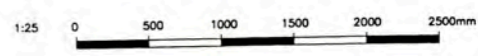


LEYENDA / LEGEND		
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	ALTURA/HEIGHT(m)
	PANEL ELECTRICO EMPOTRADO	1.80 BORDE SUPERIOR
	PANELBOARD EMBEDDED	1.80 TOP
	PANEL DE ALARMA CONTRA INCENDIOS EMPOTRADO	1.80 BORDE SUPERIOR
	FIRE ALARM CONTROL PANEL EMBEDDED	1.80 TOP
	GABINETE RITAL 15RU, IP54	PISO TECNICO
	CABINET RITAL 15RU, IP54	FLOOR TECNICAL
	CONDUCTOR AISLADO TW(VERDE), 2/0 AWG	---
	2/0 AWG PVC GREEN SHEATHED Cu CABLE	---
	CABLE DE COBRE DESNUDO 4/0 AWG	---
	4/0 AWG BARE Cu CABLE	---
	SOLDADURA EXOTERMICA TIPO TEE	---
	TEE JOINT EXOTHERMIC WELD	---
	CONDUCTOR AISLADO TW(VERDE), 4/0 AWG	---
	4/0 AWG PVC GREEN SHEATHED Cu CABLE	---
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO	---
	GROUNDING ROD WITH INSPECTION WELL	---

GROUNDING SYSTEM LAYOUT
 SECURITY GUARD BUILDING (A-8008)
 PLAN
 SCALE 1:25

NOTA/NOTE:

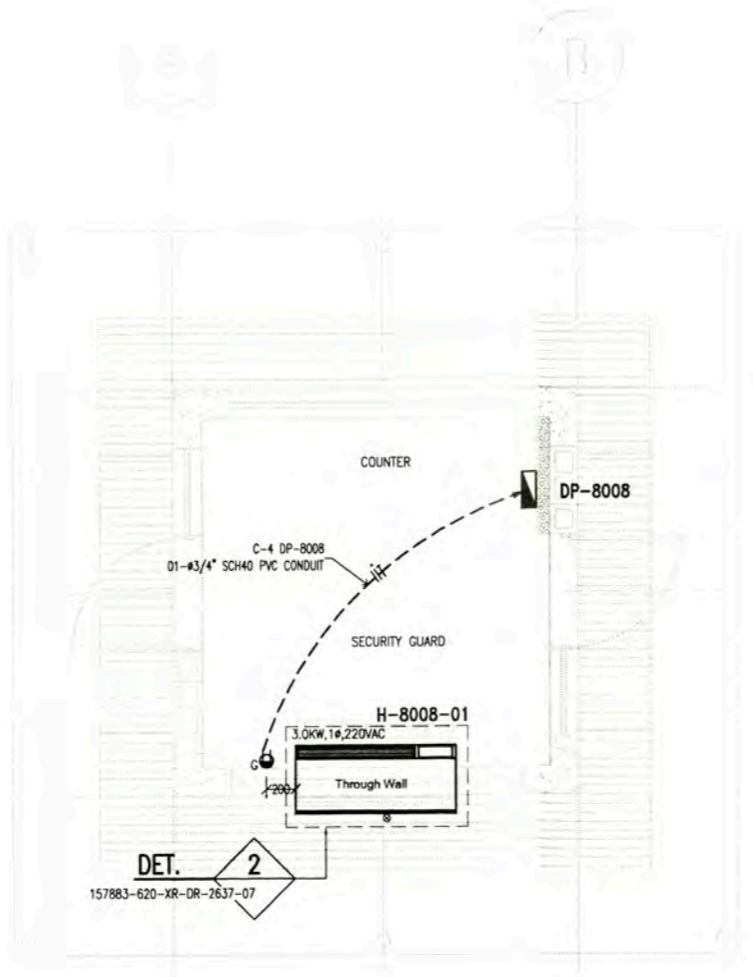
1. THE TOTAL RESISTANCE OF THE GROUNDING SYSTEM SHALL NOT EXCEED 5 ohms.
 LA RESISTENCIA TOTAL DEL SISTEMA DE PUESTA A TIERRA NO EXCEDERA A LOS 5 ohms.
2. EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS TO PLANT GROUND RING.



157883-620-XR-DR-0931-03 157883-620-EL-SK-9036-06 157883-620-XR-DR-2637-04 157883-620-XR-DR-0931-08 157883-620-XR-DR-0931-09 157883-620-XR-DR-0931-05		GROUNDING SYSTEM LAYOUT SECURITY RECEPTION BUILDING A-8007 UNDERGROUND SEWAGE LAYOUT ENTRANCE ROAD AREA WBS-620 SHEET 6 OF 8 GROUNDING AND LIGHTNING SYSTEM INSTALLATION DETAILS AND NOTES - SHEET 1 OF 2 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS SECURITY GUARD BUILDING A-8008 LIGHTING DISTRIBUTION LAYOUT SECURITY GUARD BUILDING A-8008 POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY GUARD BUILDING A-8008			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA		DRAWING NO: 157883-620-XR-DR-0931-07 DESIGNED BY: WPA CHECKED BY: COU DATE: 05/09/08 PROJECT NO: 1618 REVISION: 0	
20/08/09 WPA MEJ		157883-620-XR-DR-0931-05 POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY GUARD BUILDING A-8008			GROUNDING SYSTEM LAYOUT SECURITY GUARD BUILDING A-8008		APPROVED BY: JMG DRAWING NO: 157883-620-XR-DR-0931-07			

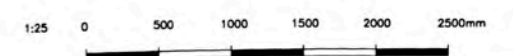


LEYENDA / LEGEND			
SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA(m) HEIGHT(m)
	CONDUCTOR DE FASE / PHASE CONDUCTOR	--	--
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	--	--
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	--	--
	EQUIPO AIRE ACONDICIONADO-THROUGH WALL	--	0.10
	THROUGH WALL AIR CONDITIONING EQUIPMENT	--	0.10
	TOMACORRIENTE SIMPLE MODELO 6-20R/LEVITON	--	0.45
	SINGLE RECEPTACLE MODEL 6-20R/LEVITON	--	0.45
	TABLERO ELECTRICO EMPOTRADO LISTADO UL	--	1.80 NIVEL SUP.
	PANELBOARD EMBEDDED. "UL" LISTED	--	1.80 TOP
	CONDUCTO SCH40 PVC-CONDUIT EMPOTRADO EN PISO. LISTADO "UL"	--	--
	RIGID SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	--	--

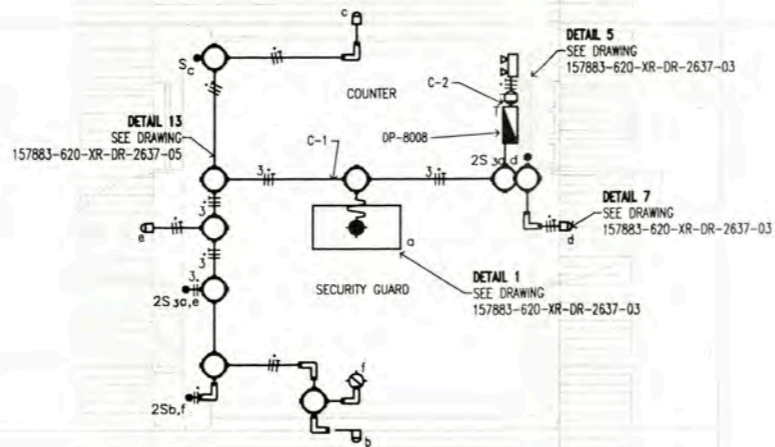


- NOTA/NOTE:**
1. EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
THE ELECTRICAL CABLE SCHEDULE IS SHOWN IN 157883-620-XR-SH-0003
 2. EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOWN IN 157883-620-XR-SH-0001

**POWER LAYOUT FOR AIR CONDITIONING EQUIPMENT
SECURITY GUARD BUILDING A-8008**
SCALE 1:25



157883-620-XR-DR-1935-02 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7801 AND DP-7802 FIRE STATION A-8005					UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING PLAN:		OUT SIDE BATTERY LIMITS - OSBL POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS SECURITY GUARD BUILDING A-8008					
157883-620-XR-DR-0935-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008					PROJECT: PERMANENT COMMUNITY BUILDINGS		DRAWING BY: WPA		DESIGNED BY: COU		REVIEWED BY: FTA		APPROVED BY: JMG	
157883-620-XR-DR-2637-07 HVAC INSTALLATION DETAILS AND NOTES					SPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		ESCALA: INDICATED		DATE: 05/09/08		PROJECT No: 1618		REVISION REVISION 0	
157883-620-XR-DR-0931-05 POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY GUARD BUILDING A-8008					LOCATION: PAMPA MELCHORITA		SCALE: INDICATED		DATE: 05/09/08		PROJECT No: 1618		REVISION REVISION 0	
157883-620-XR-DR-0931-07 GROUNDING SYSTEM LAYOUT SECURITY GUARD BUILDING A-8008					PROJECT No: 1618		DATE: 05/09/08		PROJECT No: 1618		REVISION REVISION 0		DRAWING No: 157883-620-XR-DR-0931-08	



LIGHTING DISTRIBUTION LAYOUT
SECURITY GUARD BUILDING A-8008
 SCALE 1:25

NOTA/NOTE:

- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
 LIGHTING CIRCUITS AND RECEPTACLES OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
- EL CALCULO PARA EL NUMERO DE LUMINARIAS POR CIRCUITO SE MUESTRA 157883-620-XR-CC-0004
 CALCULATION TO DETERMINE LIGHTING FIXTURE NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
- LAS LUMINARIAS ESTAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0025
 THE LIGHTING FIXTURE IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0025
- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
 THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
 THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001
- EL CALCULO DE NIVEL DE ILUMINACION SE MUESTRA EN 157883-620-XR-CC-0009
 THE CALCULATED ILLUMINATION LEVEL IS SHOW IN 157883-620-XR-CC-0009

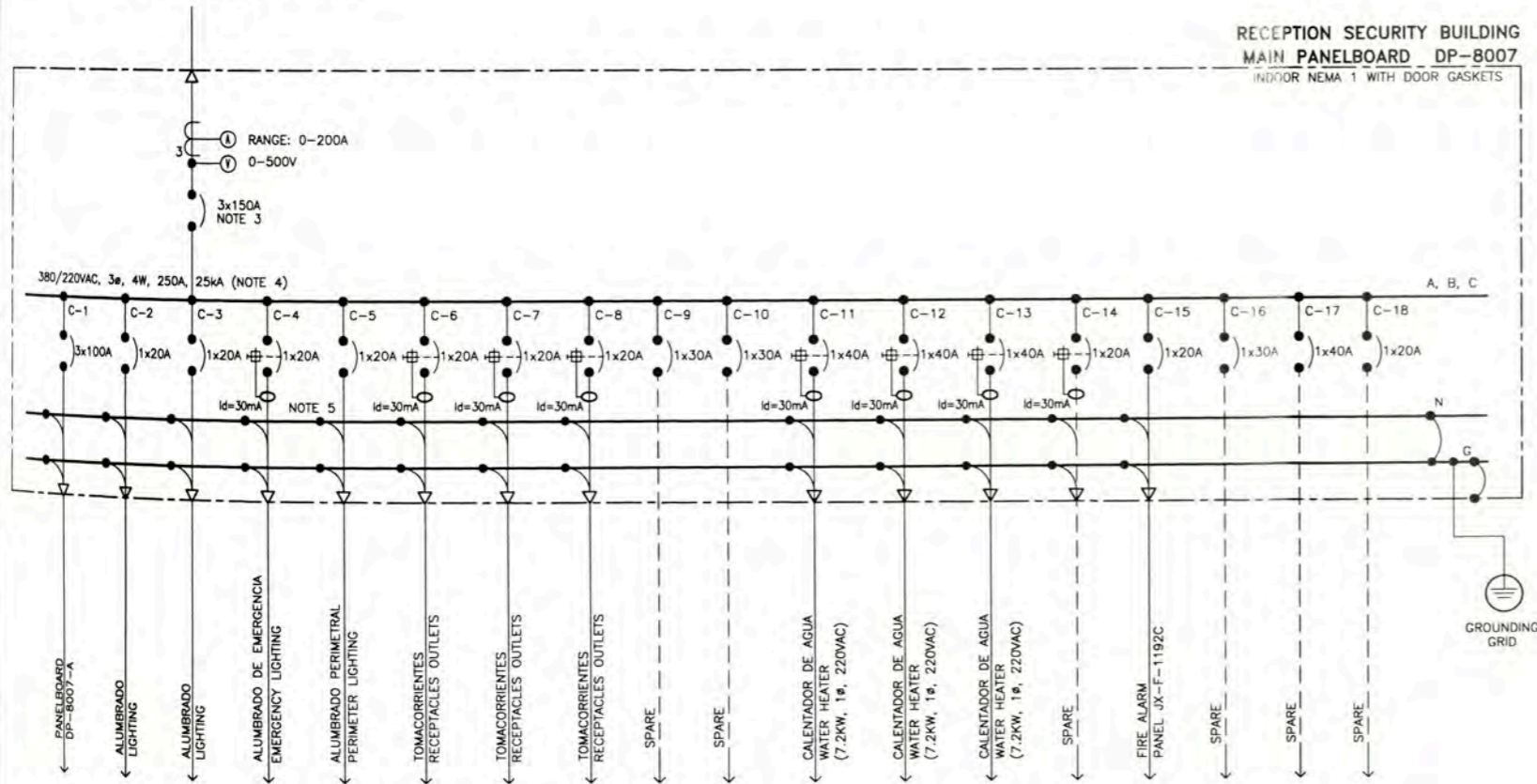
1:25 0 500 1000 1500 2000 2500mm

LEYENDA / LEGEND

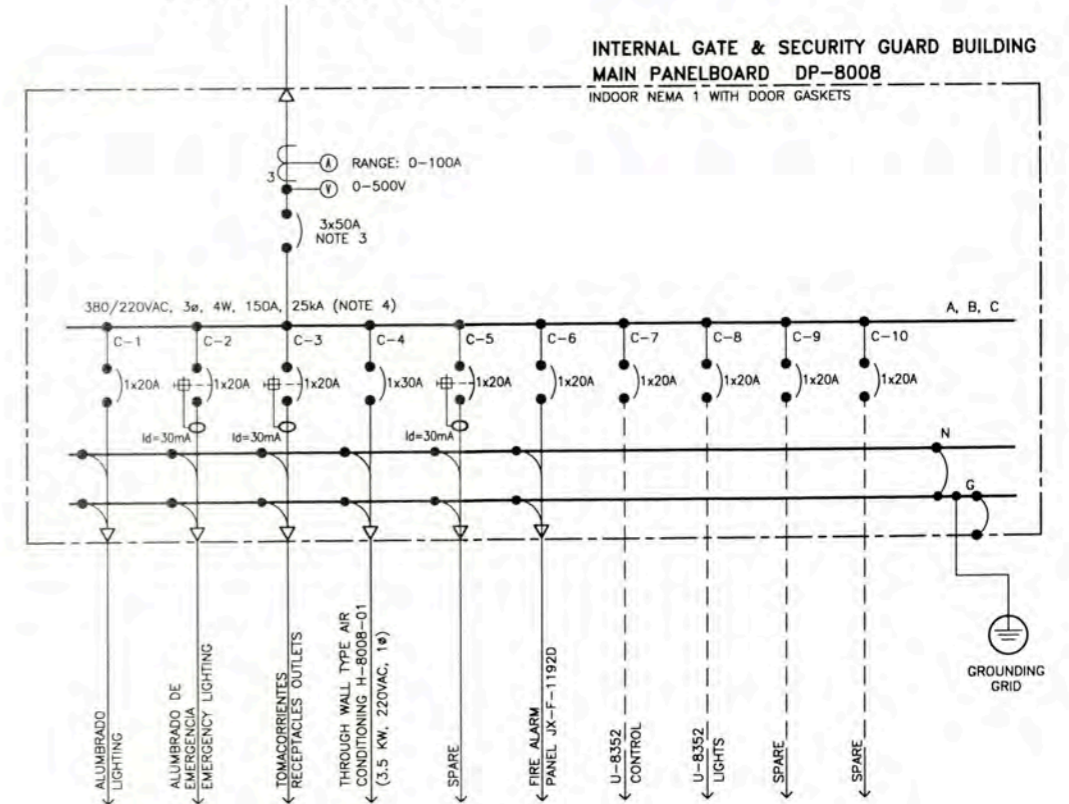
SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA/ HEIGHT(m)
	LUMINARIA PARA EMPOTRAR EN FOR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
	LIGHTING FIXTURE RECESSED IN FOR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED. MODEL: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	CEILINGS
	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 70W. BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 70S 240 DE LPI LITHONIA LIGHTING.	--	2.20m
	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINUM HOUSING WITH SPECULAR ANODIZED ALUMINUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 70 WATT CLEAR HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 70S 240 OF LPI LITHONIA LIGHTING	--	2.20m
	TABLERO ELECTRICO EMPOTRADO PANELBOARD EMBEDDED.		1.80 BORDE SUPERIOR 1.80 TOP
	LUMINARIA DE EMERGENCIA PARA ADOSAR A PARED, CON 02 LAMPARAS FLUORESCENTES COMPACTAS DE 26W, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA. LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL".	CONDULET "LB" OR "T"	2.20m
	EMERGENCY LIGH FIXTURE TO ATTACHED TO WALL, WITH 02 COMPACT FLUORESCENT LAMPS OF 26W, WITH KIT EMERGENCY AUTONOMY 1 HOUR. MAINTENANCE-FREE. 220VAC. "UL" LISTED	CONDULET "LB" OR "T"	2.20m
	SALIDA DE LUZ EN PARED TIPO SOCKET, CON 01 LAMPARAS FLUORESCENTE COMPACTA DE 18W, 220VAC. LISTADO "UL"	CONDULET "LB" OR "T"	2.20m
	WALL MOUNTED LIGHT FIXTURE WITH 01 OF 18W COMPACT FLUORESCENT LAMPS, 220VAC. "UL" LISTED	CONDULET "LB" OR "T"	2.20m
	TOMACORRIENTE DUPLEX, BIPOLAR PARA ESPIGAS PLANAS Y REDONDAS CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100X55X40	2.20m
	DUPLEX RECEPTACLE OUTLET, WITH GROUNDING, 250V, 60HZ, 15A, ENCASED ON WALL. "UL" LISTED	RECTANGULAR 100X55X40	2.20m
	CONDUCTOR DE FASE / PHASE CONDUCTOR	--	--
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	--	--
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	--	--
	LUMINARIA DE SEÑALIZACION; CON 01 LAMPARA FLUORESCENTE DE 26W, 220VAC, 1Ø, CON ALTO F.D.P. LISTADO "UL"	--	2.20m
	EXIT LIGHT; FLUORESCENT LAMP WITH 01 TO 26W, 220VAC, 1 Ø, WITH HIGH F.D.P. "UL" LISTED	--	2.20m
	CONDUCTO FLEXIBLE DE ALUMINIO LIBRE DE COBRE #3/4" LISTADO "UL"	--	--
	FLEXIBLE CONDUIT COPPER-FREE ALUMINIUM #3/4" "UL" LISTED	--	--
	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
	02 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. a,b INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON a y b. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
	02 SINGLE POLE SWITCH 16A, 250VAC, 60Hz. a, b INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH a and b. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
	01 INTERRUPTOR CONMUTACION Y 01 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
	01 3-WAY SWITCH AND 01 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
	3/4" RIGID COPPER-FREE ALUMINIUM FOR ABOVE GROUND "UL" LISTED	--	--
	CONDULET TYPE "LB". COPPER-FREE ALUMINIUM "UL" LISTED	--	--
	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	--	--

157883-620-XS-CC-0009 157883-620-XR-DR-0935-01 157883-620-XR-DR-2637-03 157883-620-XR-DR-0931-08 157883-620-XR-DR-0931-07 157883-620-XR-DR-0931-05	ILLUMINATION LEVELS CALCULATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008 ELECTRICAL INSTALLATIONS DETAILS AND NOTES POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - SECURITY GUARD BUILDING A-8008 GROUNDING SYSTEM LAYOUT - SECURITY GUARD BUILDING A-8008 POWER AND RECEPTACLES OUTLETS LAYOUT - SECURITY GUARD BUILDING A-8008	UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	DRAWING PLAN 7 OUT SIDE BATTERY LIMITS - OSBL LIGHTING DISTRIBUTION LAYOUT SECURITY GUARD BUILDING A-8008	PROJECT: PERMANENT COMMUNITY BUILDINGS	DESIGNED BY: WPA	DESIGNED BY: COU	REVISIONS: FTA	APPROVED BY: JMG	DRAWING NO. 157883-620-XR-DR-0931-09
				SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	LOCATION: PAMPA MELCHORITA	SCALE: INDICATED	DATE: 05/09/08	PROJECT NO: 1618	REVISION: 0

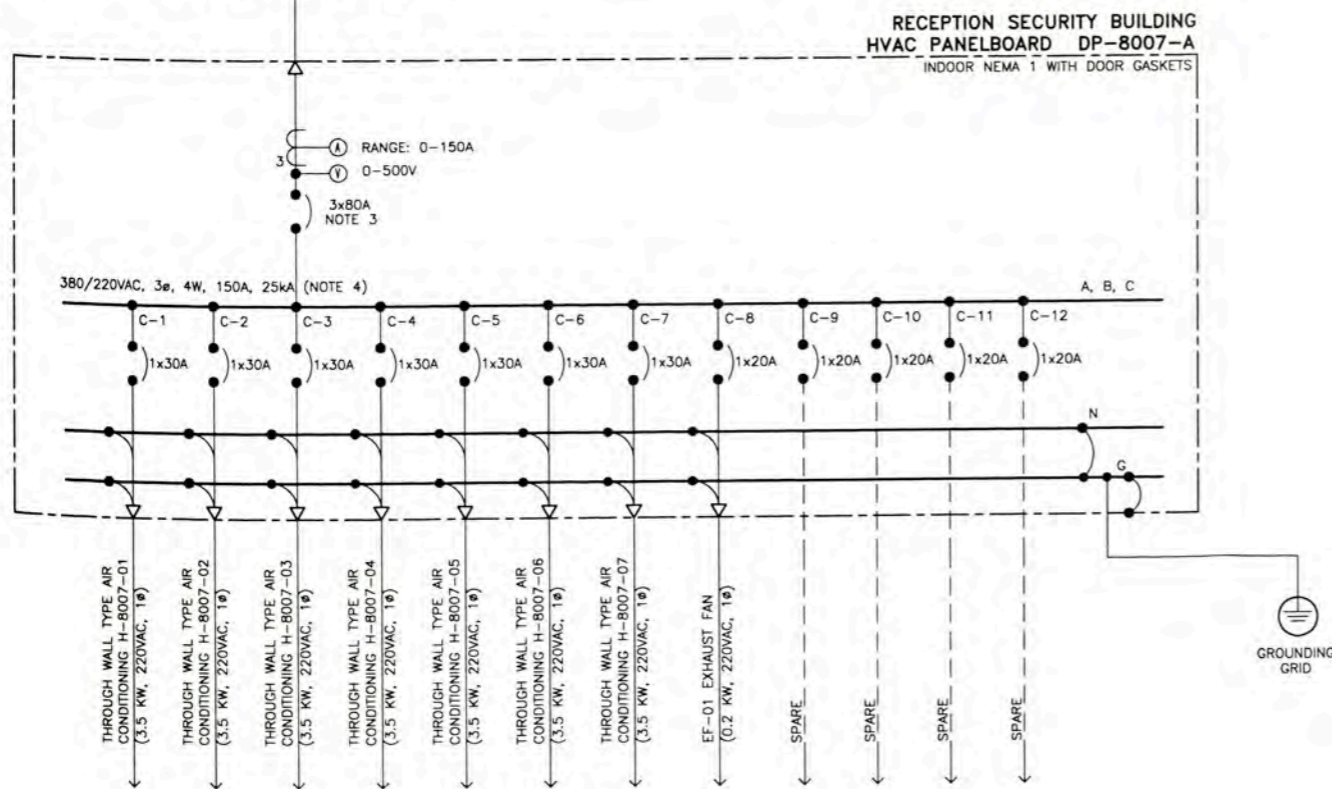
FED FROM C-2, DP-7602



FED FROM C-3, DP-7602



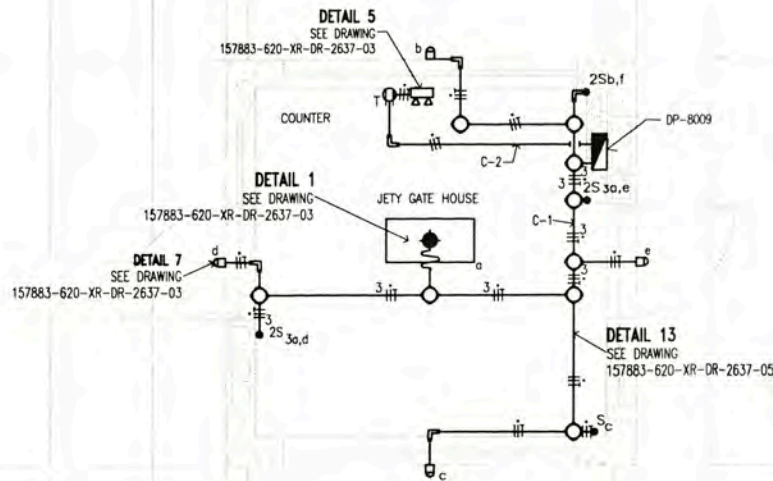
FED FROM C-1, DP-8007



GENERAL NOTES

1. VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
2. EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
3. LA TENSION NOMINAL DEL AISLAMIENTO U_i DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066
THE RATED INSULATION VOLTAGE U_i OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
4. VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
SEE OSBL SHORT CIRCUIT FAULT STUDY 157883-620-XR-CC-0001
5. ALL GFCIs OR RCDs OR Ids SHALL BE, THE PHASE CONNECTED FROM CB PHASE AND NEUTRAL CONNECTED FROM NEUTRAL BUS BAR
6. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

ISSUED FOR CONSTRUCTION		DATE: 01/22/10		WPA		MEJ		157883-620-XR-SH-0001		ELECTRICAL LOAD SCHEDULE	
DESIGNED BY: WPA		DATE: 01/22/10		MEJ		157883-620-XR-DR-1935-02		157883-620-XR-DR-2630-02		ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602	
CHECKED BY: MEJ		DATE: 01/22/10		157883-620-XR-DR-2630-02		ELECTRICAL BLOCK DIAGRAM		ELECTRICAL BLOCK DIAGRAM		TITLE: HVAC	
APPROVED BY: MEJ		DATE: 01/22/10		157883-620-XR-DR-2630-02		ELECTRICAL BLOCK DIAGRAM		ELECTRICAL BLOCK DIAGRAM		PROJECT: PERMANENT COMMUNITY BUILDINGS	
UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		PAMPA MELCHORTA		DATE: 05/09/08		PROJECT NO: 1818		REVISION: 0	
PACKAGE SUBSTATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008		DRAWING NO: WPA		DESIGNED BY: COU		REVISION: FTA		APPROVED BY: JMG		DRAWING NO: 157883-620-XR-DR-0935-01	

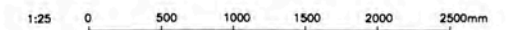


LIGHTING DISTRIBUTION LAYOUT
JETTY GATE HOUSE BUILDING A-8009
 SCALE 1:25

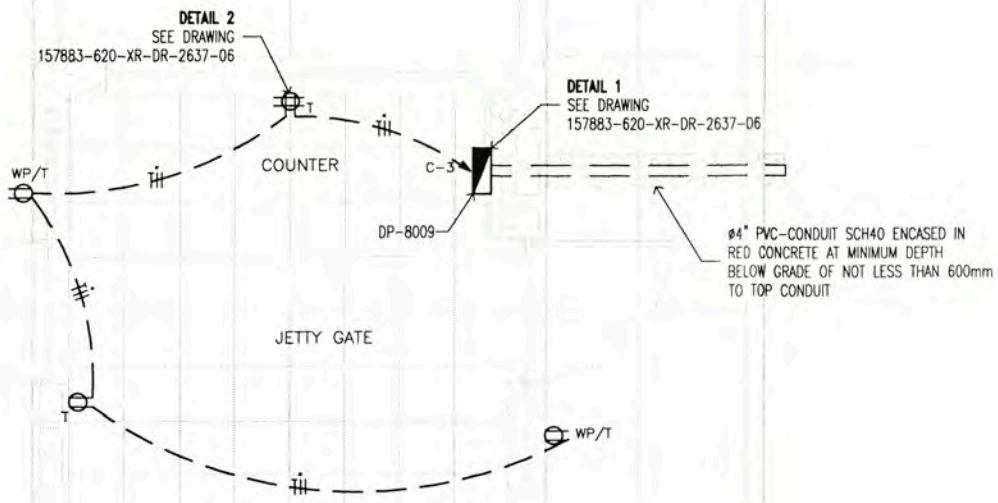
NOTA/NOTE:

- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
 LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
- EL CALCULO PARA EL NUMERO DE LUMINARIAS POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004
 CALCULATION FOR THE NUMBER OF LIGHTING EQUIPMENT PER CIRCUIT IS SHOWN IN 157883-620-XR-CC-0004
- LOS EQUIPOS DE ILUMINACION ESTARAN DE ACUERDO A LA HOJA TECNICA EN 157883-620-XR-DS-0025
 THE EQUIPMENT LIGHTING, IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0025
- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
 THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001
 THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001

LEYENDA / LEGEND			
SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA/ HEIGHT(m)
	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
	LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED. MODEL: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	CEILINGS
	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 70W, BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 70S 240 DF LPI LITHONIA LIGHTING.	--	2.20m
	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINUM HOUSING WITH SPECULAR ANODIZED ALUMINUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 70 WATT CLEAR HIGH PRESSURE SODIUM LAMP, HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 70S 240 DF LPI LITHONIA LIGHTING	--	2.20m
	TABLERO ELECTRICO EMPOTRADO	--	1.80 BORDE SUPERIOR
	PANELBOARD EMBEDDED.	--	1.80 TOP
	LUMINARIA DE EMERGENCIA PARA ADOSAR A PARED, CON 02 LAMPARAS FLUORESCENTES COMPACTAS DE 26W, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL".	JUNCTION BOX	2.20m
	EMERGENCY LGHT FIXTURE TO ATTACHED TO WALL, WITH 02 COMPACT FLUORESCENT LAMPS OF 26W, WITH KIT EMERGENCY AUTONOMY 1 HOUR, MAINTENANCE-FREE. 220VAC. "UL" LISTED	JUNCTION BOX	2.20m
	TOMACORRIENTE DUPLEX, BIPOLAR PARA ESPIGAS PLANAS Y REDONDAS CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	2.20m
	DUPLEX RECEPTACLE OUTLET, WITH GROUNDING, 250V, 60HZ, 15A, ENCASED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	2.20m
	CONDUCTOR DE FASE / PHASE CONDUCTOR	--	--
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	--	--
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	--	--
	LUMINARIA DE SERIALIZACION; CON 01 LAMPARA FLUORESCENTE DE 26W, 220VAC, 1#, CON ALTO F.D.P. LISTADO "UL"	--	2.20m
	EXIT LIGHT; FLUORESCENT LAMP WITH 01 TO 26W, 220VAC, 1 #, WITH HIGH F.D.P. "UL" LISTED	--	2.20m
	CONDUCTO FLEXIBLE DE ALUMINIO LIBRE DE COBRE #3/4" LISTADO "UL"	--	--
	FLEXIBLE COPPER-FREE ALUMINIUM CONDUIT #3/4" "UL" LISTED	--	--
	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
	SINGLE POLE SWITCH , 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
	02 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. a,b INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON a y b. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
	02 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. a, b INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH a and b. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
	01 INTERRUPTOR CONMUTACION Y 01 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
	01 3-WAY SWITCH AND 01 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
	3/4" RIGID COPPER-FREE ALUMINIUM CONDUIT FOR ABOVE GROUND "UL" LISTED	--	--
	CONDULET TYPE "LB". COPPER-FREE ALUMINIUM "UL" LISTED	--	--
	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	--	--



157883-620-XR-CC-0010 157883-620-XR-DR-1035-01 157883-620-XR-DR-2637-03 157883-620-XR-DR-1031-04 157883-620-XR-DR-1031-03 157883-620-XR-DR-1031-02		ILLUMINATION LEVELS CALCULATION - JETTY GATE HOUSE BUILDING A-8009 ELECTRICAL SINGLE LINE DIAGRAM FROM DP-8009 ELECTRICAL INSTALLATIONS DETAILS AND NOTES POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - JETTY GATE HOUSE BUILDING A-8009 GROUNDING SYSTEM LAYOUT - JETTY GATE HOUSE BUILDING A-8009 POWER DISTRIBUTION AND RECEPTABLES OUTLET - JETTY GATE HOUSE BUILDING A-8009		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA		DRAWING PLAN: OUT SIDE BATTERY LIMITS - OSBL LIGHTING DISTRIBUTION LAYOUT JETTY GATE HOUSE BUILDING A-8009		DRAWING BY: WPA DESIGNED BY: COU REVISIONS: FTA APPROVED BY: JMG PROJECT NO: 1618 DATE: 05/09/08 SCALE: INDICATED REVISION: 0		SHEET NO: 157883-620-XR-DR-1031-01	
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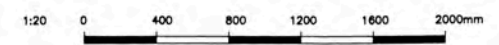


POWER AND RECEPTACLE OUTLETS LAYOUT
JETTY GATE HOUSE BUILDING A-8009
PLANT
 SCALE 1:20

LEYENDA / LEGEND			
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CANAL/NOE(mm)	ALTIMA/HEIGHT(m)
	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. A PRUEBA DE AGUA. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	TOMACORRIENTE CUADRUPLA CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
	QUADRUPLA RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
	TABLERO ELECTRICO EMPOTRADO	---	1.80 BORDE SUPERIOR
	PANELBOARD EMBEDDED.	---	1.80 TOP
	CONDUCTO DE #3/4" PVC-CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO. LISTADO "UL"	---	---
	#3/4" SCH40 PVC-CONDUIT SCH40 EMBEDDED UNDER FLOOR. "UL" LISTED	---	---

NOTA/NOTE:

- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA). LIGHTING CIRCUITS AND RECEPTACLE OUTLETS SHALL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG (GROUND)
- EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004. CALCULATION FOR THE NUMBER OF OUTLETS PER CIRCUIT IS SHOWN IN 157883-620-XR-CC-0004
- LOS TOMACORRIENTES INTERNOS ESTARAN DE ACUERDO CON LA HOJA TECNICA EN 157883-620-XR-DS-0026. RECEPTACLE OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003. THE ELECTRICAL CABLE SCHEDULE IS SHOWN IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001. THE ELECTRICAL LOAD SCHEDULE IS SHOWN IN 157883-620-XR-SH-0001



NO.	FECHA	DESCRIPCION	REVISOR	REVISADO	TITULO
1	23/12/09	ISSUED FOR CONSTRUCTION	WPA	MEJ	157883-620-XR-DR-1031-01
2					157883-620-XR-DR-2637-05
3					157883-620-XR-DR-1031-04
4					157883-620-XR-DR-1031-03
5					157883-620-XR-DR-1031-01

UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PROJECT: PERMANENT COMMUNITY BUILDINGS
 LOCATION: PAMPA MELCHORITA

SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)

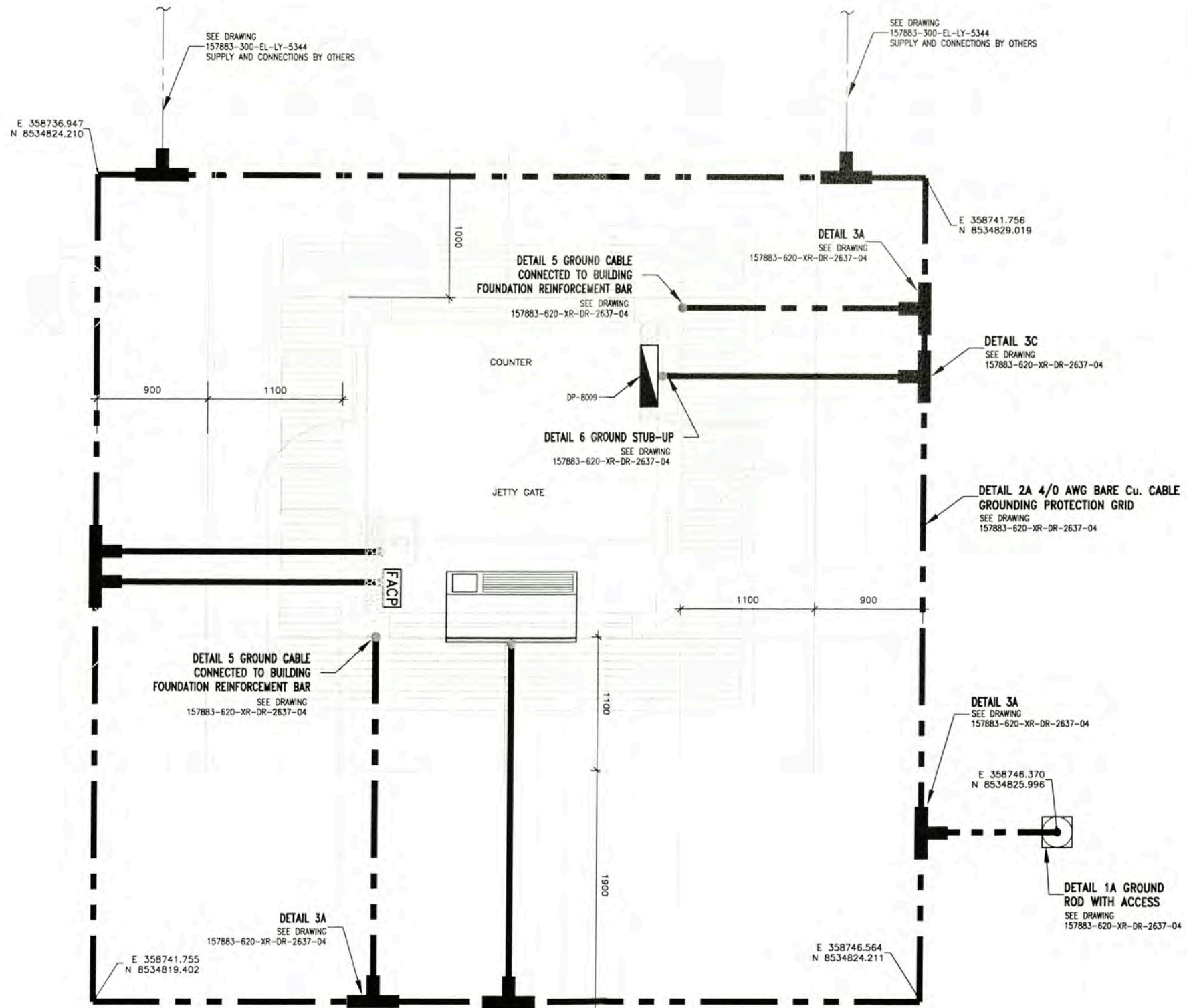
OUT SIDE BATTERY LIMITS - OSBL
POWER AND RECEPTACLE OUTLETS LAYOUT
JETTY GATE HOUSE BUILDING A-8009

DRIVING PLAN: WPA
 DESIGNED BY: COU
 DATE: 05/09/08

REVIEWED BY: FTA
 PROJECT NO: 1618

APPROVED BY: JMG
 REVISION: 0

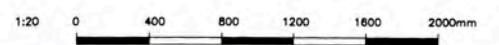
DRAWING NO: 157883-620-XR-DR-1031-02



LEYENDA / LEGEND	
SIMBOLO SYMBOL	DESCRIPCION DESCRIPTION
	TABLERO / PANELBOARD
	EQUIPO AIRE ACONDICIONADO-THROUGH WALL THROUGH WALL AIR CONDITIONING EQUIPMENT
	GABINETE DE TELECOMUNICACIONES, POR OTROS TELECOMMUNICATIONS CABINET RITAL, BY OTHERS
	PANEL DE ALARMA CONTRA INCENDIOS FIRE ALARM CONTROL PANEL EMBEDDED IN WALL
	CONDUCTOR AISLADO TW(VERDE), 2/0 AWG 2/0 AWG PVC GREEN SHEATHED Cu CABLE
	CABLE DE COBRE DESNUDO 4/0 AWG 4/0 AWG BARE Cu CABLE
	SOLDADURA EXOTERMICA TIPO TEE TEE JOINT EXOTHERMIC WELD
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO GROUNDING ROD WITH INSPECTION WELL

GROUNDING SYSTEM LAYOUT
JETTY GATE HOUSE BUILDING A-8009
 PLANT
 SCALE 1:20

- NOTE:**
1. EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS TO PLANT GROUND RING.
 2. THE TOTAL RESISTANCE OF THE GROUNDING SYSTEM SHALL NOT EXCEED 5 ohms.
 LA RESISTENCIA TOTAL DEL SISTEMA DE PUESTA A TIERRA NO EXCEDERA A LOS 5 ohms.
 3. THE CONNECTION OF GROUND LOOP WILL BE SHOW IN DRAWING CBI



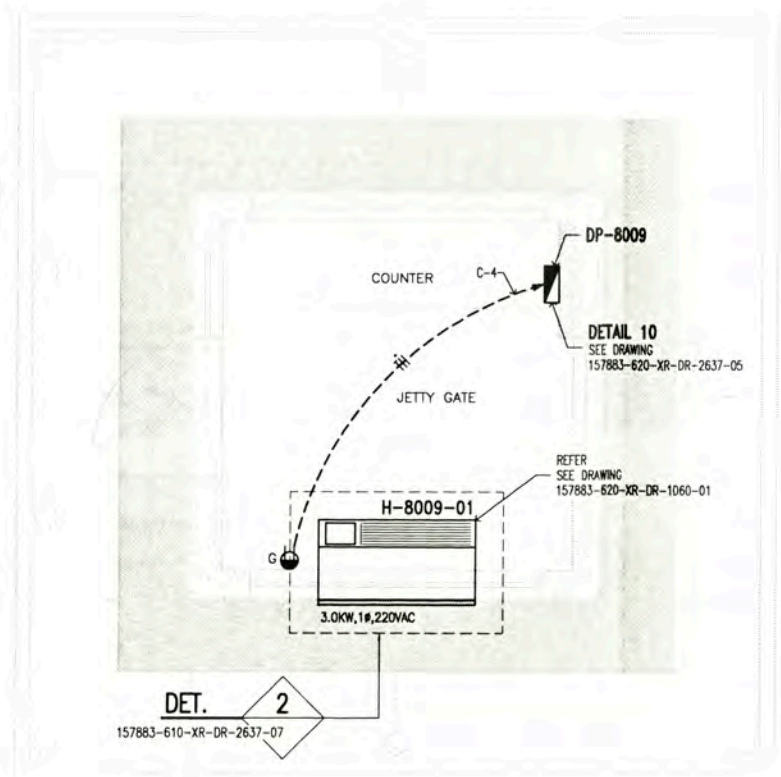
157883-300-EL-LY-5344 GROUNDING LAYOUT WBS-340 JETTY GATE HOUSE A-8009			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING PLANT : GROUNDING SYSTEM LAYOUT JETTY GATE HOUSE BUILDING A-8009	
157883-620-XR-DR-2637-04 GROUNDING AND LIGHTNING SYSTEM INSTALLATION DETAILS AND NOTES - SHEET 1 OF 2			PROJECT: PERMANENT COMMUNITY BUILDINGS		DRAWING BY: WPA DESIGNED BY: COU	
157883-620-XR-DR-1031-04 DISTRIBUTION AIR CONDITIONING JETTY GATE HOUSE A-8009			SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		REVIEWED BY: FTA APPROVED BY: JMG	
157883-620-XR-DR-1031-02 POWER DISTRIBUTION AND RECEPTACLES OUTLET JETTY GATE HOUSE A-8009			LOCATION: PAMPA MELCHORITA		DATE: 05/09/08 PROJECT NO: 1618	
157883-620-XR-DR-1031-01 LIGHTING DISTRIBUTION JETTY GATE HOUSE A-8009			TITLE: TITULO		REVISION: 0 DRAWING NO: 157883-620-XR-DR-1031-03	



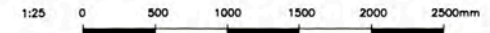
LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS / BOX (mm)	ALTURA / HEIGHT (m)
	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
	EQUIPO AIRE ACONDICIONADO - THROUGH WALL	---	0.10m
	THROUGH WALL AIR CONDITIONING EQUIPMENT	---	0.10m
	TOMACORRIENTE SIMPLE MODELO 6-20R/LEVITON	---	0.45m
	RECEPTACLE SINGLE MODEL 6-20R/LEVITON	---	0.45m
	TABLERO ELECTRICO EMPOTRADO LISTADO UL	---	1.80 NIVEL SUP.
	PANELBOARD EMBEDDED. "UL" LISTED	---	1.80 TOP
	CONDUCTO DE #3/4" PVC CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO. LISTADO "UL"	---	---
	#3/4" RIGID PVC CONDUIT SCH40 EMBEDDED UNDER FLOOR. "UL" LISTED	---	---

NOTA/NOTE:

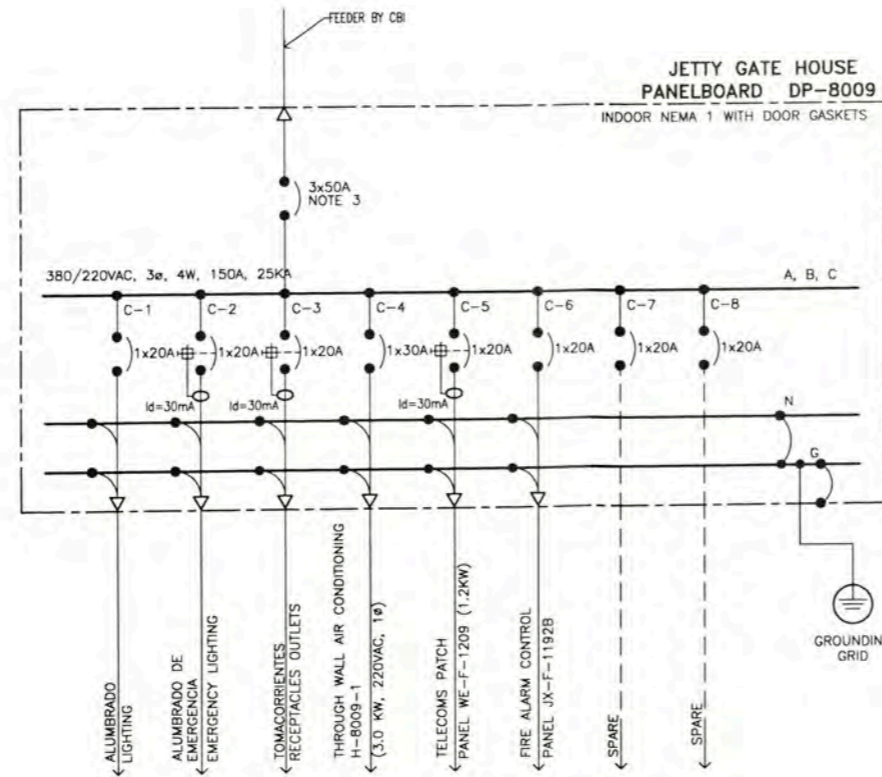
1. EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
2. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001



POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS
JETTY GATE HOUSE BUILDING A-8009
 SCALE 1:25



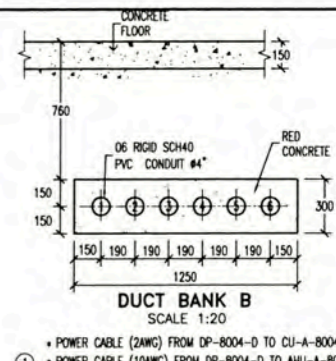
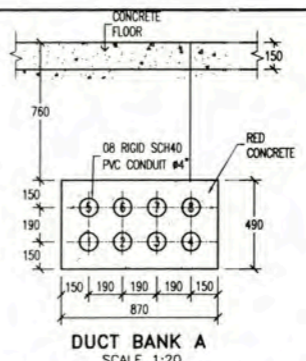
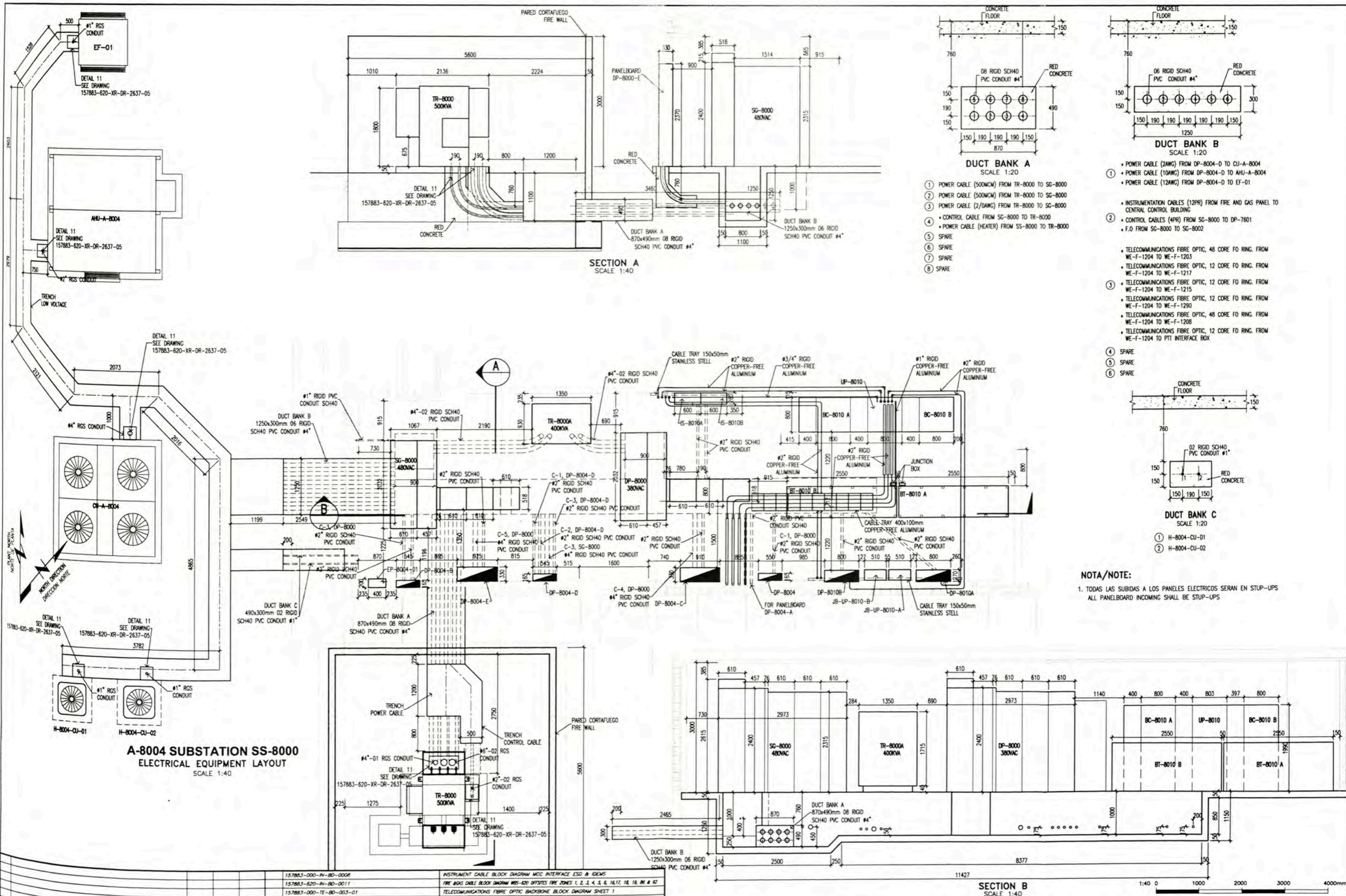
0 ISSUED FOR CONSTRUCTION DATE: 18/06/08 DESIGNED BY: WPA CHECKED BY: MEJ APPROVED BY: JMG		157883-620-XR-DR-1031-03 157883-620-XR-DR-1035-01 157883-620-XR-DR-2637-07 157883-620-XR-DR-1031-02 157883-620-XR-DR-1031-01	GROUNDING SYSTEM LAYOUT JETTY GATE HOUSE BUILDING A-8009 ELECTRICAL SINGLE LINE DIAGRAM DP-8009 OSBL HVAC INSTALLATION DETAILS AND NOTES POWER AND RECEPTACLE OUTLETS LAYOUT JETTY GATE HOUSE BUILDING A-8009 LIGHTING DISTRIBUTION LAYOUT JETTY GATE HOUSE BUILDING A-8009		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE) PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALITY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA	DRAWING PLANO: OUT SIDE BATTERY LIMITS - OSBL POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS JETTY GATE HOUSE BUILDING A-8009 DRAWING BY: WPA DESIGNED BY: COU SCALE: INDICATED DATE: 05/08/08 PROJECT NO: 1618 REVISION: 0	APPROVED BY: JMG REVISION: 0 DRAWING NO: 157883-620-XR-DR-1031-04
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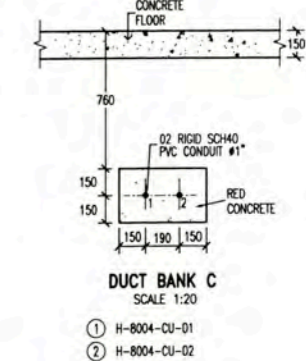
GENERAL NOTES

1. VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
2. EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
3. LA TENSION NOMINAL DEL AISLAMIENTO UI DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066
THE RATED INSULATION VOLTAGE Ui OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
4. ALL GFSIs OR RCDs OR IDs SHALL BE, THE PHASE CONNECTED FROM CB PHASE AND NEUTRAL CONNECTED FROM NEUTRAL BUS BAR
5. VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
OSBL SHORT CIRCUIT FAULT STUDY
157883-620-XR-CC-0001
6. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

157883-000-EL-PH-0001 157883-620-XR-DR-1031-04 157883-620-XR-DR-1031-03 157883-620-XR-DR-1031-02 157883-620-XR-DR-1031-01		ELECTRICAL DESIGN PHILOSOPHY POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS JETTY GATE HOUSE (A-8009) GROUNDING SYSTEM LAYOUT JETTY GATE HOUSE (A-8009) POWER AND RECEPTACLE OUTLETS LAYOUT JETTY GATE HOUSE (A-8009) LIGHTING DISTRIBUTION LAYOUT JETTY GATE HOUSE (A-8009)				UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING PLANO: JETTY GATE HOUSE JETTY GATE HOUSE	
PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		LOCATION: PAMPA MELCHORITA		DRAWING BY: WPA DESIGNED BY: COU CHECKED BY: FTA APPROVED BY: JMG		DATE: 05/09/08 PROJECT NO: 1618 REVISION: 0		DRAWING NO: 157883-620-XR-DR-1035-01	



- ① POWER CABLE (500MCM) FROM TR-8000 TO SG-8000
 - ② POWER CABLE (500MCM) FROM TR-8000 TO SG-8000
 - ③ POWER CABLE (2/DWMC) FROM TR-8000 TO SG-8000
 - ④ CONTROL CABLE FROM SG-8000 TO TR-8000
 - ⑤ POWER CABLE (HEATER) FROM SS-8000 TO TR-8000
 - ⑥ SPARE
 - ⑦ SPARE
 - ⑧ SPARE
- ① POWER CABLE (2AWG) FROM DP-8004-D TO CU-A-8004
 - ② POWER CABLE (10AWG) FROM DP-8004-D TO AHU-A-8004
 - ③ POWER CABLE (12AWG) FROM DP-8004-D TO EF-01
- ① INSTRUMENTATION CABLES (12PR) FROM FIRE AND GAS PANEL TO CENTRAL CONTROL BUILDING
 - ② CONTROL CABLES (4PR) FROM SG-8000 TO DP-7601
 - ③ F.O FROM SG-8000 TO SG-8002
- ① TELECOMMUNICATIONS FIBRE OPTIC, 48 CORE FO RING. FROM WE-F-1204 TO WE-F-1203
 - ② TELECOMMUNICATIONS FIBRE OPTIC, 12 CORE FO RING. FROM WE-F-1204 TO WE-F-1217
 - ③ TELECOMMUNICATIONS FIBRE OPTIC, 12 CORE FO RING. FROM WE-F-1204 TO WE-F-1215
 - ④ TELECOMMUNICATIONS FIBRE OPTIC, 12 CORE FO RING. FROM WE-F-1204 TO WE-F-1290
 - ⑤ TELECOMMUNICATIONS FIBRE OPTIC, 48 CORE FO RING. FROM WE-F-1204 TO WE-F-1208
 - ⑥ TELECOMMUNICATIONS FIBRE OPTIC, 12 CORE FO RING. FROM WE-F-1204 TO PIT INTERFACE BOX
- ④ SPARE
 - ⑤ SPARE
 - ⑥ SPARE

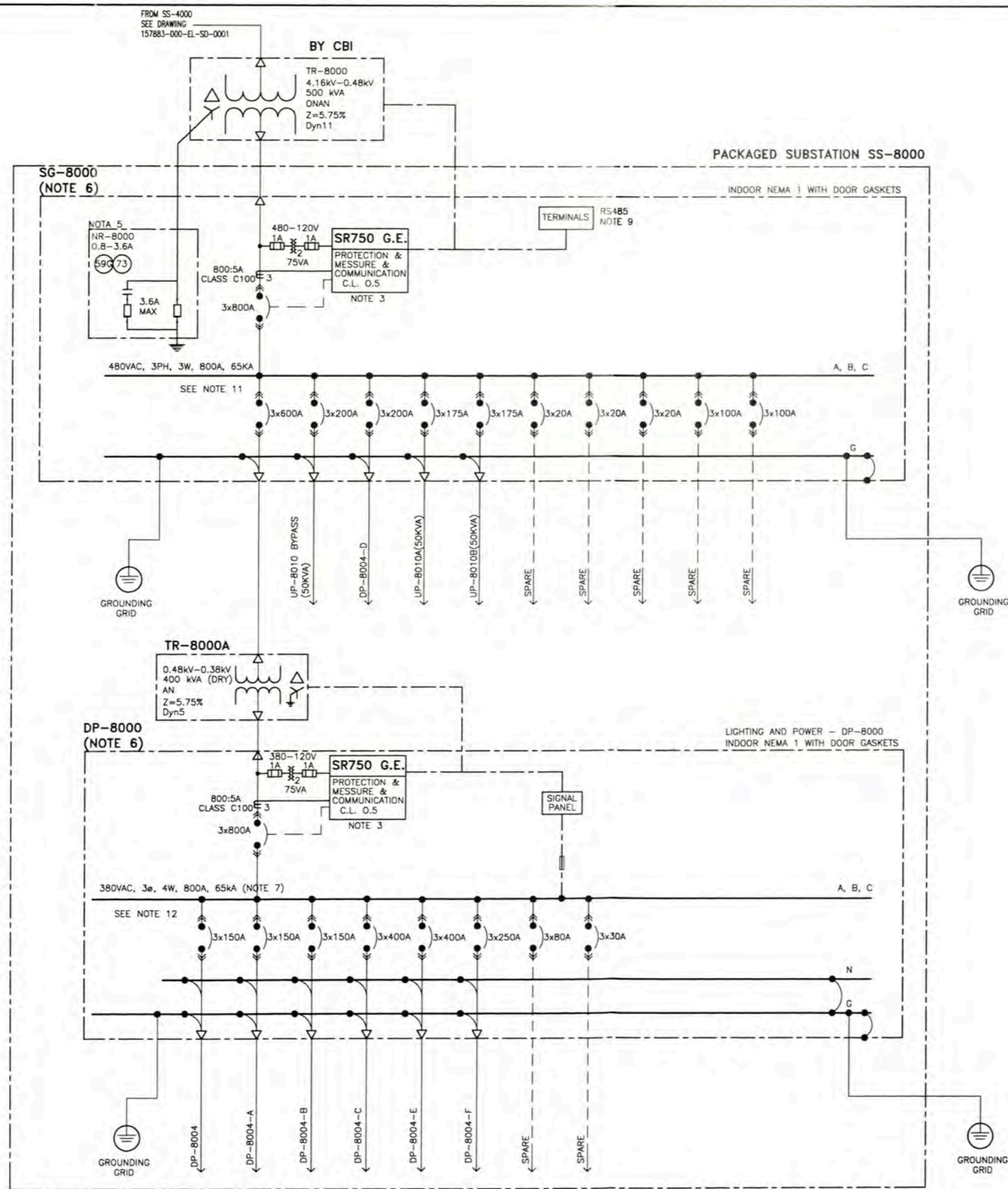


NOTA/NOTE:
 1. TODAS LAS SUBIDAS A LOS PANELES ELECTRICOS SERAN EN STUP-UPS
 ALL PANELBOARD INCOMING SHALL BE STUP-UPS

**A-8004 SUBSTATION SS-8000
 ELECTRICAL EQUIPMENT LAYOUT
 SCALE 1:40**

**SECTION B
 SCALE 1:40**

157883-000-IV-BD-000R 157883-620-IV-BD-0011 157883-000-TE-BD-003-01 157883-620-XR-DR-1935-06 157883-620-XR-DR-0704-06 157883-620-XR-DR-CC-0025 157883-620-XR-DR-1935-01 157883-620-XR-DR-0735-03 157883-620-XR-DR-0735-02 157883-620-XR-DR-0735-01	INSTRUMENT CABLE BLOCK DIAGRAM MCC INTERFACE ESD & IDEMS FIRE GAS CABLE BLOCK DIAGRAM WES-800 OPSTIES FIRE ZONES 1, 2, 3, 4, 5, 6, 16, 17, 18, 19, 20 & 22 TELECOMMUNICATIONS FIBRE OPTIC BACKBONE BLOCK DIAGRAM SHEET 1 PROTECTION AND METERING DIAGRAM SG-8000 0.48KV SWITCHGEAR OSBL BUILDINGS ADMINISTRATION BUILDING ELECTRICAL TRENCH - METALIC COVER OSBL CABLE SIZING CALCULATION ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8000 ADMINISTRATION BUILDING ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-E ADMINISTRATION BUILDING ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-B, DP-8004-C AND DP-8004-D ADMINISTRATION BUILDING ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004 AND DP-8004-A ADMINISTRATION BUILDING	UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE) PROJECT: PERMANENT COMMUNITY BUILDINGS DESIGNED BY: WPA CHECKED BY: COU DATE: 12/12/08 PROJECT NO: 1618 REVISION: 0 DRAWING NO: 157883-620-XR-DR-1931-03
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- GENERAL NOTES**
- CIRCUIT BREAKER, WITH CURRENT TRIP VALUE INDICATED BELOW LINE AND BREAKER FRAME SIZE ABOVE LINE
 3X800AF -----> AMPERES FRAME
 3X800AT -----> AMPERES TRIP
 - MC = METAL CLAD
 TC = TRAY CABLE
 - EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
 IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
 - VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
 SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
 - VER PLANO 157883-000-EL-SK-0012
 SEE DRAWING 157883-000-EL-SK-0012
 - NON ESD PROCESS MOTOR INTERFACE SIGNALS TO/FROM THE SWITCHGEAR ARE SERIAL LINKED BETWEEN LCR ICSS SYSTEM CABINETS AND IDMS (INTERFACE DATA MANAGEMENT SYSTEM) IN SUB-STATION VIA DUAL REDUNOANT RS-485 CABLES, BY INSTRUMENTS
 - VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
 SEE OSBL SHORT CIRCUIT FAULT STUDY 157883-620-XR-CC-0001
 - VER PLANO 157883-620-XR-DR-1935-06
 REFER TO DRAWING 157883-620-XR-DR-1935-06 FOR PROTECTION, METERING AND CONTROL DETAILS
 - PROVISION FOR PROTECTION, METERING & CONTROL SIGNALS VIA RS485 TO SWITCHGEAR TERMINALS
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
 SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001
 - THE LOCATION OF CIRCUIT BREAKERS IS SHOWN IN DATA SHEET 157883-620-XR-DS-0093, DRAWING N° 1036440401002
 - THE LOCATION OF CIRCUIT BREAKERS IS SHOWN IN DATA SHEET 157883-620-XR-DS-0093, DRAWING N° 1036440601002

1036440301101	480VAC, 800A, 3ø, 3W, 60HZ METAL ENCLOSED SG-8000
1036440501101	380VAC, 800A, 3ø, 4W, 60HZ METAL ENCLOSED DP-8001
157883-000-EL-SD-0001-01	KEY SINGLE LINE DIAGRAM
157883-620-XR-DR-0731-02	POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0735-03	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-E
157883-620-XR-DR-0735-02	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-B, DP-8004-C AND DP-8004-D
157883-620-XR-DR-0735-01	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-A-01 AND DP-8004-A-02



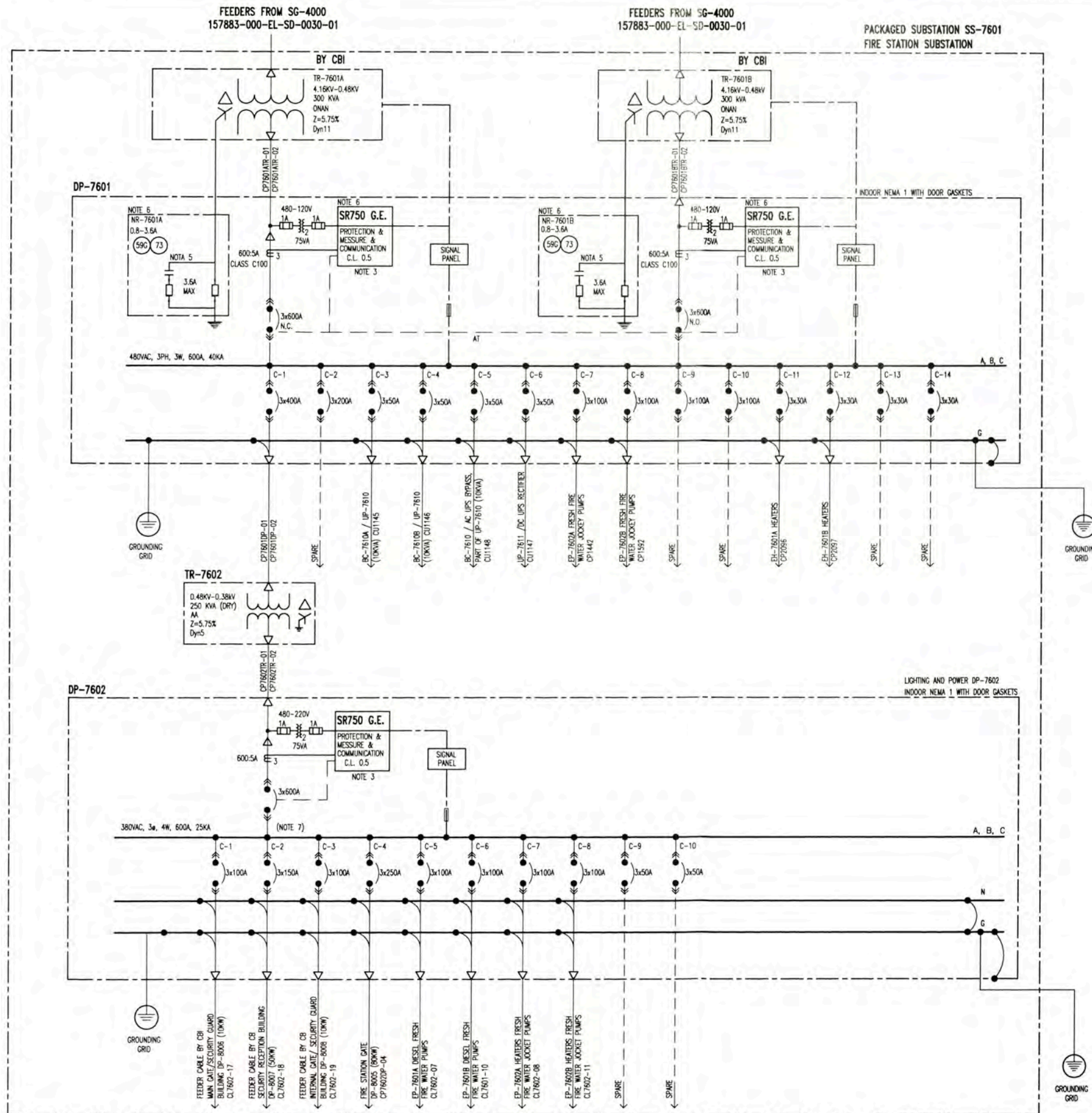
UNIVERSIDAD NACIONAL DE INGENIERIA
 FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PROYECTO: PERMANENT COMMUNITY BUILDINGS
 ESPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)
 UBICACION: PAMPA MELCHORITA

DRAWING TITLE: PACKAGE SUBSTATION SS-8000		DRAWING NO: 157883-620-XR-DR-1935-01	
ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8000		PLANO N°:	
ADMINISTRACION BUILDING - A-8004			
DRAWING BY: WPA	DESIGNED BY: COU	REVISED BY: FTA	APPROVED BY: JMG
SCALE: INDICATED	DATE: 12/12/08	PROJECT NO: 1618	REVISION: 0

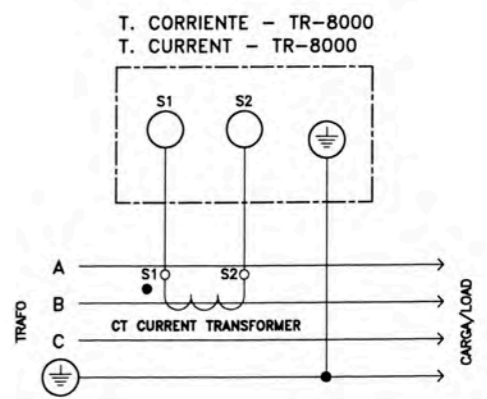
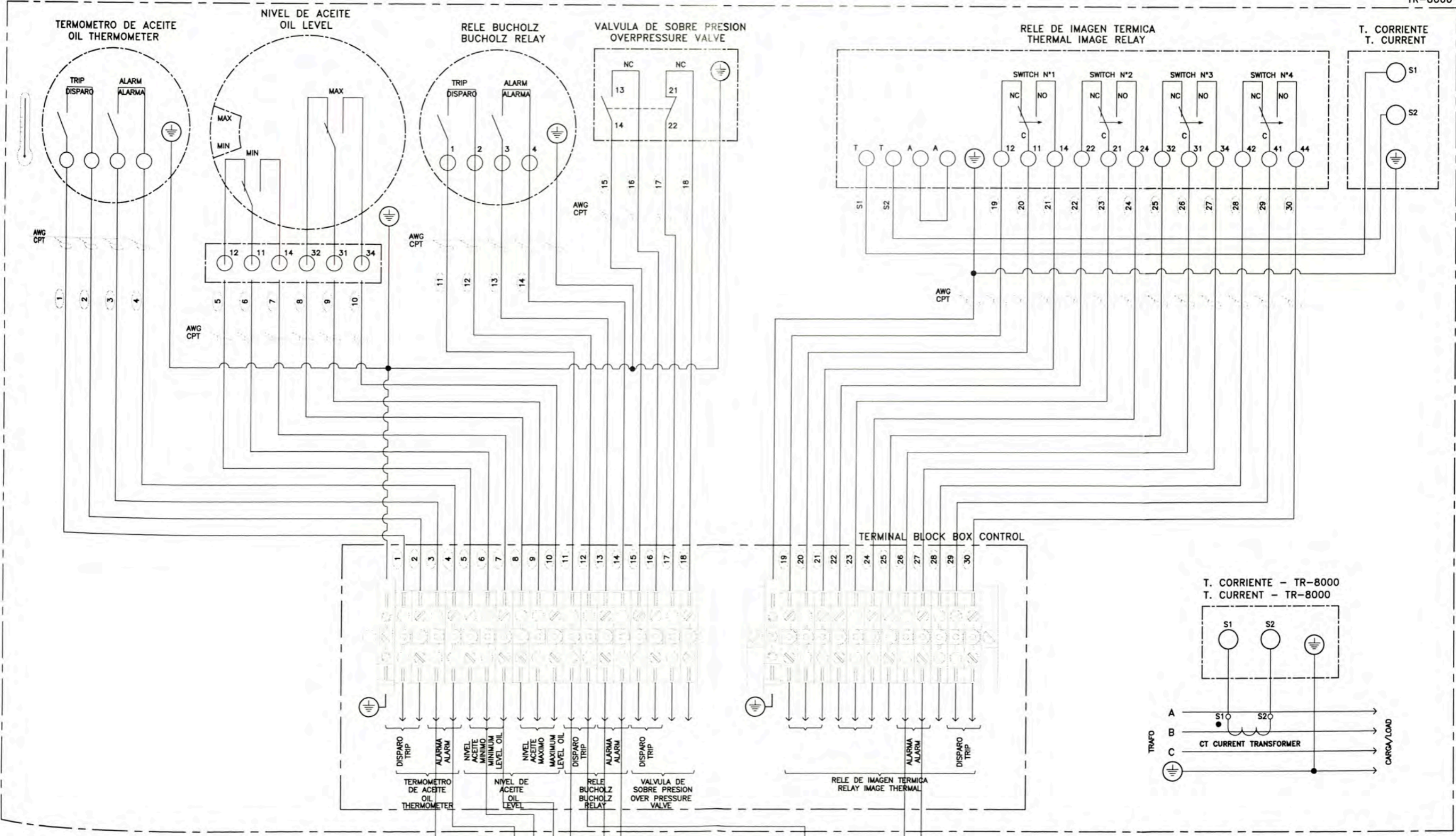
ISSUED FOR CONSTRUCTION

DATE: 01/02/10	BY: WPA	APPROVED BY: JMG
DATE: 01/02/10	BY: WPA	APPROVED BY: JMG

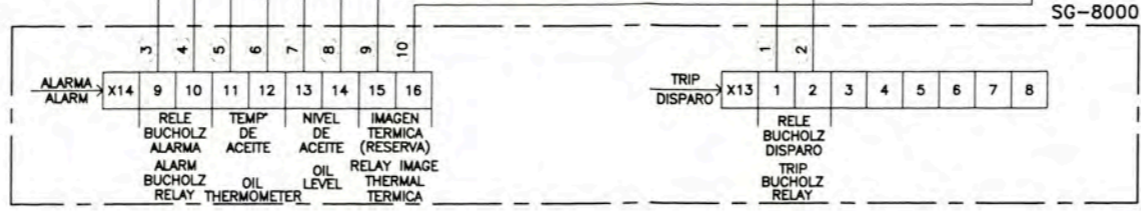


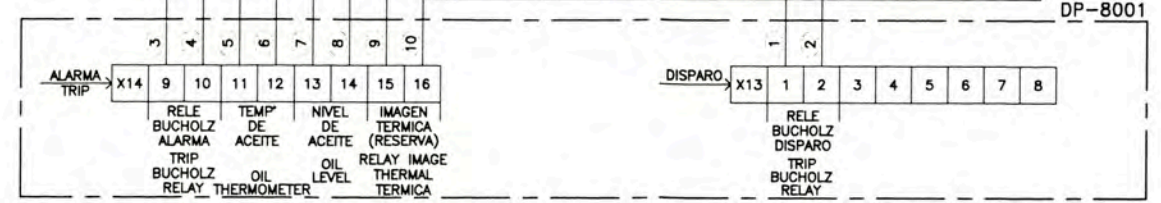
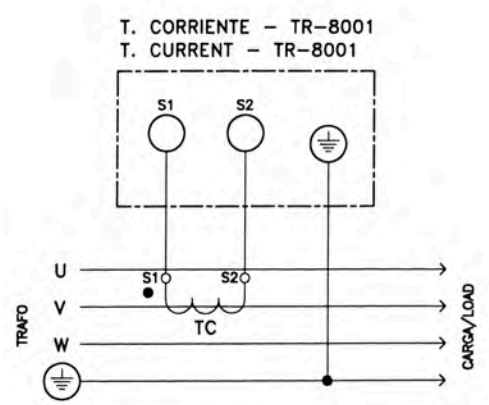
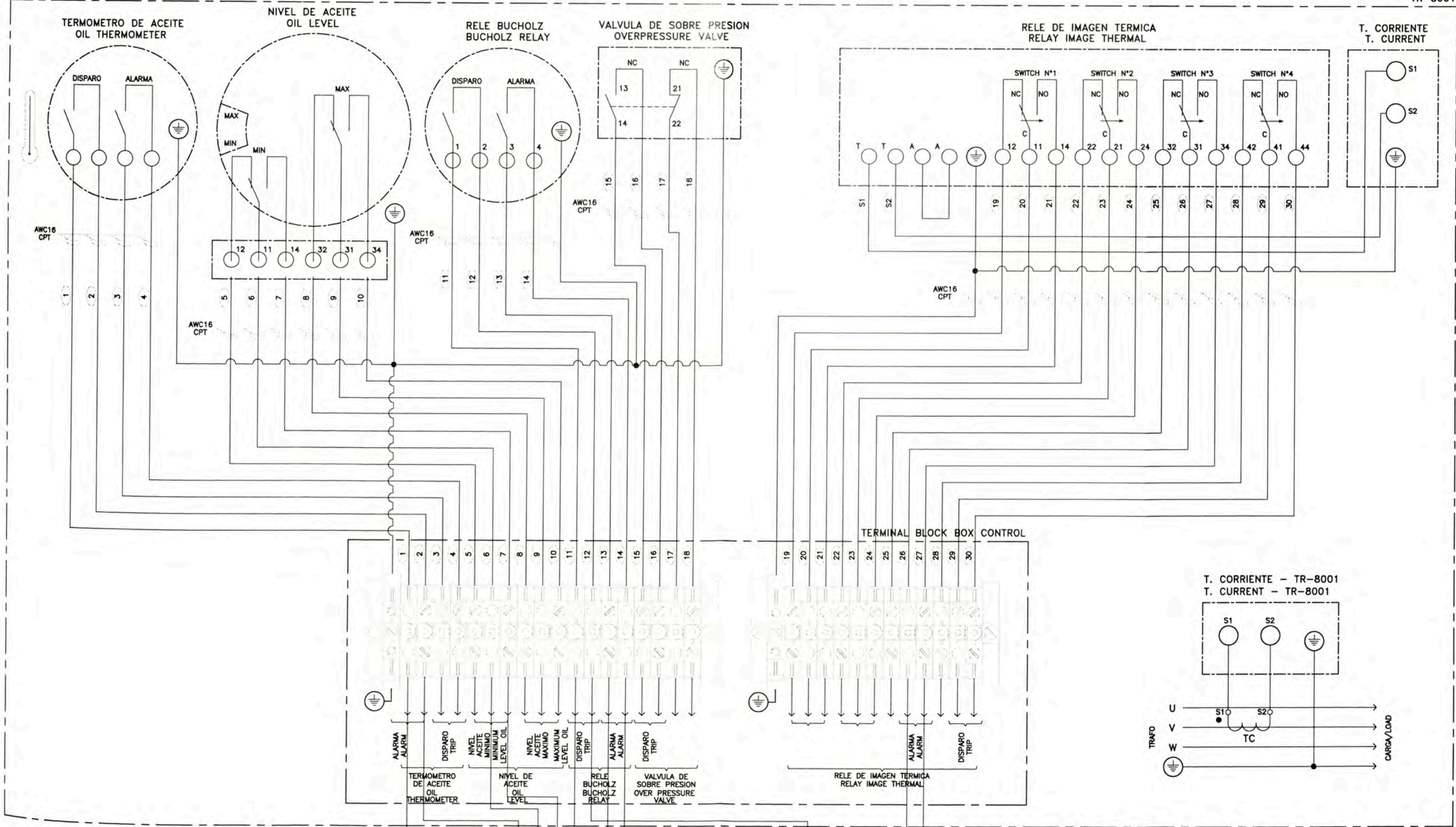
- GENERAL NOTES**
- CIRCUIT BREAKER, WITH CURRENT TRIP VALUE INDICATED BELOW LINE AND BREAKER FRAME SIZE ABOVE LINE FOR EXAMPLE:
 3X800AF ----->AMPERES FRAME
 3X800AT ----->AMPERES TRIP
 - MC = METAL CLAD
 TC = TRAY CABLE
 - EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUIE LA PROTECCION DE FALTA A TIERRA (50G).
 IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
 - VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
 SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
 - ON DETECTION OF A GROUND FAULT, THE HIGH RESISTANCE GROUNDING CONTROL PANEL WILL ALARM AN OPERATOR WILL INITIATE THE PULSING SYSTEM AND WILL MANUALLY IDENTIFY AND ISOLATE THE FAULTED CIRCUIT.
 - VER PLANO 157883-620-XR-DR-1935-05
 REFER TO DRAWING 157883-620-XR-DR-1935-05 FOR PROTECTION, METERING AND CONTROL DETAILS
 - VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
 SEE CALCULATION IN DOCUMENT: 157883-620-XR-CC-0001
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
 SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

157883-000-EL-SD-0001-02 157883-620-XR-CC-0001 157883-620-XR-DR-1935-05 157883-000-IN-BO-0008 157883-000-EL-SD-0001-02 157883-620-XR-DR-2430-02 - 157883-000-EL-SK-0009		OSBL SHORT CIRCUIT FAULT STUDY DP-7601 PROTECTION AND METERING DIAGRAM CABLE BLOCK DIAGRAM MCC INTERFACES ESD & DMS KEY SINGLE LINE DIAGRAM OSBL BLOCK DIAGRAM ELECTRICAL - ELECTRICAL BLOCK DIAGRAM FIRE STATION SUBSTATION SS-7601			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PACKAGE SUBSTATION SS-7601 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 A-8005 - FIRE STATION	
06/01/10 WPA COU FTA JMG		PERMANENT COMMUNITY BUILDINGS INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) PAMPA MELCHORITA			DRAWING NO: 157883-620-XR-DR-1935-02 SCALE: INDICATED DATE: 12/12/08 PROJECT NO: 1618 REVISION: 0			



LEYENDA/LEGEND
 CT 15VA, 800/5 A CL. 0.5 R. IMAGEN TERMICA R. IMAGE THERMAL





LEYENDA/LEGEND

TC	15VA, 800/5 A CL 1	R. IMAGEN TERMICA R. IMAGE THERMAL
----	-----------------------	---------------------------------------

1.- VER LISTA DE CONDUCTORES EN PLANO 157883-620-XS-DR-0735-02
SEE CABLE LIST IN DRAWING 157883-620-XS-DR-0735-02

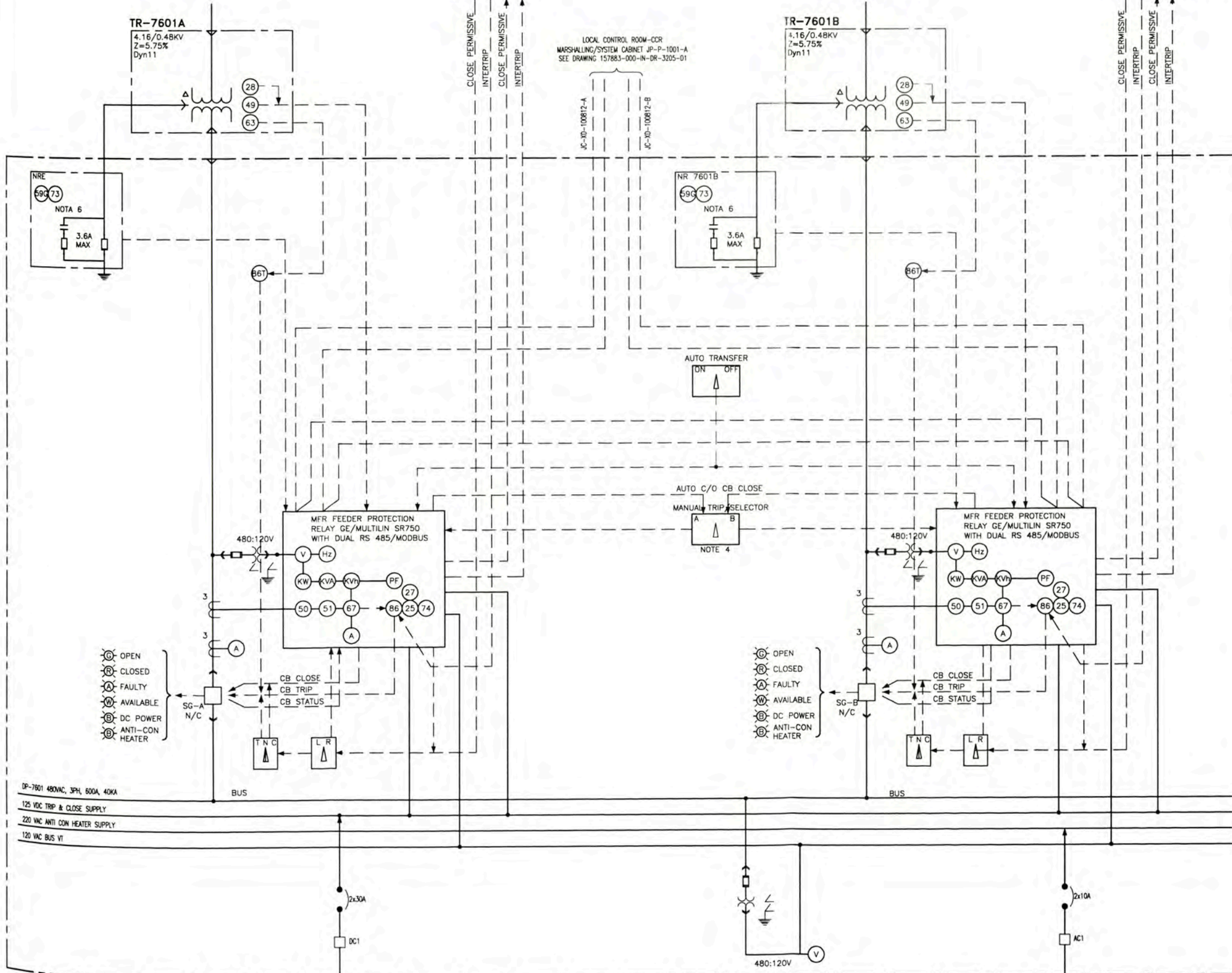
		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		DRAWING: ELECTRICAL INSTALLATIONS PLANO: SINGLE LINE DIAGRAM	
157883-620-XR-DR-1935-01 157883-620-XR-DR-1935-02 157883-620-XR-DR-2630-02	DATE: 01/12/08 DRAWING: WPA DESIGNED: COU DATE: 12/12/08	APPROVED: JMG APPROVED: JMG APPROVED: JMG	PROJECT NO: 1618 PROJECTED: 0	DRAWING NO: 157883-620-XR-DR-1935-04	LOCATION: PAMPA MELCHORTA	SCALE: INDICATED	DATE: 12/12/08

FROM SGE-4000 (A5)
CONT. ON DRAWING
157883-000-EL-SD-0035

FROM/TO SGE-4000
CONT. ON DRAWING
157883-000-EL-SD-0035

FROM SGE-4000 (B5)
CONT. ON DRAWING
157883-000-EL-SD-0035

FROM/TO SGE-4000
CONT. ON DRAWING
157883-000-EL-SD-0035



NOTAS / NOTES:

- ONE OUT OF TWO CIRCUIT BREAKERS ARE NORMALLY CLOSED.
- TRANSFER WILL BE AUTOMATICALLY BLOCKED UNDER FAULT CONDITIONS OR WHEN MANUALLY SELECTED BY AUTO/TRANSFER SELECTOR SWITCH.
- ON DETECTION OF A GROUND FAULT, THE HIGH RESISTANCE GROUNDING CONTROL PANEL WILL ALARM AND RESISTANCE GROUNDING CONTROL PANEL WILL ALARM AN OPERATOR WILL INITIATE THE PULSING SYSTEM WILL MANUALLY IDENTIFY AND ISOLATE THE FAULTED CIRCUIT.
- SERIAL LINKS TO CCR PCS-JP-P-1001-A EXTERNAL CABLE JC-XD-100812A/12B REFER TO 157883-000-IN-BD-0008
- SERIAL LINKS TO ADMINISTRATION BUILDING. EXTERNAL CABLES JC-XD-100811A/11B REFER TO 157883-000-IN-BD-0008

ANSI CODES	FEATURES	
50/51 P/N	1 PHASE OR EARTH OVERCURRENT	•
50/51	3 PHASE OVERCURRENT	•
50/51N	EARTH OVERCURRENT	•
67P	3 PHASE DIRECTIONAL OVERCURRENT	•
67N	EARTH FAUL DIRECTIONAL OVERCURRENT	•
51V	VOLTAGE CONTROLLED OVERCURRENT	•
37	3 PHASE UNDERCURRENT	•
46	NEGATIVE PHASE SEQUENCE OVERCURRENT	•
27/59	PHASE UNDER RELAY/OVER VOLTAGE RELAY.	•
59N	RESIDUAL OVER VOLTAGE	•
32	DIRECTIONAL POWER	•
32N	WATTMETRIC EARTH FAULT	•
81U/D	UNDER/OVER FREQUENCY	•
49	THERMAL OVERLOAD	•
86	OUTPUT RELAY LATCHING	•
79	AUTORECLOSE	•
50BF	CIRCUIT BREAKER FAILURE DETECTION	•
46BC	BROKEN CONDUCTOR DETECTION 12/11	•
25	SYNCHCHECK	•
74	ALARM RELAY	•
86	TRIP RELAY	•
28	RESERVED FOR FUTURE APPLICATION	•
63	LIQUID OR GAS PRESSURE LEVEL OR FLOW RELAY	•
73	LOAD RESISTOR CONTACTOR	•
26	APPARATUS THERMAL DEVICE	•

DP-7601 480VAC, 3PH, 600A, 40KA
125 VDC TRIP & CLOSE SUPPLY
220 VAC ANTI CON HEATER SUPPLY
120 VAC BUS VI

125 VDC TRIP & CLOSE SUPPLY PANELBOARD DP-7611

220VAC ANTI-CON HEATER SUPPLY PANELBOARD C-11/DP-8005-A

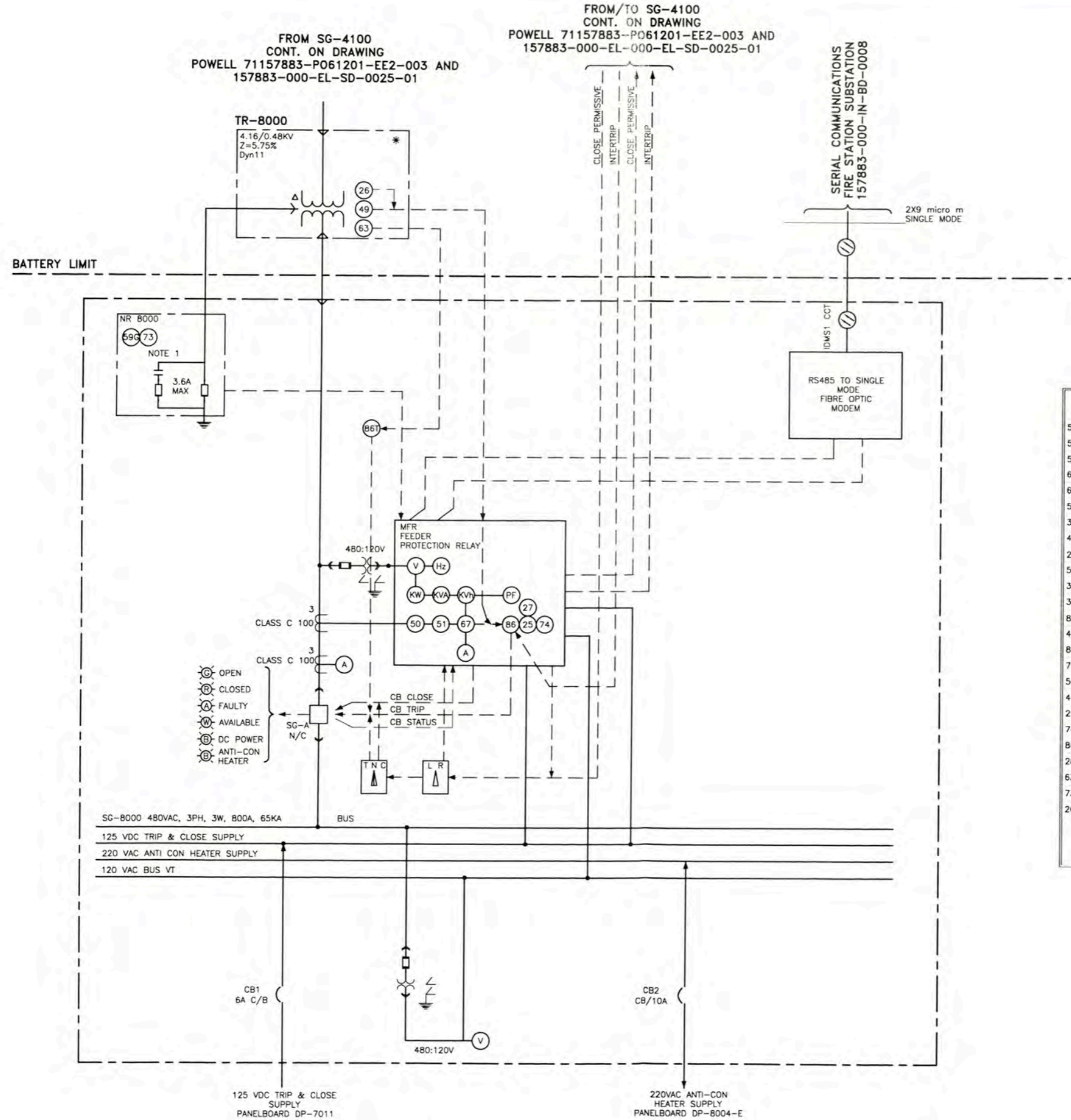
		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PROTECTION AND METERING DIAGRAM SWITCHGEAR DP-7601	
PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		LOCATION: PAMPA MELCHORITA		DRAWING NO: 157883-620-XR-DR-1935-05	
INSTRUMENT CABLE BLOCK DIAGRAM MCC INTERFACE ESD AND IDMS ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 KEY SINGLE LINE DIAGRAM		DRAWING BY: WPA DESIGNED BY: COU DATE: 12/12/08		APPROVED BY: JMG REVISION: 0	
157883-000-IN-BD-0008 157883-620-XR-DR-1935-02 157883-000-EL-SD-0001-02 157883-000-EL-SD-0035		DATE: 25/11/09 DRAWING: MEJ APPROVED: MEJ DESIGNED: WPA		PROJECT NO: 1618 REVISION: 0	

FROM SG-4100
CONT. ON DRAWING
POWELL 71157883-PO61201-EE2-003 AND
157883-000-EL-SD-0025-01

FROM/TO SG-4100
CONT. ON DRAWING
POWELL 71157883-PO61201-EE2-003 AND
157883-000-EL-000-EL-SD-0025-01

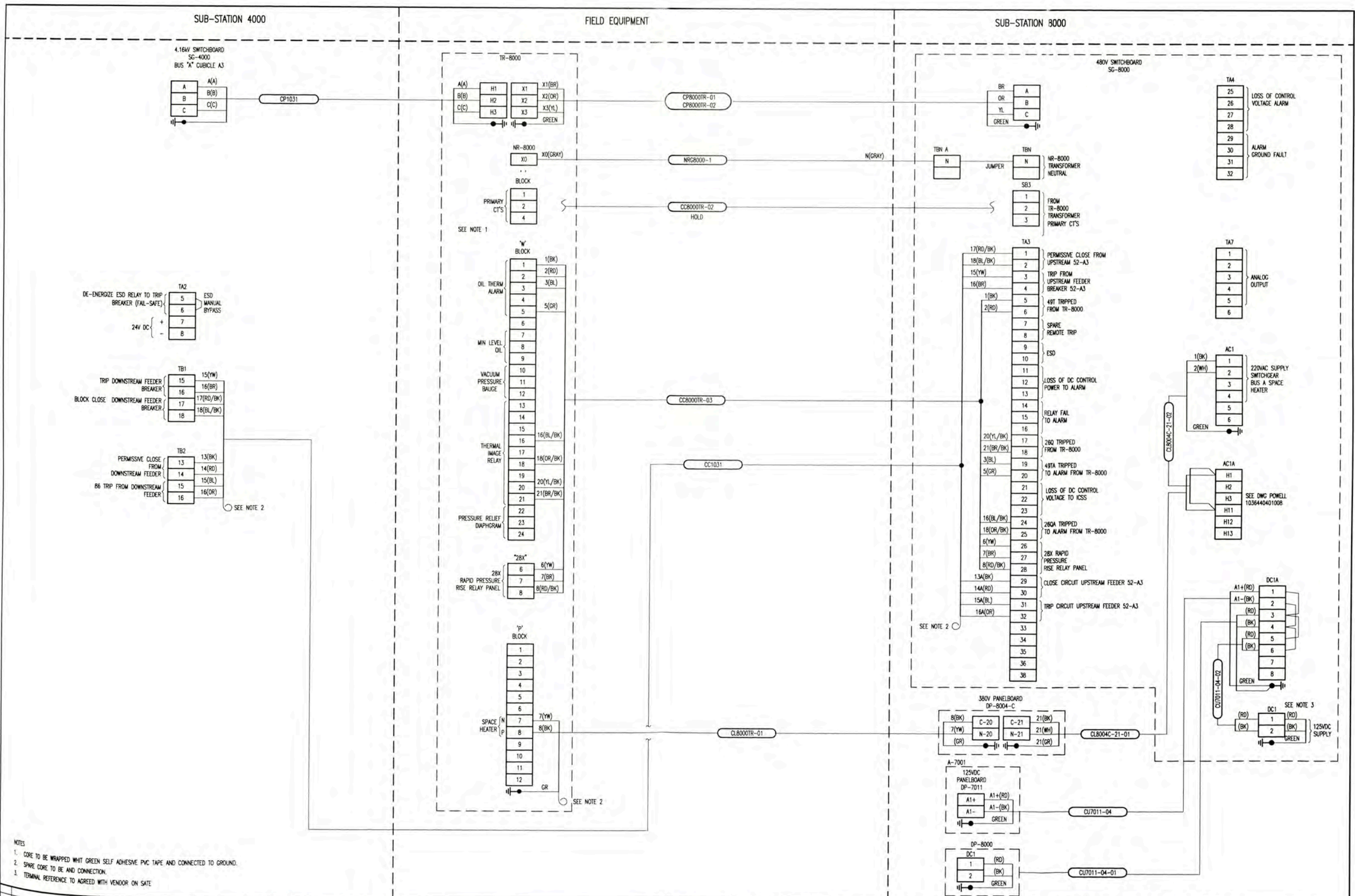
NOTES

1. ON DETECTION OF A GROUND FAULT, THE HIGH RESISTANCE GROUNDING CONTROL PANEL WILL ALARM AN OPERATOR WILL INITIATE THE PULSING SYSTEM AND WILL MANUALLY IDENTIFY AND ISOLTE THE FAULTED CIRCUIT.



ANSI CODES	FEATURES	
50/51 P/N	1 PHASE OR EARTH OVERCURRENT	o
50/51	3 PHASE OVERCURRENT	o
50/51N	EARTH OVERCURRENT	o
67P	3 PHASE DIRECTIONAL OVERCURRENT	o
67N	EARTH FAUL DIRECTIONAL OVERCURRENT	o
51V	VOLTAGE CONTROLLED OVERCURRENT	o
37	3 PHASE UNDERCURRENT	o
46	NEGATIVE PHASE SEQUENCE OVERCURRENT	o
27/59	PHASE UNDER RELAY/OVER VOLTAGE RELAY.	o
59N	RESIDUAL OVER VOLTAGE	o
32	DIRECTIONAL POWER	o
32N	WATTMETRIC EARTH FAULT	o
81U/O	UNDER/OVER FREQUENCY	o
49	THERMAL OVERLOAD	o
86	OUTPUT RELAY LATCHING	o
79	AUTORECLOSE	o
50BF	CIRCUIT BREAKER FAILURE DETECTION	o
46BC	BROKEN CONDUCTOR DETECTION I2/I1	o
25	SYNCHCHECK	o
74	ALARM RELAY	o
86	TRIP RELAY	o
28	RESERVED FOR FUTURE APPLICATION	o
63	LIQUID OR GAS PRESSURE LEVEL OR FLOW RELAY	o
73	LOAD RESISTOR CONTACTOR	o
26	APPARATUS THERMAL DEVICE	o

		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING TITLE: PROTECTION AND METERING DIAGRAM SG-8000 0.48KV SWITCHGEAR	
PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCALIDAD: PAMPA MELCHORITA		DRAWING NO: WPA ESCALA: INDICATED		DESIGNED BY: COU DATE: 12/12/08	
INSTRUMENT CABLE BLOCK DIAGRAM MCC INTERFAS ESD AND EDMS ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8001 ADMINISTRACION BUILDING - A-8004 KEY SINGLE LINE DIAGRAM		REVISADO BY: FTA APROBADO BY: JMG		PROJECT NO: 1618 REVISION: 0	
1036440301304 157883-000-IN-80-0008 157883-620-XR-DR-1935-01 157883-000-EL-SD-0001-02 157883-000-EL-SD-0001-02		480V, 800A, 3W, 3W, 60Hz LV METAL ENCLOSED SG-8000 INSTRUMENT CABLE BLOCK DIAGRAM MCC INTERFAS ESD AND EDMS ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8001 ADMINISTRACION BUILDING - A-8004 KEY SINGLE LINE DIAGRAM		DRAWING NO: 157883-620-XR-DR-1935-06	



NOTES
 1. CORE TO BE WRAPPED WITH GREEN SELF ADHESIVE PVC TAPE AND CONNECTED TO GROUND.
 2. SPARE CORE TO BE AND CONNECTION.
 3. TERMINAL REFERENCE TO AGREED WITH VENDOR ON SITE

1	ISSUED FOR CONSTRUCTION																			
2	ISSUED FOR CONSTRUCTION	08/12/09	WPA	MEJ	157883-620-EL-0046	ELECTRICAL INTERCONNECTION DIAGRAM SYSTEM 070 SG-8000 BUS "A"														
3	ISSUED FOR CONSTRUCTION	03/12/09	WPA	MEJ	157883-620-XR-SH-0003	ELECTRICAL CABLE SCHEDULE														
4	ISSUED FOR COMMENTS	01/12/09	WPA	MEJ	157883-000-EL-SH-0121	CONTROL AND INDICATION SCHEDULE														
5	ISSUED FOR COMMENTS	12/11/09	WPA	MEJ	157883-070-EL-00-0020-22	ELECTRICAL BLOCK DIAGRAM SYSTEM 0070														



UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

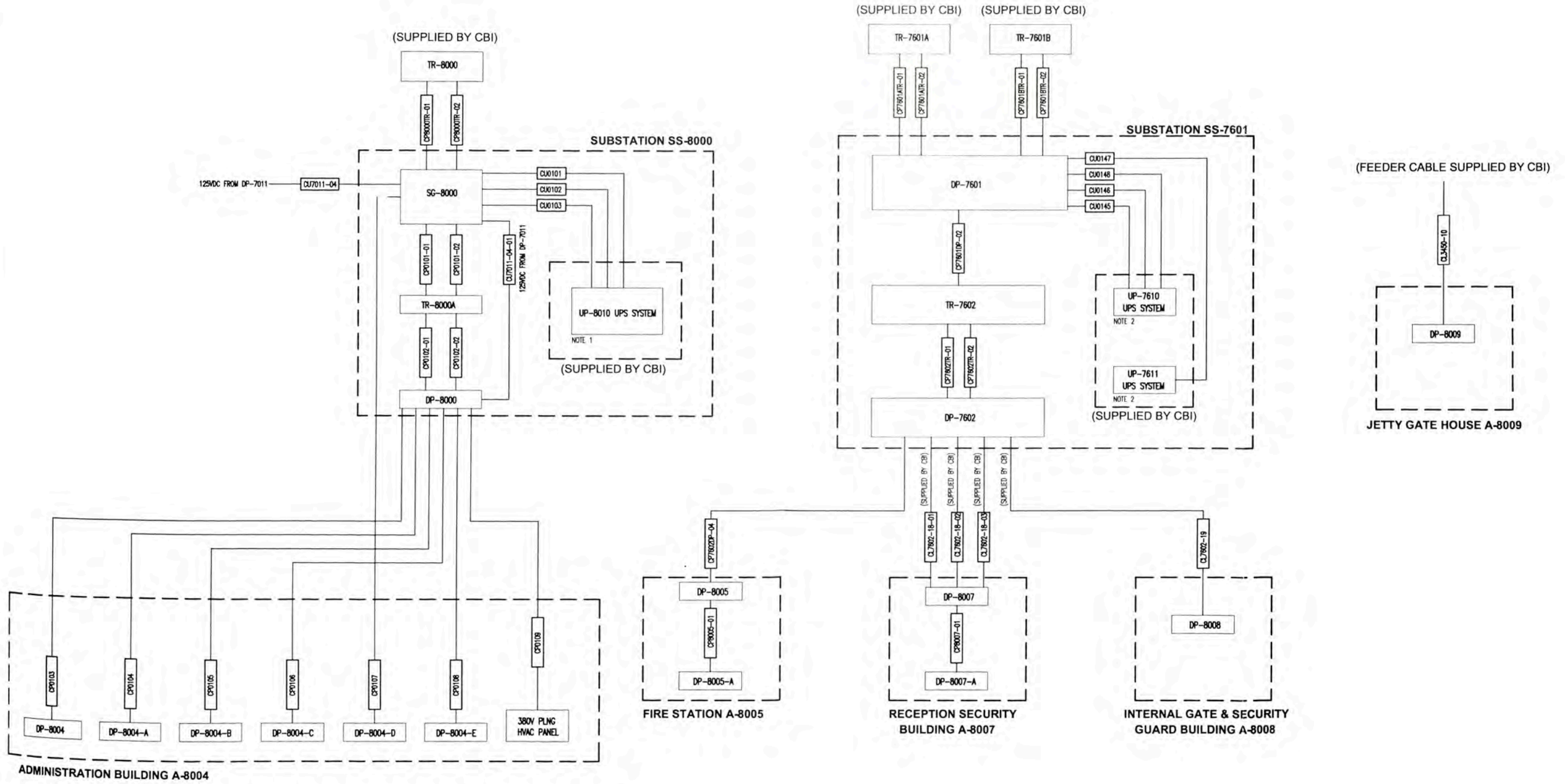
PROYECTO: PERMANENT COMMUNITY BUILDINGS
 LOCALIDAD: PAMPA MELCHORITA

PROYECTO: OUT SIDE BATTERY LIMITS - OSBL
 ELECTRICAL INTERCONNECTION BLOCK DIAGRAM FOR SG-8000

PROYECTADO: WPA
 DISEÑADO: COU
 REVISADO: FTA
 APROBADO: JMG

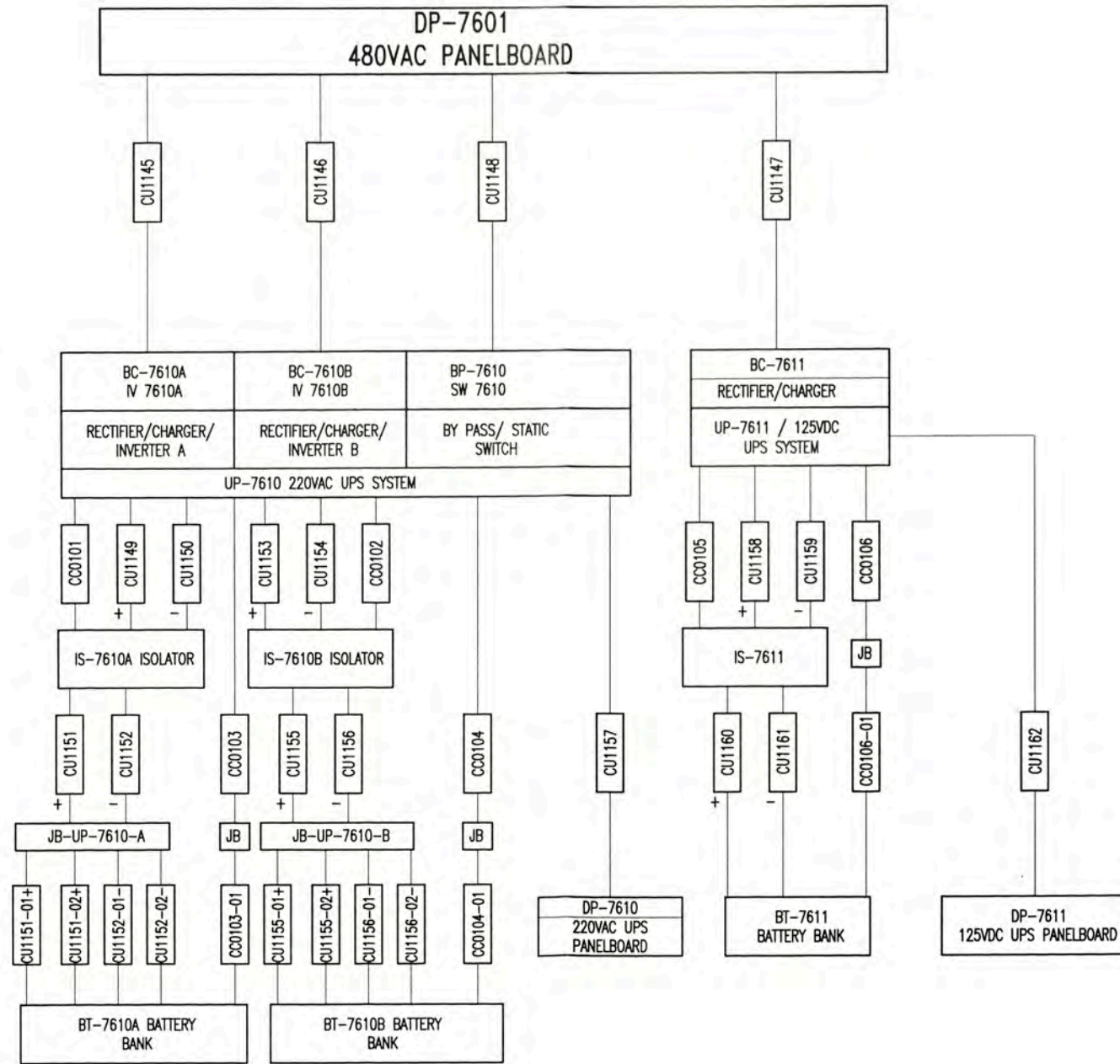
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PLANO N°: 157883-620-XR-DR-1936-01

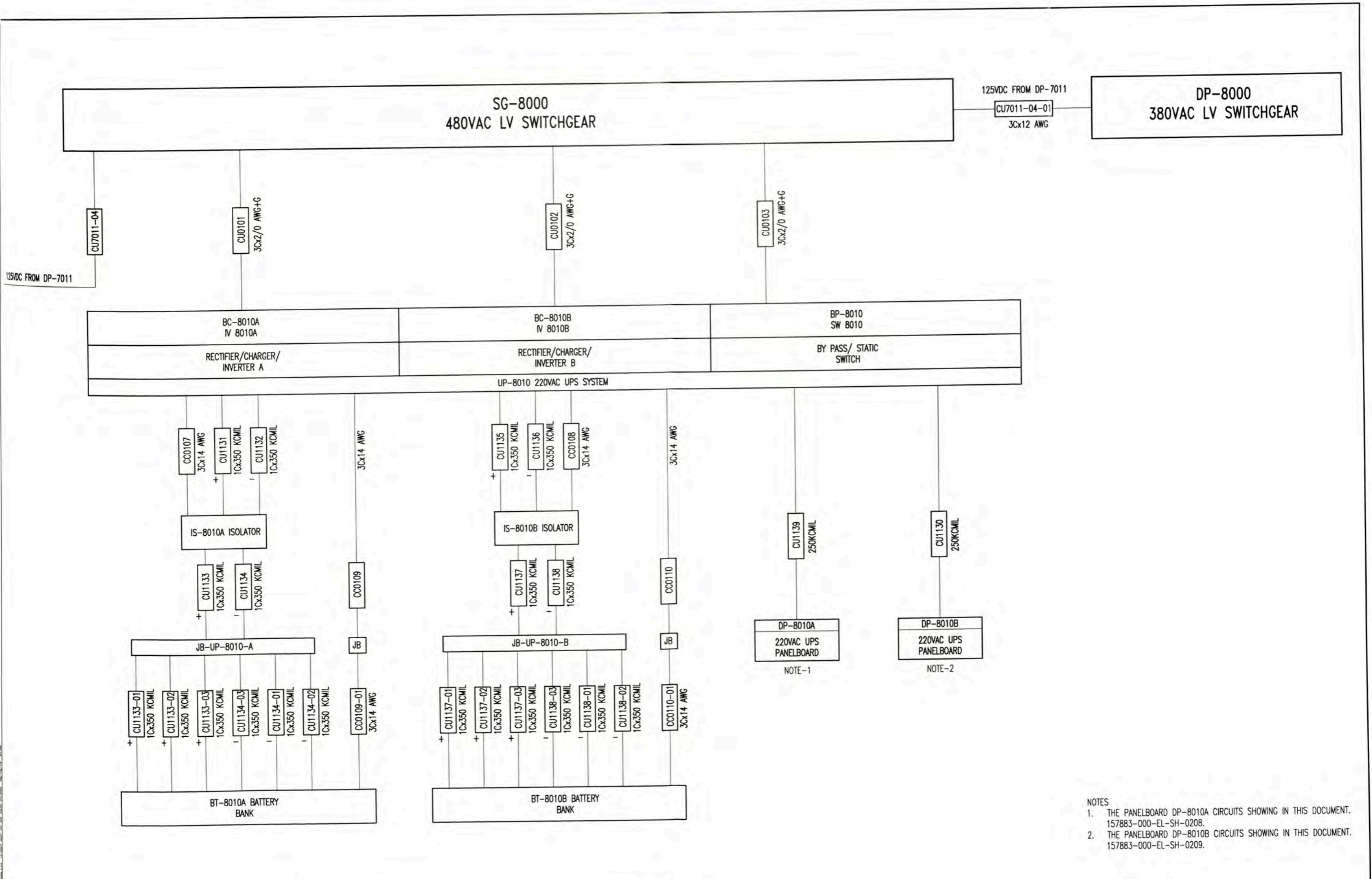


NOTE:
 1. SEE DRAWING 157883-620-XS-DR-2630-04 ELECTRICAL BLOCK DIAGRAM FOR SS-8000 UPS SYSTEM
 2. SEE DRAWING 157883-620-XS-DR-2630-03 SS-7601 UPS SYSTEM
 3. THE ELECTRICAL CABLE SCHEDULE IS SHOWN IN: 157883-620-XR-SH-0003
 EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN: 157883-620-XR-SH-0003

157883-620-XR-DR-2630-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING NO.: OUT SIDE BATTERY LIMITS - OSBL ELECTRICAL INTERCONNECTION BLOCK DIAGRAM		
157883-620-XR-DR-2630-02 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005 AND DP-8005-A			PROJECT: PERMANENT COMMUNITY BUILDINGS		DRAWING BY: WPA DESIGNED BY: COU REVISION BY: FTA APPROVED BY: JMG		
157883-620-XR-DR-1935-01 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 A-8005 - FIRE STATION		SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		LOCATION: PAMPA MELCHORITA		SCALE: INDICATED	
157883-620-XR-DR-1935-02 ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8000 ADMINISTRATION BUILDING - A-8004		DATE: 12/12/08		PROJECT NO.: 1618		REVISION: 0	
ISSUED FOR CONSTRUCTION		07/11/09		157883-620-XR-DR-2630-02		DRAWING NO.: 157883-620-XR-DR-2630-02	

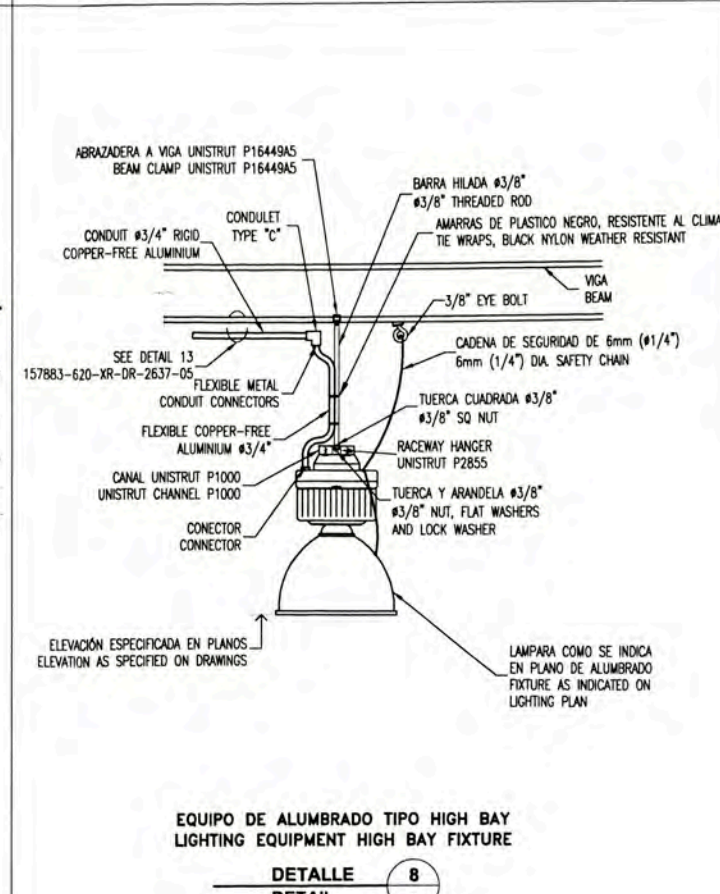
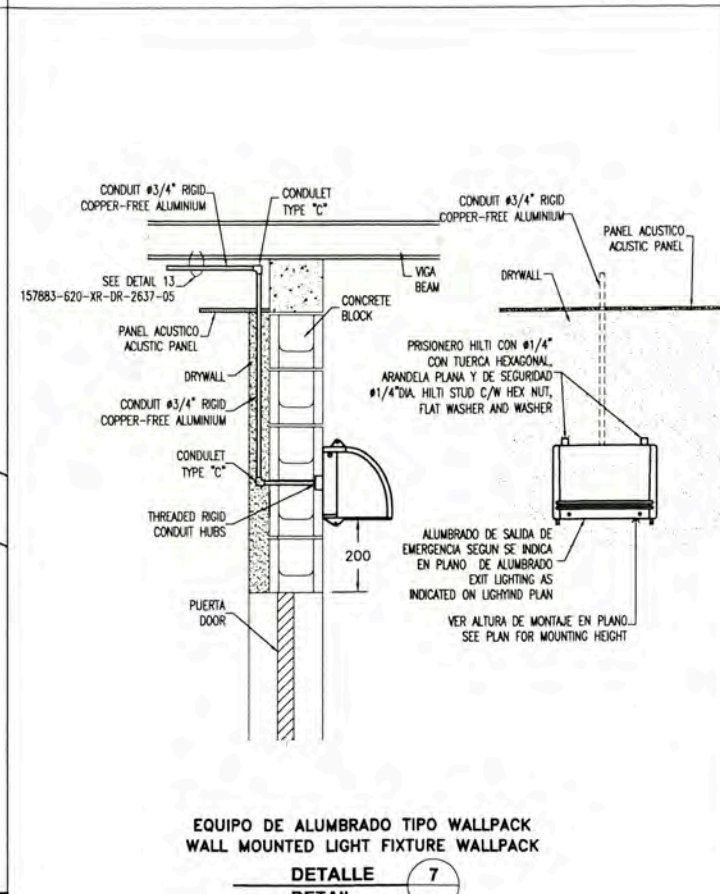
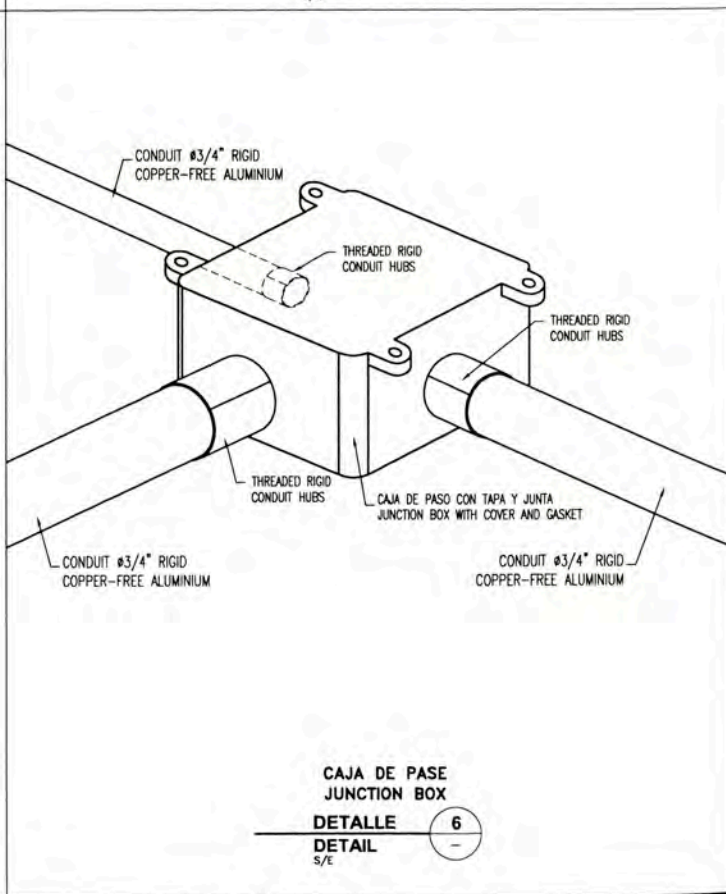
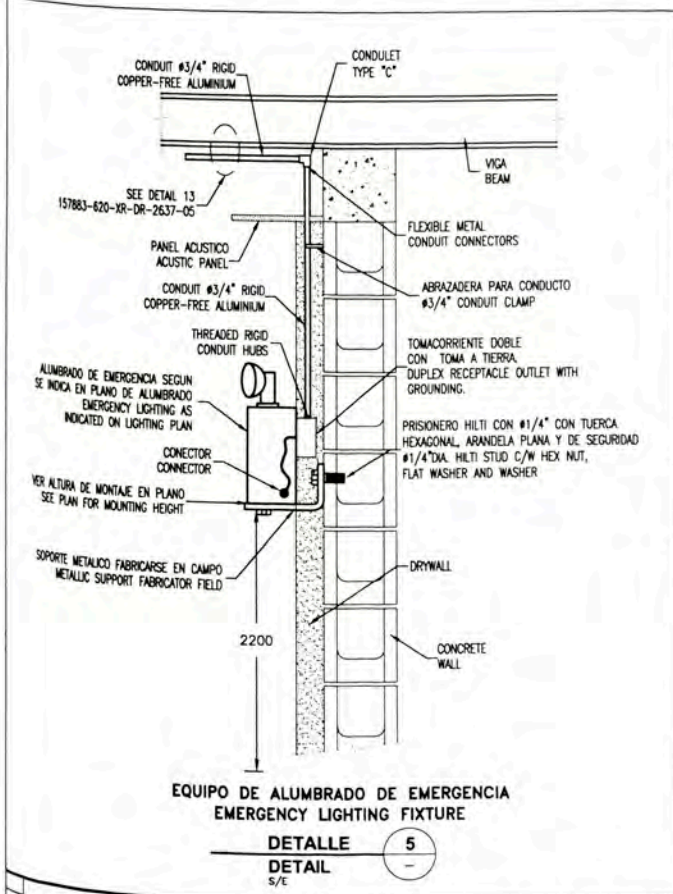
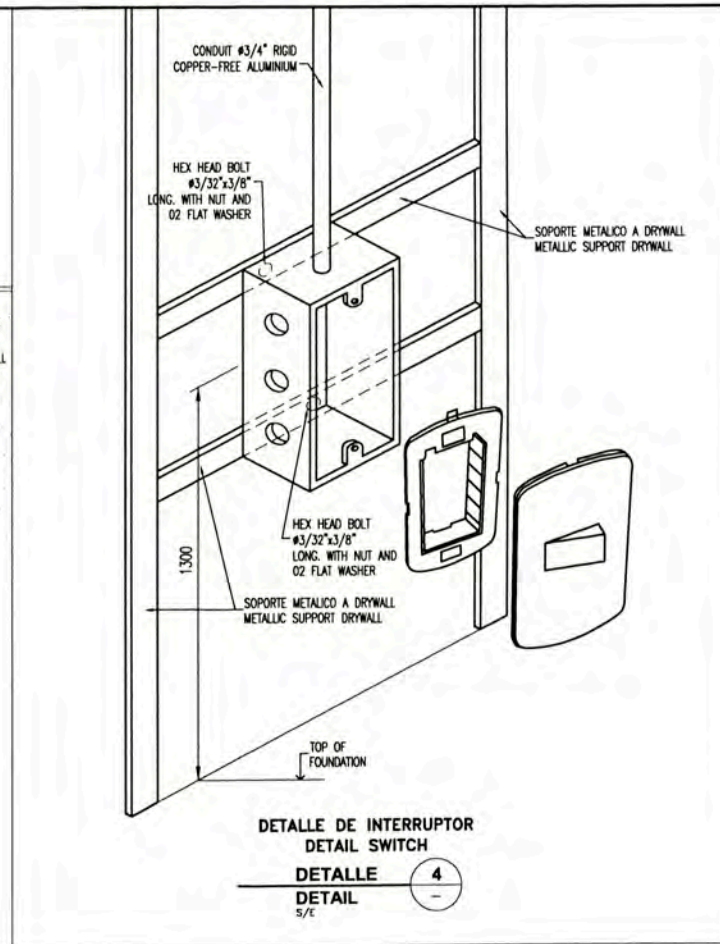
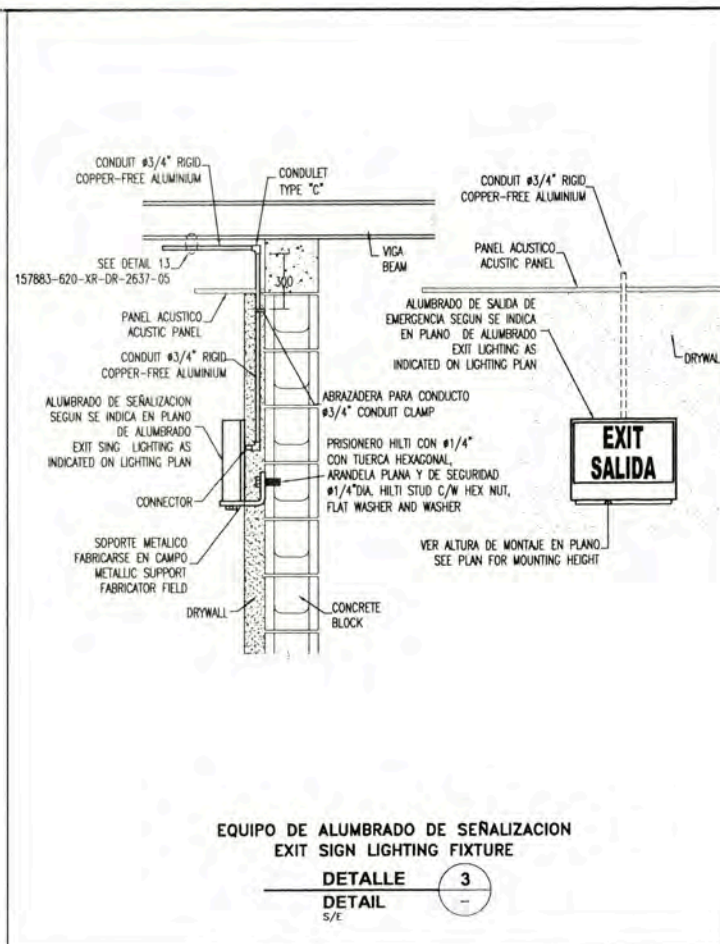
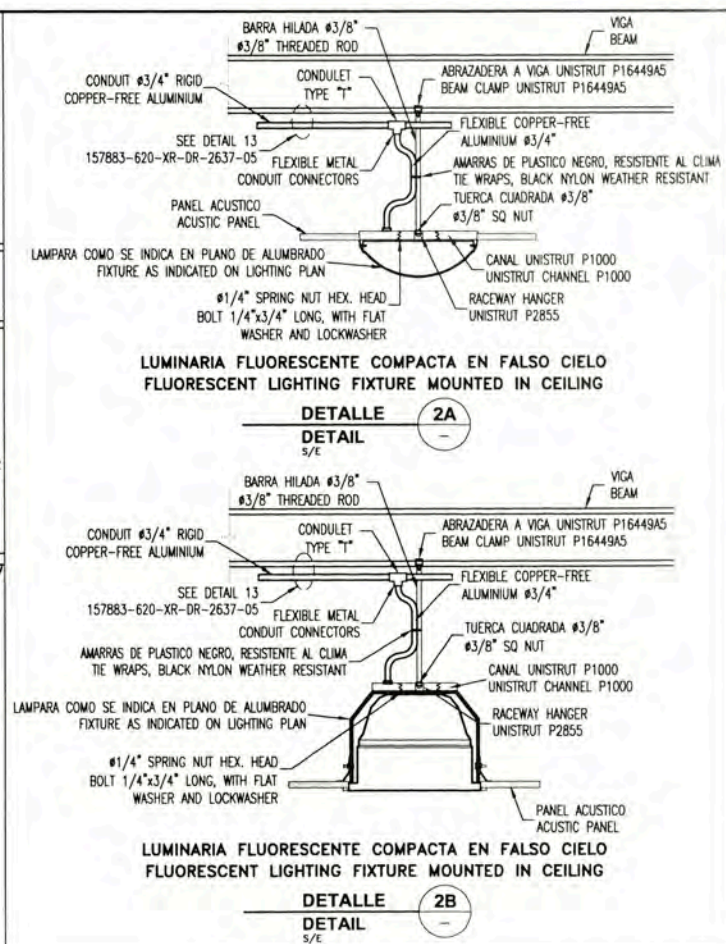
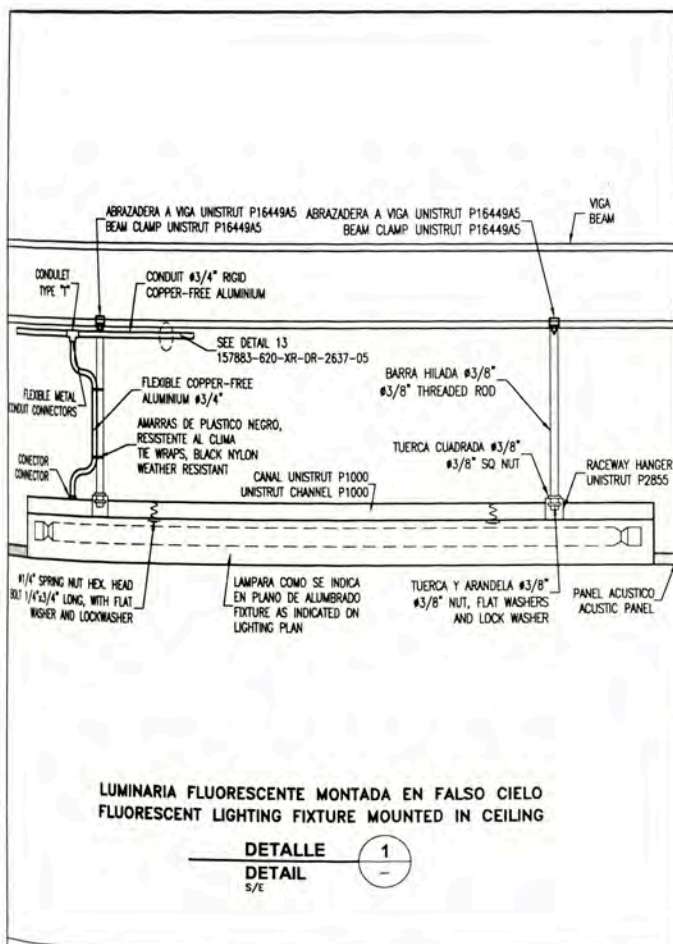


157883-000-EL-SP-0012 157883-000-EL-PH-0001 157883-620-XR-DR-1935-02 157883-620-XR-DR-0835-01 157883-620-XR-DR-2630-02		SPECIFICATION FOR PANELBOARD ELECTRICAL DESIGN PHILOSOPHY ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 A-8005 - FIRE STATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005 AND DP-8005-A OSBL BLOCK DIAGRAM ELECTRICAL			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		OUT SIDE BATTERY LIMITS - OSBL ELECTRICAL BLOCK DIAGRAM FOR SS-7601 UPS SYSTEM			
17/10/09 WPA MEJ		PERMANENT COMMUNITY BUILDINGS INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) PAMPA MELCHORITA			DRAWING NO: WPA DESIGNED BY: COU DATE: 03/09/09		REVISION: FTA APPROVED BY: JMG PROJECT NO: 1618 REVISION: 0		DRAWING NO: 157883-620-XR-DR-2630-03	




- NOTES
1. THE PANELBOARD DP-8010A CIRCUITS SHOWING IN THIS DOCUMENT. 157883-000-EL-SH-0208.
 2. THE PANELBOARD DP-8010B CIRCUITS SHOWING IN THIS DOCUMENT. 157883-000-EL-SH-0209.

157883-620-XR-SH-0003		OSBL ELECTRICAL CABLE SCHEDULE			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)				OUT SIDE BATTERY LIMITS - OSBL ELECTRICAL BLOCK DIAGRAM FOR SS-8000 UPS SYSTEM			
157883-620-XR-SH-0001		OSBL ELECTRICAL LOAD SCHEDULE							PERMANENT COMMUNITY BUILDINGS			
157883-000-EL-SH-0209		DP-8010B PANELBOARD SCHEDULE FOR AC UPS			DRAWING BY: WPA DESIGNED BY: COU REVIEWED BY: FTA APPROVED BY: JMG DRAWING NO.: PLAN NO.:							
157883-000-EL-SH-0208		DP-8010A PANELBOARD SCHEDULE FOR AC UPS			SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA SCALE: INDICATED DATE: 03/09/09 PROJECT NO: 1618 REVISION: 0 157883-620-XR-DR-2630-04							
157883-620-XR-DR-1935-01		ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8000 ADMINISTRACION BUILDING - A-8004										
157883-000-EL-PH-0001		ELECTRICAL DESIGN PHILOSOPHY										
157883-620-XR-DR-2630-02		OSBL BLOCK DIAGRAM ELECTRICAL										
157883-620-XR-DR-2630-02		REFERENCE DRAWINGS										
157883-620-XR-DR-2630-02		DETAILS OF REFERENCIAL										
157883-620-XR-DR-2630-02		TITLE										



157883-620-XR-DR-1031-01	LIGHTING DISTRIBUTION JETTY GATE HOUSE (A-8009)
157883-620-XR-DR-0931-06	LIGHTING DISTRIBUTION SECURITY RECEPTION BUILDING A-8008
157883-620-XR-DR-0931-01	LIGHTING DISTRIBUTION SECURITY RECEPTION BUILDING A-8007
157883-620-XR-DR-0831-05	LIGHTING DISTRIBUTION MAIN GATE SECURITY GUARD BUILDING A-8006
157883-620-XR-DR-0831-01	LIGHTING DISTRIBUTION FIRE STATION A-8005
157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION ADMINISTRATION BUILDING A-8004



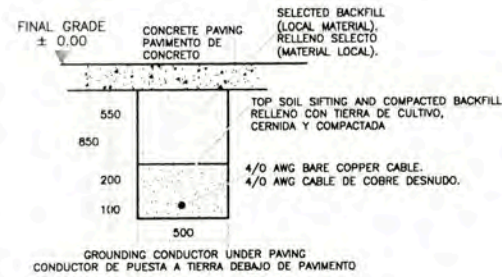
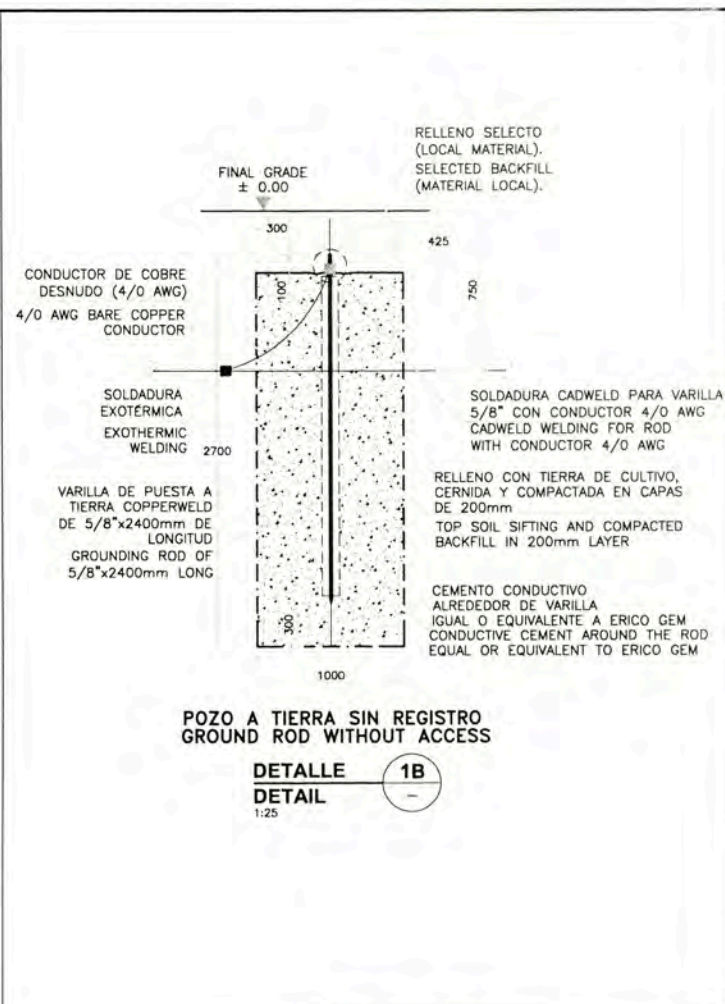
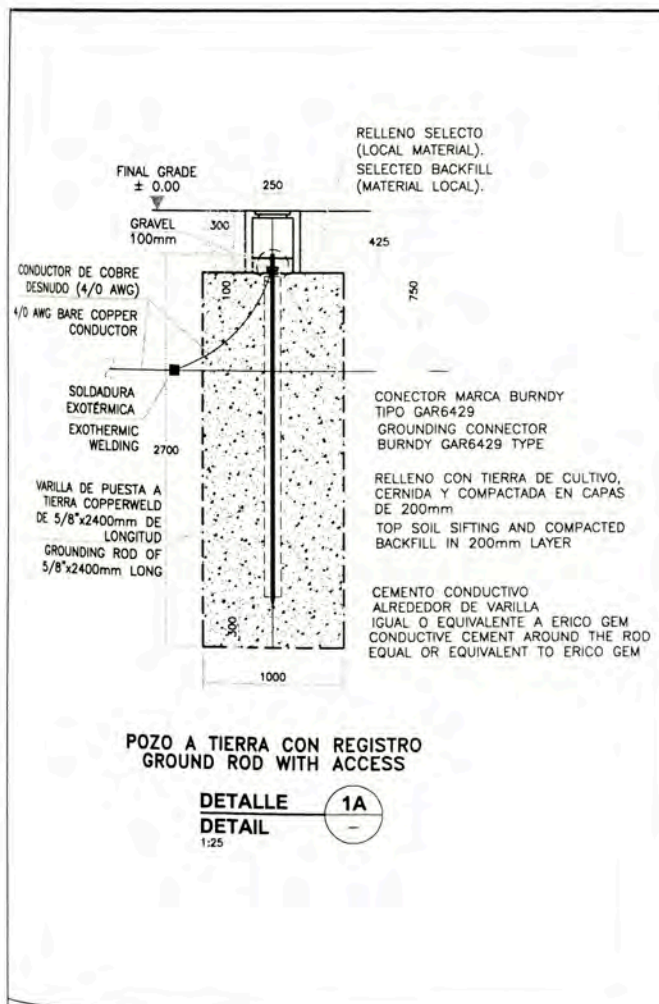
UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PERMANENT COMMUNITY BUILDINGS

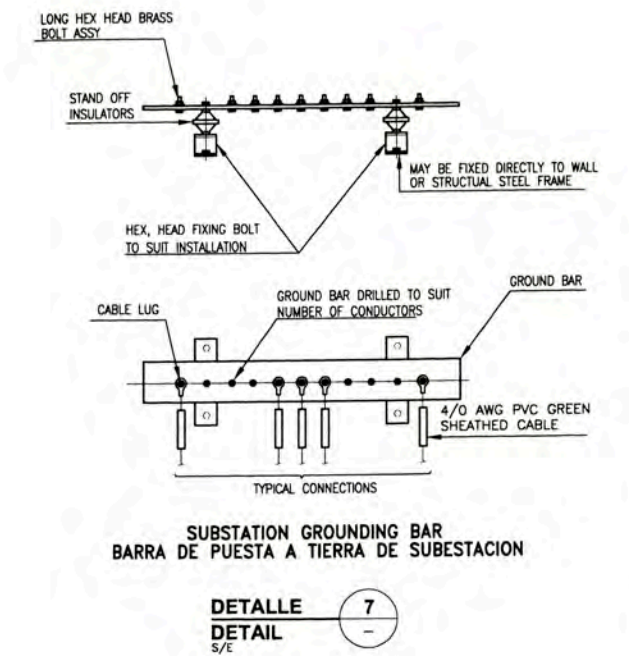
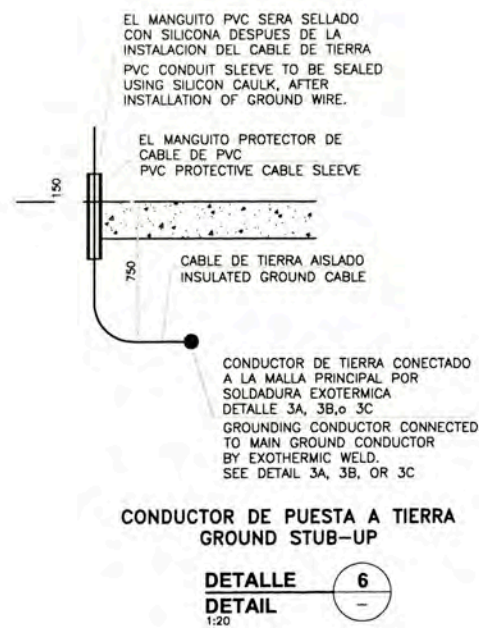
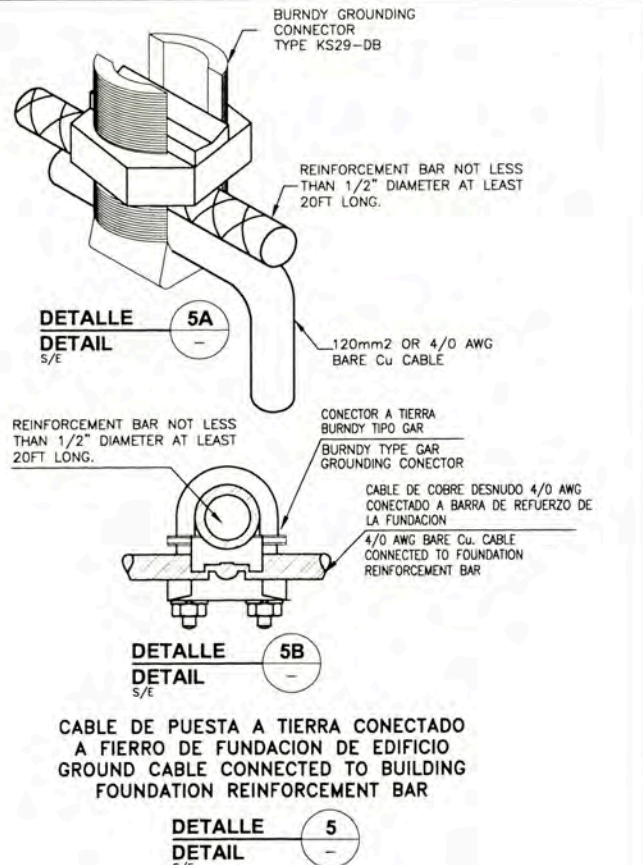
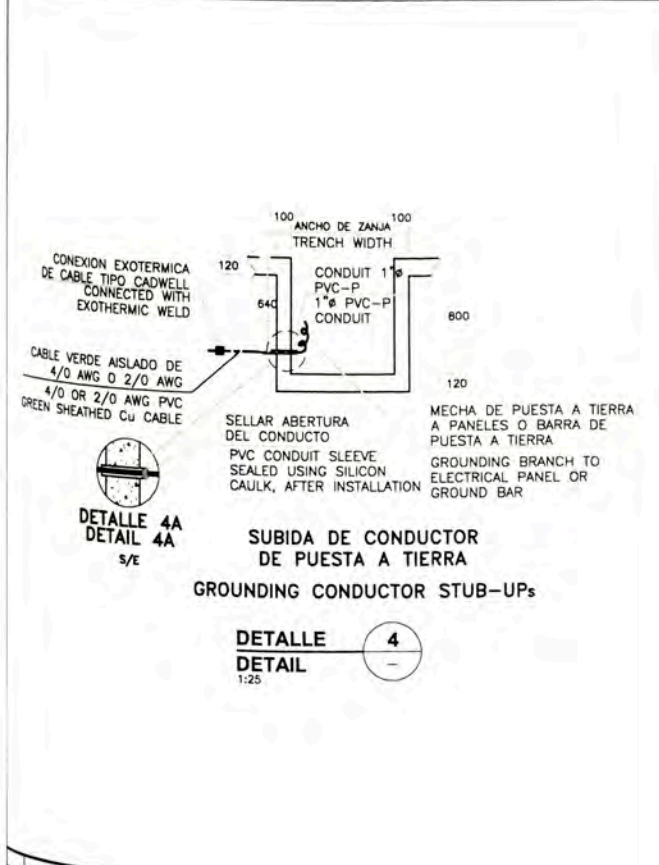
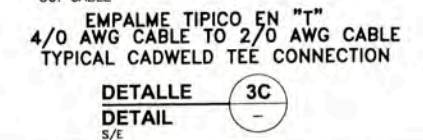
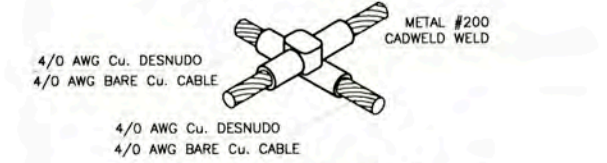
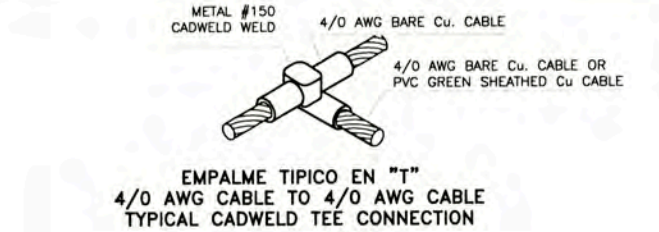
INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) | PAMPA MELCHORITA

OUT SIDE BATTERY LIMITS - OSBL
ELECTRICAL INSTALLATION DETAILS AND NOTES

PROJECT: PERMANENT COMMUNITY BUILDINGS	DRAWING BY: WPA	DESIGNED BY: COU	REVIEWED BY: FTA	APPROVED BY: JMG	DRAWING NO: 157883-620-XR-DR-2637-03
SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	SCALE: INDICATED	DATE: 03/09/08	PROJECT NO: 1618	REVISION: 0	



DETALLE / DETALLE 2
CONDUCTOR DE PUESTA A TIERRA GROUNDING CONDUCTOR



157883-000-EL-PH-0001-Electrical Design Philosophy			
157883-000-EL-SP-0020 Specification for Electrical Installation			
157883-620-XR-DR-1935-01			
157883-620-XR-DR-1935-02			
157883-620-XR-DR-2637-02			

UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PERMANENT COMMUNITY BUILDINGS

OUT SIDE BATTERY LIMITS - OSBL
GROUNDING AND LIGHTNING SYSTEM INSTALLATION
DETAILS AND NOTES - SHEET 1 OF 2

PROJECT: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA

DESIGNED BY: WPA CHECKED BY: COU

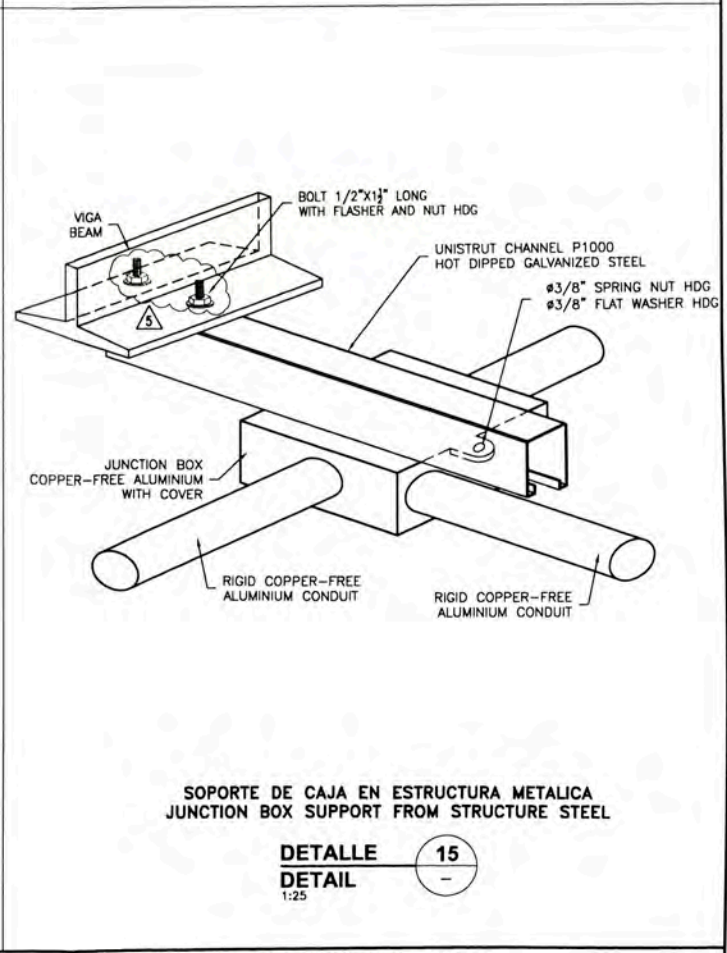
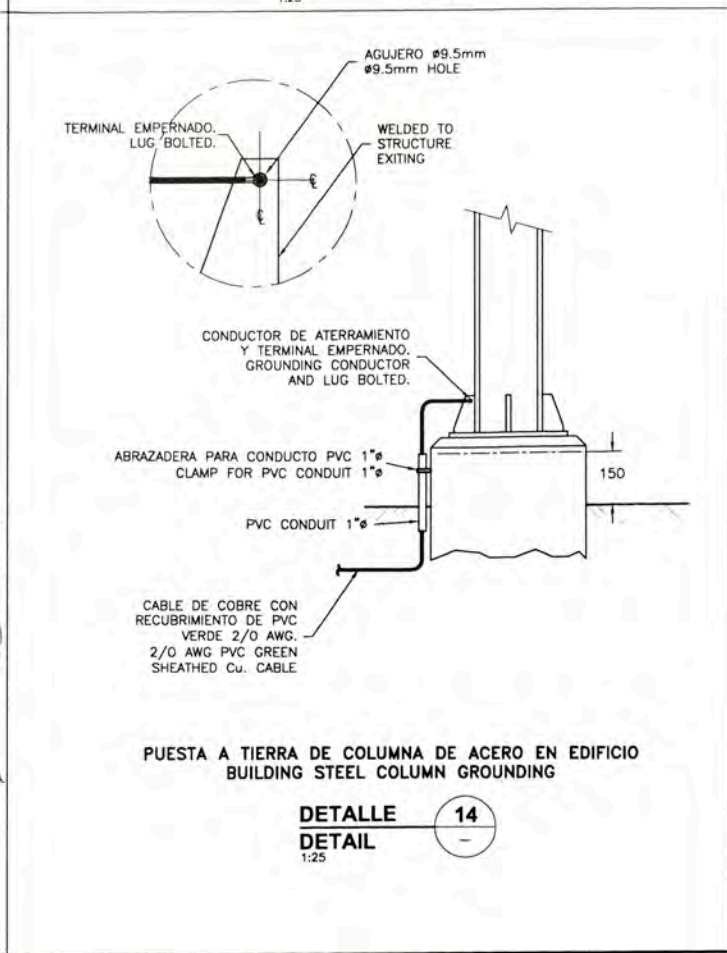
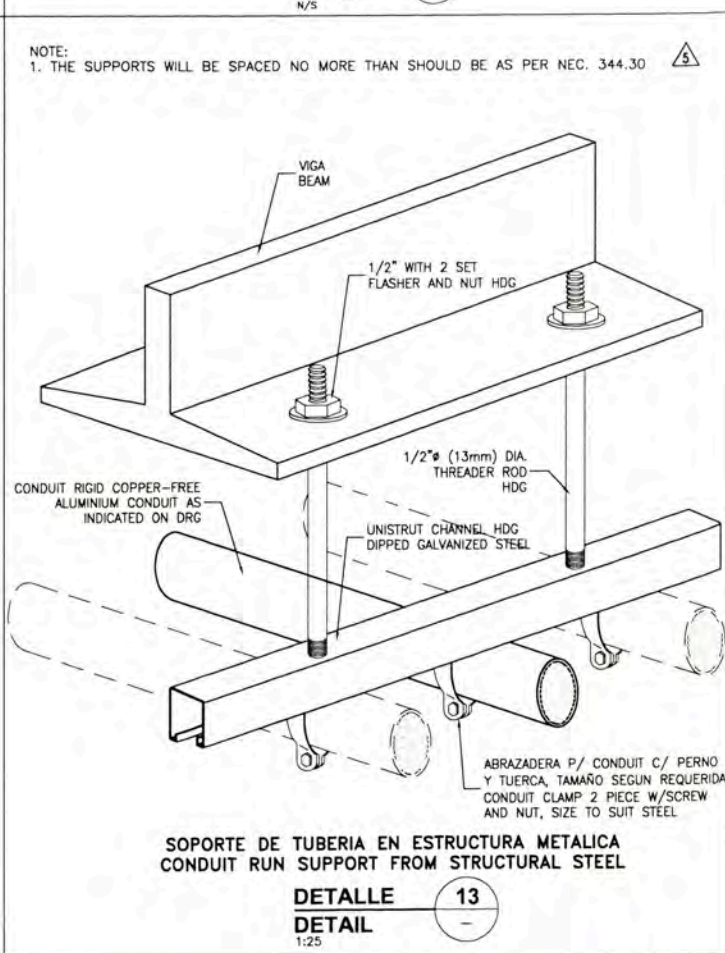
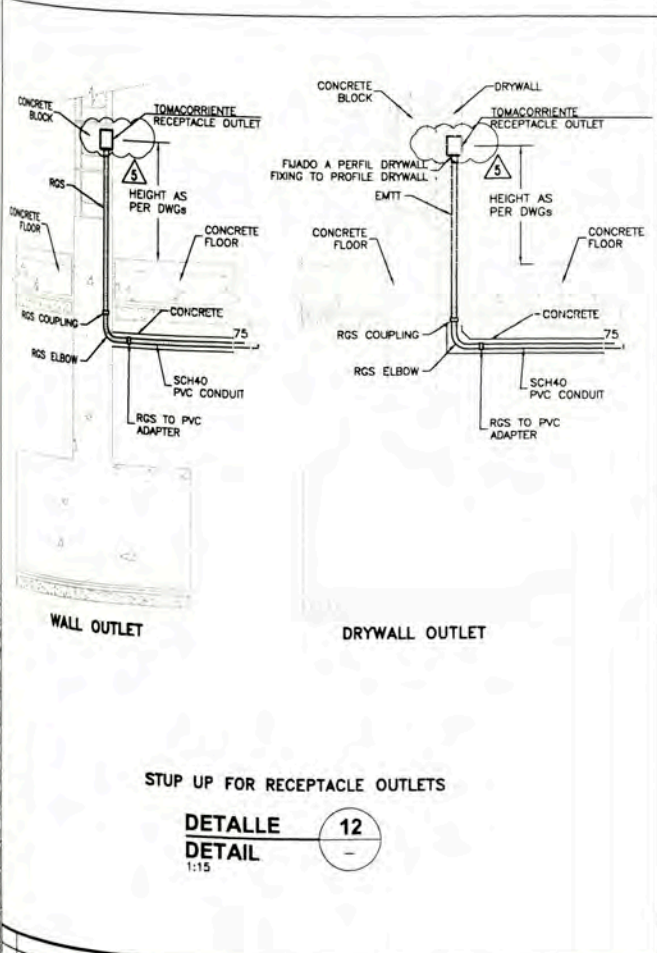
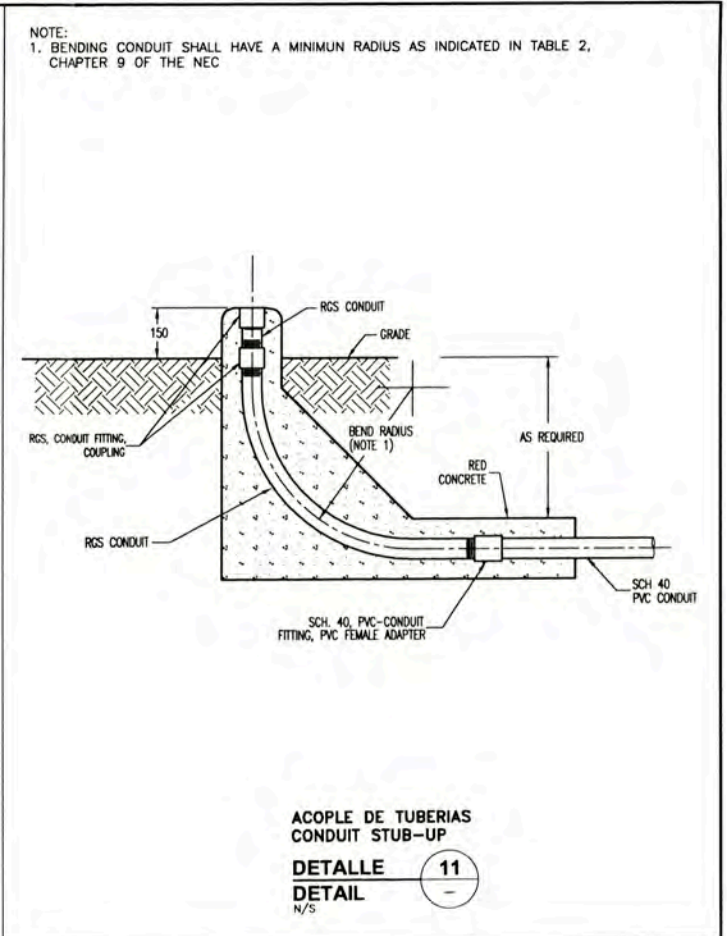
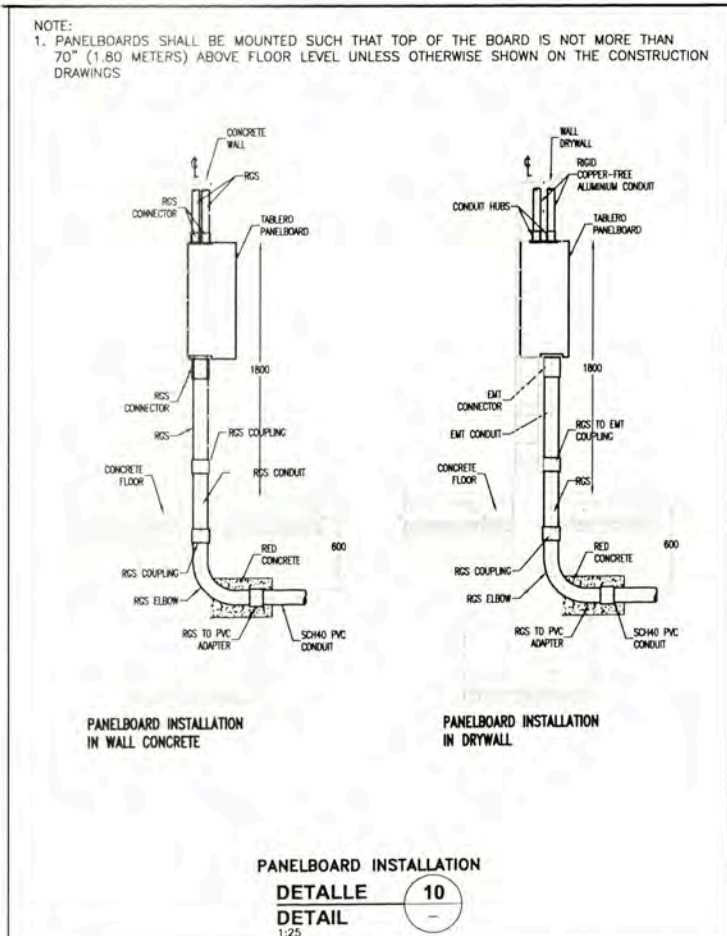
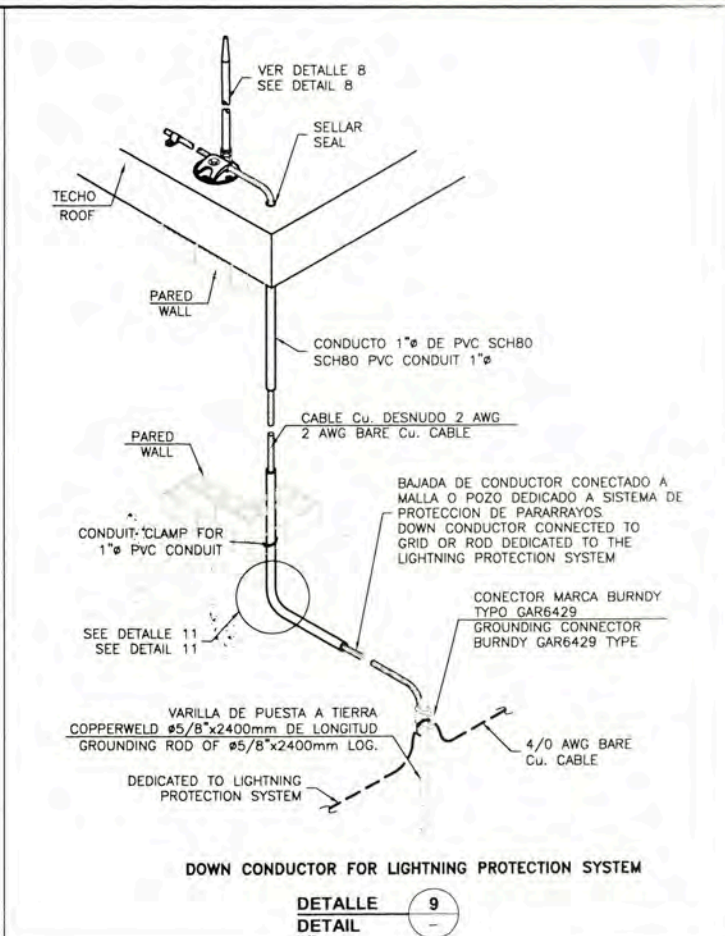
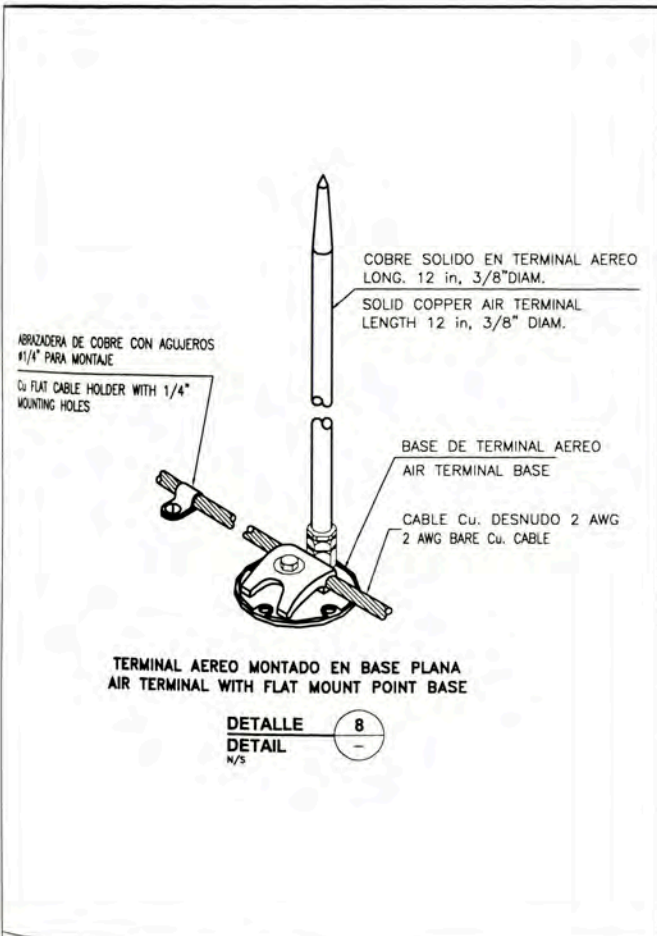
REVISIONS: 0

DATE: 03/09/08

PROJECT NO: 1618

REVISION: 0

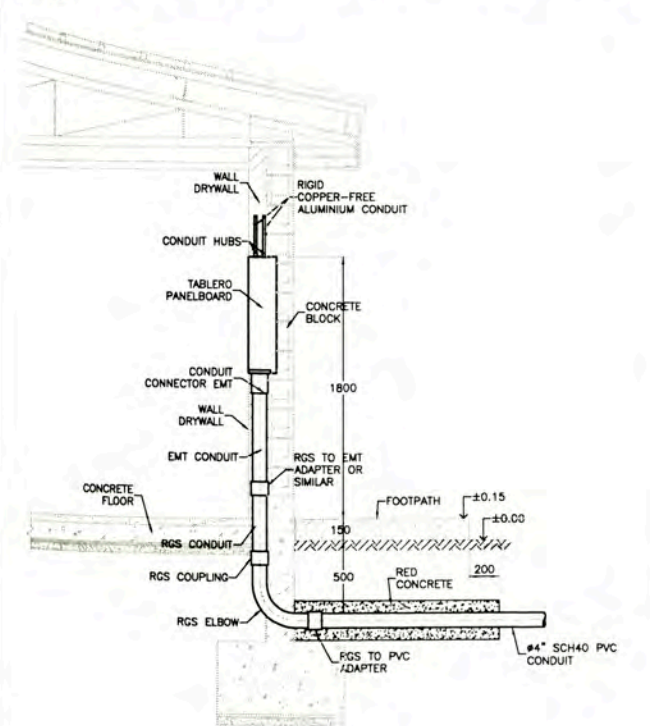
DRAWING NO: 157883-620-XR-DR-2637-04



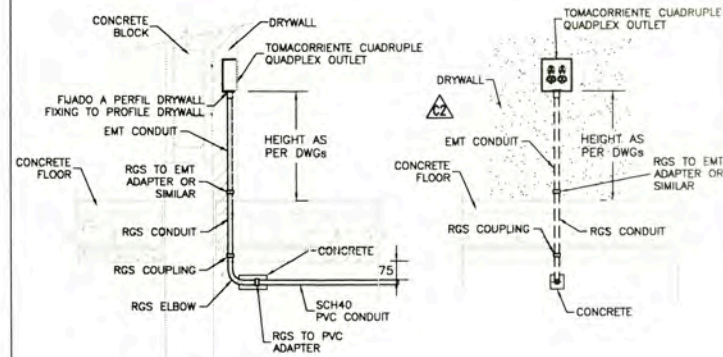
157883-620-XR-DR-0831-03	GROUNDING SYSTEM LAYOUT FIRE STATION BUILDING A-800S
157883-620-XR-DR-0831-02	POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION A-800S
157883-620-XR-DR-0731-03	ADMINISTRATION BUILDING A-800A GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT
157883-620-XR-DR-0731-02	POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-800A

	UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING NO: 157883-620-XR-DR-2637-05 SHEET 2 OF 2	
	PROJECT: PERMANENT COMMUNITY BUILDINGS SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	LOCATION: PAMPA MELCHORITA	DRAWING BY: WPA SCALE: INDICATED	DESIGNED BY: COU DATE: 03/09/08

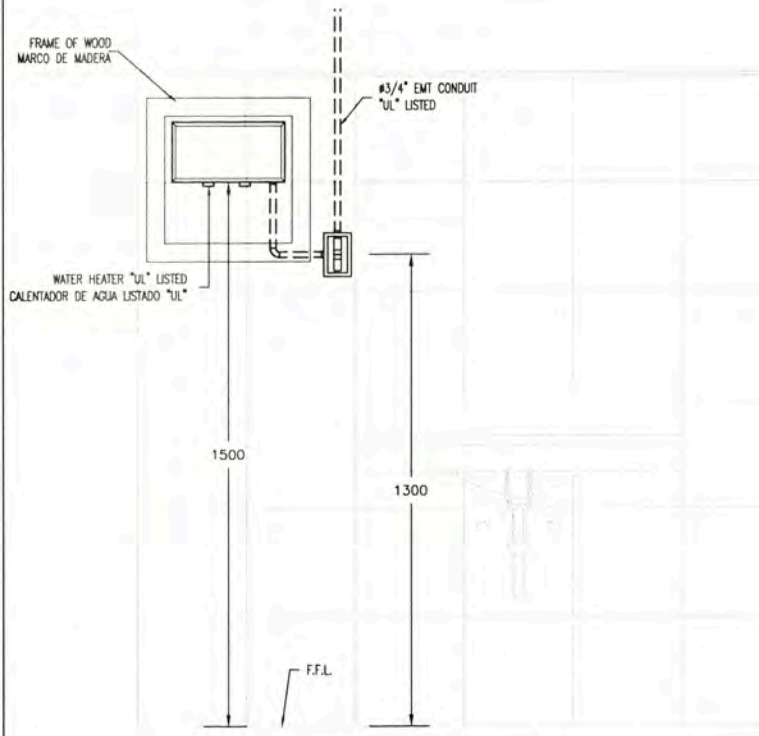
NOTE:
1. PANELBOARDS SHALL BE MOUNTED SUCH THAT TOP OF THE BOARD IS NOT MORE THAN 70" (1.80 METERS) ABOVE FLOOR LEVEL UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS



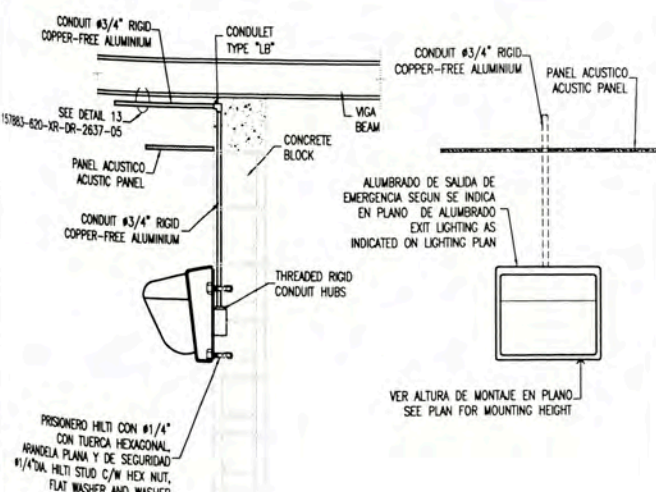
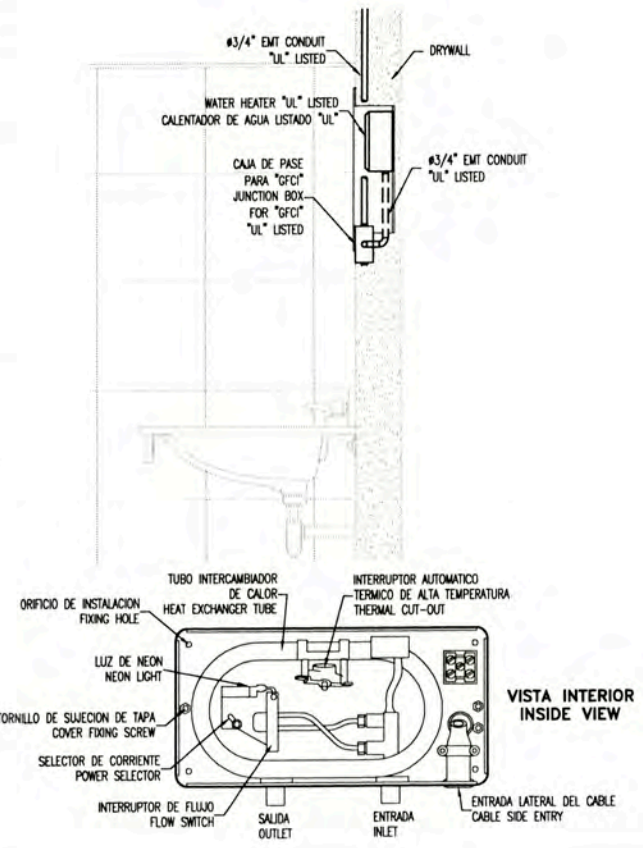
PANELBOARD INSTALLATION
DETALLE 1
DETAIL 1:25



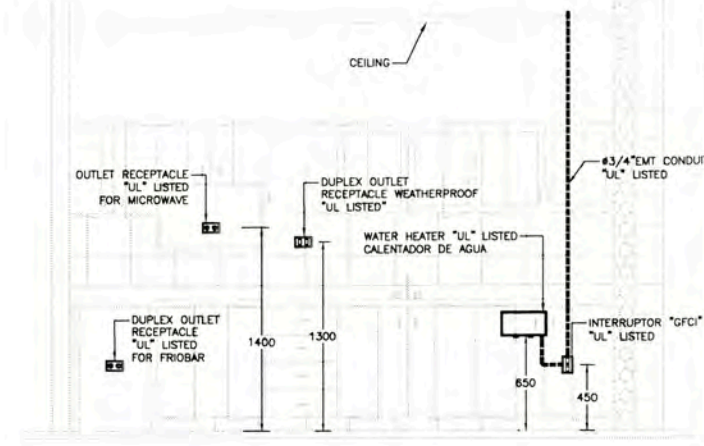
DRYWALL OUTLET
TOMACORRIENTE CUADRUPLE QUADPLEX OUTLET
DETALLE 2
DETAIL 1:15



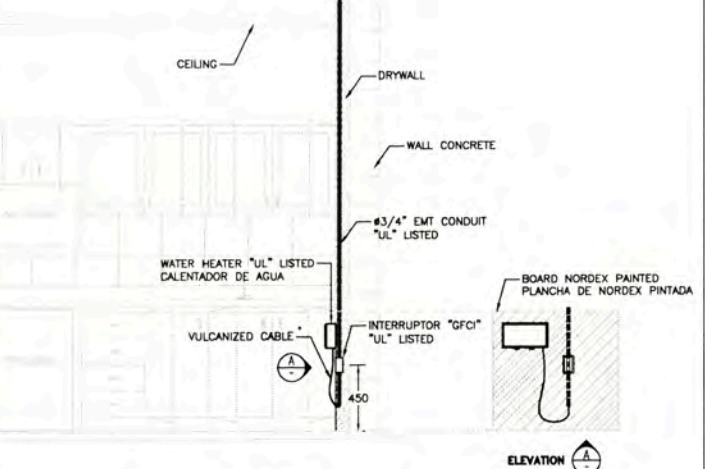
DETALLE TÍPICO DE CALENTADOR DE AGUA
WATER HEATER TYPICAL DETAIL
DETALLE 3
DETAIL 1:10



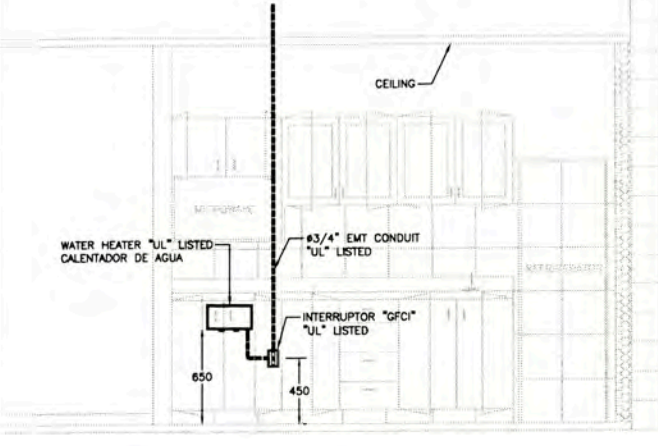
EQUIPO DE ALUMBRADO TIPO SOCKETS
LIGHTING FIXTURE SOCKETS TYPE
DETALLE 4
DETAIL 5/7



INSTALACION DE CALENTADOR DE AGUA EN MUEBLERIA
WATER HEATER INSTALLATION IN FURNITURE A-8007
DETALLE 5
DETAIL 1:25



INSTALACION DE CALENTADOR DE AGUA EN MUEBLERIA
WATER HEATER INSTALLATION IN FURNITURE A-8005
DETALLE 6
DETAIL 1:25



INSTALACION DE CALENTADOR DE AGUA EN MUEBLERIA
WATER HEATER INSTALLATION IN FURNITURE A-8004
DETALLE 7
DETAIL 1:25

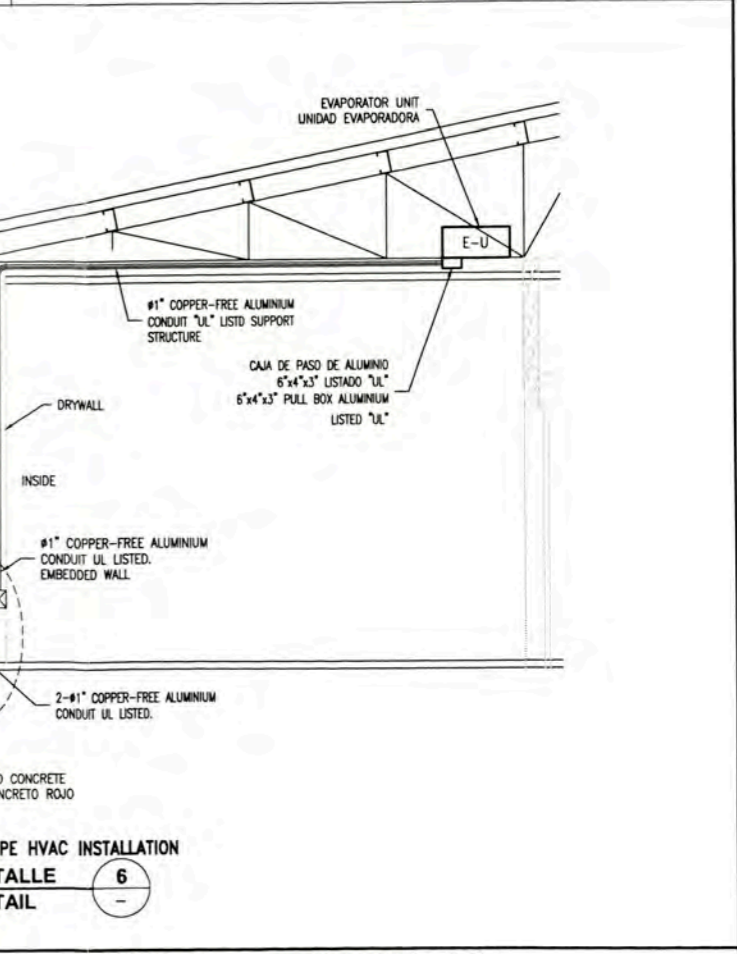
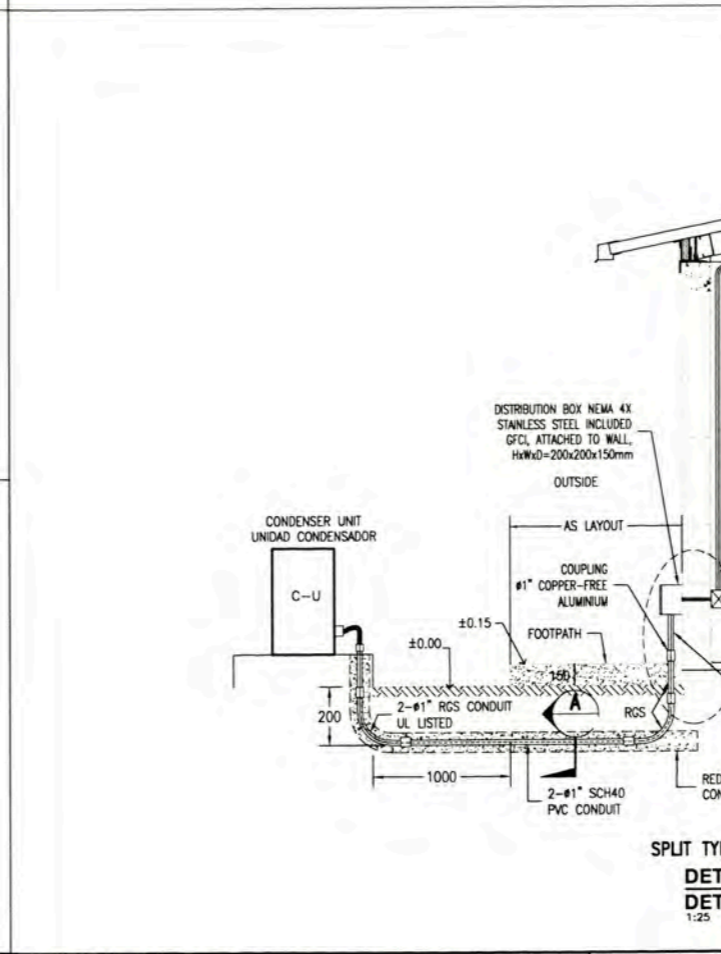
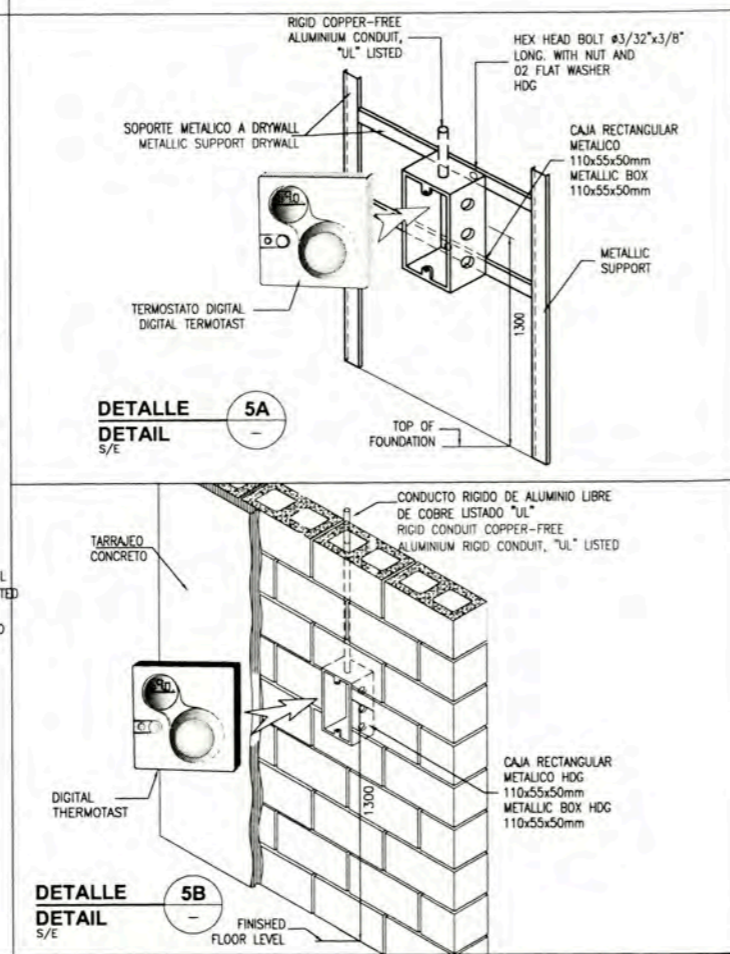
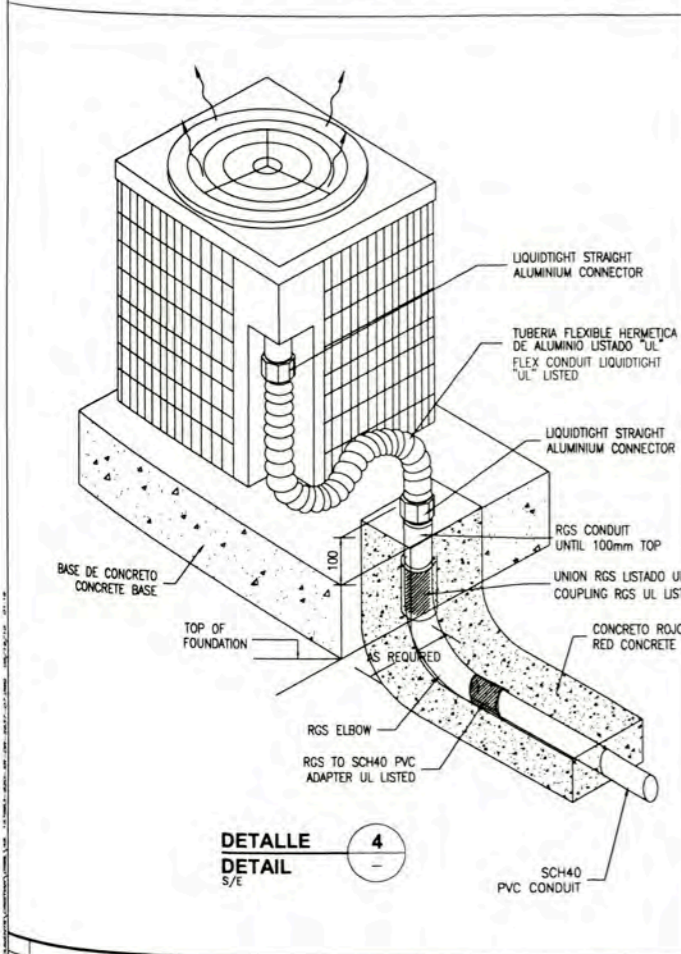
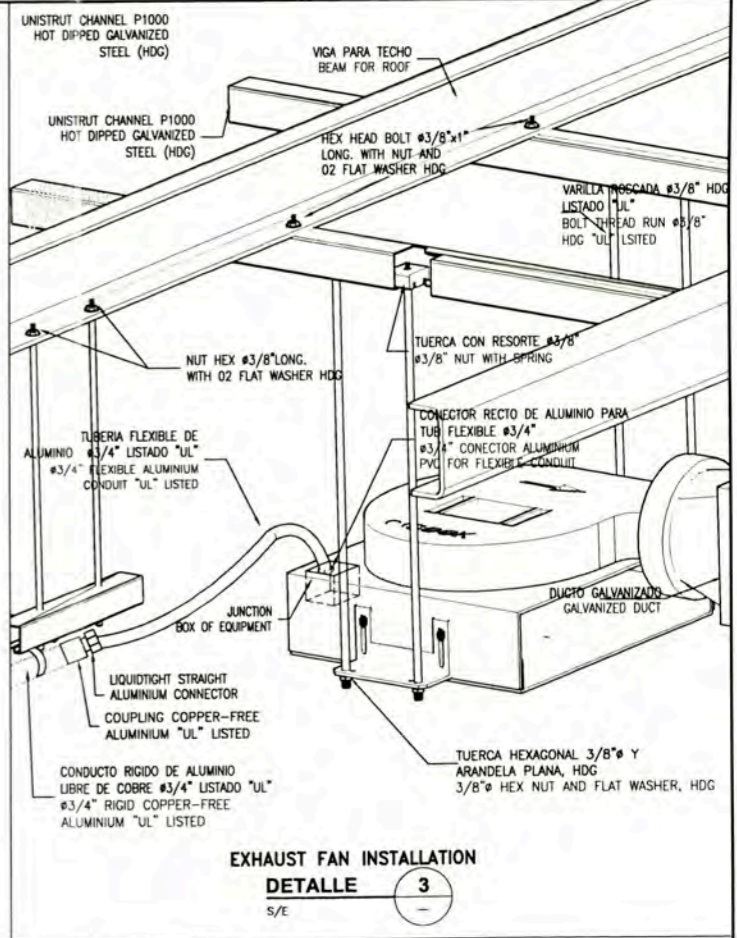
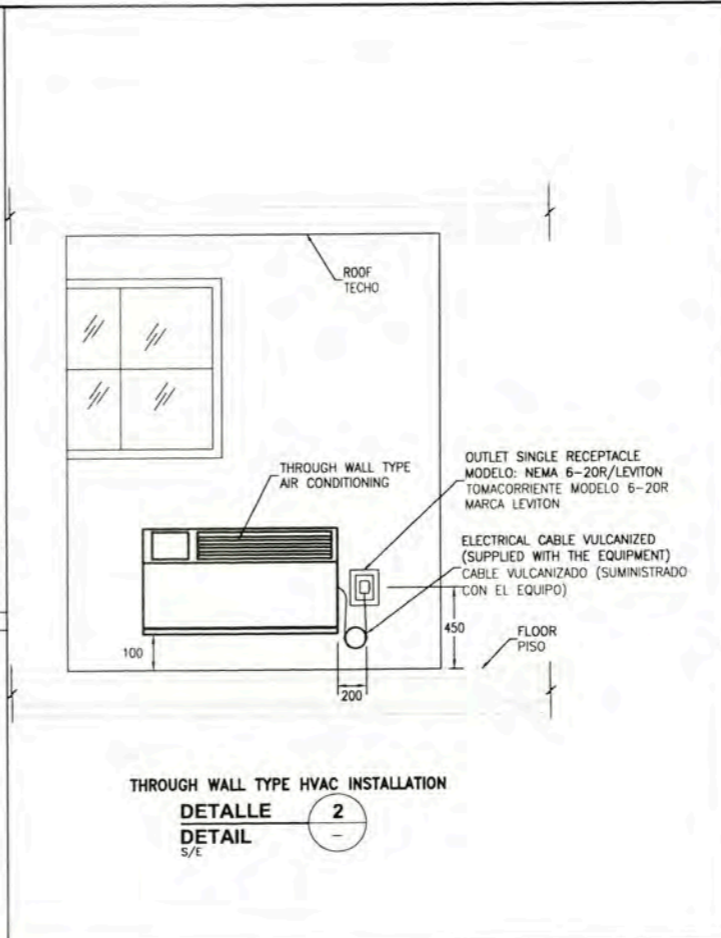
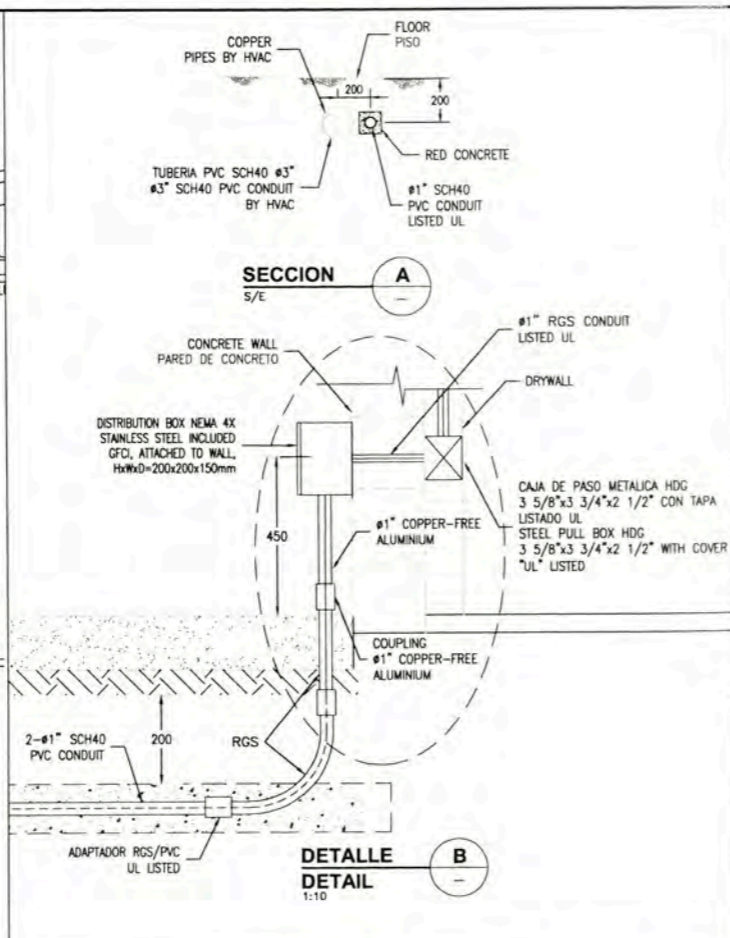
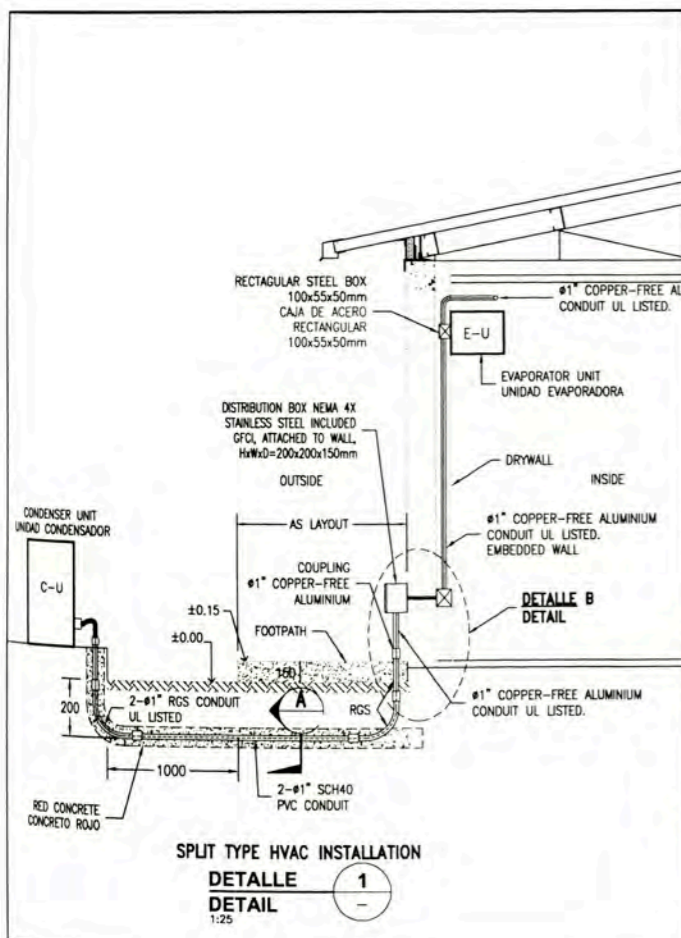
157883-620-XR-DR-1031-01	LIGHTING DISTRIBUTION LAYOUT JETTY GATE HOUSE BUILDING A-8008
157883-620-XR-DR-1031-02	POWER AND RECEPTACLE OUTLETS LAYOUT JETTY GATE HOUSE BUILDING A-8008
157883-620-XR-DR-0931-05	POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY GUARD BUILDING A-8008
157883-620-XR-DR-0931-02	POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY RECEPTION BUILDING A-8007
157883-620-XR-DR-0831-02	POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION BUILDING A8005
157883-620-XR-DR-0731-02	POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004
DATE: 23/09/09	WPA MEJ
BY: [Signature]	APPROVED: [Signature]
DATE: 23/09/09	WPA MEJ
BY: [Signature]	APPROVED: [Signature]



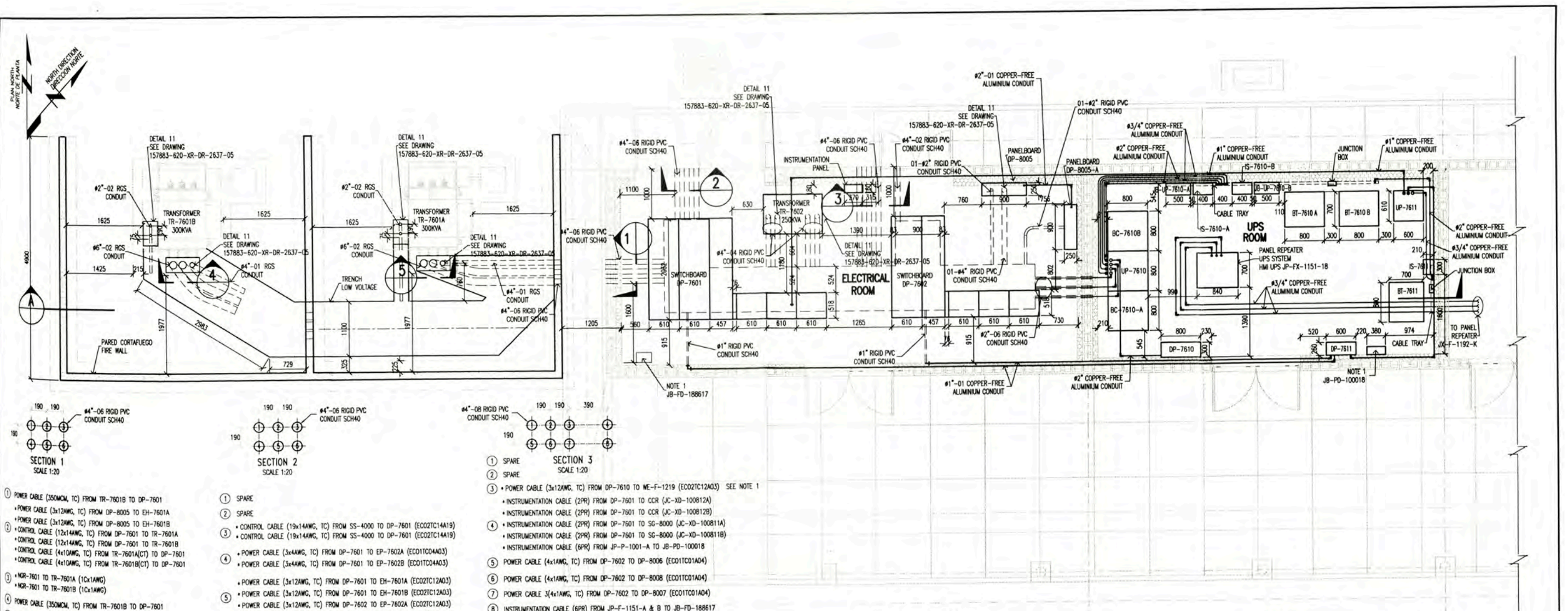
UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)
PROJECT: PERMANENT COMMUNITY BUILDINGS
SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)
LOCATION: PAMPA MELCHORTA

OUT SIDE BATTERY LIMITS - OSBL
ELECTRICAL INSTALLATIONS DETAILS - NOTES

DRAWING BY: WPA	DESIGNED BY: COU	REVISED BY: FTA	APPROVED BY: JMG	DRAWING NO: 157883-620-XR-DR-2637-06
DATE: 03/09/08	PROJECT NO: 1618	REVISION: 0		

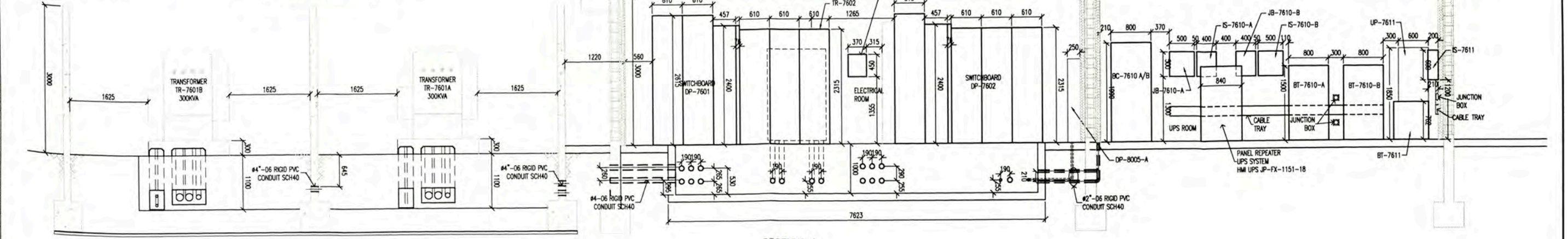
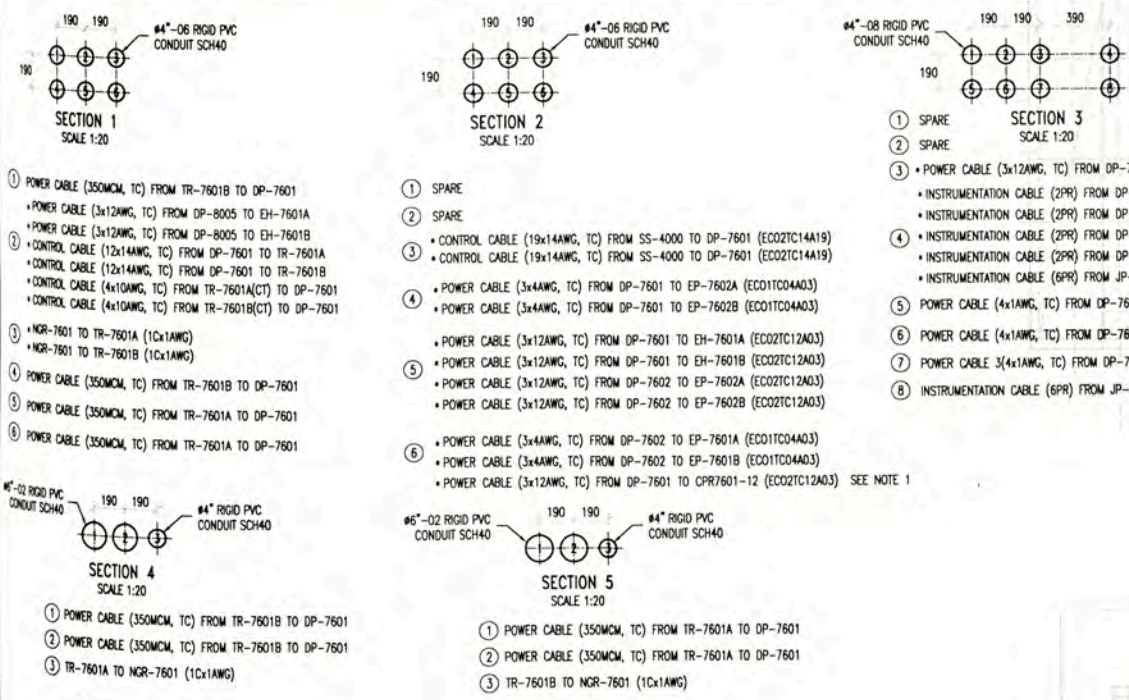


157883-620-XR-DR-1031-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - JETTY GATE HOUSE A-8008					UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIE)		OUT SIDE BATTERY LIMITS - OSBL HVAC INSTALLATION DETAILS AND NOTES	
157883-620-XR-DR-0931-08 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - INTERNAL GATE/SECURITY GUARD BUILDING A-8008					PROJECT: PERMANENT COMMUNITY BUILDINGS		DRAWING NO.: WPA	
157883-620-XR-DR-0931-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - SECURITY RECEPTION BUILDING A-8007					SPECIALITY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		DESIGNED BY: COU	
157883-620-XR-DR-0831-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - FIRE STATION A-8005					LOCATION: PAMPA MELCHORITA		REVISIONS: FTA	
157883-620-XR-DR-0731-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - ADMINISTRATION BUILDING A-8004				TITLE:		APPROVED BY: JMG		
157883-620-XR-DR-0731-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - ADMINISTRATION BUILDING A-8004				SCALE: INDICATED		PROJECT NO: 1618		
157883-620-XR-DR-2637-07 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - ADMINISTRATION BUILDING A-8004				DATE: 03/09/08		REVISIONS: 0		



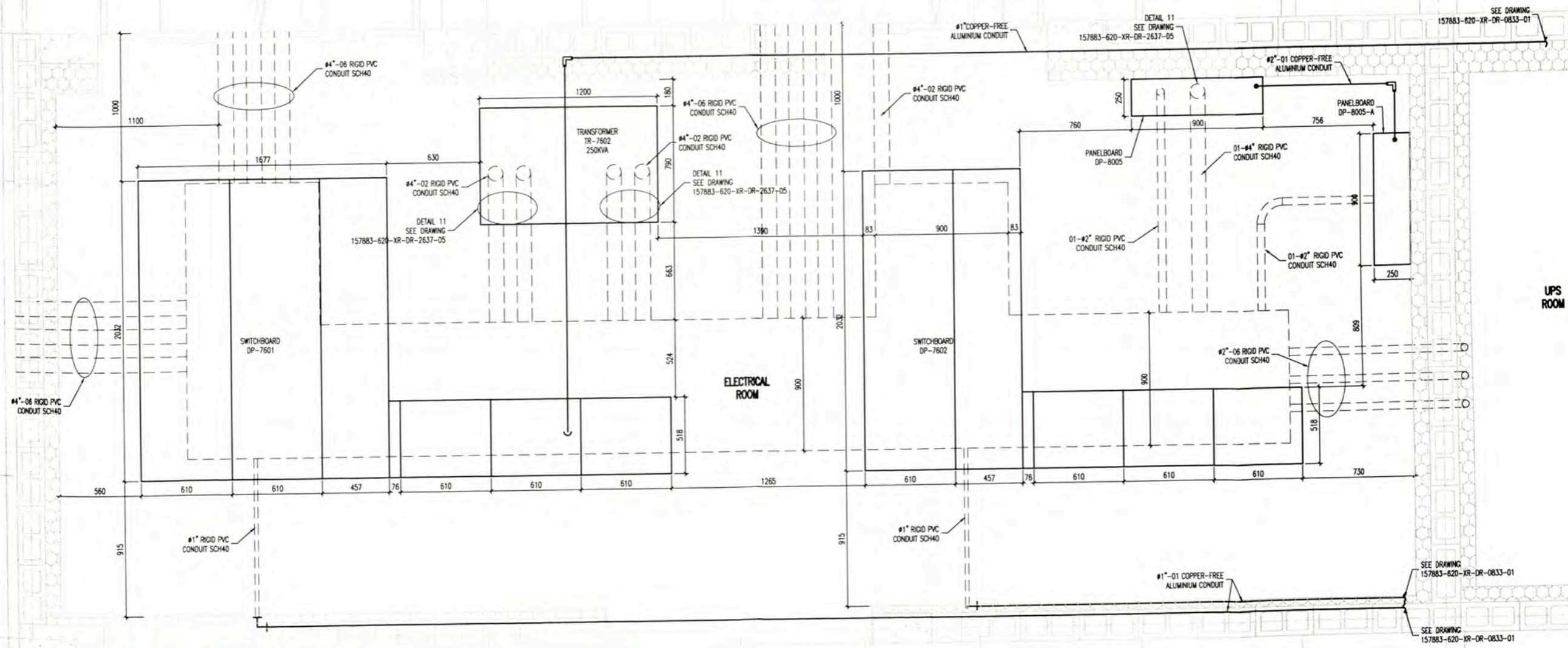
**SUBSTATION SS-7601
ELECTRICAL EQUIPMENT LAYOUT
SCALE 1:40**

NOTAS / NOTES
1. LA INSTALACION Y CANALIZACION SERA POR OTROS
THE INSTALLATION RACEWAYS SHALL BE BY OTHERS



**SECTION A
SCALE 1:40**

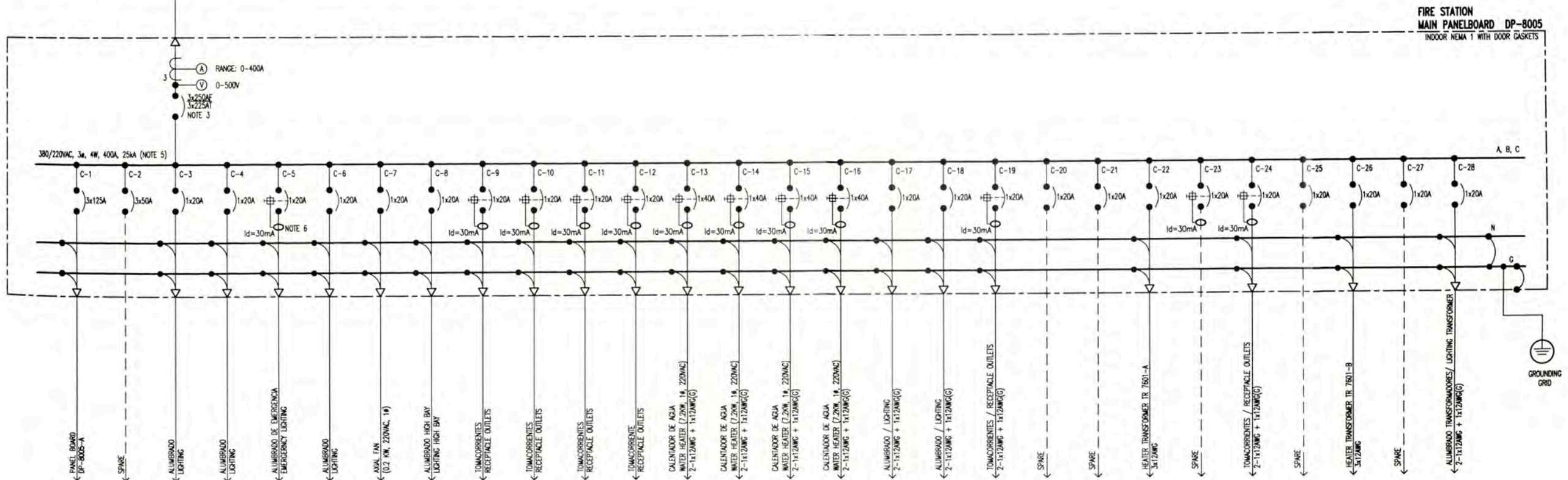
157883-620-XR-DR-0833-02 157883-620-XR-DR-0831-04 157883-620-XR-DR-0831-03 157883-620-XR-DR-0831-02 157883-620-XR-DR-0831-01 157883-620-XR-DR-1935-02		OSBL A-8005 - SUBSTATION SS-7601 ELECTRICAL EQUIPMENT LAYOUT POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS FIRE STATION A-8005 GROUNDING SYSTEM LAYOUT FIRE STATION A-8005 POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION A-8005 LIGHTING DISTRIBUTION LAYOUT FIRE STATION A-8005 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 FIRE STATION		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE) PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) PAMPA MELCHORITA		OUT SIDE BATTERY LIMITS - OSBL A-8005 - SUBSTATION SS-7601 ELECTRICAL EQUIPMENT LAYOUT AND SECTIONS WPA COU FTA JMG 05/09/08 1618 0 157883-620-XR-DR-0833-01	
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**SUBSTATION SS-7601
ELECTRICAL EQUIPMENT LAYOUT
SCALE 1:15**

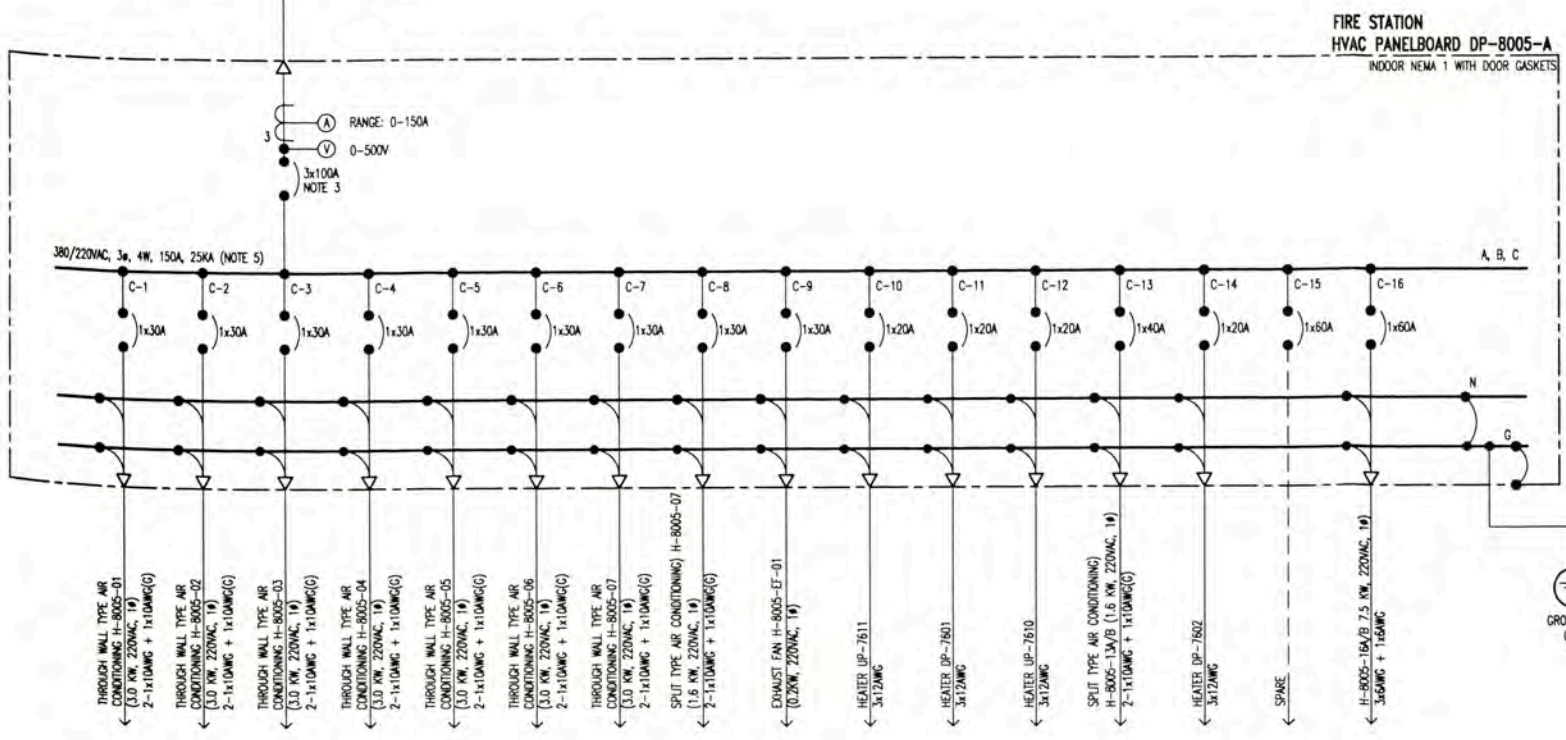
157883-620-XR-DR-0833-01 157883-620-XR-DR-0831-04 157883-620-XR-DR-0831-03 157883-620-XR-DR-0831-02 157883-620-XR-DR-0831-01 157883-620-XR-DR-1935-02		A-8005 SUBSTATION SS-7601 ELECTRICAL EQUIPMENT LAYOUT AND SECTION POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS FIRE STATION A-8005 GROUNDING SYSTEM LAYOUT FIRE STATION A-8005 POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION A-8005 LIGHTING DISTRIBUTION LAYOUT FIRE STATION A-8005 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 FIRE STATION			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE) PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	PAMPA MELCHORITA	DRAWING NO: 157883-620-XR-DR-0833-02 PLAN NO: 157883-620-XR-DR-0833-02	OUT SIDE BATTERY LIMITS - OSBL A-8005 - SUBSTATION SS-7601 ELECTRICAL EQUIPMENT LAYOUT	DESIGNED BY: WPA CHECKED BY: COU DATE: 01/04/09	REVISIONS: 0	PROJECT NO: 1618	APPROVED BY: JMG	DRAWING NO: 157883-620-XR-DR-0833-02
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FED FROM C-4, DP-7602



FIRE STATION
MAIN PANELBOARD DP-8005
INDOOR NEMA 1 WITH DOOR GASKETS

FED FROM C-1, DP-8005

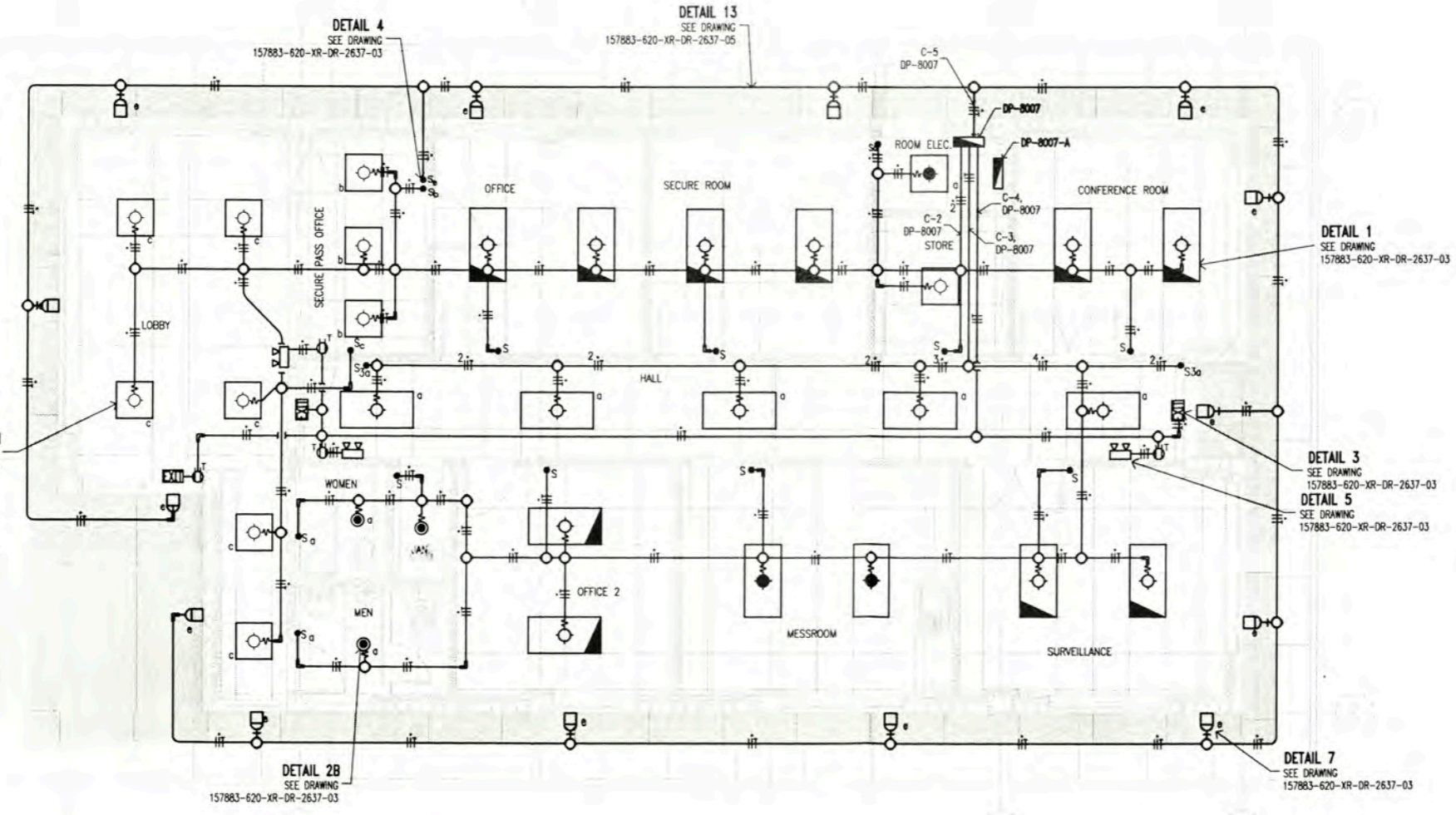


FIRE STATION
HVAC PANELBOARD DP-8005-A
INDOOR NEMA 1 WITH DOOR GASKETS

GENERAL NOTES

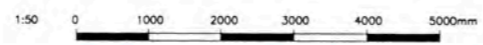
1. VER LISTA DE CABLE ELECTRICOS 157883-620-XR-SH-0003
SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
2. EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
3. LA TENSION NOMINAL DEL AISLAMIENTO UL DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066
THE RATED INSULATION VOLTAGE UL OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
4. CIRCUIT BREAKER, WITH CURRENT TRIP VALUE INDICATED BELOW LINE AND BREAKER FRAME SIZE ABOVE LINE FOR EXAMPLE
3X300AF ----->AMPERES FRAME
3X300AT ----->AMPERES TRIP
5. VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
SEE CALCULATION IN 157883-620-XR-CC-0001
6. ALL GFCIs OR RCDs OR Idn SHALL BE, THE PHASE CONNECTED FROM CB PHASE AND NEUTRAL CONNECTED FROM NEUTRAL BUS BAR
7. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

157883-620-XR-DR-1935-02		ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 A-8005 - FIRE STATION		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	DRAWING NO: PACKAGE SUBSTATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005 AND DP-8005-A	
157883-000-EL-SP-0012		SPECIFICATION FOR PANELBOARD			DESIGNED BY: WPA	DESIGNED BY: COU
157883-000-EL-PH-0001		ELECTRICAL DESIGN PHILOSOPHY		PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS	DATE: 03/09/08	PROJECT NO: 1618
157883-620-XR-DR-1935-02		ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 - A-8005 - FIRE STATION		INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	LOCATION: PAMPA MELCHORITA	REVISION: 0
157883-620-XR-DR-2630-02		OSSR - BUILDINGS ELECTRICAL BLOCK DIAGRAM		PROJECT PROTECT: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	DATE: 03/09/08	DRAWING NO: 157883-620-XR-DR-0835-01
157883-620-XR-DR-2630-02		OSSR - BUILDINGS ELECTRICAL BLOCK DIAGRAM		PROJECT PROTECT: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	DATE: 03/09/08	DRAWING NO: 157883-620-XR-DR-0835-01



LIGHTING DISTRIBUTION LAYOUT
SECURITY RECEPTION BUILDING A-8007
 SCALE 1:50

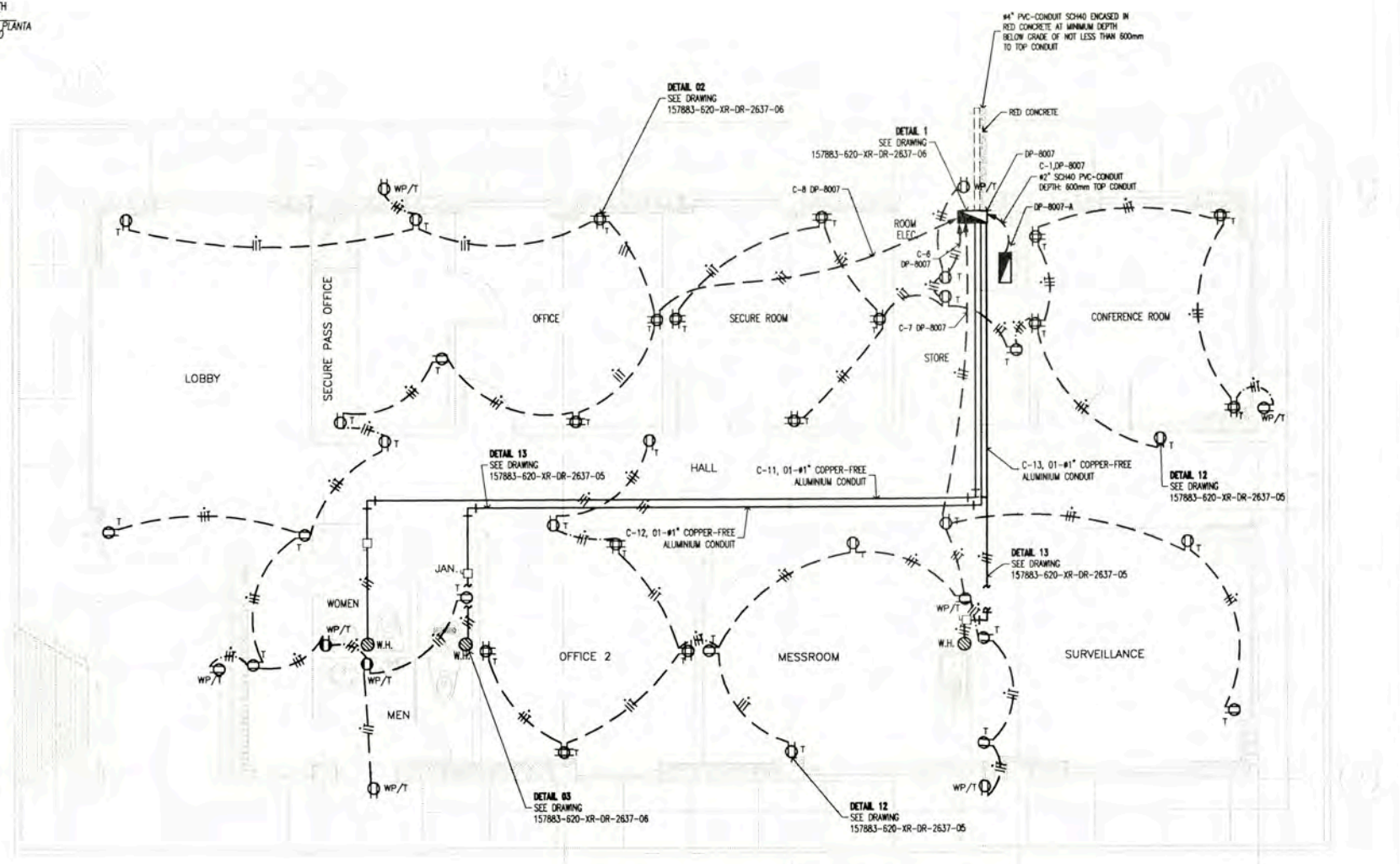
- NOTA/NOTE:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA). LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE LUMINARIAS POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004. CALCULATION TO DETERMINE LIGHTING NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
 - LAS LUMINARIAS ESTAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0025. THE LIGHTING FIXTURE IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0025
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003. THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001. THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001
 - EL CALCULO DE NIVEL DE ILUMINACION SE MUESTRA EN 157883-620-XR-CC-0008. THE CALCULATED LIGHTING LEVEL IS SHOW IN 157883-620-XR-CC-0008



SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/BOX(mm)	ALTURA/HEIGHT(m)
•S ₀	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL" SINGLE POLE SWITCH, 16A, 250VAC, 60HZ, "UL" LISTED	RECTANGULAR 100x55x40 RECTANGULAR 100x55x40	1.30m 1.30m
•2S _{a,b}	02 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL" 02 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100x55x40 RECTANGULAR 100x55x40	1.30m 1.30m
•2S _{3a,b}	01 INTERRUPTOR CONMUTACION Y 01 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL" 01 3-WAY SWITCH AND 01 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100x55x40 RECTANGULAR 100x55x40	1.30m 1.30m
•S _{3a}	01 INTERRUPTOR CONMUTACION, 16A, 250VAC, 60HZ. LISTADO "UL" 01 3-WAY SWITCH 16A, 250VAC, 60HZ, "UL" LISTED	RECTANGULAR 100x55x40 RECTANGULAR 100x55x40	1.30m 1.30m
2S _{3a,3b}	02 INTERRUPTOR CONMUTACION, 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL" 02 3-WAY SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100x55x40 RECTANGULAR 100x55x40	1.30m 1.30m
+++	3/4" RIGID COPPER-FREE ALUMINIUM FOR ABOVE GROUND "UL" LISTED	---	---
⌋	CONDUIT TYPE "LB". COPPER-FREE ALUMINIUM "UL" LISTED	---	---
○	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	---	---

LEYENDA / LEGEND			
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/BOX(mm)	ALTURA/HEIGHT(m)
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 17W TB, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA. LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL". MODELO: 2PM3N 3 17 9LD MVOLT LP741 LITHONIA LIGHTING LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 17W TB. WITH KIT EMERGENCY AUTONOMY 1 HOUR. MAINTENANCE-FREE. 220VAC. "UL" LISTED	JUNCTION BOX	FALSO CIELO
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 17W TB. LISTADA "UL". MODELO: 2PM3N 3 17 9LD MVOLT LP741 LITHONIA LIGHTING LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 17W TB. "UL" LISTED.	JUNCTION BOX	CEILING
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 2 32 12LD MVOLT LP741 LITHONIA LIGHTING. LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	FALSO CIELO
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING. LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	CEILING
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 4 32 32LD MVOLT LP741 LITHONIA LIGHTING. LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	FALSO CIELO
◻	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTIAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 4 32 32LD MVOLT LP741 LITHONIA LIGHTING. LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	CEILING
●	SPOT EMPOTRABLE CON YUGO DE SUECION DE SISTEMA OPTICO FABRICADO EN ACERO GALVANIZADO, REFLECTOR EN ALUMINIO BRILLANTE ESPECULAR ABERTO. INCLUYE DOS LAMPARAS COMPACTAS DE 26W BALASTO MULTIVOLTIAJE. LISTADA "UL". LFB 2 26 TRT MVOLT F803AZ LPI LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
●	RECESSED DOWNLIGHT RUGGED, GALVANIZED STEEL FRAME-IN WITH ADJUSTABLE INTEGRAL YOKE TO RETAIN OPTICAL SYSTEM. OPEN CLEAR SPECULAR ALUMINUM REFLECTOR. INCLUDE TWO 26-WATT COMPACT FLUORESCENT, MULTIVOLT BALLAST. "UL" LISTED. LFB 2 26 TRT MVOLT F803AZ LPI LITHONIA LIGHTING.	JUNCTION BOX	CEILING
◻	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 70W. BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 70S 240 DF LPI LITHONIA LIGHTING.	---	2.20m
◻	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINUM HOUSING WITH SPECULAR ANODIZED ALUMINUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 70 WATT CLEAR HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 70S 240 DF LPI LITHONIA LIGHTING	---	2.20m
◻	TABLERO ELECTRICO EMPOTRADO	---	1.80 BORDE SUPERIOR
◻	PANELBOARD EMBEDDED.	---	1.80 TOP
◻	LUMINARIA DE EMERGENCIA PARA ADOSAR A PARED, CON 02 LAMPARAS FLUORESCENTES COMPACTAS DE 26W, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA. LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL".	JUNCTION BOX	2.20m
◻	EMERGENCY LIGHT FIXTURE TO ATTACHED TO WALL, WITH 02 COMPACT FLUORESCENT LAMPS OF 26W, WITH KIT EMERGENCY AUTONOMY 1 HOUR. MAINTENANCE-FREE. 220VAC. "UL" LISTED	JUNCTION BOX	2.20m
◻	TOMACORRIENTE DUPLEX, BIPOLAR PARA ESPIGAS PLANAS Y REDONDAS CON TOMA A TIERRA, 250V, 60HZ, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	2.20m
◻	DUPLEX RECEPTACLE OUTLET, WITH GROUNDING, 250V, 60HZ, 15A, ENCASED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	2.20m
+	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
+	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
+	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
EXIT	LUMINARIA DE SEÑALIZACION; CON 01 LAMPARA FLUORESCENTE DE 26W, 220VAC, 1#, CON ALTO F.D.P. LISTADO "UL"	---	2.20m
EXIT	EXIT LIGHT; FLUORESCENT LAMP WITH 01 TO 26W, 220VAC, 1 #, WITH HIGH F.D.P. "UL" LISTED	---	2.20m
—	CONDUCTO FLEXIBLE DE ALUMINIO LIBRE DE COBRE #3/4" LISTADO "UL"	---	---
—	FLEXIBLE CONDUIT COPPER-FREE ALUMINIUM #3/4" "UL" LISTED	---	---
•S	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
•S	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100x55x40	1.30m

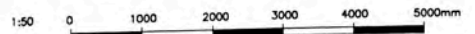
157883-620-XR-CC-0008	ILLUMINATION LEVELS CALCULATION		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE) PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) PAMPA MELCHORITA	DESIGNING: WPA	DESIGNED: COU	REVISOR: FTA	APPROVED: JMG	DATE: 05/09/08	PROJECT NO: 1618	DRAWING NO: 157883-620-XR-DR-0931-01	
157883-620-XR-DR-0935-01	PACKAGE SUBSTATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008										
157883-620-XR-DR-2637-03	ELECTRICAL INSTALLATIONS DETAIL AND NOTES										
157883-620-XR-DR-0931-04	POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - SECURITY RECEPTION BUILDING A-8007										
157883-620-XR-DR-0931-03	GROUNDING SYSTEM LAYOUT - SECURITY RECEPTION BUILDING A-8007	ISSUED FOR CONSTRUCTION	DATE: 07/11/09	DESIGNED: WPA	APPROVED: MEJ	DATE: 07/11/09	DESIGNED: WPA	APPROVED: MEJ	DATE: 07/11/09	DESIGNED: WPA	APPROVED: MEJ



POWER AND SOCKET OUTLETS LAYOUT
SECURITY RECEPTION BUILDING A-8007
PLANT
 SCALE 1:50

LEYENDA / LEGEND			
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CALIBRE/SIZE(mm)	ALTIMA/HEIGHT(m)
⊗ R	CAJA DE PASO RECTANGULAR LISTADO "UL" NEMA 12, 100x55x50mm PULL BOX "UL" LISTED, NEMA 12, 100x55x50mm	RECTANGULAR	0.45m
⊗ T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊗ T	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊗ T	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
⊗ T	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊗ T	TOMACORRIENTE DUPLEX BIPOLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	2.20m
⊗ T	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	2.20m
⊗ WP/T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊗ WP/T	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊗ WP/T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
⊗ WP/T	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊗ T	TOMACORRIENTE CUADRUPLA CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊗ T	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
▬	TABLERO ELECTRICO EMPOTRADO	---	1.80 BORDE SUPERIOR
▬	PANELBOARD EMBEDED.	---	1.80 TOP
—+—	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
— —	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
—-—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
⊗	INTERRUPTOR DIFERENCIAL "ID" DE 1x40A, 220VAC, 10KA, EMPOTRADO EN PARED MODELO BP, MARCA GENERAL ELECTRIC	---	1.30m
⊗	GROUND FAULT CIRCUIT INTERRUPTOR "GFCI" 1x40A, 220VAC, 10KA, EMBEDED WALL MODEL: BP, BRANCH: GENERAL ELECTRIC	---	1.30m
⊗	CAJA DE CONEXION TERMICA ELECTRICA 7.2KW, 220VAC, 60Hz, LISTADO "UL" MODEL: BP, BRANCH: GENERAL ELECTRIC	---	0.45m
⊗	BOX OF CONNECTION OF WATER HEATERS 7.2KW, 220VAC, 60Hz, "UL" LISTED	---	0.45m
—	CONDUCTO DE #3/4" PVC-CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO LISTADO "UL"	---	---
—	#3/4" SCH40 PVC-CONDUIT EMBEDED UNDER FLOOR "UL" LISTED	---	---
—	CONDUCTO DE #3/4" EMT, EMPOTRADO EN PARED DE DRYWALL LISTADO "UL"	---	---
—	#3/4" EMT, EMBEDED ON WALL OF DRYWALL "UL" LISTED	---	---
—	RED COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND "UL" LISTED	---	---
—	TYPE "UL", "UL" LISTED, COPPER-FREE ALUMINIUM CONDUIT	---	---
⊗	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	---	---
⊗	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN ESTRUCTURA DE TECHO LISTADO "UL"	RECTANGULAR 100x55x40	---
⊗	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORTED IN ROOF LISTADO "UL"	RECTANGULAR 100x55x40	---
⊗	TOMACORRIENTE CUADRUPLA CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN MESA DE TRABAJO LISTADO "UL"	RECTANGULAR 100x55x40	---
⊗	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT IN WORK TABLE "UL" LISTED	RECTANGULAR 100x55x40	---

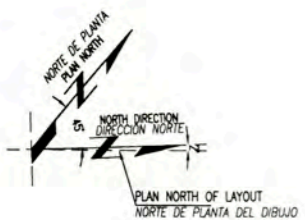
- NOTA/NOTE:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
 LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004
 CALCULATION TO DETERMINE SOCKETS OUTLET NUMBER BY CIRCUIT IS 157883-620-XR-CC-0004
 - LOS TOMACORRIENTES ESTARAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XS-DR-0026
 SOCKET OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
 THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001
 THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001



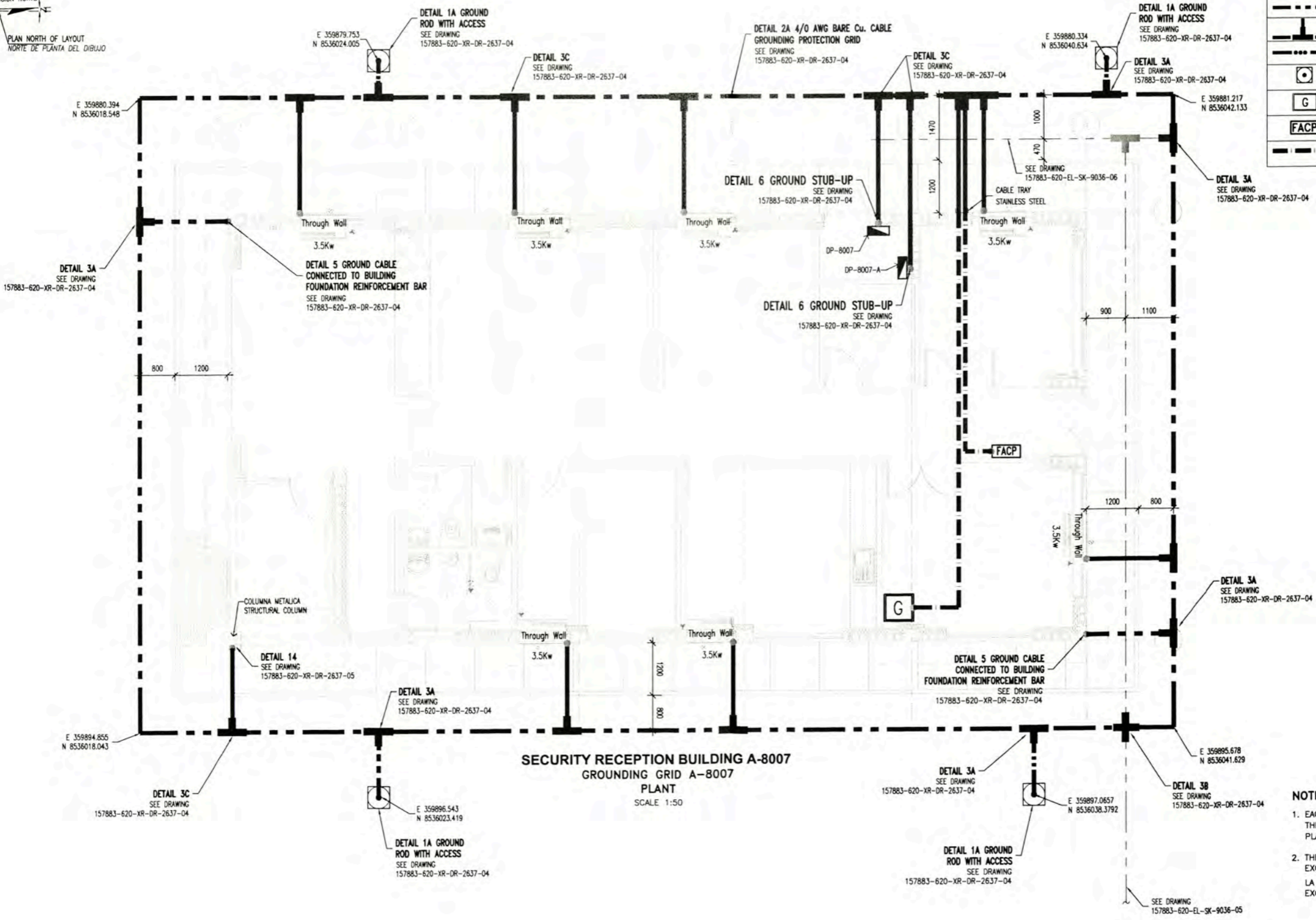
157883-620-XR-DR-1935-02 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-7801 AND DP-7802			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING NO.: 157883-620-XR-DR-0931-02
157883-620-XR-DR-0935-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008			PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DESIGNED BY: WPA
157883-620-XR-DR-2637-05 OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2			INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		CHECKED BY: COU
157883-620-XR-DR-0931-04 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS SECURITY RECEPTION BUILDING A-8007			LOCALIDAD: PAMPA MELCHORITA		REVISADO BY: FTA
157883-620-XR-DR-0931-03 GROUNDING SYSTEM LAYOUT SECURITY RECEPTION BUILDING A-8007			PROJECT NO.: 1818		APROBADO BY: JMG
157883-620-XR-DR-0931-01 LIGHTING DISTRIBUTION LAYOUT SECURITY RECEPTION BUILDING A-8007		SCALE: INDICATED		REVISION: 0	

OUT SIDE BATTERY LIMITS - OSBL
POWER AND SOCKET OUTLETS LAYOUT
SECURITY RECEPTION BUILDING A-8007

DRAWING NO.:
157883-620-XR-DR-0931-02



LEYENDA / LEGEND	
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION
	TABLERO / PANELBOARD
	CONDUCTOR AISLADO TH(WERDE), 2/0 AWG 2/0 AWG PVC GREEN SHEATHED Cu CABLE
	CABLE DE COBRE DESNUDO 4/0 AWG 4/0 AWG BARE Cu CABLE
	SOLDADURA EXOTERMICA TIPO TEE TEE JOINT EXOTHERMIC WELD
	CONDUCTOR AISLADO TH(WERDE), 4/0 AWG 4/0 AWG PVC GREEN SHEATHED Cu CABLE
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO GROUNDING ROD WITH INSPECTION WELL
	GABINETE RITAL 15RU (POR OTROS) CABINET RITAL 15RU (BY OTHERS)
	PANEL DE ALARMA CONTRA INCENDIOS EMPOTRADO FIRE ALARM CONTROL PANEL EMBEDDED
	CONDUCTOR AISLADO TH(WERDE), 2/0 AWG. POR TECHO 2/0 AWG PVC GREEN SHEATHED Cu CABLE STRUCTURE ROOF



- NOTE:**
1. EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS TO PLANT GROUND RING.
 2. THE TOTAL RESISTANCE OF THE GROUNDING SYSTEM SHALL NOT EXCEED 5 ohms.
LA RESISTENCIA TOTAL DEL SISTEMA DE PUESTA A TIERRA NO EXCEDERA A LOS 5 ohms.



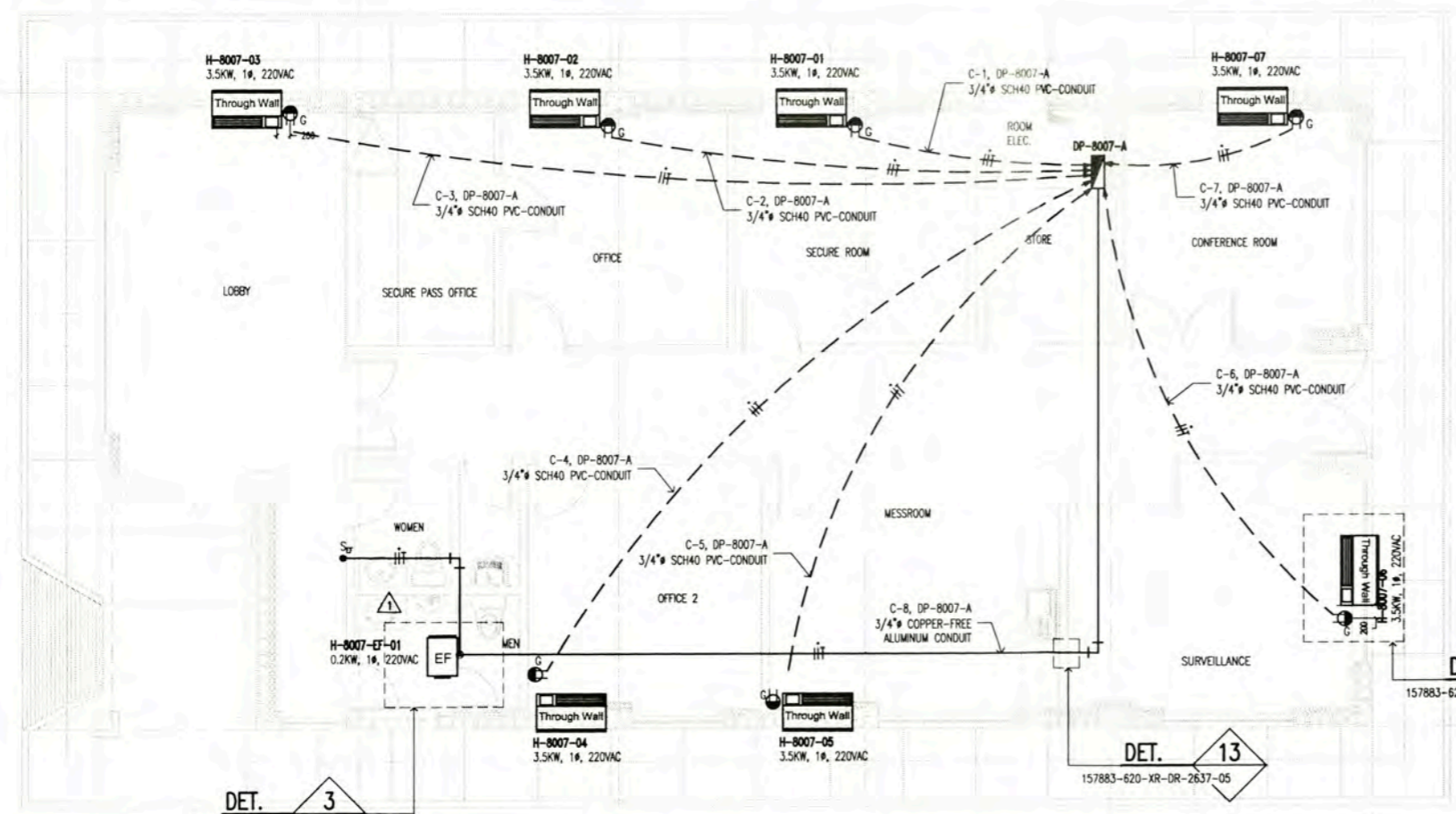
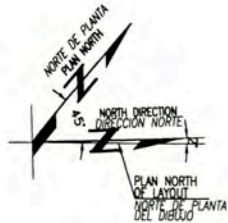
NO.	REVISION	DATE	BY	CHKD.	APP'D.	DESCRIPTION
1		24/11/09	WPA	MEJ		DESIGN AND INSTALLATION OF GROUNDING SYSTEM
2		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
3		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
4		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
5		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
6		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
7		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
8		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
9		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM
10		24/11/09	WPA	MEJ		REVISION OF GROUNDING SYSTEM



UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PROYECTO: PERMANENT COMMUNITY BUILDINGS
 ESPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)
 LOCALIDAD: PAMPA MELCHORITA

DRAWING TITLE		DRAWING NO.		DRAWING PLAN	
GROUNDING SYSTEM LAYOUT		157883-620-XR-DR-0931-03		PLAN 01	
DESIGNED BY: WPA	DESIGNED BY: COU	REVISION BY: FTA	REVISION BY: JMG	APPROVED BY: JMG	APPROVED BY: JMG
DATE: 05/09/08	DATE: 05/09/08	PROJECT NO: 1618	REVISION: 0	PROJECT NO: 1618	REVISION: 0



LEYENDA / LEGEND			
SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA(m) HEIGHT(m)
	CONDUCTOR DE FASE / PHASE CONDUCTOR	--	--
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	--	--
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	--	--
	RIGID COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND. "UL" LISTED	--	TECHO/ROOF
	CONDUIT TYPE "LB", "UL" LISTED	--	TECHO/ROOF
	EQUIPO AIRE ACONDICIONADO-THROUGH WALL / AIR CONDITIONING-THROUGH WALL	--	0.10
	TOMACORRIENTE SIMPLE MODELO 6-20R/LEVITON	--	0.45
	SINGLE RECEPTACLE MODEL 6-20R/LEVITON	--	0.45
	EXTRACTOR DE AIRE	--	TECHO/ROOF
	EXHAUST FAN	--	TECHO/ROOF
	TABLERO ELECTRICO EMPOTRADO LISTADO UL	--	1.80 NIVEL SUP.
	PANELBOARD EMBEDDED. "UL" LISTED	--	1.80 TOP
	CONDUCTO DE 3/4" SCH40 PVC-CONDUIT EMPOTRADO EN PISO. LISTADO "UL"	--	--
	SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	--	--
	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. MODELO 1221-2I DE LEVITON	RECTANGULAR 100x55x40	1.30
	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. BRANCH 1221-2I WITH COVER LEVITON	RECTANGULAR 100x55x40	1.30

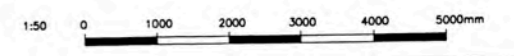
NOTA/NOTE
 1.- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
 THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 2.- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
 THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001

DET. 3
157883-620-XR-DR-2637-07

DET. 13
157883-620-XR-DR-2637-05

DET. 2
157883-620-XR-DR-2637-07

POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS
SECURITY RECEPTION BUILDING A-8007
 SCALE 1:50



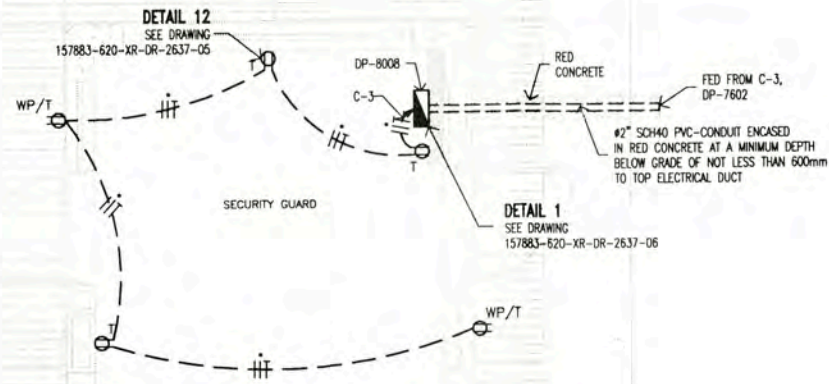
157883-620-XR-DR-0931-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008					UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIE)				OUT SITE BATTERY LIMITS - OSBL POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS SECURITY RECEPTION BUILDING A-8007			
157883-620-XR-DR-2637-07 OSBL HVAC INSTALLATION DETAILS AND NOTES					PERMANENT COMMUNITY BUILDINGS				DRAWING NO: 157883-620-XR-DR-0931-04			
157883-620-XR-DR-0931-03 GROUNDING SYSTEM LAYOUT-SECURITY RECEPTION BUILDING A-8007				PROJECT: PERMANENT COMMUNITY BUILDINGS				DRAWING BY: WPA				
157883-620-XR-DR-0931-02 POWER AND RECEPTACLE OUTLETS-SECURITY RECEPTION BUILDING A-8007				SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)				DESIGNED BY: COU				
157883-620-XR-DR-0931-01 LIGHTING DISTRIBUTION LAYOUT SECURITY RECEPTION BUILDING A-8007				LOCATION: PAMPA MELCHORITA				REVISIONS: FTA				
DATE: 27/05/08				DATE: 05/09/08				PROJECT NO: 1618				
DRAWING APPROVED BY: MEJ				DATE: 05/09/08				REVISIONS: 0				



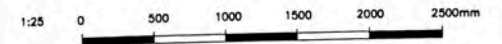
LEYENDA / LEGEND			
SYMBOL/SYMBOL	DESCRIPTION/DESCRIPTION	CABLE/CONDUCTOR	ALTIMETRIA/HEIGHT
	TABLERO ELECTRICO EMPOTRADO PANELBOARD EMBEDDED.		1.80 BORDE SUPERIOR 1.80 TOP
	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. A PRUEBA DE AGUA. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
	CONDUCTO DE #3/4" PVC-CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO. LISTADO "UL"	---	---
	#3/4" SCH40 PVC-CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	---	---

NOTA/NOTE:

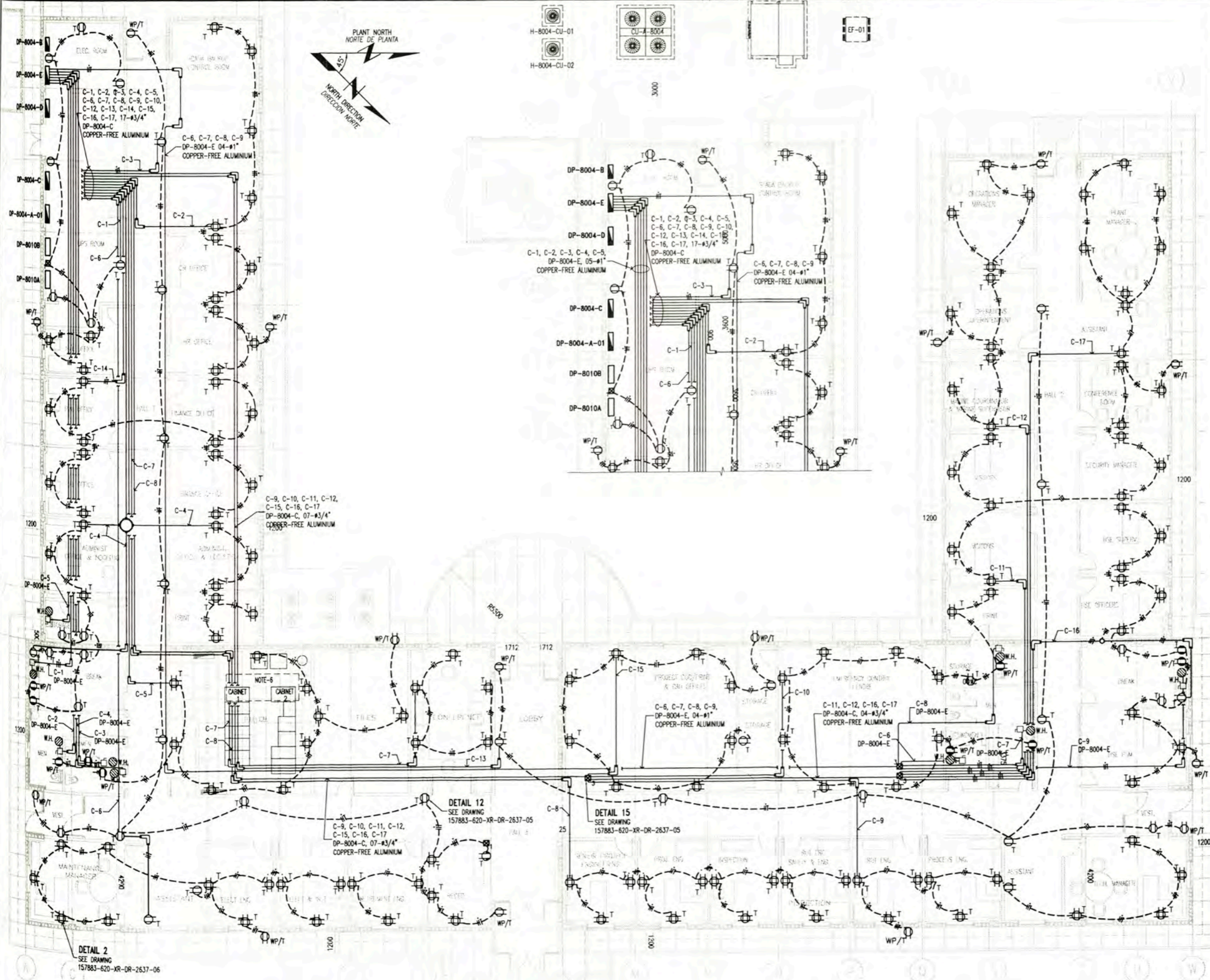
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
LIGHTING CIRCUITS AND RECEPTACLE OUTLETS SHALL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
- EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004
CALCULATION TO DETERMINE RECEPTACLE OUTLET NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
- LOS TOMACORRIENTES ESTARAN DE ACUERDO CON LA HOJA TECNICA EN 157883-620-XR-DS-0026
RECEPTACLE OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
THE ELECTRICAL CABLE SCHEDULE IS SHOWN IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOWN IN 157883-620-XR-SH-0001



POWER AND RECEPTACLE OUTLETS LAYOUT
SECURITY GUARD BUILDING A-8008
 PLANT
 SCALE 1:25



ISSUED FOR CONSTRUCTION		DATE: 26/05/08	DESIGNED BY: WPA	APPROVED BY: MEJ	157883-620-XR-DR-1935-02	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-7601 AND DP-7602 FIRE STATION A-8008	UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	OUT SITE BATTERY LIMITS - OSBL POWER AND RECEPTACLE OUTLETS LAYOUT SECURITY GUARD BUILDING A-8008	
		DATE: 27/05/08	DESIGNED BY: WPA	APPROVED BY: MEJ	157883-620-XR-DR-0935-01	ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8007, DP-8007-A AND DP-8008		PROJECT: PERMANENT COMMUNITY BUILDINGS	SCALE: INDICATED
					157883-620-XR-DR-2637-05	OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2	SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)	DATE: 05/09/08	
					157883-620-XR-DR-0931-08	POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS SECURITY GUARD BUILDING A-8008	LOCATION: PAMPA MELCHORITA	PROJECT NO: 1618	
					157883-620-XR-DR-0931-07	GROUNDING SYSTEM LAYOUT SECURITY GUARD BUILDING A-8008		REVISOR: 0	
					157883-620-XR-DR-0931-09	LIGHTING DISTRIBUTION LAYOUT SECURITY GUARD BUILDING A-8008			

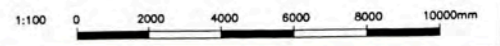


LEYENDA / LEGEND			
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/BOXES (mm)	ALUMEN/HEIGHT (m)
⊠	CAJA DE PASO RECTANGULAR LISTADO "UL" NEMA 12, 100x55x50mm PULL BOX "UL" LISTED, NEMA 12, 100x55x50mm	RECTANGULAR	0.45m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊠	TOMACORRIENTE DUPLEX BIPOLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	2.20m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	2.20m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, A PRUEBA DE AGUA LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊠	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED	RECTANGULAR 100x55x40	1.30m
⊠	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊠	TOMACORRIENTE CUADRUPLA CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊠	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊠	TABLERO ELECTRICO EMPOTRADO	---	1.80 BORDE SUPERIOR
⊠	PANELBOARD EMBEDDED	---	1.80 TOP
—	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
—	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
⊠	INTERRUPTOR DIFERENCIAL "ID" DE 1x40A, 220VAC, 10KA, EMPOTRADO EN PARED MODELO: BP, MARCA GENERAL ELECTRIC	---	1.30m
⊠	GROUND FAULT CIRCUIT INTERRUPTER "GFCI" 1x40A, 220VAC, 10KA, EMBEDDED WALL MODEL: BP, BRANCH: GENERAL ELECTRIC	---	1.30m
⊠	CAJA DE CONEXION TERMO ELECTRICA 7.2KW, 220VAC, 60Hz, LISTADO "UL" MODEL: BP, BRANCH: GENERAL ELECTRIC	---	0.45m
⊠	BOX OF CONNECTION OF WATER HEATERS 7.2KW, 220VAC, 60Hz, "UL" LISTED	---	0.45m
—	CONDUCTO DE 3/4" PVC-CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO LISTADO "UL"	---	---
—	3/4" SCH40 PVC-CONDUIT EMBEDDED UNDER FLOOR "UL" LISTED	---	---
—	CONDUCTO DE 3/4" EMT, EMPOTRADO EN PARED DE DRYWALL LISTADO "UL"	---	---
—	3/4" EMT ELECTRICAL METAL TUBING (EMT), EMBEDDED DRYWALL "UL" LISTED	---	---
—	CONDUCTO DE 3/4" COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND LISTADO "UL"	---	---
—	TYPE "UL" "UL" LISTED, COPPER-FREE ALUMINIUM CONDUIT	---	---
⊠	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	---	---
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN ESTRUCTURA DE TECHO LISTADO "UL"	RECTANGULAR 100x55x40	---
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT STRUCTURE IN ROOF "UL" LISTED	RECTANGULAR 100x55x40	---
⊠	TOMACORRIENTE CUADRUPLA CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN MESA DE TRABAJO LISTADO "UL"	RECTANGULAR 100x55x40	---
⊠	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT IN WORK TABLE "UL" LISTED	RECTANGULAR 100x55x40	---

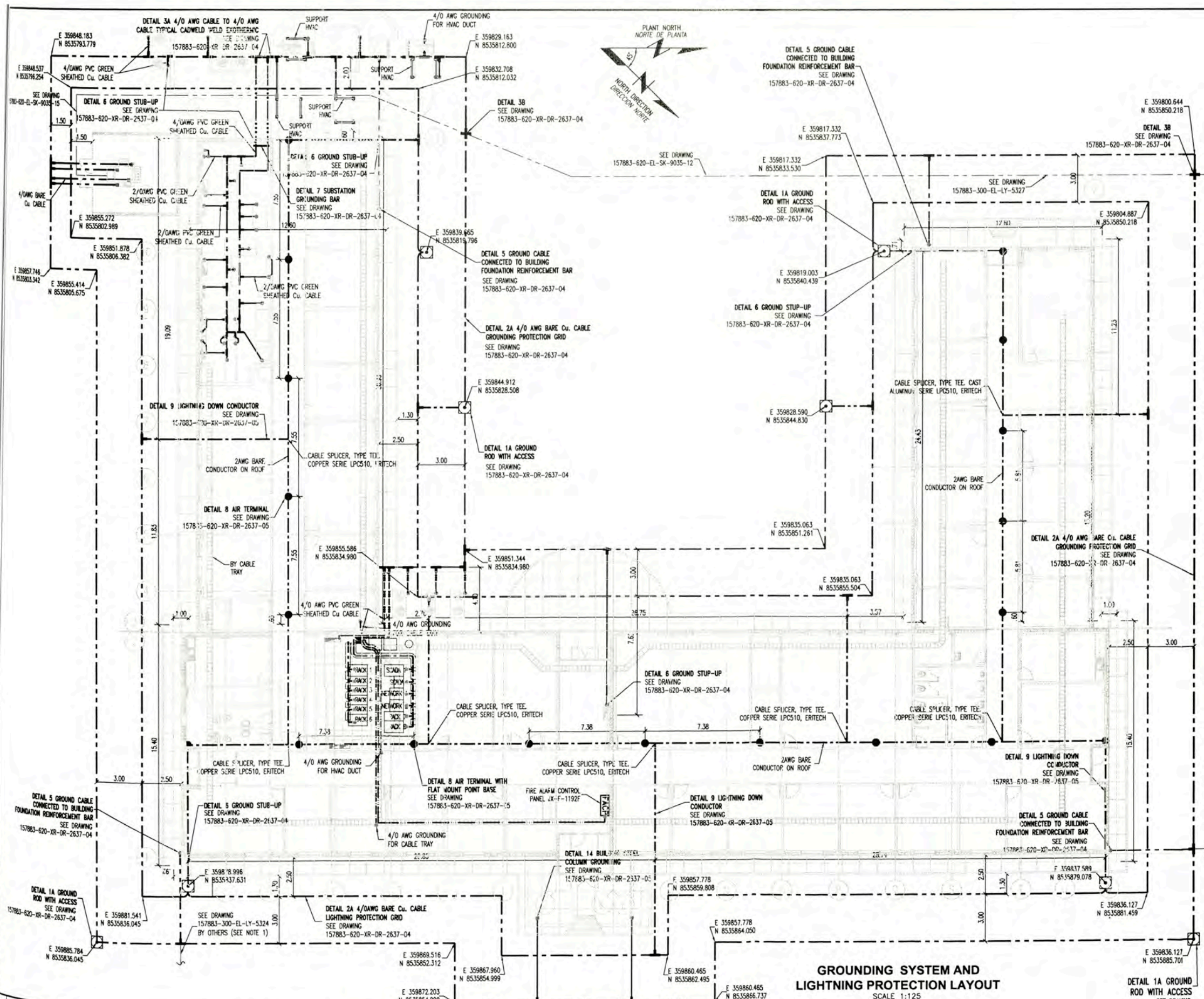
- NOTA/NOTE:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA). LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA 157883-620-XR-CC-0004. CALCULATION TO DETERMINE RECEPTACLE OUTLET NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
 - LOS TOMACORRIENTES ESTARAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0026. RECEPTACLE OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003. THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001. THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001
 - EL ALIMENTADOR PARA EL GABINETE 1 Y GABINETE 2 SERA DEL (DP-8010A Y DP-8010B). THE POWER SUPPLY FOR CABINET 1 AND CABINET 2 SHALL BE PANELBOARD (DP-8010A Y DP-8010B)

POWER AND RECEPTACLE OUTLETS LAYOUT
ADMINISTRATION BUILDING A-8004

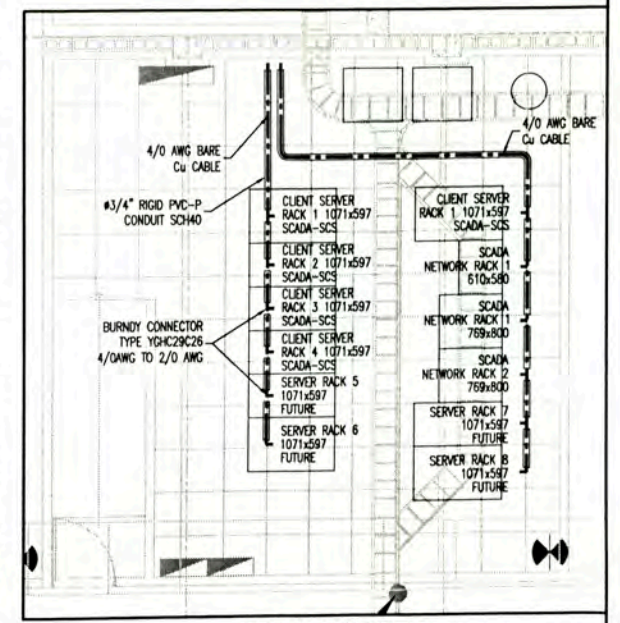
PLANT
SCALE 1:100



157883-620-XR-DR-0731-03	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-E ADMINISTRATION BUILDING A-8004		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS	DRAWING BY: WPA DESIGNED BY: COU REVISOR: FTA APPROVED BY: JMG DATE: 05/09/08 PROJECT No: 1618 REVISION: 0	DRAWING No: 157883-620-XR-DR-0731-02
157883-620-XR-DR-0731-02	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-B, DP-8004-C AND DP-8004-D ADMINISTRATION BUILDING					
157883-620-XR-DR-0731-01	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-A-01 AND DP-8004-A-02 ADMINISTRATION BUILDING SHEET 2 OF 2					
157883-620-XR-DR-2637-05	OSBLS ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2					
157883-620-XR-DR-0731-02	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-B, DP-8004-C AND DP-8004-D ADMINISTRATION BUILDING					
157883-620-XR-DR-0731-04	POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS ADMINISTRATION BUILDING A-8004					
157883-620-XR-DR-0731-03	ADMINISTRATION BUILDING A-8004 GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT	PROJECT LOCATION: PAMPA MELCHORITA				
157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION LAYOUT ADMINISTRATION BUILDING A-8004	SCALE: 1:100				



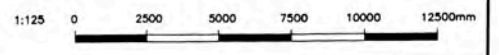
LEYENDA / LEGEND	
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION
	TABLERO / PANELBOARD
	CONDUCTOR ASLADO (TW(VERDE)), 2/0 AWG 2/0 AWG PVC GREEN SHEATHED Cu CABLE
	CABLE DE COBRE DESNUDO 4/0 AWG 4/0 AWG BARE Cu CABLE
	SOLDADURA EXOTERMICA TIPO TEE TEE JOINT EXOTHERMIC WELD
	CABLE DESNUDO 2 AWG 2 AWG BARE CONDUCTOR ON THE ROOF AND DOWN CONDUCTOR
	CONDUCTOR ASLADO (TW(VERDE)), 4/0 AWG 4/0 AWG PVC GREEN SHEATHED Cu CABLE
	CONDUCTOR ASLADO (TW(VERDE)) 2/0 AWG POR BANDEJA 2/0 AWG PVC GREEN SHEATHED Cu CABLE BY CABLE TRAY
	CONDUCTOR ASLADO (TW(VERDE)) 4/0 AWG POR BANDEJA 4/0 AWG PVC GREEN SHEATHED Cu CABLE BY CABLE TRAY
	PUNTA FRANKLIN AIR TERMINAL DET. 9 - 157883-620-XR-DR-2637-05
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO GROUNDING ROD WITH INSPECTION WELL



TELECOM ROOM
SCALE 1:50

- NOTE:
1. EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS TO PLANT GROUND RING.
 2. WHERE LIGHTNING GROUND CONDUCTOR CROSS PLANT GROUND CONDUCTORS A PHYSICAL SEPARATION OF >300mm MUST BE MAINTAINED.
 3. THE FINAL POSITION OF TELECOM CABINETS SHALL BE DEFINED BY PROVIDED (BY VENDOR)
LA POSICION FINAL DE LOS GABINETES DE TELECOM SERA DEFINIDA EN CAMPO POR EL EQUIPADOR (POR VENDOR).
 4. GROUNDING BAR SHALL BE BY OTHERS

GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT
SCALE 1:125



157883-620-EL-SK-9035-15	UNDERGROUND SERVICES LAYOUT GAS INLET & FIRE STATION AREA WBS-620 SHEET 15 OF 15
157883-620-EL-SK-9035-12	UNDERGROUND SERVICES LAYOUT GAS INLET & FIRE STATION AREA WBS-620 SHEET 12 OF 15
157883-000-EL-SO-2001	SINGLE DIAGRAM PLANT GROUNDING PHILOSOPHY
157883-620-XR-DR-2637-05	OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2
157883-620-XR-DR-2637-04	OSBL ELECTRICAL INSTALLATIONS GROUNDING AND LIGHTNING SYSTEM INSTALLATION DETAILS AND NOTES - SHEET 1 OF 2
157883-620-XR-DR-0731-04	POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-02	POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION LAYOUT ADMINISTRATION BUILDING A-8004



UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIE)

PERU LNG EXPORT PROJECT
PERMANENT COMMUNITY BUILDINGS

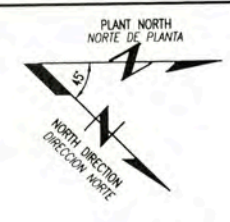
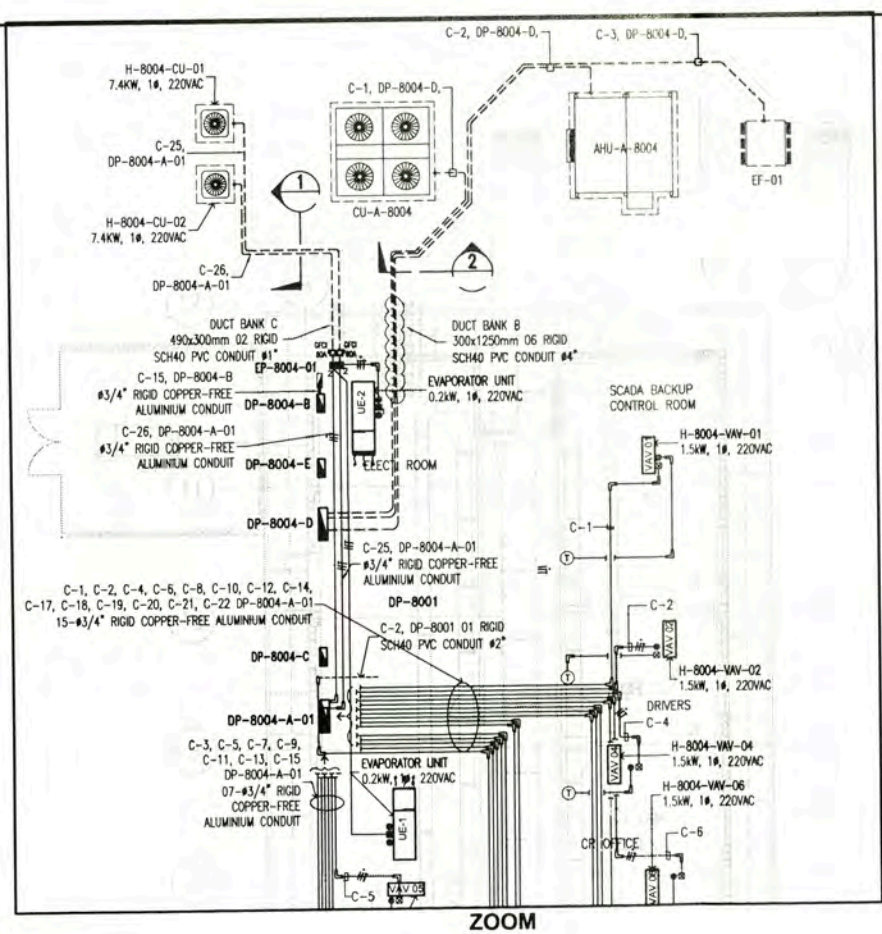
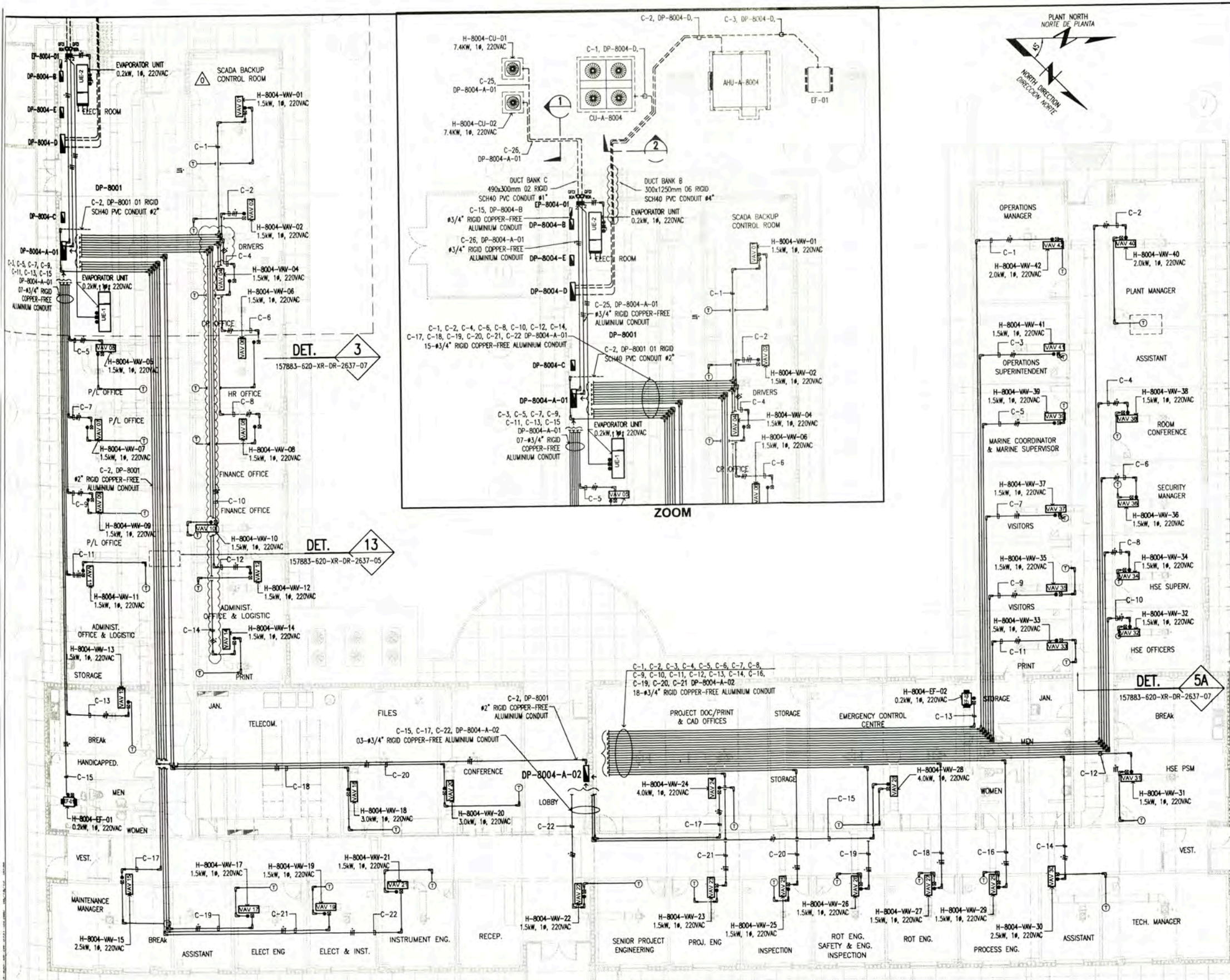
INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)
PAMPA MELCHORITA

ADMINISTRATION BUILDING A-8004
GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT

DESIGNED BY: WPA
DATE: 05/09/08

REVISOR: JMG
APPROVED BY: JMG
PROJECT NO: 1618
REVISION: 0

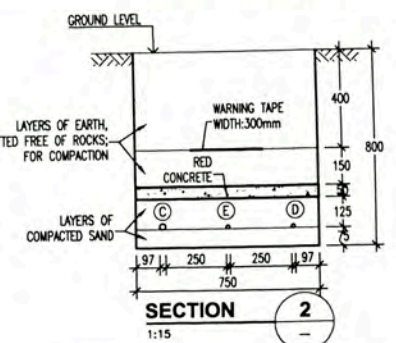
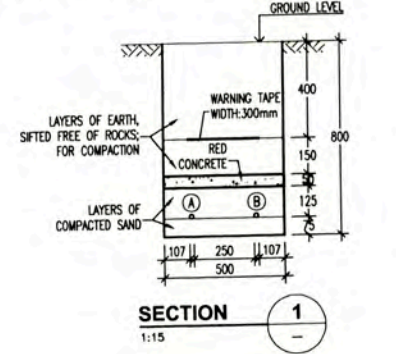
157883-620-XR-DR-0731-03



LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS(mm) / BOX(mm)	ALTURA(m) / HEIGHT(m)
☒ 1	CAJA DE PISO LISTADO "UL" NEMA 3R 6"x4"x3", DE ACUERDO CON HOJA TECNICA 157883-620-XR-05-0052	RECTANGULAR	TECHO
☒ 2	PULL BOX "UL" LISTED, NEMA 3R, 6"x4"x3", ACCORDING TO DATA SHEET 157883-620-XR-05-0052	RECTANGULAR	ROOF
—	CONDUCTOR DE FASE / PHASE CONDUCTOR	—	—
—	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	—	—
—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	—	—
—	RIGID COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND, "UL" LISTED	—	TECHO/ROOF
—	TYPE "LB", "UL" LISTED, COPPER-FREE ALUMINIUM CONDUIT	—	TECHO/ROOF
—	TYPE "T", "UL" LISTED, COPPER-FREE ALUMINIUM CONDUIT	—	TECHO/ROOF
EF	EXTRACTOR DE AIRE / EXHAUST FAN	—	TECHO/ROOF
—	VOLUMEN DE AIRE VARIABLE	—	TECHO/ROOF
VAV	VARIABLE AIR VOLUME	—	TECHO/ROOF
UE	UNIDAD EVAPORADORA / EVAPORATOR UNIT	—	TECHO/ROOF
T	TERMOSTATO	RECTANGULAR	1.30
T	TERMOSTAT	RECTANGULAR	1.30
—	TABLERO ELECTRICO EMPOTRADO	—	1.80 NIVEL SUP.
—	PANELBOARD EMBEDDED	—	1.80 TOP
—	CONDUCTO DE PVC SCH40 EMPOTRADO EN PISO, LISTADO "UL"	—	—
—	RIGID SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR, "UL" LISTED	—	—

NOTA/NOTE:

- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003 THE ELECTRICAL CABLE SCHEDULE IS SHOWN IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001 THE ELECTRICAL LOAD SCHEDULE IS SHOWN IN 157883-620-XR-SH-0001



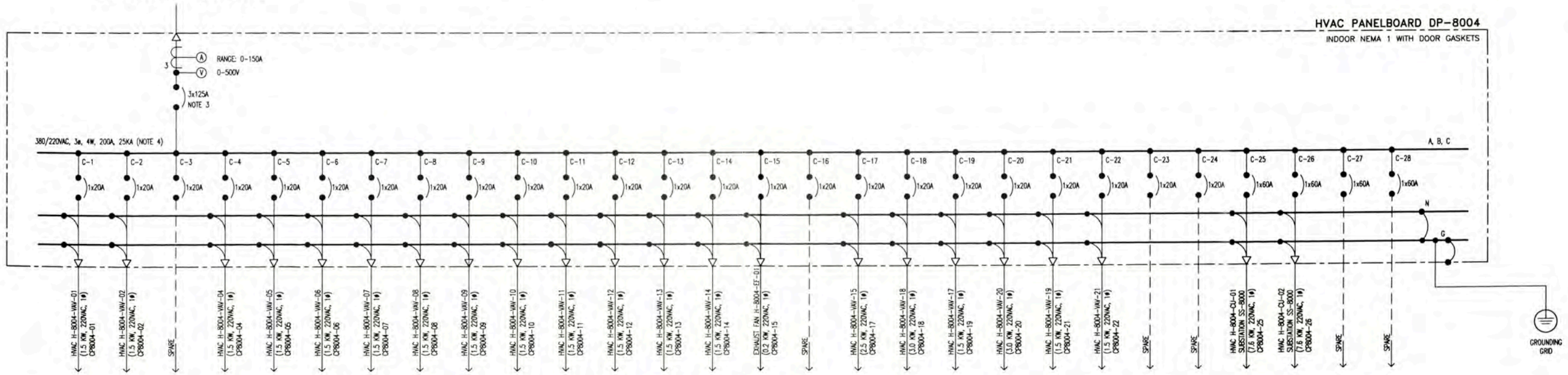
ELECTRICAL CABLES LIST	
①	CP8004A-01-25, C-25 DP-8004-A-01: 25MM THICK (TC)
②	CP8004A-02-26, DP-8004-A-01: 26MM THICK (TC)
③	CP8004A-01, DP-8004A: 25MM THICK (TC)
④	CP8004A-02, DP-8004A: 26MM THICK (TC)
⑤	CP8004A-03, DP-8004A: 10MM THICK (TC)

POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS
ADMINISTRATION BUILDING A-8004
 SCALE 1:100

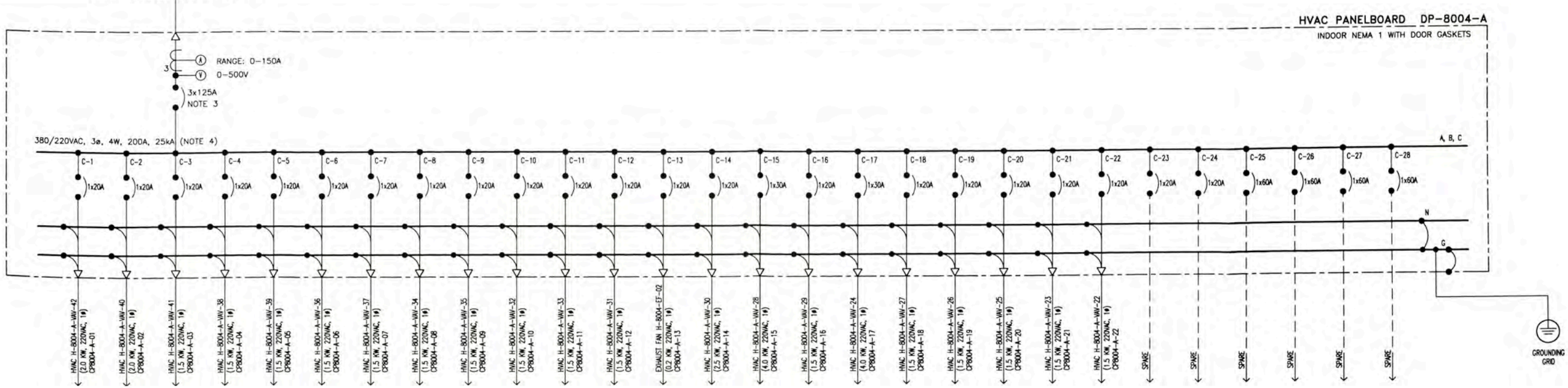
1:100 0 1000 2000 3000 4000 5000 6000mm

<p>157883-620-XR-DR-2637-07</p> <p>157883-620-XR-DR-2637-05</p> <p>157883-620-XR-DR-0735-02</p> <p>157883-620-XR-DR-0731-02</p> <p>157883-080-WV-SM-0005-02</p> <p>157883-080-WV-SM-0005-01</p>	<p>OSBL HVAC INSTALLATIONS DETAILS AND NOTES</p> <p>OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2</p> <p>ELECTRIC SINGLE LINE DIAGRAM FOR DP-8004-A, DP-8004-B, DP-8004-C AND DP-8004-D ADMINISTRATION BUILDING SHEET 2 OF 2</p> <p>POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004</p> <p>HVAC SUPPLY & EXTRACT DISTRIBUTION SCHEMATIC ADMINISTRATION BUILDING A-8004 SHEET 20F2</p> <p>HVAC SUPPLY & EXTRACT PLANT SCHEMATIC ADMINISTRATION BUILDING A-8004 SHEET 10F2</p>	<p>UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)</p> <p>PROYECTO: PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS</p> <p>INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)</p> <p>LOCALIDAD: PAMPA MELCHORITA</p>	<p>OUT SIDE BATTERY LIMITS - OSBL</p> <p>POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS</p> <p>ADMINISTRATION BUILDING A-8004</p> <p>157883-620-XR-DR-0731-04</p>
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FED FROM C-1, DP-8000



FED FROM C-2, DP-8000

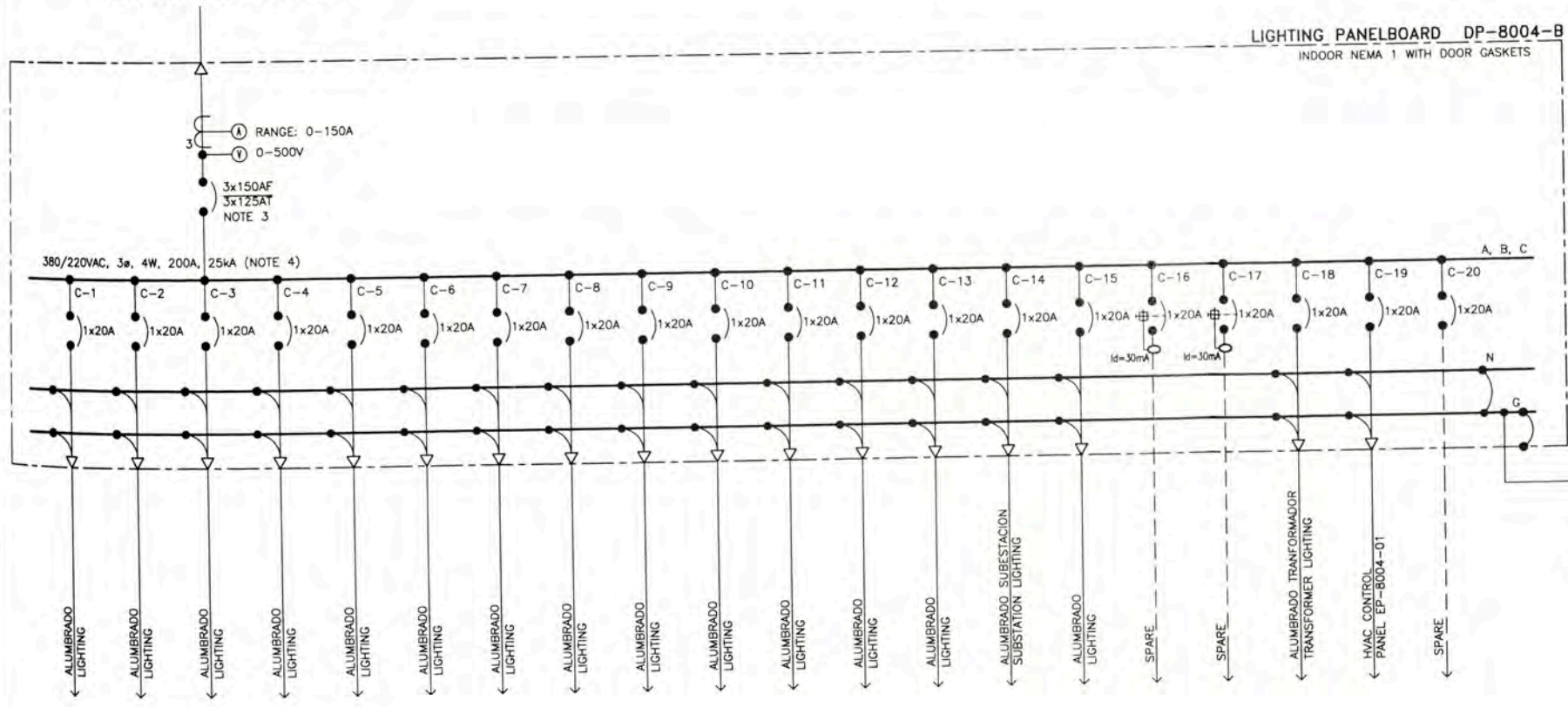


GENERAL NOTES

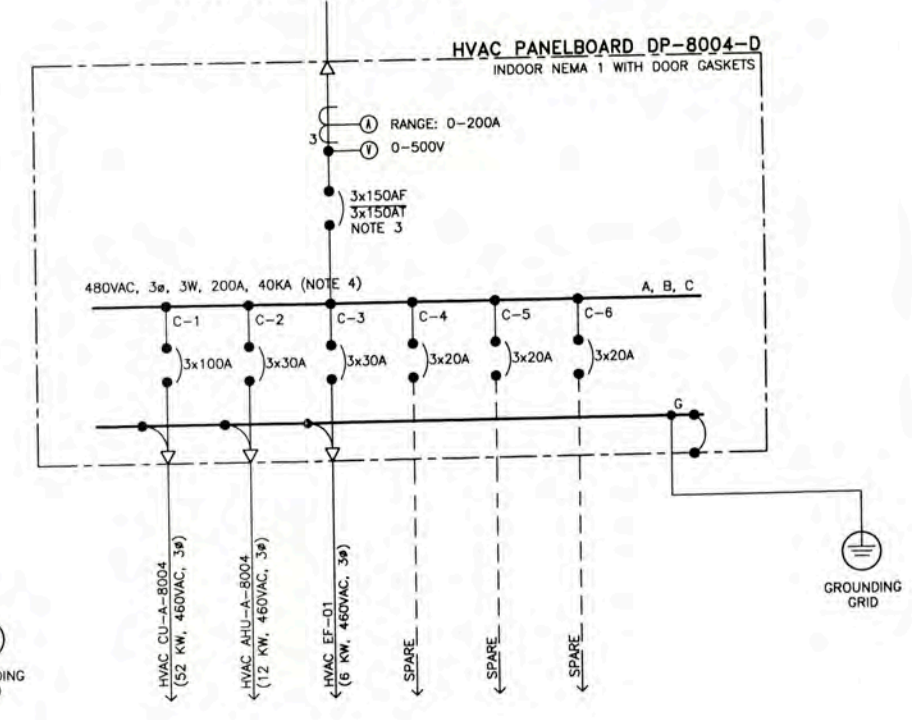
1. VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
2. EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
3. LA TENSION NOMINAL DEL AISLAMIENTO UI DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066
THE RATED INSULATION VOLTAGE UI OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
4. VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
SEE OSBL SHORT CIRCUIT FAULT STUDY 157883-620-XR-CC-0001
5. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

157883-000-EL-SP-0012		SPECIFICATION FOR PANELBOARD		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	PACKAGE SUBSTATION SS-8000		ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004 AND DP-8004-A		ADMINISTRATION BUILDING A-8004		SHEET 1 OF 2		
157883-000-EL-PA-0001		ELECTRICAL DESIGN PHILOSOPHY			PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		PROJECT NO: 1518		DATE: 05/09/08		PROJECT NO: 1518		
157883-620-XR-DR-1925-01		ELECTRICAL SINGLE LINE DIAGRAM FOR SC-8000 AND DP-8000			PROJECT NO: 1518		DATE: 05/09/08		PROJECT NO: 1518		PROJECT NO: 1518		
157883-620-XR-DR-0725-02		ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-B, DP-8004-C AND DP-8004-D			PROJECT NO: 1518		DATE: 05/09/08		PROJECT NO: 1518		PROJECT NO: 1518		
157883-620-XR-DR-2630-02		OSBL BLOCK DIAGRAM ELECTRICAL			PROJECT NO: 1518		DATE: 05/09/08		PROJECT NO: 1518		PROJECT NO: 1518		
157883-620-XR-DR-2630-02		OSBL BLOCK DIAGRAM ELECTRICAL		PROJECT NO: 1518		DATE: 05/09/08		PROJECT NO: 1518		PROJECT NO: 1518		PROJECT NO: 1518	

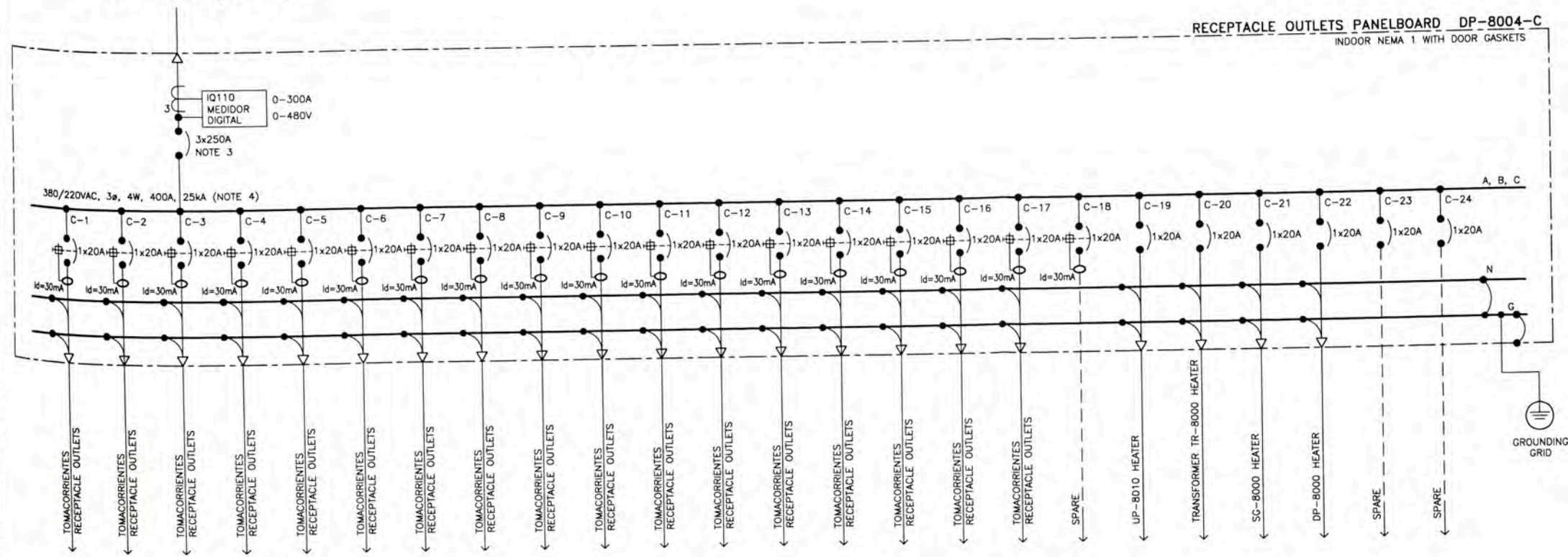
FED FROM C-3, DP-8000



FED FROM C-3, SG-8000



FED FROM C-4, DP-8000



GENERAL NOTES

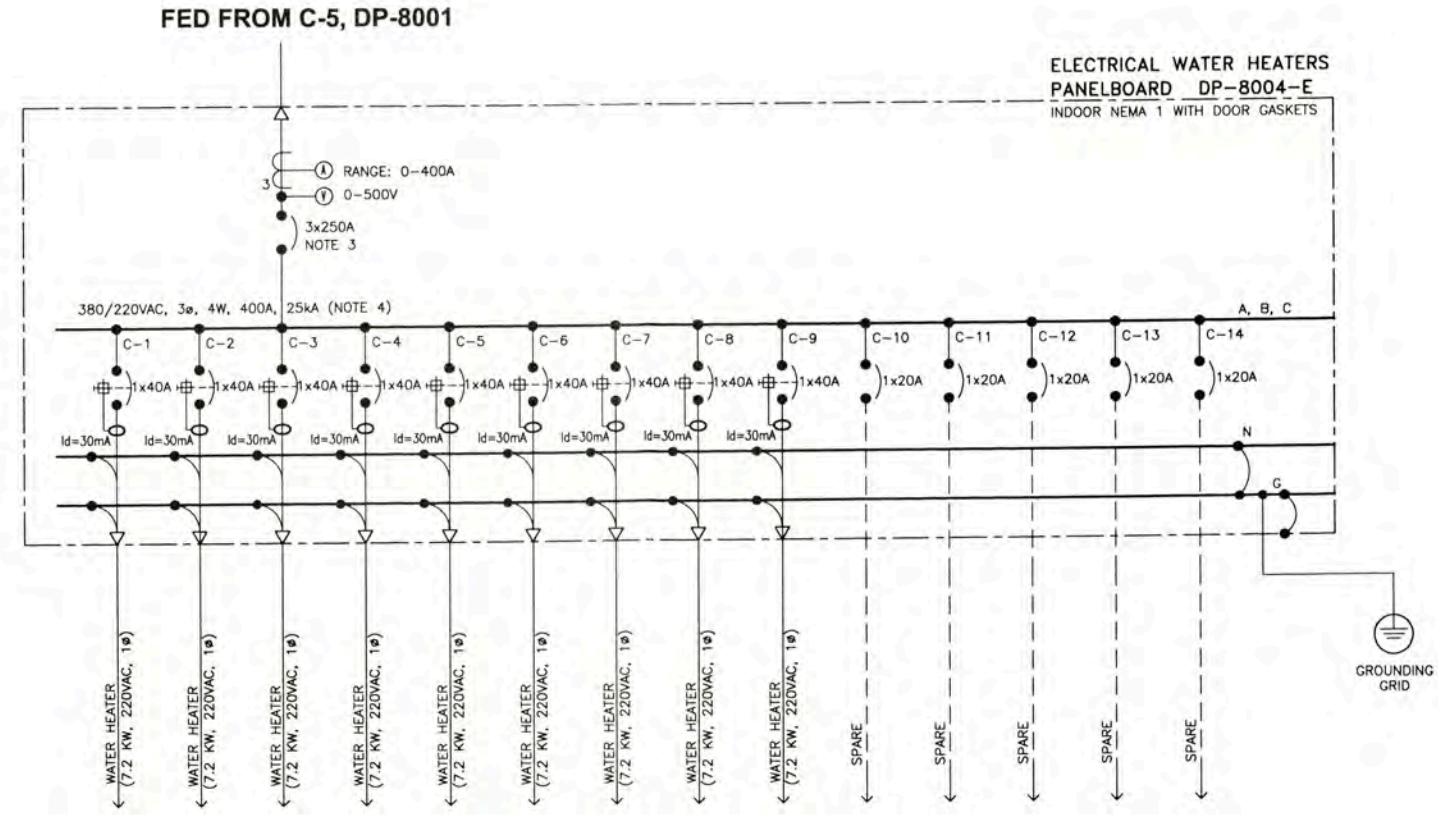
- VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003 SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
- EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G). IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
- LA TENSION NOMINAL DEL AISLAMIENTO UI DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066. THE RATED INSULATION VOLTAGE UI OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
- VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001 SEE CALCULATION IN DOCUMENT: 157883-620-XR-CC-0001
- EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001 SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001
- EL ALIMENTADOR PARA EL PANEL DE DETECCION JX-F-1192-F SERA DEL C-1/DP-8010B. THE POWER SUPPLY FOR FIRE ALARM CONTROL PANEL JX-F-1192 SHALL BE PANELBOARD (DP-8010B)
- EL ALIMENTADOR PARA EL GABINETE 1 Y GABINETE 2 SERA DEL (DP-8010A Y DP-8010B). THE POWER SUPPLY FOR CABINET 1 AND CABINET 2 SHALL BE PANELBOARD (DP-8010A AND DP-8010B)

157883-620-XR-DR-1935-01	ELECTRICAL SINGLE LINE DIAGRAM SG-8000 AND DP-8000 ADMINISTRATION BUILDING - A-8004
157883-620-XR-DR-0731-04	POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-02	POWER AND RECEPTACLE OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0731-03	GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT ADMINISTRATION BUILDING A-8004
157883-620-XR-DR-0735-03	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-E ADMINISTRATION BUILDING - A-8004
157883-620-XR-DR-0735-01	ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004 AND DP-8004-A ADMINISTRATION BUILDING 1 OF 2



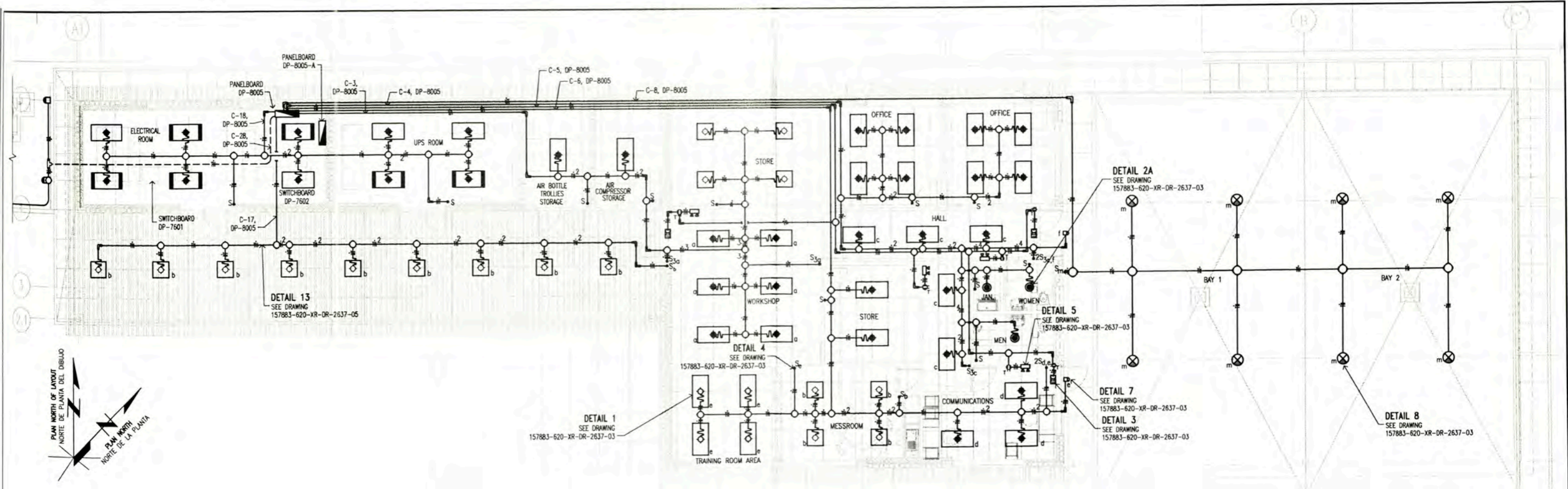
UNIVERSIDAD NACIONAL DE INGENIERIA
FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)

PROJECT: PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DRAWING NO: WPA		DESIGNED BY: COU		REVISED BY: FTA		APPROVED BY: JMG		DRAWING NO: 157883-620-XR-DR-0735-02	
SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		SCALE: S/E		DATE: 05/09/08		PROJECT NO: 1618		REVISION: 0		SHEET 2 OF 2	



- GENERAL NOTES**
1. VER LISTA DE CABLES ELECTRICOS 157883-620-XR-SH-0003
SEE ELECTRICAL CABLE SCHEDULE 157883-620-XR-SH-0003
 2. EN HOJA DE DATOS 157883-620-XR-DS-0002 SE INDICA LAS PROTECCIONES DE LOS TABLEROS; INCLUYE LA PROTECCION DE FALLA A TIERRA (50G).
IN DATA SHEET 157883-620-XR-DS-0002 LISTS THE PROTECTIONS OF THE SWITCHBOARDS; INCLUDING GROUND INSTANTANEOUS OVERCURRENT (50G)
 3. LA TENSION NOMINAL DEL AISLAMIENTO UI DE LOS INTERRUPTORES AUTOMATICOS SERA DE 600VAC DE ACUERDO A NORMA UL 489 Y UL 1066
THE RATED INSULATION VOLTAGE UI OF THE CIRCUIT BREAKERS WILL BE 600VAC ACCORDING TO STANDARD UL 489 AND UL 1066
 4. VER CALCULOS DE "POTENCIA DE CORTO CIRCUITO" EN DOCUMENTO 157883-620-XR-CC-0001
SEE CALCULATION IN DOCUMENT: 157883-620-XR-CC-0001
 5. EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN: 157883-620-XR-SH-0001
SEE ELECTRICAL LOAD SCHEDULE 157883-620-XR-SH-0001

ISSUED FOR CONSTRUCTION		19/12/09	WPA	MEJ	157883-000-EL-SP-0012	SPECIFICATION FOR PANELBOARD	UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)	PROJECT: PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS	DRAWING NO: WPA	DESIGNED BY: COU	REVISED BY: FTA	APPROVED BY: JMG	DRAWING NO: 157883-620-XR-DR-0735-03
DATE: 19/12/09		DESIGNED BY: WPA	APPROVED BY: MEJ	157883-000-EL-PH-0001	ELECTRICAL DESIGN PHILOSOPHY	SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)							
DESCRIPTION		DATE	DESIGNED BY	APPROVED BY	157883-620-XR-DR-0731-03	GROUNDING SYSTEM AND LIGHTNING PROTECTION LAYOUT ADMINISTRATION BUILDING A-8004	PACKAGE SUBSTATION SS-8000 ELECTRICAL SINGLE LINE DIAGRAM FOR DP-8004-E ADMINISTRATION BUILDING A-8004	PROJECT NO: 1618	SCALE: S/E	DATE: 05/09/08	PROJECT NO: 1618	REVISION: 0	DRAWING NO: 157883-620-XR-DR-0735-03
DESCRIPTION		DATE	DESIGNED BY	APPROVED BY	157883-620-XR-DR-0731-02	POWER AND SOCKETS OUTLETS LAYOUT ADMINISTRATION BUILDING A-8004							
DESCRIPTION		DATE	DESIGNED BY	APPROVED BY	157883-620-XR-DR-0731-01	LIGHTING DISTRIBUTION LAYOUT ADMINISTRATION BUILDING A-8004							

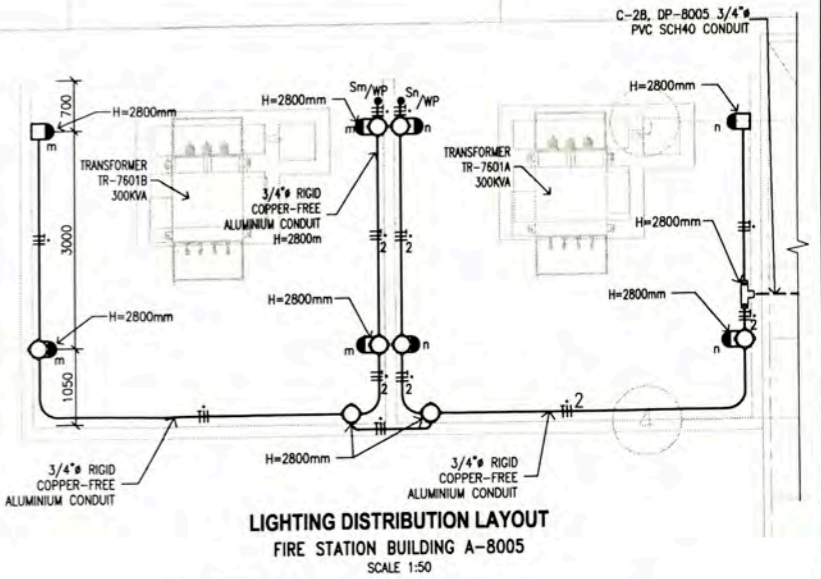


LIGHTING DISTRIBUTION LAYOUT
FIRE STATION BUILDING A-8005
SCALE 1:75

LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS / BOX (mm)	ALTURA / HEIGHT (m)
□	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 17W TB. LISTADA "UL". MODELO: 2PM3N 3 17 9LD MVOLT LP741 LITHONIA LIGHTING	JUNCTION BOX	FALSO CIELO
□	LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 17W TB. "UL" LISTED.	JUNCTION BOX	CEILINGS
□	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 12LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
□	LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	CEILINGS
□	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA, LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
□	LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES MAINTENANCE-FREE. 220VAC. "UL" LISTED.	JUNCTION BOX	CEILINGS
□	LUMINARIA PARA EMPOTRAR EN FCR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAJE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
□	LIGHTING FIXTURE RECESSED IN FCR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED.	JUNCTION BOX	CEILINGS
□	SPOT EMPOTRABLE CON YUGO DE SUELECCION DE SISTEMA OPTICO FABRICADO EN ACERO GALVANIZADO, REFLECTOR EN ALUMINIO BRILIANTE ESPECULAR. INCLUYE DOS LAMPARAS COMPACTAS DE 26W. BALASTO MULTIVOLTAJE. LISTADA "UL".	JUNCTION BOX	FALSO CIELO
□	RECESSED DOWNLIGHT RUGGED, GALVANIZED STEEL FRAME-IN WITH ADJUSTABLE INTEGRAL YOKES TO RETAIN OPTICAL SYSTEM. CLEAR SPECULAR ALUMINUM REFLECTOR. INCLUDE TWO 26WATT COMPACT FLUORESCENT. MULTIVOLT BALLAST. "UL" LISTED.	JUNCTION BOX	CEILINGS

□	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 70W. BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 70S 240 DF LPI LITHONIA LIGHTING.	---	2.20m
□	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINIUM HOUSING WITH SPECULAR ANODIZED ALUMINIUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 70 WATT CLEAR HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 70S 240 DF LPI LITHONIA LIGHTING	---	2.20m
□	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 150W. BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 150S 240 DF LPI LITHONIA LIGHTING.	---	2.20m
□	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINIUM HOUSING WITH SPECULAR ANODIZED ALUMINIUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 150 WATT CLEAR HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 150S 240 DF LPI LITHONIA LIGHTING	---	2.20m
□	HIGH BAY CON ENSAMBLE DE BAJO PERFIL DE MONTAJE LA CUAL LLEVA AL COSTADO EL COMPARTIMIENTO DEL BALASTO Y EL REFLECTOR/REFRACTOR. REFLECTOR DE ALUMINIO Y OPTICA CERRADA EN VIDRIO BOROSILICATO. INCLUYE UNA LAMPARA SODIO DE ALTA PRESION 250 WATT, BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: PPSK 250M MTP011 S-64404 MARCA HOLOPHANE. NEMA 4.	---	4.80m
□	HIGH BAY LOW PROFILE MOUNTING ASSEMBLY TO WHICH IS ATTACHED A BALLAST HOUSING AND AN OPTICAL REFLECTOR/REFRACTOR. SPUN ALUMINIUM REFLECTOR AND ENCLOSED OPTIC MADE OF BOROSILICATE GLASS. INCLUDE ONE 250 WATT HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: PPSK 250M MTP011 S-64404 HOLOPHANE. NEMA 4	---	4.80m
□	TABLERO ELECTRICO EMPOTRADO	1.80 BORDE SUPERIOR	1.80 TOP
□	PANELBOARD EMBEDDED.	---	---
□	LUMINARIA DE EMERGENCIA PARA ADOSAR A PARED, CON 02 LAMPARAS FLUORESCENTES COMPACTAS DE 26W, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA. LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL".	CONDUIT "LB" OR "T"	2.20m
□	EMERGENCY LIGHT FIXTURE TO ATTACHED TO WALL, WITH 02 COMPACT FLUORESCENT LAMPS OF 26W, WITH KIT EMERGENCY AUTONOMY 1 HOUR. MAINTENANCE-FREE. 220VAC. "UL" LISTED	CONDUIT "LB" OR "T"	2.20m
□	TOMACORRIENTE DUPLEX, BIPOLAR PARA CON TOMA A TIERRA, 250V, 60HZ, 15A, EMPOTRADO EN PARED. LISTADO "UL".	RECTANGULAR 100X55X40	2.20m
□	DUPLEX RECEPTACLE OUTLET, WITH GROUNDING, 250V, 60HZ, 15A, ENCASED ON WALL. "UL" LISTED	RECTANGULAR 100X55X40	2.20m
+	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
+	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
---	CONDUCTO DE PVC SCH40 EMPOTRADO EN PISO. LISTADO "UL"	---	---
---	RIGID SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	---	---

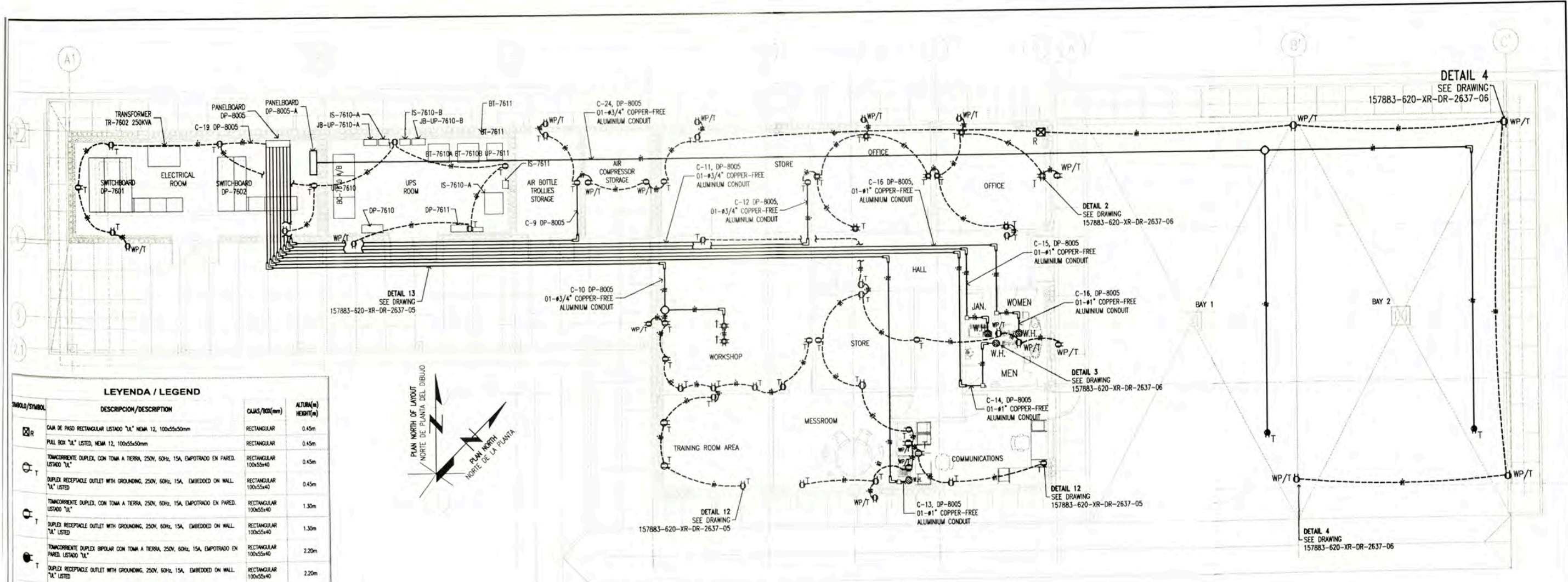
□	CONDUIT TYPE "T" COOPER-FREE ALUMINIUM. "UL" LISTED	---	---
---	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
□	LUMINARIA DE SEÑALIZACION; CON 01 LAMPARA FLUORESCENTE DE 26W, 220VAC, 1ø, CON ALTO F.D.P. LISTADO "UL"	---	2.20m
□	EXIT LIGHT; FLUORESCENT LAMP WITH 01 TO 26W, 220VAC, 1 ø, WITH HIGH F.D.P. "UL" LISTED	---	2.20m
---	CONDUCTO FLEXIBLE DE ALUMINIO LIBRE DE COBRE #3/4" LISTADO "UL"	---	---
---	FLEXIBLE COPPER-FREE ALUMINIUM CONDUIT #3/4" "UL" LISTED	---	---
•S	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•S	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
•S ₀	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•S ₀	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
•2S _{a,b}	02 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON a y b. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•2S _{a,b}	02 SINGLE POLE SWITCH 16A, 250VAC, 60Hz. a, b INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH a and b. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
•2S _{3a,b}	01 INTERRUPTOR CONMUTACION Y 01 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•2S _{3a,b}	01 3-WAY SWITCH AND 01 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
•S _{3a}	01 INTERRUPTOR CONMUTACION, 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•S _{3a}	01 3-WAY SWITCH 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
•2S _{3a,3b}	02 INTERRUPTOR CONMUTACION, 16A, 250VAC, 60HZ. A,B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
•2S _{3a,3b}	02 3-WAY SWITCH 16A, 250VAC, 60Hz. a, b INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH a and b. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
---	3/4" RIGID COPPER-FREE ALUMINIUM CONDUIT FOR ABOVE GROUND "UL" LISTED	---	---
---	TYPE "LB". COPPER-FREE ALUMINIUM CONDUIT "UL" LISTED	---	---
---	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED	---	---



LIGHTING DISTRIBUTION LAYOUT
FIRE STATION BUILDING A-8005
SCALE 1:50

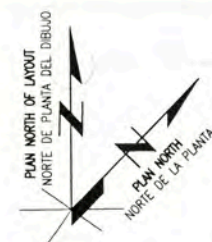
- NOTAS / NOTES:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA). LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE LUMINARIAS POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004. CALCULATION TO DETERMINE LIGHTING FIXTURE NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
 - LAS LUMINARIAS ESTAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0025. THE LIGHTING FIXTURE IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0025
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003. THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001. THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001
 - EL CALCULO DE NIVEL DE ILUMINACION SE MUESTRA EN 157883-620-XR-CC-0006. THE CALCULATED LIGHTING LEVEL IS SHOW IN 157883-620-XR-CC-0006

157883-620-XR-CC-0006 157883-620-XR-DR-0831-01 157883-620-XR-DR-0831-04 157883-620-XR-DR-0831-03 157883-620-XR-DR-0831-02 157883-620-XR-DR-2637-03	ILLUMINATION LEVEL CALCULATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005, DP-8005-A AND DP-8006 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS - FIRE STATION BUILDING A-8005 GROUNDING SYSTEM LAYOUT - FIRE STATION BUILDING A-8005 POWER AND RECEPTACLE OUTLETS LAYOUT - FIRE STATION BUILDING A-8005 ELECTRICAL INSTALLATION DETAILS AND NOTES	<p>UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)</p> <p>PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS</p> <p>INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)</p> <p>PAMPA MELCHORITA</p>	<p>OUT SIDE BATTERY LIMITS - OSBL LIGHTING DISTRIBUTION LAYOUT FIRE STATION BUILDING A-8005</p> <p>DESIGNING: WPA DESIGNED BY: COU DATE: 05/09/08</p> <p>REVISADO: FTA APPROVED BY: JMG REVISION: 0</p> <p>PROJECT NO: 1618</p> <p>157883-620-XR-DR-0831-01</p>
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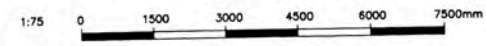


POWER AND RECEPTACLE OUTLETS LAYOUT
FIRE STATION A-8005
PLANT
 SCALE 1:75

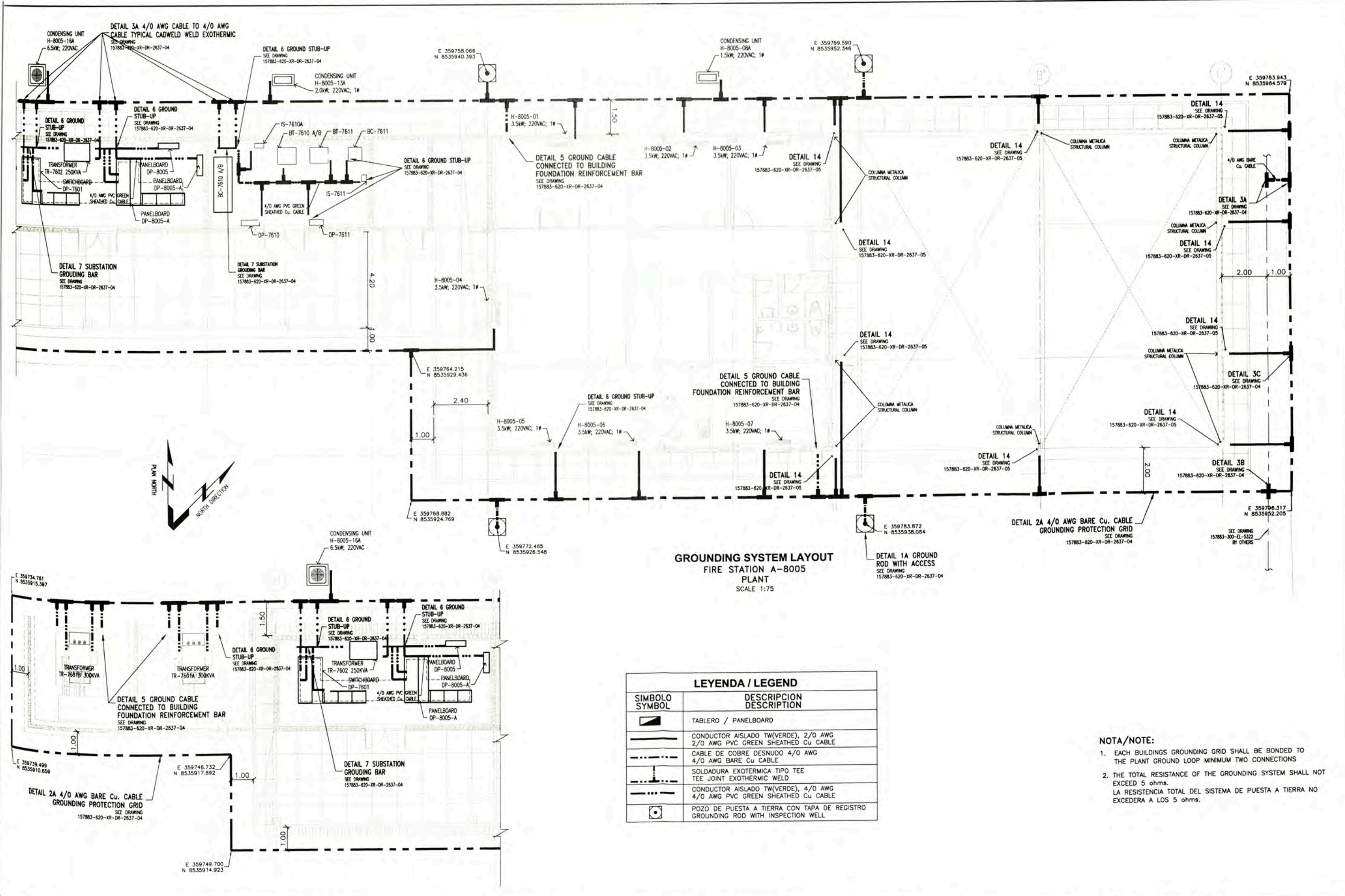
LEYENDA / LEGEND		
SÍMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	ALTIMA(m) HEIGHT(m)
⊠	CAJA DE PASO RECTANGULAR LISTADO "LA" NEMA 12, 100x55x50mm	RECTANGULAR 0.45m
⊠	PULL BOX "LA" LISTED, NEMA 12, 100x55x50mm	RECTANGULAR 0.45m
⊠	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, LISTADO "LA"	RECTANGULAR 100x55x40 0.45m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 0.45m
⊠	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, LISTADO "LA"	RECTANGULAR 100x55x40 1.30m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 1.30m
⊠	TOMACORRIENTE DUPLEX BIPOLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, LISTADO "LA"	RECTANGULAR 100x55x40 2.20m
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 2.20m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, A PRESIÓN DE AGUA, LISTADO "LA"	RECTANGULAR 100x55x40 0.45m
⊠	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 0.45m
⊠	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, A PRESIÓN DE AGUA, LISTADO "LA"	RECTANGULAR 100x55x40 1.30m
⊠	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 1.30m
⊠	TOMACORRIENTE CUADRIPLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED, LISTADO "LA"	RECTANGULAR 100x55x40 0.45m
⊠	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL, "LA" LISTED	RECTANGULAR 100x55x40 0.45m
⊠	TABLETO ELECTRICO EMPOTRADO	1.80 BORDE SUPERIOR
⊠	PANELBOARD EMBEDDED	1.80 TOP
⊠	CONDUCTOR DE FASE / PHASE CONDUCTOR	---
⊠	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---
⊠	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---
⊠	INTERRUPTOR DIFERENCIAL "DO" DE 1+40A, 220VAC, 10KA, EMPOTRADO EN PARED MODELO: BP, WIPAC GENERAL ELECTRIC	1.30m
⊠	GROUND FAULT CIRCUIT INTERRUPTOR "GFCI" DE 1+40A, 220VAC, 10KA, EMPOTRADO EN PARED MODELO: BP, BRANCO GENERAL ELECTRIC	1.30m
⊠	CAJA DE CONEXIÓN TIERRA ELECTRICA 7.20W, 220VAC, 60Hz, LISTADO "LA" MODELO: BP, BRANCO GENERAL ELECTRIC	0.45m
⊠	BOX OF CONNECTION OF WATER HEATERS 7.20W, 220VAC, 60Hz, "LA" LISTED	0.45m
⊠	CONDUCTO DE 1/2" PVC-CONDUIT SÓLO EMPOTRADO DEBAJO DEL PISO, LISTADO "LA"	---
⊠	1/2" PVC CONDUIT UNDER FLOOR, "LA" LISTED	---
⊠	CONDUCTO DE 1/2" EMT, EMPOTRADO EN PARED DE DRYWALL, LISTADO "LA"	---
⊠	1/2" ELECTRICAL METAL TUBING (EMT), EMBEDDED DRYWALL, "LA" LISTED	---
⊠	RIGID COPPER-FREE ALUMINUM CONDUIT, FOR ABOVE GROUND, "LA" LISTED	---
⊠	TYPE "LB", "LA" LISTED, COPPER-FREE ALUMINUM CONDUIT	---
⊠	JUNCTION BOX COPPER-FREE ALUMINUM "UL" LISTED	---
⊠	TOMACORRIENTE DUPLEX, CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN ESTRUCTURA DE TECHO, LISTADO "LA"	RECTANGULAR 100x55x40 ---
⊠	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT STRUCTURE IN ROOF, "LA" LISTED	RECTANGULAR 100x55x40 ---
⊠	TOMACORRIENTE CUADRIPLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, SOPORTADO EN MESA DE TRABAJO, LISTADO "LA"	RECTANGULAR 100x55x40 ---
⊠	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT IN WORK TABLE, "LA" LISTED	RECTANGULAR 100x55x40 ---



- NOTA/NOTE:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG THHN (FASES), 12AWG THHN (NEUTRO) Y 12AWG THHN (TIERRA). LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG THHN (PHASE), 12AWG THHN (NEUTRAL) AND 12AWG THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004. CALCULATION TO DETERMINE SOCKETS OUTLET NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
 - LOS TOMACORRIENTES ESTARAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0026. SOCKET OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003. THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001. THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001



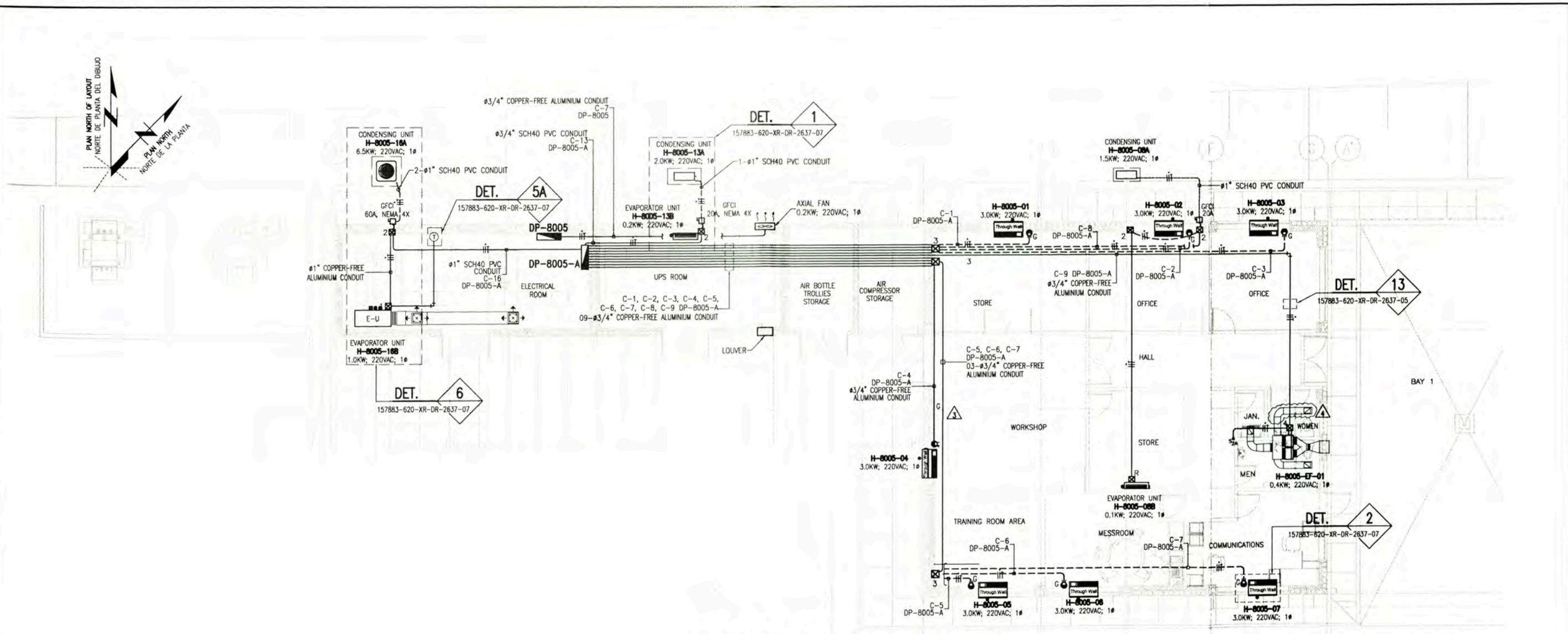
157883-620-XR-DR-0831-01 157883-620-XR-DR-2637-05 157883-620-XR-DR-0831-04 157883-620-XR-DR-0831-03 157883-620-XR-DR-0831-01		ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005, DP-8005-A AND DP-8006 OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS FIRE STATION A-8005 GROUNDING SYSTEM LAYOUT FIRE STATION A-8005 LIGHTING DISTRIBUTION LAYOUT FIRE STATION A-8005			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		OUT SIDE BATTERY LIMITS - OSBL POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION BUILDING A-8005	
PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		PROJECT: PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS			DRAWING BY: WPA DESIGNED BY: COU REVISADO BY: FTA APROBADO BY: JMG	SCALE: 1:75 DATE: 05/09/08 PROJECT NO: 1618 REVISION: 0	DRAWING NO: 157883-620-XR-DR-0831-02	



LEYENDA / LEGEND	
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION
	TABLERO / PANELBOARD
	CONDUCTOR AISLADO TW(VERDE), 2/0 AWG 2/0 AWG PVC GREEN SHEATHED Cu CABLE
	CABLE DE COBRE DESNUDO 4/0 AWG 4/0 AWG BARE Cu CABLE
	SOLDADURA EXOTERMICA TIPO TEE TEE JOINT EXOTHERMIC WELD
	CONDUCTOR AISLADO TW(VERDE), 4/0 AWG 4/0 AWG PVC GREEN SHEATHED Cu CABLE
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO GROUNDING ROD WITH INSPECTION WELL

- NOTA/NOTE:**
- EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS
 - THE TOTAL RESISTANCE OF THE GROUNDING SYSTEM SHALL NOT EXCEED 5 ohms.
LA RESISTENCIA TOTAL DEL SISTEMA DE PUESTA A TIERRA NO EXCEDERA A LOS 5 ohms.

157883-620-XR-DR-2637-05 157883-620-XR-DR-2637-04 157883-620-XR-DR-0831-04 157883-300-EL-LY-5322 157883-620-XR-DR-0831-02 157883-620-XR-DR-0835-01		OSB ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2 GROUNDING AND LIGHTING SYSTEM INSTALLATION DETAILS AND NOTES - SHEET 1 OF 2 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENT FIRE STATION BUILDING A8005 GROUNDING LAYOUT MBS-620 FIREWATER STORAGE POWER AND RECEPTACLE OUTLETS FIRE STATION BUILDING A8005 LIGHTING DISTRIBUTION LAYOUT FIRE STATION BUILDING A8005		UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		GROUNDING SYSTEM LAYOUT FIRE STATION BUILDING A-8005	
DATE: 05/09/08 DRAWING NO: 157883-620-XR-DR-0831-03		PROJECT NO: 1618 REVISION: 0		SCALE: 1:75		DRAWING BY: WPA DESIGNED BY: COU CHECKED BY: FTA APPROVED BY: JMG		DRAWING NO: 157883-620-XR-DR-0831-03	



POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS
FIRE STATION A-8005
 SCALE 1:75

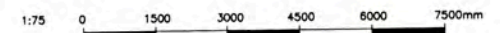
LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS / BOX (mm)	ALTURA (m) / HEIGHT (m)
☒ 1	CAJA DE PASO LISTADO "UL" NEMA 3R 6"x4"x3". ALUMINIO LIBRE DE COBRE, CATAL. WYS 060403 APPLETON	RECTANGULAR	TECHO
☒ 2	PULL BOX "UL" LISTED, NEMA 3R, 6"x4"x3". CAST COPPER FREE-ALUMINIUM, CATAL. WYS 060403 APPLETON	RECTANGULAR	ROOF
☒ 3	CAJA DE PASO LISTADO "UL" 3 5/8"x 3 3/4"x2 1/2". ACERO GALVANIZADO EN CALIENTE. M2-250 APPLETON.	RECTANGULAR	0.45
☒ 4	PULL BOX "UL" LISTED, 3 5/8"x3 3/4"x2 1/2". HOT DIPPED GALVANIZED STEEL, CATAL. M2-250 APPLETON.	RECTANGULAR	0.45
☒ 5	CAJA DE PASO LISTADO "UL" 7 3/8"x 3 3/4"x2 1/2". ACERO GALVANIZADO EN CALIENTE. M4-250 APPLETON.	RECTANGULAR	0.45
☒ 6	PULL BOX "UL" LISTED, 7 3/8"x3 3/4"x2 1/2". HOT DIPPED GALVANIZED STEEL, CATAL. M4-250 APPLETON.	RECTANGULAR	0.45
☒ R	CAJA DE PASO LISTADO "UL" 1 13/16"x 3 3/4"x2 1/2". ACERO GALVANIZADO EN CALIENTE, CATAL. M1-250 APPLETON.	RECTANGULAR	2.20
☒ T	PULL BOX "UL" LISTED, 1 13/16"x3 3/4"x2 1/2" WITH COVER HOT DIPPED GALVANIZED STEEL, CATAL. M1-250 APPLETON.	RECTANGULAR	2.20
—	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
—	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
—	RIGID COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND. "UL" LISTED	---	TECHO/ROOF
—	CONDULET TYPE "LB" COPPER FREE ALUMINIUM. "UL" LISTED	---	TECHO/ROOF
⊕	TERMOSTATO	RECTANGULAR	1.30
⊕	TERMOSTAT	RECTANGULAR	1.30

LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS / BOX (mm)	ALTURA (m) / HEIGHT (m)
—	EQUIPO AIRE ACONDICIONADO-UNIDAD EVAPORADOR / AIR CONDITIONING-EVAPORATOR UNIT	---	2.20
—	EQUIPO AIRE ACONDICIONADO - UNIDAD CONDENSADOR	---	0.20
—	AIR CONDITIONING - CONDENSING UNIT	---	0.20
—	EQUIPO AIRE ACONDICIONADO-THROUGH WALL THROUGH WALL AIR CONDITIONING EQUIPMENT	---	0.10
—	EQUIPO AIRE ACONDICIONADO - TOMA DE AIRE	---	TECHO/ROOF
—	AIR INTAKE EXHAUST FAN	---	TECHO/ROOF
—	INTERRUPTOR DIFERENCIAL DE 1x20A, 30mA, NEMA 4X, 220VAC, 10KA, EMPOTRADO A PARED, MODELO GHBGFEP1020 DE EATON CUTLER HAMMER	---	0.45
—	GFCI 1x20A, 30mA, NEMA 4X, 220VAC, 10KA, EMBEDDED WALL, MODEL GHBGFEP1020 OF EATON CUTLER HAMMER	---	0.45
—	TABLERO ELECTRICO EMPOTRADO LISTADO UL	---	1.80 NIVEL SUP.
—	PANELBOARD EMBEDDED. "UL" LISTED	---	1.80 TOP
—	TOMACORRIENTE SIMPLE MODELO 6-20R/LEVITON	---	0.45
—	SINGLE RECEPTACLE MODEL 6-20R/LEVITON	---	0.45
—	CONDUCTO DE PVC SCH40 EMPOTRADO EN PISO. LISTADO "UL"	---	---
—	RIGID SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	---	---
—	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, PARA CONTROL DE EXTRACTOR MODELO 1221-2I CON CUBIERTA LISTADO "UL"	RECTANGULAR 100x55x40	1.30
—	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ, FOR EXHAUST FAN CONTROL MODEL 1221-2I WITH COVER "UL" LISTED	RECTANGULAR 100x55x40	1.30

LEYENDA / LEGEND			
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION	CAJAS / BOX (mm)	ALTURA (m) / HEIGHT (m)
—	EQUIPO DE AIRE ACONDICIONADO - UNIDAD CONDENSADOR	---	0.20
—	AIR CONDITIONING - CONDENSING UNIT	---	0.20
—	EQUIPO AIRE ACONDICIONADO-UNIDAD EVAPORADOR	---	DENTRO DE TECHO
—	AIR CONDITIONING-EVAPORATOR UNIT	---	IN ROOF
—	INTERRUPTOR BIPOLAR DE 3 POSICIONES 20A, 250VAC, MODELO 1386-I CON CUBIERTA, COLOR MARFIL. LISTADO UL, POR HUBBELL	RECTANGULAR 100x55x40	1.30
—	BIPOLAR SWITCH 3 POSITION 20A, 250VAC, MODEL 1386-I, FACE PLATE MORY COLOR, UL LISTED, HUBBELL.	RECTANGULAR 100x55x40	1.30
—	CAJA DE PASO LISTADO "UL" 1 13/16"x 3 3/4"x2 1/2". ACERO GALVANIZADO EN CALIENTE. M1-350 APPLETON.	RECTANGULAR	TECHO
—	PULL BOX "UL" LISTED, 1 13/16"x3 3/4"x2 1/2" WITH COVER GALVANIZED STEEL, CATAL. M1-350 APPLETON.	RECTANGULAR	ROOF

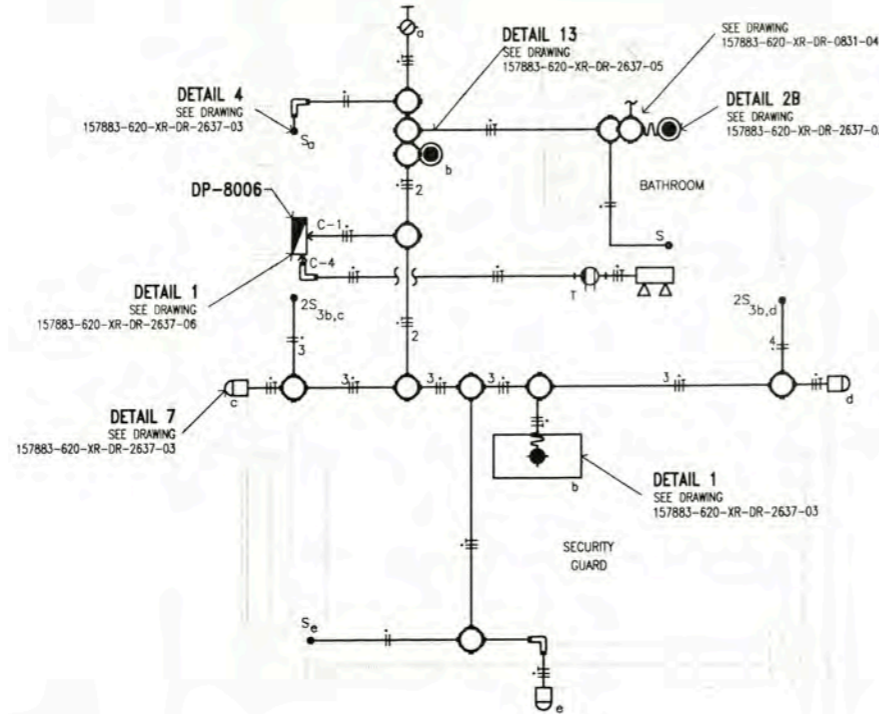
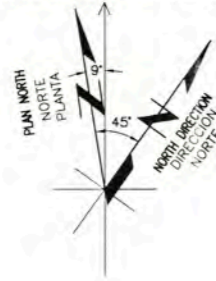
NOTAS/NOTES:

- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001



157883-620-XR-DR-2637-05 157883-620-XR-DR-2637-07 157883-620-XR-DR-0831-01 157883-620-XR-DR-0860-01 157883-620-XR-DR-0831-01 157883-620-XR-DR-0831-02		OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2 HVAC INSTALLATIONS DETAILS AND NOTES - OSBL ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005, DP-8005-A AND DP-8005-B HVAC GENERAL A-8005 POWER AND RECEPTACLE OUTLETS LAYOUT FIRE STATION A-8005 LIGHTING DISTRIBUTION LAYOUT FIRE STATION A-8005			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIE)		PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DRAWING NO: 157883-620-XR-DR-0831-04 PLANO N°: 157883-620-XR-DR-0831-04	
ISSUED FOR CONSTRUCTION		DATE: 06/11/09 DESIGNED: WPA APPROVED: COU			PROJECT: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING) LOCATION: PAMPA MELCHORITA		SCALE: 1:75 DATE: 05/09/08		REVISIONS: 0	

PLAN NORTH OF LAYOUT
NORTE DE PLANTA DEL DIBUJO



LIGHTING DISTRIBUTION LAYOUT
MAIN GATE SECURITY & GUARD HOUSE A-8006
SCALE 1:25



NOTA/NOTE:

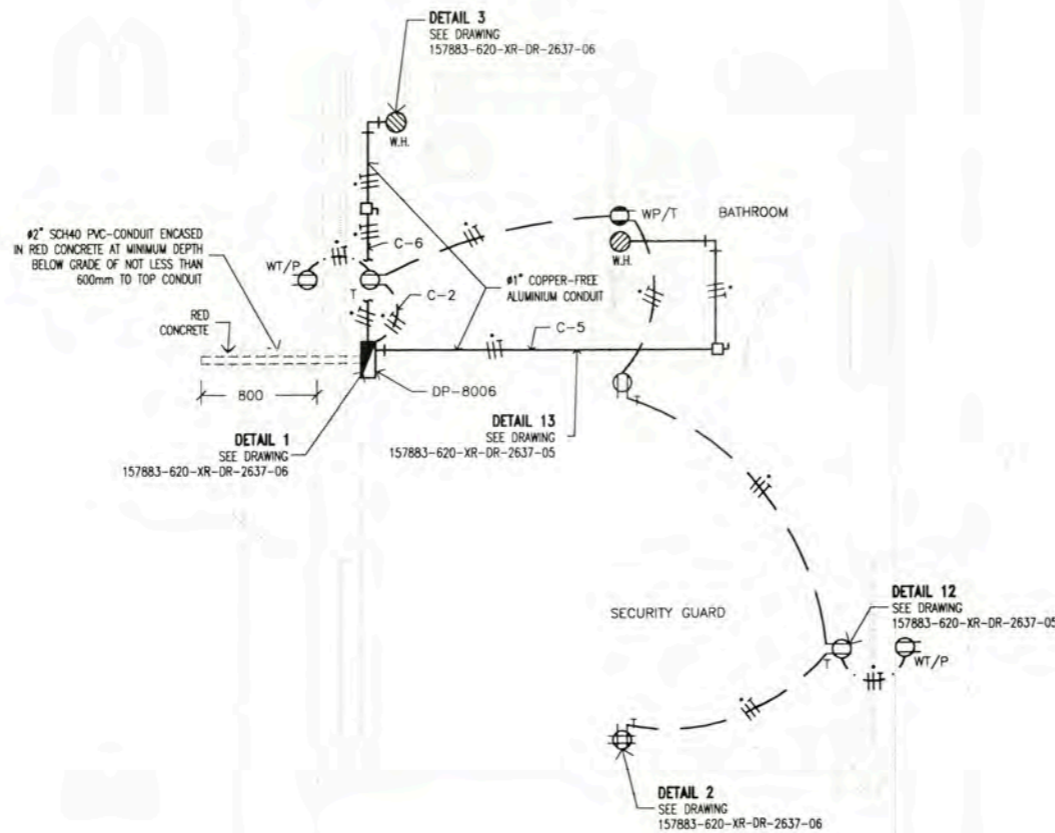
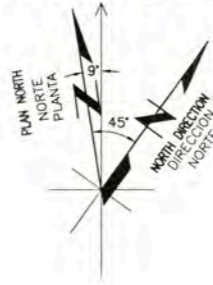
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
- EL CALCULO PARA EL NUMERO DE LUMINARIAS POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004
CALCULATION TO DETERMINE LIGHTING NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
- LAS LUMINARIAS ESTAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0025
THE LIGHTING FIXTURE IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0025
- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001
- EL CALCULO DE NIVEL DE ILUMINACION SE MUESTRA EN 157883-620-XR-CC-0007
THE CALCULATED LIGHTING LEVEL IS SHOW IN 157883-620-XR-CC-0007

LEYENDA / LEGEND

SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA/ HEIGHT(m)
◻	LUMINARIA PARA EMPOTRAR EN FOR DE TIPO REJILLAS PARABOLICAS DE CELDA PROFUNDA 3", BAJA IRIDISCENCIA, EQUIPADA CON BALASTO ELECTRONICO MULTIVOLTAGE INCLUYE LAMPARAS FLUORESCENTES LINEALES DE 32W TB. LISTADA "UL". MODELO: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
◻	LIGHTING FIXTURE RECESSED IN FOR, WITH DEEP PARABOLIC LOUVER 3", LOW IRIDISCENT, EQUIPPED WITH MULTIVOLTAGE BALLAST INCLUDES FLUORESCENT LAMP 32W TB. "UL" LISTED. MODEL: 2PM3N 3 32 18LD MVOLT LP741 LITHONIA LIGHTING.	JUNCTION BOX	CEILING
◻	LUMINARIA INSTALADA EN PARED, CUERPO DE ALUMINIO FUNDIDO CON REFLECTOR DE ALUMINIO ANODIZADO ESPECULAR Y REFRACTOR DE VIDRIO BOROSILICATO PRISMATICO. INCLUYE UNA LAMPARA DE VAPOR DE SODIO DE 70W. BALASTO EN ALTO FACTOR DE POTENCIA 240VAC. LISTADA UL. MODELO: TWH 70S 240 DF LPI LITHONIA LIGHTING.	---	2.20m
◻	BUILDING MOUNTED LUMINAIRE, RUGGED DIE CAST ALUMINUM HOUSING WITH SPECULAR ANODIZED ALUMINUM REFLECTOR AND PRISMATIC BOROSILICATE GLASS REFRACTOR. INCLUDE ONE 70 WATT CLEAR HIGH PRESSURE SODIUM LAMP. HIGH POWER FACTOR BALLAST, 240VAC. "UL" LISTED. MODEL: TWH 70S 240 DF LPI LITHONIA LIGHTING	---	2.20m
◻	SPOT EMPOTRABLE CON YUJO DE SUJECION DE SISTEMA OPTICO FABRICADO EN ACERO GALVANIZADO. REFLECTOR EN ALUMINIO BRILLANTE ESPECULAR ABIERTO. INCLUYE DOS LAMPARAS COMPACTAS DE 26 W. BALASTO MULTIVOLTAGE. LISTADA "UL". LFB 2 26 TRT MVOLT F803AZ LPI LITHONIA LIGHTING.	JUNCTION BOX	FALSO CIELO
◻	RECESSED DOWNLIGHT RUGGED, GALVANIZED STEEL FRAME-IN WITH ADJUSTABLE INTEGRAL YUJO TO RETAIN OPTICAL SYSTEM OPEN CLEAR SPECULAR ALUMINUM REFLECTOR. INCLUDE TWO 26-WATT COMPACT FLUORESCENT, MULTIVOLT BALLAST. "UL" LISTED. LFB 2 26 TRT MVOLT F803AZ LPI LITHONIA LIGHTING.	JUNCTION BOX	CEILING
◻	TABLERO ELECTRICO EMPOTRADO	---	1.80 BORDE SUPERIOR
◻	PANELBOARD EMBEDDED.	---	1.80 TOP
◻	LUMINARIA DE EMERGENCIA PARA ADOSAR A PARED, CON 02 LAMPARAS FLUORESCENTES COMPACTAS DE 26W, CON KIT DE EMERGENCIA DE AUTONOMIA 1 HORA. LIBRE DE MANTENIMIENTO. 220VAC. LISTADO "UL".	CONDULET "LB" OR "T"	2.20m
◻	EMERGENCY LIGH FIXTURE TO ATTACHED TO WALL, WITH 02 COMPACT FLUORESCENT LAMPS OF 26W, WITH KIT EMERGENCY AUTONOMY 1 HOUR. MAINTENANCE-FREE. 220VAC. "UL" LISTED	CONDULET "LB" OR "T"	2.20m
◻	SALIDA DE LUZ EN PARED TIPO SOCKET, CON 01 LAMPARAS FLUORESCENTE COMPACTA DE 18W, 220VAC. LISTADO "UL"	CONDULET "LB" OR "T"	2.20m
◻	WALL MOUNTED LIGHT FIXTURE WITH 01 OF 18W COMPACT FLUORESCENT LAMPS, 220VAC. "UL" LISTED	CONDULET "LB" OR "T"	2.20m
◻	TOMACORRIENTE DUPLEX, BIPOLAR PARA ESPIGAS PLANAS Y REDONDAS CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100X55X40	2.20m
◻	DUPLEX RECEPTACLE OUTLET, WITH GROUNDING, 250V, 60HZ, 15A, ENCASED ON WALL. "UL" LISTED	RECTANGULAR 100X55X40	2.20m
—	CONDUCTOR DE FASE / PHASE CONDUCTOR	---	---
—	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	---	---
—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	---	---
EXIT	LUMINARIA DE SEÑALIZACION, CON 01 LAMPARA FLUORESCENTE DE 26W, 220VAC, 1Ø, CON ALTO F.D.P. LISTADO "UL"	---	2.20m
EXIT	EXIT LIGH; FLUORESCENT LAMP WITH 01 TO 26W, 220VAC, 1 Ø, WITH HIGH F.D.P. "UL" LISTED	---	2.20m
—	CONDUCTO FLEXIBLE DE ALUMINIO LIBRE DE COBRE #3/4" LISTADO "UL"	---	---
—	FLEXIBLE CONDUIT COPPER-FREE ALUMINIUM #3/4" "UL" LISTED	---	---
.S	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
.S	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
.S _a	INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
.S _a	SINGLE POLE SWITCH, 16A, 250VAC, 60HZ. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
+2S _{a,b}	02 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. a, b INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON a y b. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
+2S _{a,b}	02 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. a, b INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH a and b. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
+2S _{a,b}	01 INTERRUPTOR CONMUTACION Y 01 INTERRUPTOR UNIPOLAR SIMPLE 16A, 250VAC, 60HZ. A, B INDICA EL CONTROL SOBRE LOS ARTEFACTOS IDENTIFICADOS CON A Y B. LISTADO "UL"	RECTANGULAR 100X55X40	1.30m
+2S _{a,b}	01 3-WAY SWITCH AND 01 SINGLE POLE SWITCH 16A, 250VAC, 60HZ. A, B INDICATES THE CONTROL DEVICES ON THE IDENTIFIED WITH A AND B. "UL" LISTED	RECTANGULAR 100X55X40	1.30m
—	3/4" RIGID COPPER-FREE ALUMINIUM FOR ABOVE GROUND "UL" LISTED	---	---
◻	CONDULET TYPE "LB". COPPER-FREE ALUMINIUM "UL" LISTED	---	---
◻	CONDULET TYPE "T". COPPER-FREE ALUMINIUM "UL" LISTED	---	---

<p>157883-620-XR-CC-0007</p> <p>157883-620-XR-DR-0831-01</p> <p>157883-620-XR-DR-2637-03</p> <p>157883-620-XR-DR-0831-08</p> <p>157883-620-XR-DR-0831-07</p> <p>157883-620-XR-DR-0831-08</p>				<p>ILLUMINATION LEVELS CALCULATION</p> <p>PACKAGE SUBSTATION ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8006, DP-8005-A AND DP-8006</p> <p>ELECTRICAL INSTALLATION DETAILS AND NOTES</p> <p>POWER LAYOUT FOR AIR CONDITIONING - MAIN GATE SECURITY & GUARD HOUSE A-8006</p> <p>GROUNDING SYSTEM LAYOUT - MAIN GATE SECURITY & GUARD HOUSE A-8006</p> <p>POWER DISTRIBUTION AND SOCKETS'S OUTLET LAYOUT - MAIN GATE SECURITY & GUARD HOUSE A-8006</p>				<p>UNIVERSIDAD NACIONAL DE INGENIERIA</p> <p>FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)</p> <p>PERU LNG EXPORT PROJECT</p> <p>PERMANENT COMMUNITY BUILDINGS</p> <p>INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)</p> <p>PAMPA MELCHORITA</p>				<p>OUT SIDE BATTERY LIMITS - OSBL</p> <p>LIGHTING DISTRIBUTION LAYOUT</p> <p>MAIN GATE SECURITY & GUARD HOUSE A-8006</p> <p>157883-620-XR-DR-0831-05</p>			
<p>ISSUED FOR CONSTRUCTION</p>		<p>18/07/09</p>	<p>WPA</p>	<p>MEJ</p>	<p>157883-620-XR-DR-0831-08</p>	<p>PROJECT NO: 1618</p>	<p>REVISION: 0</p>	<p>DATE: 05/09/08</p>	<p>SCALE: INDICATED</p>	<p>PROJECT NO: 1618</p>	<p>REVISION: 0</p>	<p>DATE: 05/09/08</p>	<p>SCALE: INDICATED</p>		

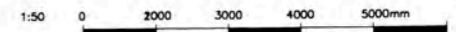
PLAN NORTH OF LAYOUT
NORTE DE PLANTA DEL DIBUJO



POWER AND RECEPTACLE OUTLETS LAYOUT
POWER AND RECEPTACLE OUTLETS LAYOUT
MAIN GATE SECURITY & GUARD HOUSE A-8006
PLANT
SCALE 1:50

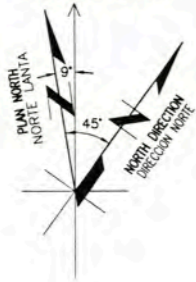
LEYENDA / LEGEND			
SIMBOLO/SYMBOL	DESCRIPCION/DESCRIPTION	CALIBRE/NO(mm)	ALTIM(m) HECH(m)
⊗ R	CAJA DE PASO RECTANGULAR LISTADO "UL" NEMA 12, 100x55x50mm PULL BOX "UL" LISTED, NEMA 12, 100x55x50mm	RECTANGULAR	0.45m
⊗ T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊗ T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	1.30m
⊗ T	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊗ T	TOMACORRIENTE DUPLEX BIPOLAR CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	2.20m
⊗ T	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	2.20m
⊗ WP/T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. A PRUEBA DE AGUA LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊗ WP/T	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
⊗ WP/T	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED.	RECTANGULAR 100x55x40	1.30m
⊗ WP/T	DUPLEX RECEPTACLE OUTLET WEATHERPROOF WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	1.30m
⊗ HT	TOMACORRIENTE CUADRUPLE CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN PARED. LISTADO "UL"	RECTANGULAR 100x55x40	0.45m
⊗ HT	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, EMBEDDED ON WALL. "UL" LISTED	RECTANGULAR 100x55x40	0.45m
	TABLERO ELECTRICO EMPOTRADO		1.80 BORDE SUPERIOR
	PANELBOARD EMBEDDED.		1.80 TOP
—	CONDUCTOR DE FASE / PHASE CONDUCTOR		---
—	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR		---
—	CONDUCTOR DE TIERRA / GROUND CONDUCTOR		---
—	INTERRUPTOR DIFERENCIAL "ID" DE 1-40A, 220VAC, 10KA, EMPOTRADO EN PARED MODELO: BP, MARCA GENERAL ELECTRIC		1.30m
—	GROUND FAULT CIRCUIT INTERRUPTOR "GFCI" 1x40A, 220VAC, 10KA, EMBEDDED WALL MODEL: BP, BRANCO, GENERAL ELECTRIC		1.30m
—	CAJA DE CONEXION TERMICA ELECTRICA 7.2KW, 220VAC, 60Hz, LISTADO "UL" MODELO: BP, BRANCO, GENERAL ELECTRIC		0.45m
—	BOX OF CONNECTION OF WATER HEATERS 7.2KW, 220VAC, 60Hz, "UL" LISTED		0.45m
—	CONDUCTO DE #3/4" PVC-CONDUIT SCH40 EMPOTRADO DEBAJO DEL PISO. LISTADO "UL"		---
—	#3/4" SCH40 PVC-CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED		---
—	CONDUCTO DE #3/4" EMT, EMPOTRADO EN PARED DE DRYWALL.		---
—	#3/4" ELECTRICAL METAL TUBING (EMT), EMBEDDED DRYWALL.		---
—	CONDUCTO DE #3/4" COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND. "UL" LISTED		---
—	#3/4" COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND. "UL" LISTED		---
—	TYPE "LB" "UL" LISTED, COPPER-FREE ALUMINIUM CONDUIT		---
—	JUNCTION BOX COPPER-FREE ALUMINIUM "UL" LISTED		---
—	TOMACORRIENTE DUPLEX CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN ESTRUCTURA DE TECHO. LISTADO "UL"		---
—	DUPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORTED IN ROOF. "UL" LISTED		---
—	TOMACORRIENTE CUADRUPLE CON TOMA A TIERRA, 250V, 60Hz, 15A, EMPOTRADO EN MESA DE TRABAJO. LISTADO "UL"		---
—	QUADPLEX RECEPTACLE OUTLET WITH GROUNDING, 250V, 60Hz, 15A, SUPPORT IN WORK TABLE. "UL" LISTED		---

- NOTA/NOTE:**
- LOS CIRCUITOS DE ALUMBRADO Y TOMACORRIENTES TENDRAN UN CALIBRE MINIMO DE 12AWG, THHN (FASES), 12AWG, THHN (NEUTRO) Y 12AWG, THHN (TIERRA).
LIGHTING CIRCUITS AND OUTLETS WILL HAVE A SIZE MINIMUM OF 12AWG, THHN (PHASE), 12AWG, THHN (NEUTRAL) AND 12AWG, THHN (GROUND)
 - EL CALCULO PARA EL NUMERO DE TOMACORRIENTES POR CIRCUITO SE MUESTRA EN 157883-620-XR-CC-0004
CALCULATION TO DETERMINE SOCKETS OUTLET NUMBER BY CIRCUIT IN 157883-620-XR-CC-0004
 - LOS TOMACORRIENTES ESTARAN DE ACUERDO CON LA HOJA TECNICA 157883-620-XR-DS-0026
SOCKET OUTLET IN ACCORDING TO DATA SHEET 157883-620-XR-DS-0026
 - EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
 - EL LISTADO DE CARGAS ELECTRICAS SE MUESTRA EN 157883-620-XR-SH-0001
THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001

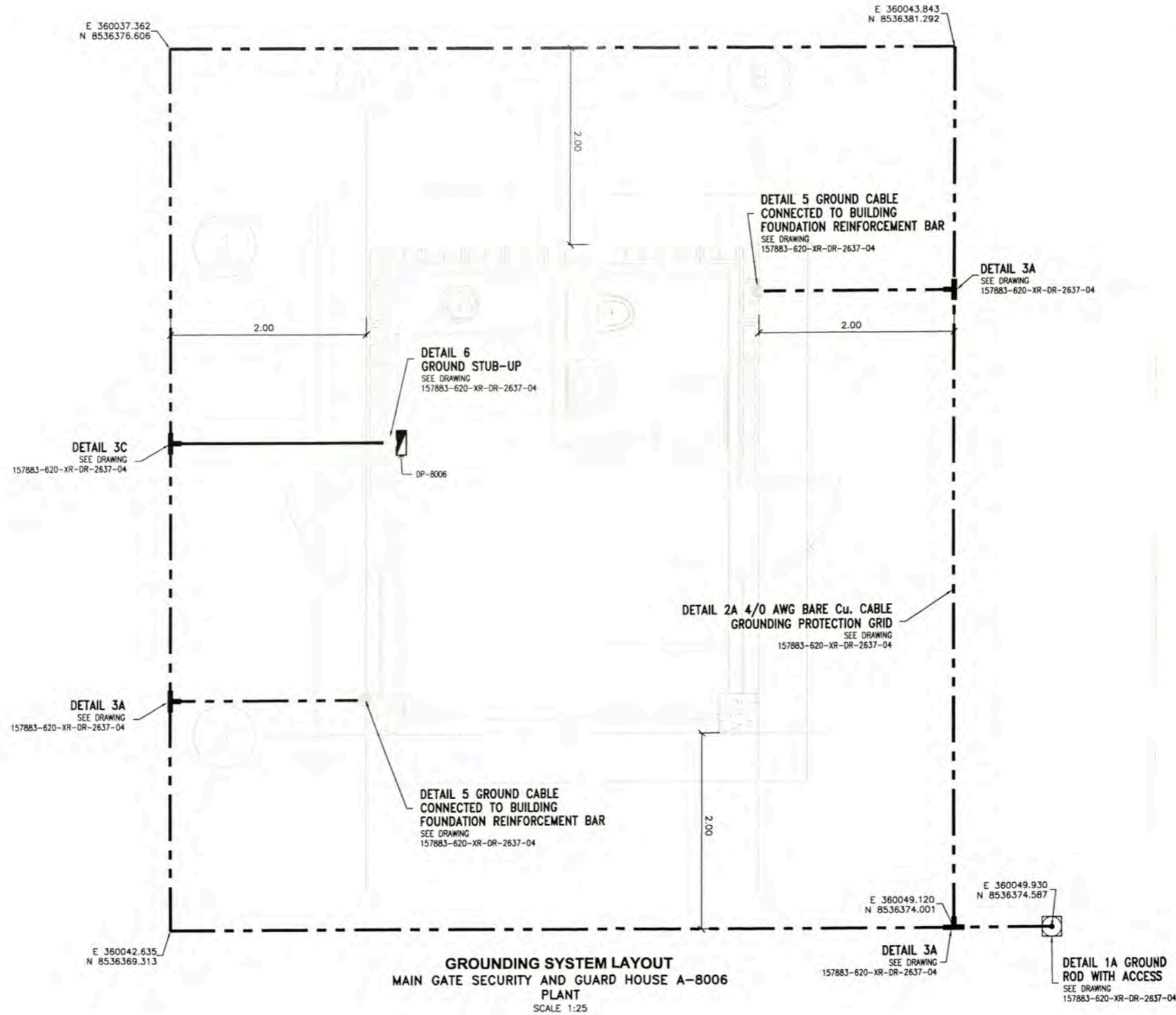


157883-620-XR-DR-0831-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8005, DP-8005-A AND DP-8006			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		DRAWING PLANO: OUT SIDE BATTERY LIMITS - OSBL POWER AND RECEPTACLE OUTLETS LAYOUT MAIN GATE SECURITY & GUARD HOUSE A-8006	
157883-620-XR-DR-2637-05 OSBL ELECTRICAL INSTALLATIONS DETAILS AND NOTES - SHEET 2 OF 2			PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DRAWING BY: WPA DESIGNED BY: COU	
157883-620-XR-DR-0831-08 POWER LAYOUT FOR AIR CONDITIONING EQUIPMENT MAIN GATE SECURITY & GUARD HOUSE A-8006			INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		DATE: 05/09/08 PROJECT NO: 1618	
157883-620-XR-DR-0831-07 GROUNDING SYSTEM LAYOUT MAIN GATE SECURITY & GUARD HOUSE A-8006			LOCATION: PAMPA MELCHORITA		APPROVED BY: JMG REVISIONS: 0	
157883-620-XR-DR-0831-05 LIGHTING DISTRIBUTION LAYOUT MAIN GATE SECURITY & GUARD HOUSE A-8006			TITLE: 157883-620-XR-DR-0831-06		DRAWING NO: 157883-620-XR-DR-0831-06	

PLAN NORTH OF LAYOUT
NORTE DE PLANTA DEL DIBUJO



LEYENDA / LEGEND	
SIMBOLO / SYMBOL	DESCRIPCION / DESCRIPTION
	TABLERO / PANELBOARD
	CONDUCTOR AISLADO TW(VERDE), 2/0 AWG 2/0 AWG PVC GREEN SHEATHED Cu CABLE
	CABLE DE COBRE DESNUDO 4/0 AWG 4/0 AWG BARE Cu CABLE
	SOLDADURA EXOTERMICA TIPO TEE TEE JOINT EXOTHERMIC WELD
	CONDUCTOR AISLADO TW(VERDE), 4/0 AWG 4/0 AWG PVC GREEN SHEATHED Cu CABLE
	POZO DE PUESTA A TIERRA CON TAPA DE REGISTRO GROUNDING ROD WITH INSPECTION WELL

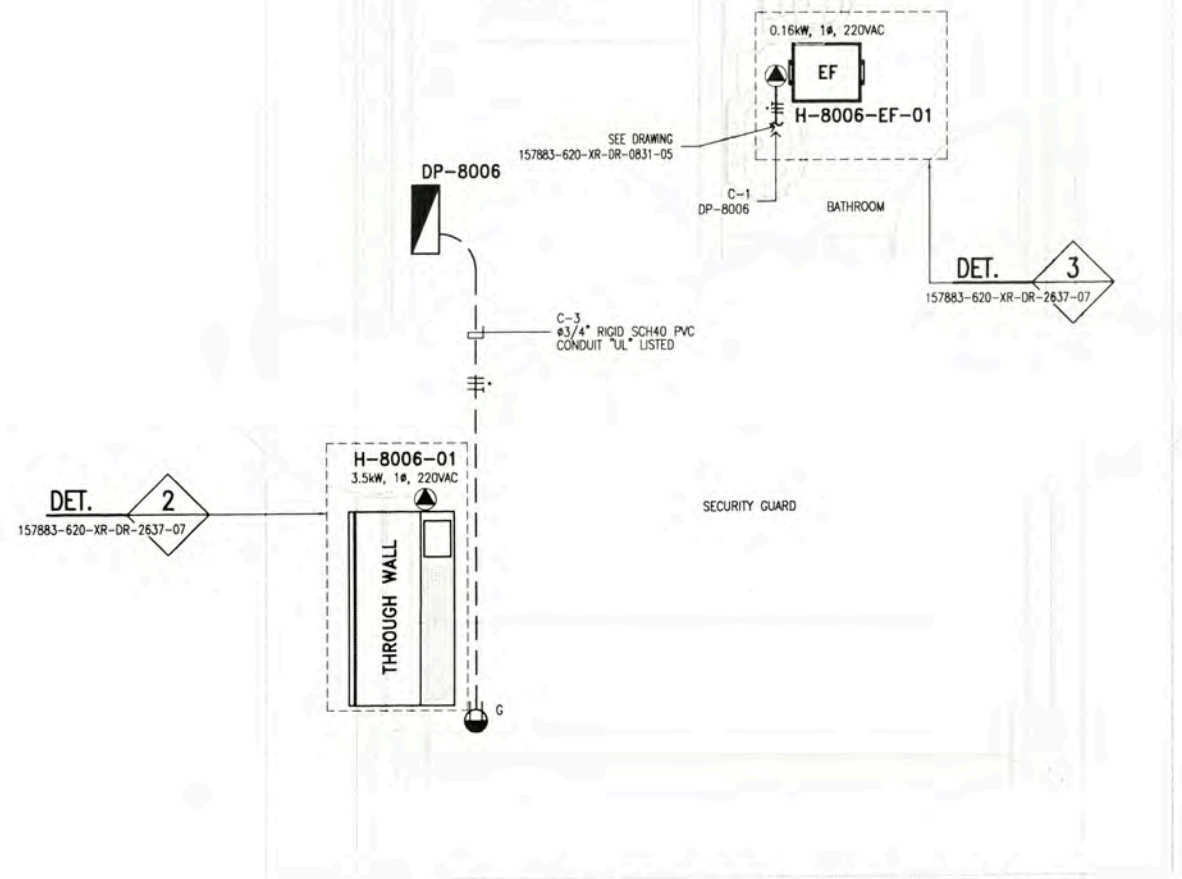
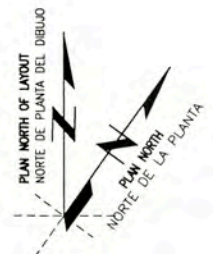


GROUNDING SYSTEM LAYOUT
MAIN GATE SECURITY AND GUARD HOUSE A-8006
PLANT
SCALE 1:25

NOTE / NOTAS:

1. EACH BUILDINGS GROUNDING GRID SHALL BE BONDED TO THE PLANT GROUND LOOP MINIMUM TWO CONNECTIONS
2. THE TOTAL RESISTANCE OF THE GROUNDING SYSTEM SHALL NOT EXCEED 5 ohms.
LA RESISTENCIA TOTAL DEL SISTEMA DE PUESTA A TIERRA NO EXCEDERA A LOS 5 ohms.
3. THE CONNECTION OF GROUND LOOP WILL BE SHOP IN DRAWING CBI

UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		PROJECT: PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DRAWING TITLE: GROUNDING SYSTEM LAYOUT MAIN GATE SECURITY AND GUARD HOUSE A-8006	
PROJECT NO: 157883-620-XR-DR-0831-07		SPECIALTY: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		SCALE: INDICATED	
DATE: 18/02/09		DESIGNED BY: COU		DATE: 05/09/08	
DRAWING NO: 157883-620-XR-DR-0831-07		APPROVED BY: JMG		PROJECT NO: 1618	
ISSUED FOR CONSTRUCTION		REVISIONS: 0		DRAWING NO: 157883-620-XR-DR-0831-07	

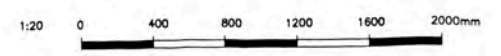


POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS
MAIN GATE SECURITY & GUARD HOUSE A-8006
 SCALE 1:20

LEYENDA / LEGEND			
SIMBOLO/ SYMBOL	DESCRIPCION/DESCRIPTION	CAJAS/ BOX(mm)	ALTURA(m) HEIGHT(m)
	CONDUCTOR DE FASE / PHASE CONDUCTOR	--	--
	CONDUCTOR NEUTRO / NEUTRAL CONDUCTOR	--	--
	CONDUCTOR DE TIERRA / GROUND CONDUCTOR	--	--
	RIGID COPPER-FREE ALUMINIUM CONDUIT, FOR ABOVE GROUND. "UL" LISTED	--	TECHO/ROOF
	CONDULET TYPE "LB". "UL" LISTED	--	TECHO/ROOF
	CONDULET TYPE "T". "UL" LISTED	--	TECHO/ROOF
	EQUIPO AIRE ACONDICIONADO-THROUGH WALL / AIR CONDITIONING-THROUGH WALL	--	0.10
	TOMACORRIENTE SIMPLE MODELO 6-20R/LEVITON	--	0.45
	SINGLE RECEPTACLE MODEL 6-20R/LEVITON	--	0.45
	EXTRACTOR DE AIRE / EXHAUST FAN	--	TECHO/ROOF
	TABLERO ELECTRICO EMPOTRADO LISTADO UL	--	1.80 NIVEL SUP.
	PANEL BOARD EMBEDDED. "UL" LISTED	--	1.80 TOP
	CONDUCTO DE PVC SCH40 EMPOTRADO EN PISO. LISTADO "UL"	--	--
	RIGID SCH40 PVC CONDUIT EMBEDDED UNDER FLOOR. "UL" LISTED	--	--

NOTA/NOTE

- 1.- EL LISTADO DE CABLES ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0003
 THE ELECTRICAL CABLE SCHEDULE IS SHOW IN 157883-620-XR-SH-0003
- 2.- EL LISTADO DE CARGAS ELECTRICOS SE MUESTRA EN 157883-620-XR-SH-0001
 THE ELECTRICAL LOAD SCHEDULE IS SHOW IN 157883-620-XR-SH-0001



157883-080-MV-SM-0009-01 HVAC SCHEMATIC MAIN GATE / SECURITY GUARD BUILDING A-8006			UNIVERSIDAD NACIONAL DE INGENIERIA FACULTAD DE INGENIERIA ELECTRICA Y ELECTRONICA (FIEE)		OUT SIDE BATTERY LIMITS - OSBL POWER LAYOUT FOR AIR CONDITIONING EQUIPMENTS MAIN GATE SECURITY & GUARD HOUSE A-8006	
157883-620-XR-DR-2637-07 HVAC INSTALLATIONS DETAILS AND NOTES-OSBL			PERU LNG EXPORT PROJECT PERMANENT COMMUNITY BUILDINGS		DRAWING BY: WPA DESIGNED BY: COU REVISOR: FTA APPROVED BY: JMG PROJECT No: 1618 REVISION: 0	
157883-620-XR-DR-0831-01 ELECTRICAL SINGLE LINE DIAGRAMS FOR DP-8006, DP-8005-A AND DP-8006		ESPECIALIDAD: INGENIERIA ELECTRICA (ELECTRICAL ENGINEERING)		LOCATION: PAMPA MELCHORITA		DRAWING No: 157883-620-XR-DR-0831-08
157883-620-XR-DR-0831-05 LIGHTING DISTRIBUTION LAYOUT MAIN GATE SECURITY & GUARD HOUSE A-8006		REFERENCIA DIBUJOS (REFERENCE DRAWINGS)		DATE: 05/09/08		
157883-620-XR-DR-0831-06 POWER AND RECEPTACLE OUTLETS LAYOUT MAIN GATE SECURITY & GUARD HOUSE A-8006		NOTE:		SCALE: INDICATED		