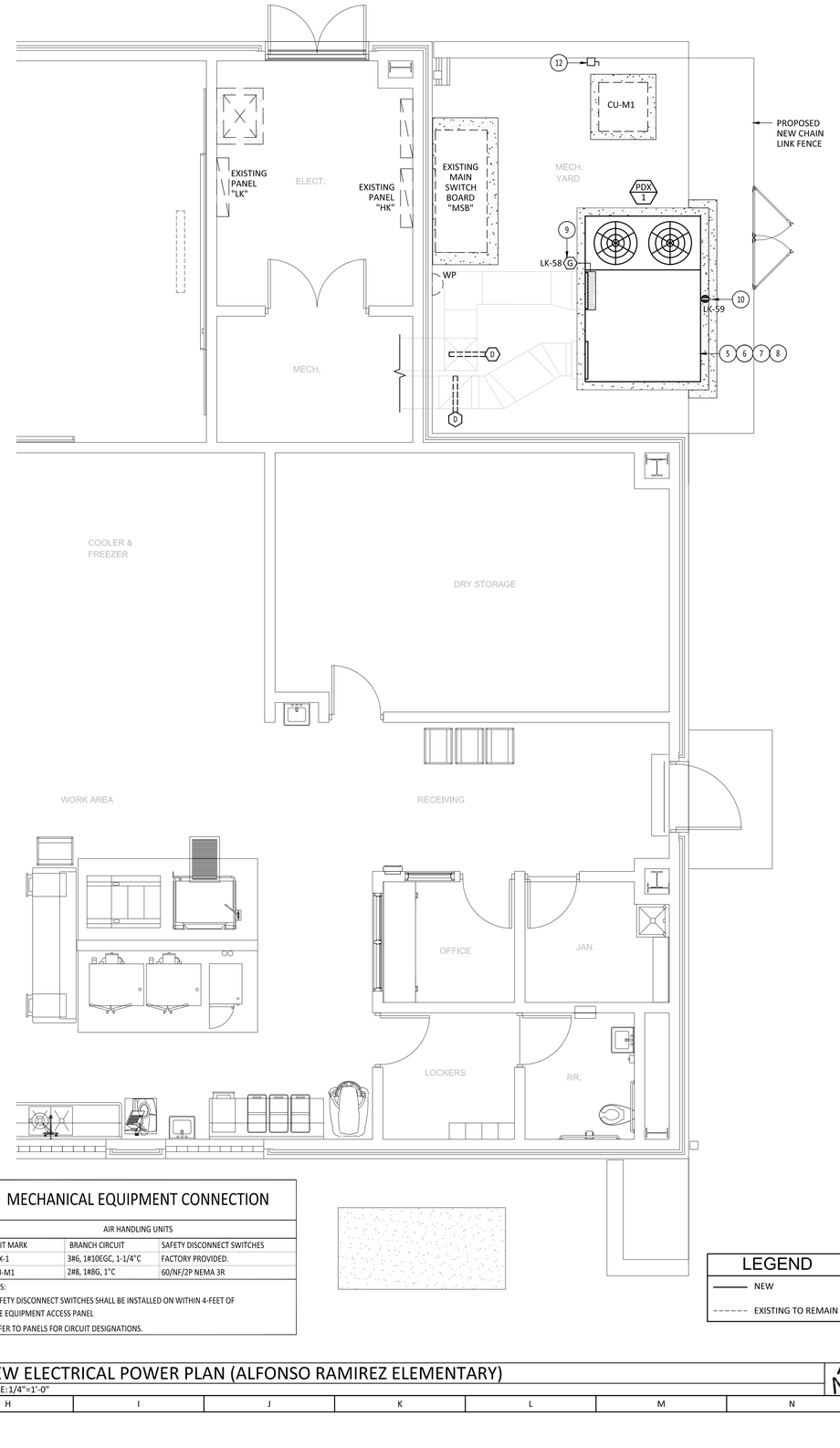


1 ELECTRICAL DEMOLITION PLAN (ALFONSO RAMIREZ ELEMENTARY)

SCALE: 1/4"=1'-0"

DEMOLITION LEGEND

- TO BE DEMOLISHED
- EXISTING TO REMAIN



2 NEW ELECTRICAL POWER PLAN (ALFONSO RAMIREZ ELEMENTARY)

SCALE: 1/4"=1'-0"

MECHANICAL EQUIPMENT CONNECTION

AIR HANDLING UNITS		
UNIT MARK	BRANCH CIRCUIT	SAFETY DISCONNECT SWITCHES
PDX-1	3#6, 1#10EGC, 1-1/4"C	FACTORY PROVIDED.
CU-M1	2#8, 1#8G, 1"C	60/NF/2P NEMA 3R

NOTES:
A. SAFETY DISCONNECT SWITCHES SHALL BE INSTALLED ON WITHIN 4-FEET OF THE EQUIPMENT ACCESS PANEL
B. REFER TO PANELS FOR CIRCUIT DESIGNATIONS.

LEGEND

- NEW
- EXISTING TO REMAIN

GENERAL NOTES:

A. REFER TO SHEET MEP-1.0 FOR GENERAL NOTES.

B. REFER TO PANEL SCHEDULES FOR EQUIPMENT BRANCH CIRCUITS.

KEY NOTES: (#)

1. EXISTING CONDESING UNIT "CU-1K AND SPLIT DX SYTEMS AIR HANDLING UNIT "FCU-1K" TO BE DEMOLISH. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO DISCONNECT EXISTING ELECTRICAL FEEDER AND BRANCH CIRCUIT.

2. EXISTING CONDENSING UNIT "CU-M1" TO BE RELOCATED. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO RECONNECT EXISTING CONDENSING UNIT TO ITS EXISTING BRANCH CIRCUIT AND DEMOLISHED EXISTING SAFETY DISCONNECT SWITCH. FURNISH AND INSTALL NEW CIRCUIT BREAKER AND SAFETY DISCONNECT SWITCH.

3. CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO DEMOLISH EXISTING DUCT SMOKE DETECTORS. RETURN TO OWNER OR DISCARD AT THE OWNER'S REQUEST.

4. EXISTING MAIN SWITCH BOARD "MSB" TO REMAIN.

5. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO CONNECT NEW PACKAGED DX UNIT. REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR ELECTRICAL FEEDER AND CONDUIT SIZES. FURNISH AND INSTALL NEW SMOKE DETECTORS; CONNECT SMOKE DETECTORS TO EXISTING FIRE ALARM SYSTEM. ALL FEEDERS AND CONTROL'S WIRING SHALL BE INSTALLED USING FLOOR SUPPORTED FOOTINGS, GALVANIZED METAL CONDUIT, WITH LFMC WHIP FROM CONDUIT TO PDX UNIT.

6. ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID TO OWNER MATERIAL AND LABOR REQUIRED TO FURNISH AND INSTALL NEW PHASE FAILURE MONITORING DEVICE EQUAL TO POWER STANDARDS (PSL) MODEL # PQUBE3-PQ-E08N-PM-UPS1. INSTALL POWER MONITORING DEVICE INSIDE CONTROL ENCLOSURE.

7. FURNISH AND INSTALL NEW DATA DROP FOR INTERFACE WITH NEW POWER MONITORING DEVICE. ROUTE DATA DROP IN CONDUIT TO THE NEAREST IDF OR MDF ROOM. COORDINATE WITH ECISD-IT DEPARTMENT REGARDING CABLING STANDARDS.

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PROJECT NO.: 20007
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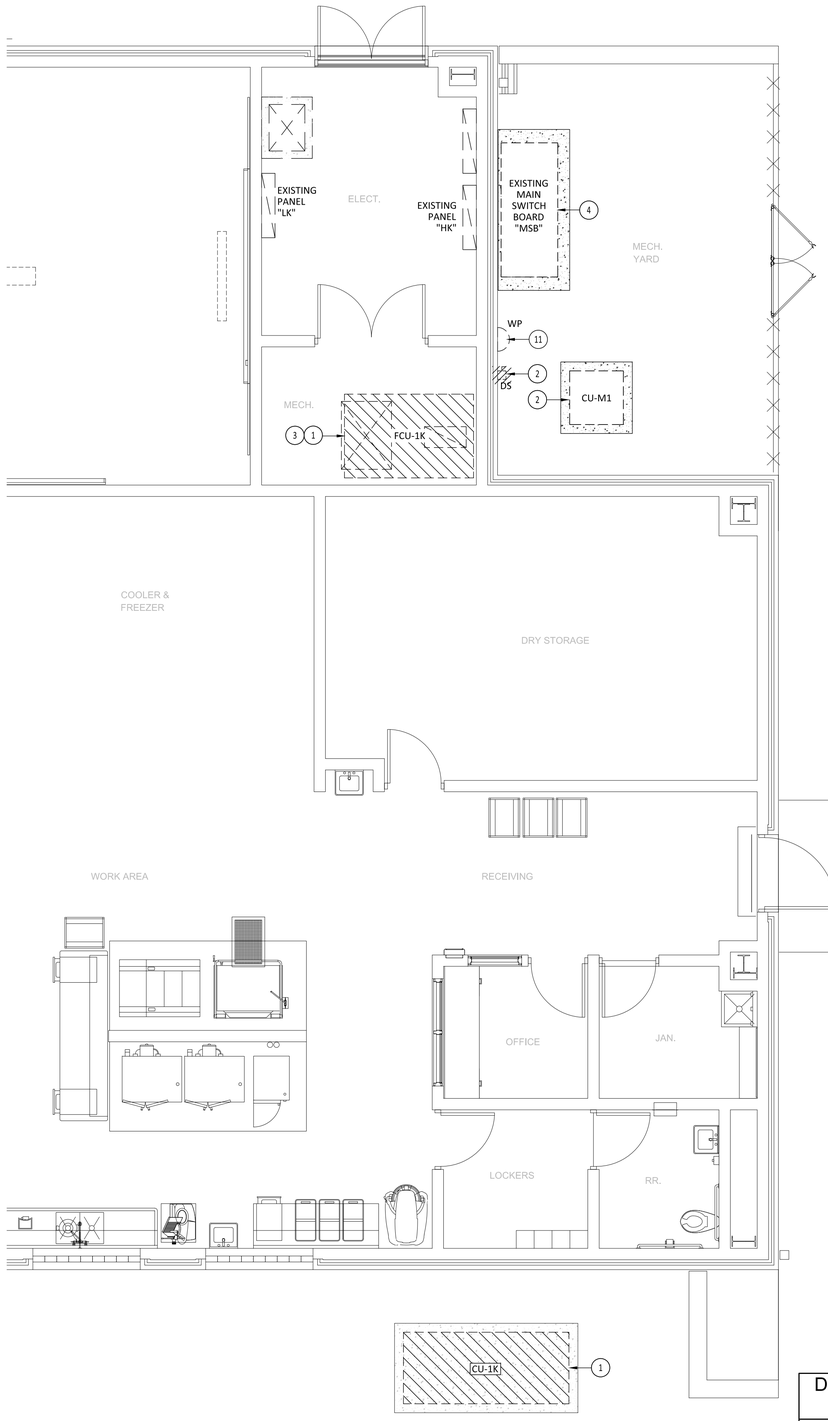
DRAWN BY: KA
CHECKED BY: JAN
SHEET TITLE:
ELECTRICAL PLAN

E-1.2

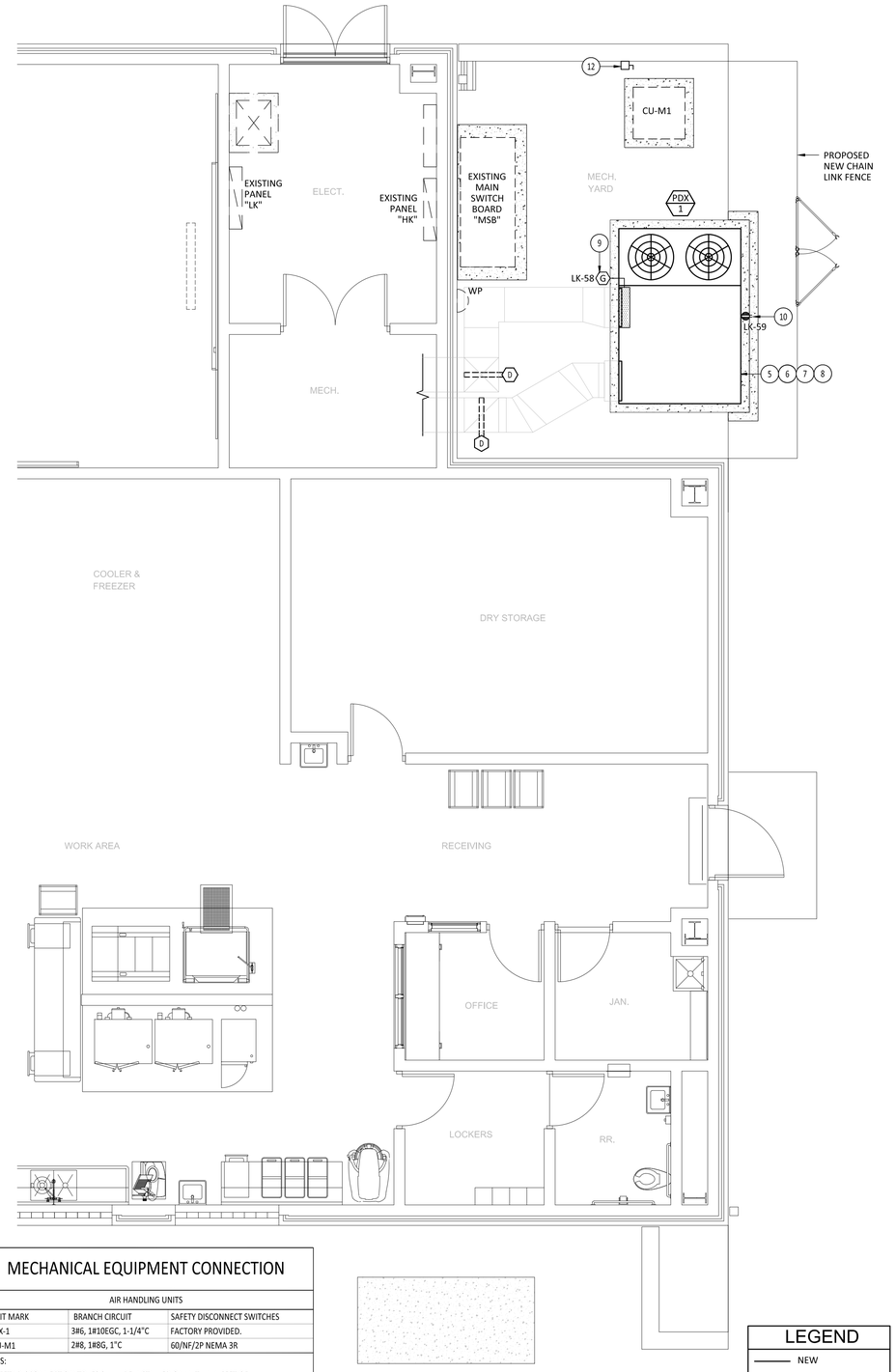


DEMOLITION LEGEND

- TO BE DEMOLISHED
- EXISTING TO REMAIN

1 ELECTRICAL DEMOLITION PLAN (FLORES-ZAPATA ELEMENTARY)

SCALE: 1/4"=1'-0"



MECHANICAL EQUIPMENT CONNECTION

AIR HANDLING UNITS		
UNIT MARK	BRANCH CIRCUIT	SAFETY DISCONNECT SWITCHES
PDX-1	3#6, 1#10EGC, 1-1/4"C	FACTORY PROVIDED.
CU-M1	2#8, 1#8G, 1"C	60/NF/2P NEMA 3R

NOTES:
A. SAFETY DISCONNECT SWITCHES SHALL BE INSTALLED ON WITHIN 4-FEET OF THE EQUIPMENT ACCESS PANEL
B. REFER TO PANELS FOR CIRCUIT DESIGNATIONS.

LEGEND

- NEW
- EXISTING TO REMAIN

2 NEW ELECTRICAL POWER PLAN (FLORES-ZAPATA ELEMENTARY)

SCALE: 1/4"=1'-0"

GENERAL NOTES:

A. REFER TO SHEET MEP-1.0 FOR GENERAL NOTES.

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DRAWN BY: KA
CHECKED BY: JAN
SHEET TITLE:
ELECTRICAL PLAN

E-1.3

EXISTING PANELBOARD "HK"

VOLTAGE: 480Y/277 VOLT 3 PHASE 4 WIRE — LOCATION: ELECTRICAL ROOM C130

400A MAIN LUGS ONLY — MOUNTING: SURFACE, NEMA 1

BUSES: MAIN - 400A; NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 65,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0		7756	PDX-1	40/3	1	A	2	50/3	SPARE	0		
0		7756	"	-	3	B	4	-	"	0		
0		7756	"	-	5	C	6	-	"	0		
0		5540	CONVECTION OVEN	30/3	7	A	8	30/3	DOUBLE STEAMER	0		4900
0		5540	"	-	9	B	10	-	"	0		4900
0		5540	"	-	11	C	12	-	"	0		4900
0			SHUNT TRIP	20/1	13	A	14	20/1	SHUNT TRIP	0		
0		37483	TLK	175/3	15	B	16	30/3	CONVENCTION OVEN	0		5540
0		37483	"	-	17	C	18	-	"	0		5540
0		37483	"	-	19	A	20	-	"	0		5540
0			SPACE	20/1	21	B	22	20/1	SHUNT TRIP	0		
0			SPACE	20/1	23	C	24	30/3	CONVENCTION OVEN	0		5540
0			SPACE	20/1	25	A	26	-	"	0		5540
0			SPACE	20/1	27	B	28	-	"	0		5540
0			SPACE	20/1	29	C	30	20/1	SHUNT TRIP	0		
0			SPACE	20/1	31	A	32	30/3	CONVENCTION OVEN	0		5540
0			SPACE	20/1	33	B	34	-	"	0		5540
0			SPACE	20/1	35	C	36	-	"	0		5540
0			SPACE	20/1	37	A	38	20/1	SHUNT TRIP	0		
0			SPACE	20/1	39	B	40	20/1	SPACE	0		
0			SPACE	20/1	41	C	42	20/1	SPACE	0		

NOTE: SHADED CELL INDICATE NEW CIRCUIT BREAKER REQUIRED.

VA:L (LIGHTING)	0	CONNECTED	0 DEMAND
VA:R (RECEPTACLES)	0	CONNECTED	0 DEMAND
VA:O (OTHER)	216897	CONNECTED	216897 DEMAND
VA: TOTAL	216897	CONNECTED	216897 DEMAND
AMPS: TOTAL	261	CONNECTED	261 DEMAND

L	R	O		TOTAL			
0	0	72299	VA CONNECTED TO A PHASE	72299	VA =	261	AMPS CONNECTED TO A PHASE @ 277 VOLTS
0	0	72299	VA CONNECTED TO B PHASE	72299	VA =	261	AMPS CONNECTED TO B PHASE @ 277 VOLTS
0	0	72299	VA CONNECTED TO C PHASE	72299	VA =	261	AMPS CONNECTED TO C PHASE @ 277 VOLTS
0	0	216897	**TOTAL**	216897	VA		

EXISTING PANELBOARD "LK"

VOLTAGE: 208Y/120 VOLT 3 PHASE 4 WIRE — LOCATION: ELECTRICAL ROOM C130

400A MAIN LUGS ONLY — MOUNTING: SURFACE, NEMA 1

BUSES: MAIN - 400A; NEUTRAL - 100%; EQUIPMENT GROUND — Isc = 22,000 A RMS SYM AVAILABLE

VA:L	VA:R	VA:O	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	VA:L	VA:R	VA:O
0	0	3750	FCU-M1	60/	1	A	2	40/2	CU-M1	0	0	2000
0	0	3750	"	-	3	B	4	-	"	0	0	2000
0	0	360	RECEPTACLES	20/1	5	C	6	20/1	RECEPTACLES	0	0	360
0	0	360	RECEPTACLES	20/1	7	A	8	20/1	RECEPTACLES	0	0	360
0	0	200	FIRE PROTEC. SYS.	20/1	9	B	10	20/1	RECEPTACLES	0	0	360
0	0	600	POS	20/1	11	C	12	80/3	LOAD CENTER	0	0	8100
0	0	1632	ICE MACHINE	20/1	13	A	14	-	"	0	0	8100
0	0	1272	DISPOSER	20/3	15	B	16	-	"	0	0	8100
0	0	1272	"	-	17	C	18	20/1	REFRIGERATOR	0	0	1000
0	0	1272	"	-	19	A	20	20/1	RECEPTACLES	0	0	360
0	0	811	PASS THRU HOT	20/2	21	B	22	20/1	EXH. LIGHTING	0	0	600
0	0	811	"	-	23	C	24	20/1	SLICER	0	0	300
0	0	1200	MIXER	20/3	25	A	26	50/3	BURNER RANGE	0	0	4500
0	0	1200	"	-	27	B	28	-	"	0	0	4500
0	0	1200	"	-	29	C	30	-	"	0	0	4500
0	0	790	DISPOSER	20/3	31	A	32	20/1	SHUNT TRIP	0	0	
0	0	790	"	-	33	B	34	20/1	LIGHTS	0	0	600
0	0	790	"	-	35	C	36	20/1	DOOR HEATER	0	0	600
0	0	1600	REF. SYS - COOLER	20/2	37	A	38	40/2	REF. SYS. - FREEZER	0	0	3000
0	0	1600	"	-	39	B	40	-		0	0	3000
0	0	700	LIGHT	20/1	41	C	42	50/3	BRASING PAN	0	0	4500
0	0	900	DOOR HEATER	20/1	43	A	44	-	"	0	0	4500
0	0	552	MILK CABINET	20/1	45	B	46	-	"	0	0	4500
0	0	800	FSD	20/1	47	C	48	20/1	SHUNT TRIP	0	0	
0	0	360	RECEPTACLES	20/1	49	A	50	20/1	RECEPTACLES	0	0	360
0	0	600	EF-C3	20/1	51	B	52	25/3	EWH-1C	0	0	2000
0	0	600	EF-C2	20/1	53	C	54	-	"	0	0	2000
0	0	720	AIR SCREEN	20/1	55	A	56	-	"	0	0	2000
0	0	400	CP-1	20/1	57	B	58	20/1	BIPOLAR IONIZATION DEVICE	0	0	120
0	180		GFCI RECPT. PDX-1	20/1	59	C	60	20/1	SPACE	0	0	
0	0		SPACE	20/1	61	A	62	20/1	SPACE	0	0	
0	0		SPACE	20/1	63	B	64	20/1	SPACE	0	0	
0	0		SPACE	20/1	65	C	66	20/1	SPACE	0	0	
0	0		SPACE	20/1	67	A	68	20/1	SPACE	0	0	
0	0		SPACE	20/1	69	B	70	20/1	SPACE	0	0	
0	0		SPACE	20/1	71	C	72	20/1	SPACE	0	0	
0	0		SPACE	20/1	73	A	74	20/1	SPACE	0	0	
0	0		SPACE	20/1	75	B	76	20/1	SPACE	0	0	
0	0		SPACE	20/1	77	C	78	20/1	SPACE	0	0	
0	0		SPACE	20/1	79	A	80	20/1	SPACE	0	0	
0	0		SPACE	20/1	81	B	82	20/1	SPACE	0	0	
0	0		SPACE	20/1	83	C	84	20/1	SPACE	0	0	

NOTE: SHADED CELL INDICATE NEW CIRCUIT BREAKER REQUIRED.

VA:L (LIGHTING)	0	CONNECTED	0 DEMAND
VA:R (RECEPTACLES)	180	CONNECTED	180 DEMAND
VA:O (OTHER)	103212	CONNECTED	103212 DEMAND
VA: TOTAL	103392	CONNECTED	103392 DEMAND
AMPS: TOTAL	287	CONNECTED	287 DEMAND

L	R	O		TOTAL			
0	0	37764	VA CONNECTED TO A PHASE	37764	VA =	315	AMPS CONNECTED TO A PHASE @ 120 VOLTS
0	0	36955	VA CONNECTED TO B PHASE	36955	VA =	308	AMPS CONNECTED TO B PHASE @ 120 VOLTS
0	180	28493	VA CONNECTED TO C PHASE	28673	VA =	239	AMPS CONNECTED TO C PHASE @ 120 VOLTS
0	180	103212	**TOTAL**	103392	VA		

ELECTRICAL GENERAL LEGEND

ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	POWER	
	DUPLEX RECEPTACLE - 20A/125V/1P/3W/G	15" AFF
	DUPLEX RECEPTACLE, 20A, GROUND FAULT INTERCEPTOR; C = CEILING MOUNTED.	15" AFF
	DUPLEX RECEPTACLE, 20A, INSULATED GROUND DEVICE WITH ISOLATED GROUNDING CONDUCTOR; CLG = CEILING MOUNTED.	15" AFF
	QUADPLEX RECEPTACLE, 20A, GROUND FAULT INTERCEPTOR; CLG = CEILING MOUNTED.	AS REQD.
	QUADPLEX RECEPTACLE, 20A, INSULATED GROUND DEVICE WITH INSULATED GROUNDING CONDUCTOR; CLG = CEILING MOUNTED.	AS REQD.
E	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT	AS REQD.
	SPECIAL PURPOSE RECEPTACLE; MOTOR OR EQUIPMENT CONNECTION	AS REQD.
J J	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED	15" AFF
MPFB	AUDIO, VIDEO, DATA, AND POWER FLOOR BOX WIRING DIVICE. FURNISH AND INSTALL EQUAL LEGRAND #RBF11; FURNISH WITH THE FOLLOWING: QTY.(2) IG DUPLEX RECEPTACLES AND 6 PORT-DATA WIRING DEVICE PLATE TO ACCOMODATE CATEGORY 6A CABELING.FLOOR BOX CONVER TO MATCH FINISH FLOOR TYPE (IE. CARPET, TILE, WOOD, ETC.)	FLOOR
FB	FURNITURE FEED POKE THRU BOX FOR POWER. FURNISH AND INTALL EQUAL TO LEGRAND 6ATCFF WITH THE FOLLOWING: 5BLH OUTER COMPARTMENT 1 175CHA &1BHA CENTER COMPARTMENT 5BLH OUTER COMPARTMENT 1	SECOND FLOOR
30/-/3	DISCONNECT SWITCH - 30/-/3 INDICATES 30A, 3-POLE, NONFUSED; 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.
CB 30/3	CIRCUIT BREAKER DISCONNECT SWITCH - THERMAL MAGNETIC CB IN NEMA 1 ENCL; AMPS/POLES AS INDICATED	AS REQD.
30/30/3	DISCONNECT SWITCH - 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE	AS REQD.
2	MOTOR STARTER FVNR UNO; NUMBER INDICATES NEMA SIZE	AS REQD.
CB	COMBINATION MOTOR CONTROLLER/DISCONNECT SWITCH	AS REQD.
	PANELBOARD	-
	MOTOR	-
~	SINGLE LINE CONTINUATION	-
GAAP	GENERATOR ANNUNCIATOR PANEL	-
X,X,X	THREE SINGLE POLE DEVICE CIRCUIT NUMBERS	-
X/X/X	MULTI-POLE DEVICE CIRCUIT NUMBERS	-
	DATA AND TELEPHONE OUTLET; REFER TO INSTALLATION DETAILS FOR REQUIREMENTS.	-
		-
		-
	TRANSFORMER	-

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	FIRE ALARM	
F	FIRE ALARM VOICE EVACUATION SPEAKER.	-
F	FIRE ALARM PULL STATION	48" AFF
F S	FIRE ALARM AUDIBLE/VISUAL SIGNAL; WP = WEATHER PROOF; S = WITH INTEGRAL VOICE ACTIVATED SPEAKER.	80" AFF
F S	FIRE ALARM AUDIBLE SIGNAL; WP = WEATHER PROOF; S = WITH INTEGRAL VOICE ACTIVATED SPEAKER.	80" AFF
F S	FIRE ALARM VISUAL SIGNAL; WP = WEATHER PROOF; S = WITH INTEGRAL VOICE ACTIVATED SPEAKER.	80" AFF
FS	FIRE ALARM SPRINKLER FLOW SWITCH	-
TS	FIRE ALARM SPRINKLER TAMPER SWITCH	-
S	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED	AS REQD.
H	HEAT DETECTOR CEILING OR WALL MOUNTED	AS REQD.
R	FIRE ALARM INTERFACE RELAY	-
D	DUCT SMOKE DETECTOR	AS REQD.
FACP	FIRE ALARM CONTROL PANEL	AS REQD.
FAAP	FIRE ALARM ANNUNCIATOR PANEL	AS REQD.
FAEP	FIRE ALARM EXTENDING PANEL	AS REQD.
VAFP	VOICE ACTIVATED FIRE ALARM PANEL	80" AFF
$	SWITCH	
$3	3 WAY LIGHT SWITCH	
DH	MAGNETIC DOOR HOLDER, FLOOR MOUNTED	AS REQD.
DS	DOOR STATUS SWITCH	AS REQD.
ADO	AUTOMATIC DOOR OPERATOR	AS REQD.

GENERAL ABBREVIATIONS

ABS	ABOVE BACK SPLASH
AFF	ABOVE FINISHED FLOOR
BFC	BELOW FINISHED CEILING
C	CONDUIT
CB	CIRCUIT BREAKER
CLG	CEILING
EC	EMPTY CONDUIT
EP	ELECTRICAL PRIMARY
EX	EXISTING
F	FUSE
G	GROUND (EQUIPMENT)
GFI	GROUND FAULT INTERRUPTER
HCC	HORIZONTAL CROSS CONNECT
IC	INTERRUPTING CAPACITY
ICC	INTERMEDIATE CROSS CONNECT
IG	ISOLATED GROUND
MTD	MOUNT OR MOUNTED
NC (N.C.)	NORMALLY CLOSED
NF	NONFUSED
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO (N.O.)	NORMALLY OPEN
PNL	PANEL
RCPT(S)	RECEPTACLE(S)
SO (S.O.)	SPACE ONLY
SP	SPARE
SPD	SURGE PROTECTION DEVICE
ST (S.T.)	SHUNT TRIP
SW	SWITCH
TYP	TYPICAL
UF	UNDERFLOOR
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER

NOTES:
1. 48" AFF INDICATES TO TOP OF DEVICE; 15" AFF INDICATES TO BOTTOM OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

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EDINBURG CISD
GORENA, CRAWFORD, RAMIREZ,
AND FLORES - ZAPATA ELEMENTARY
HVAC KITCHEN UPGRADES
EDINBURG, TX

STATE OF TEXAS
JOSE ANTONIO NICANOR
108783
LICENSED PROFESSIONAL ENGINEER
12/16/2020

PROJECT NO.: 20007
ISSUED: 12/16/2020
REVISIONS:

NO.	DATE	DESCRIPTION

DRAWN BY: KA
CHECKED BY: JAN
SHEET TITLE: ELECTRICAL SCHED.& LEGEND

E-2.0

1 ELECTRICAL PANEL SCHEDULES & GENERAL LEGEND (GORENA, CRAWFORD, RAMIREZ & FLORES-ZAPATA ELEMENTARY)
SCALE:N.T.S.