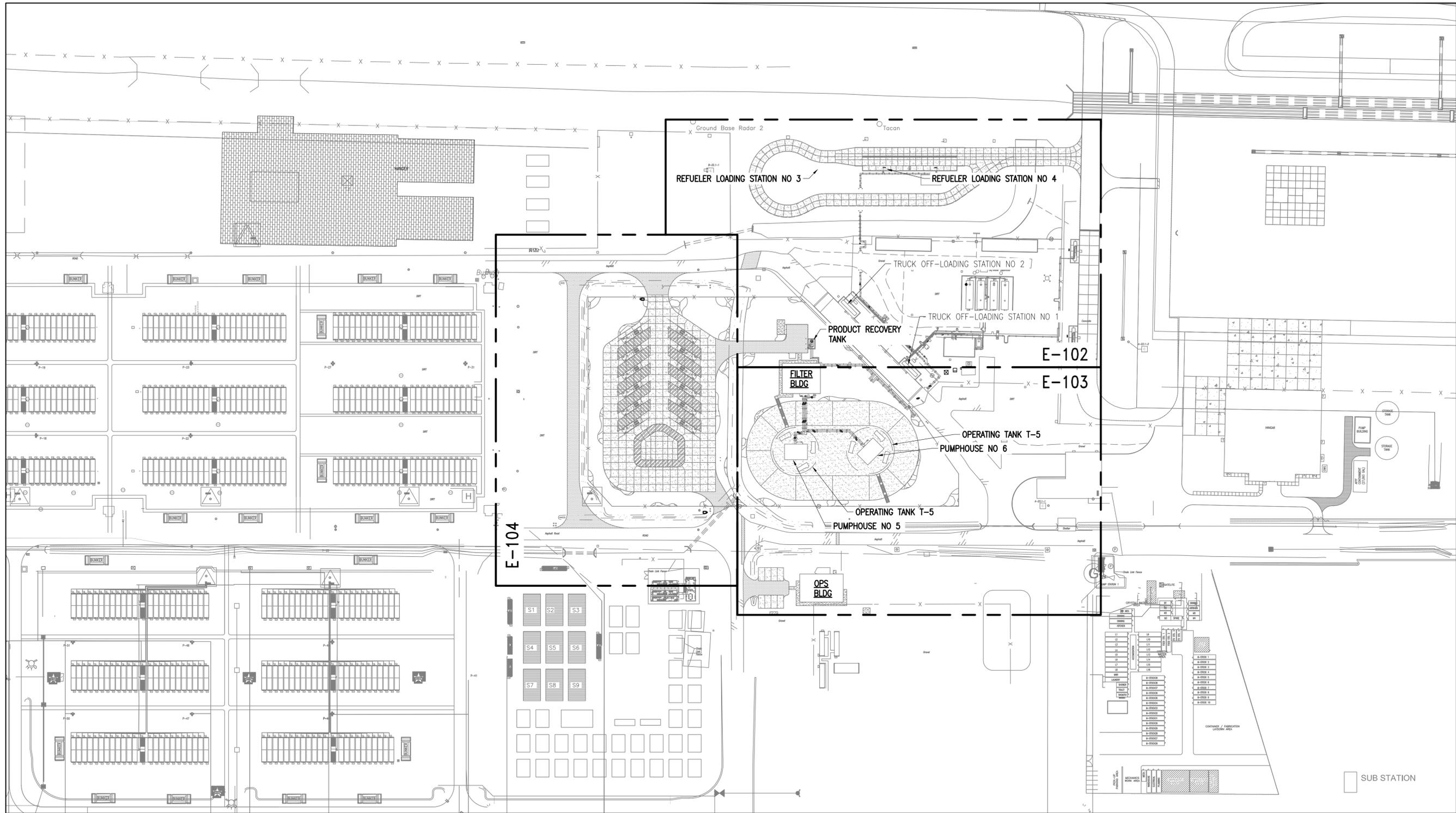


FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-01 KEY PLAN.dwg LAYOUT NAME: KEY PLAN PLOTTED: Wednesday, May 11, 2016 - 12:27pm USER: hopkins



PLAN NORTH

KEY PLAN
 SCALE: 1:1000



SYN	DESCRIPTION	DATE	APPR



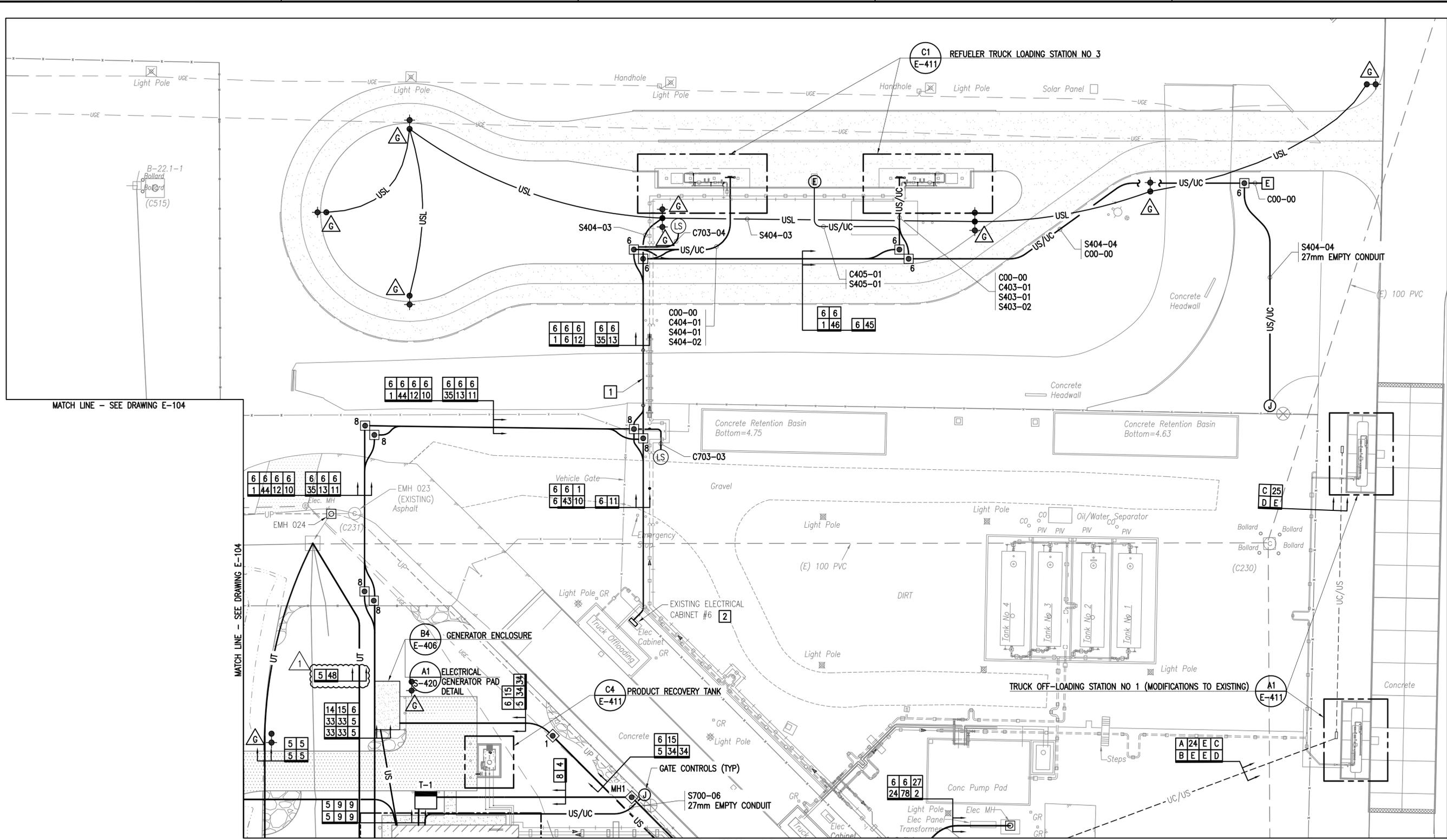
APPROVED
 FOR COMMANDER NAVFAC
 ACTIVITY
APPROVED BY ANDREA LEMON
 VIA EMAIL
 SATISFACTORY TO DATE 4/4/16
 DES: RJK | DRW: WMC | CHK: CHM
 PM/OM: LEY/RES
 BRANCH MANAGER
 DESIGN DIRECTOR: R.B. FITCH, III P.E.
 FIRE PROTECTION

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 LANT CAPITAL IMPROVEMENTS
 CAMP LEMONNIER
 NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
 NORFOLK, VIRGINIA
 DUBOULT AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
 KEY PLAN

SCALE: AS NOTED
 PROJECT NO.: 1344008
 CONSTR. CONTR. NO. N62470-16-R-6004
 NAVFAC DRAWING NO. 14047116
 SHEET 152 OF 186
E-101

DRAWING REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Dhh\air - Fuel Storage Facility - NAVFAC LANTCOM AutoCAD\E-102 PARTIAL SITE PLAN PLOTTED: Wednesday, May 11, 2016 - 2:11pm USER: rhpkins



MATCH LINE - SEE DRAWING E-104

MATCH LINE - SEE DRAWING E-104

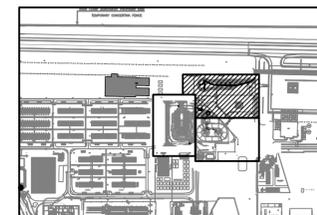
MATCH LINE - SEE DRAWING E-103

NEW WORK NOTES - THIS SHEET:

1. USE FUEL PIPING BRIDGE TO CROSS DRAINAGE DITCH.
2. SEE DETAIL E-502 FOR WIRING CONNECTIONS IN ELECTRICAL CABINET 6.



PARTIAL SITE PLAN
SCALE: 1:300

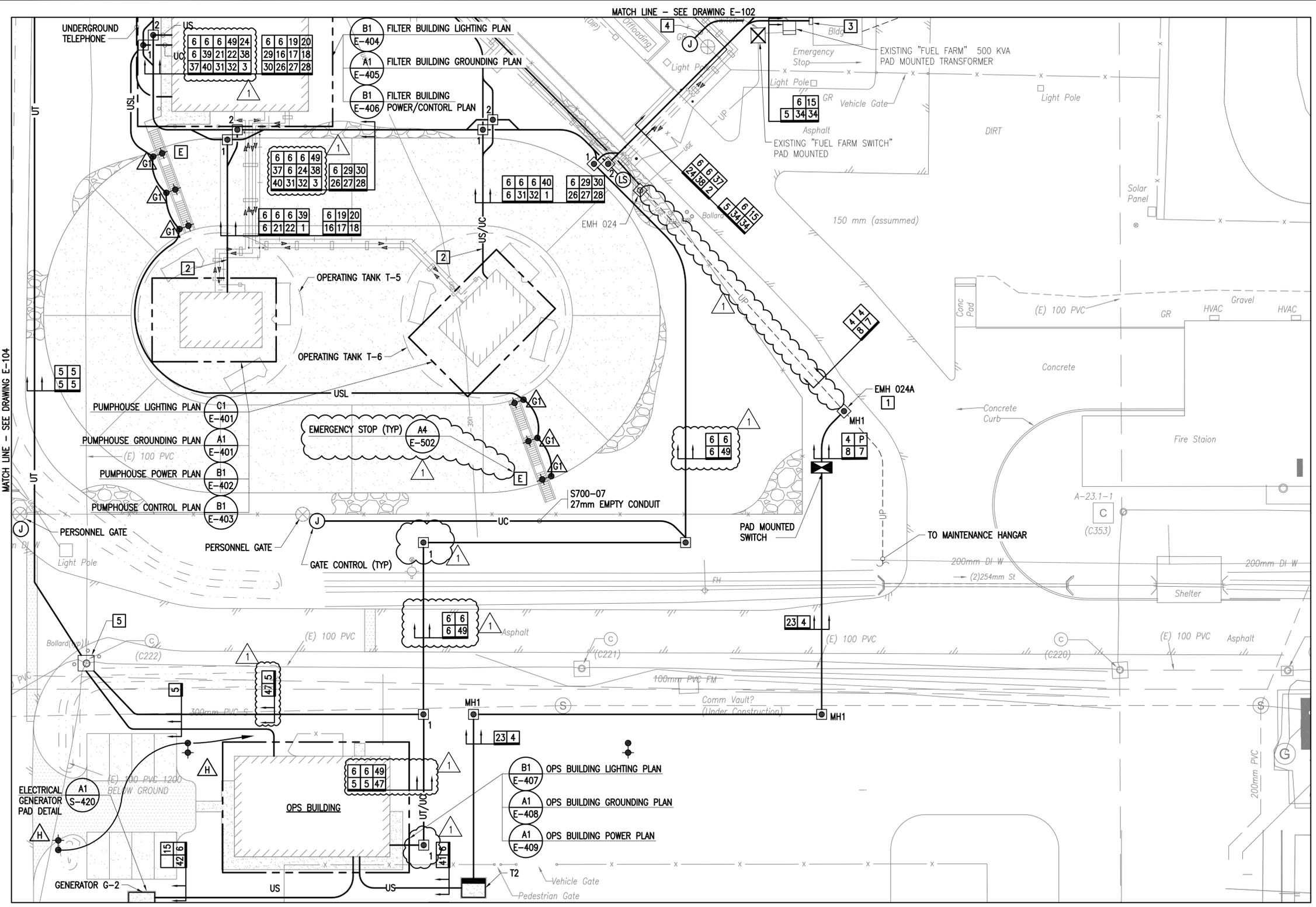


KEY PLAN
SCALE: NONE

GRAPHIC SCALE(S):



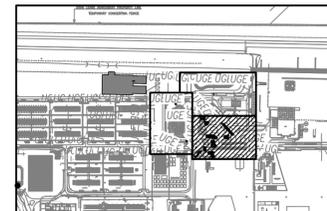
APPROVED	REVISED DUCTBANK INFO	DATE	APPR
	1	4/29/16	
			
			
			
APPROVED			
FOR COMMANDER NAVFAC			
ACTIVITY			
APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO DATE 4/4/16			
DES	RJK	DRW	WMC
CHK	CHM		
PM/DM LET/RES			
BRANCH MANAGER			
DESIGN DIRECTOR R.B. FITCH, III P.E.			
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING COMMAND			
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC			
LANT CAPITAL IMPROVEMENTS			
CAMP LEMONNIER			
DUBOULT AFRICA			
DESC 1701/P-1701			
CONSTRUCT FUEL STORAGE FACILITIES			
PARTIAL SITE PLAN			
SCALE: AS NOTED			
PROJECT NO.: 1344008			
CONSTR. CONTR. NO.			
N62470-16-R-6004			
NAVFAC DRAWING NO.			
14047117			
SHEET 153 OF 186			
E-102			
DRAWFORM REVISION: 10 MARCH 2009			



NEW WORK NOTES - THIS SHEET:

1. TYPE 2 MANHOLE, CAST-IN-PLACE. INTERCEPT EXISTING DUCTBANK. CUT DUCTBANK AWAY INSIDE MANHOLE WITHOUT DAMAGING PRIMARY CONDUCTOR. PROVIDE BELL ENDS ON EXISTING DUCTS.
2. TRANSITION DUCT BANK FROM TWO HIGH DUCTS AT BERM TO ONE HIGH DUCTS ALONG TOP OF TANK.
3. PROVIDE 1000A, SERVICE ENTRANCE RATED MANUAL TRANSFER SWITCH.
4. PERSONNEL GATE WITH KEYPAD AND ELECTRIC RELEASE. PROVIDE EMPTY 27mm CONDUIT TO EXISTING P906 ELECTRICAL BUILDING. PROVIDE 15A BRANCH CIRCUIT TO NEW BREAKER IN EXISTING PANEL.
5. EXISTING TELECOMMUNICATIONS MANHOLE. PROVIDE CONDUITS AND CABLING AS SHOWN. COORDINATE ALL WORK IN HANDHOLE WITH BASE TELECOM AT LEAST 48 HOURS IN ADVANCE. TERMINATIONS BY BASE TELECOMMUNICATIONS, MANHOLE SHALL REMAIN SECURE AT ALL TIMES.

PLAN NORTH
PARTIAL SITE PLAN
 SCALE: 1:300

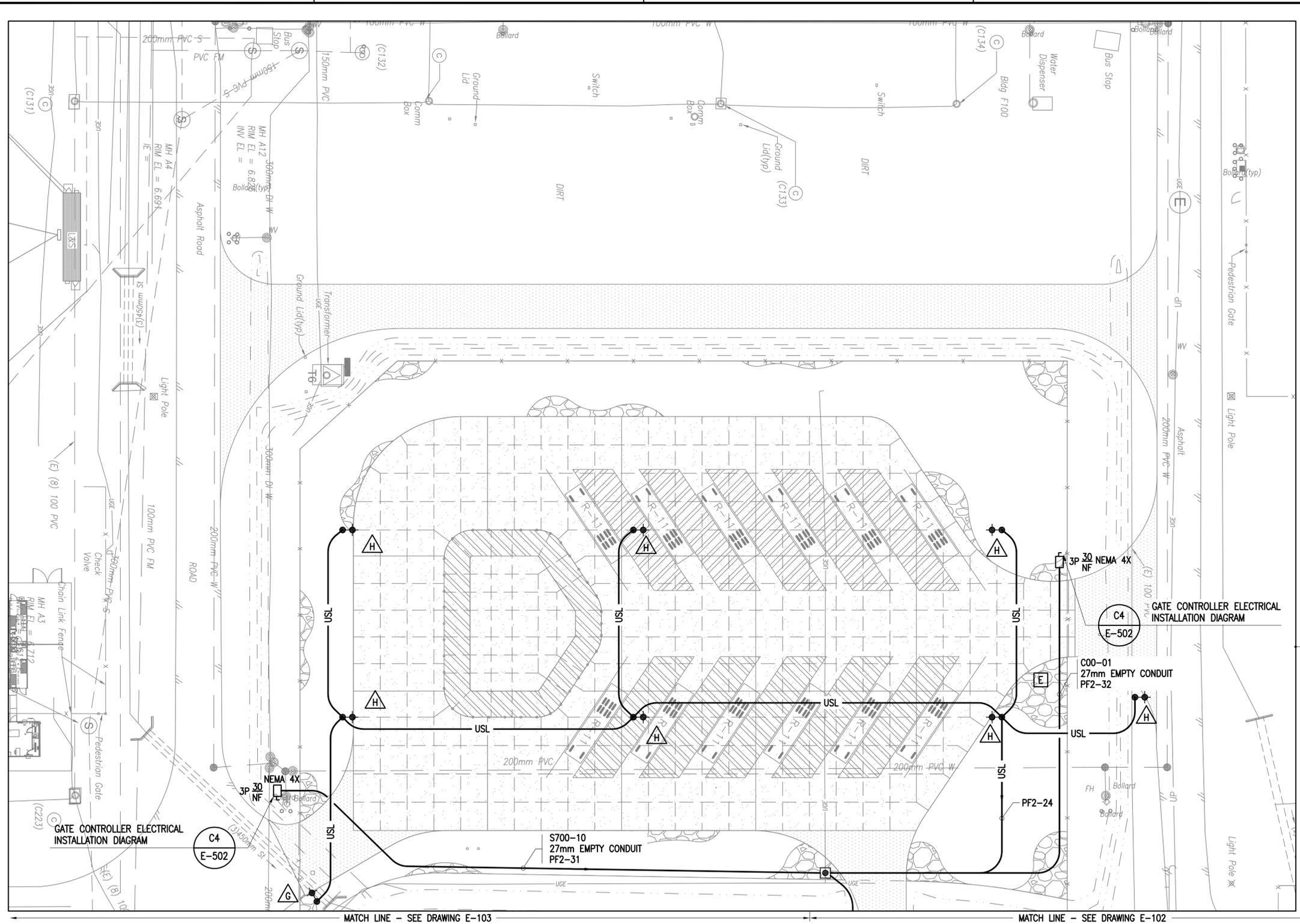


KEY PLAN
 SCALE: NONE

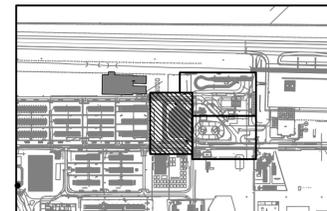


APPROVED	DATE	5/10/16
ADDED MH AND INFO	DESCRIPTION	
APPROVED		
FOR COMMANDER NAVFAC		
ACTIVITY		
APPROVED BY ANDREA LEMON VIA EMAIL		
SATISFACTORY TO	DATE	4/4/16
DESIGNER	DRW	CHK
RJK	WMC	CHM
PM/DM	LET/RES	
BRANCH MANAGER		
DESIGN DIRECTOR R.B. FITCH, III P.E.		
FIRE PROTECTION		
NAVAL FACILITIES ENGINEERING COMMAND		
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC		
LANE CAPITAL IMPROVEMENTS		
DIBOUTI, AFRICA		
CAMP LEMONNIER		
DESC 1701/P-1701		
CONSTRUCT FUEL STORAGE FACILITIES		
PARTIAL SITE PLAN		
SCALE:	AS NOTED	
PROJECT NO.:	1344008	
CONSTR. CONTR. NO.:		
NAVFAC DRAWING NO.:	N62470-16-R-6004	
SHEET	154	OF 186
E-103		
DRAWING REVISION: 10 MARCH 2009		

FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-104 PARTIAL SITE PLAN.dwg LAYOUT NAME: PARTIAL SITE PLAN PLOTTED: Wednesday, May 11, 2016 - 12:59pm USER: hopkins



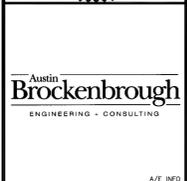
PLAN NORTH
PARTIAL SITE PLAN
 SCALE: 1:300



KEY PLAN
 SCALE: NONE



SYN	DESCRIPTION	DATE	APPR



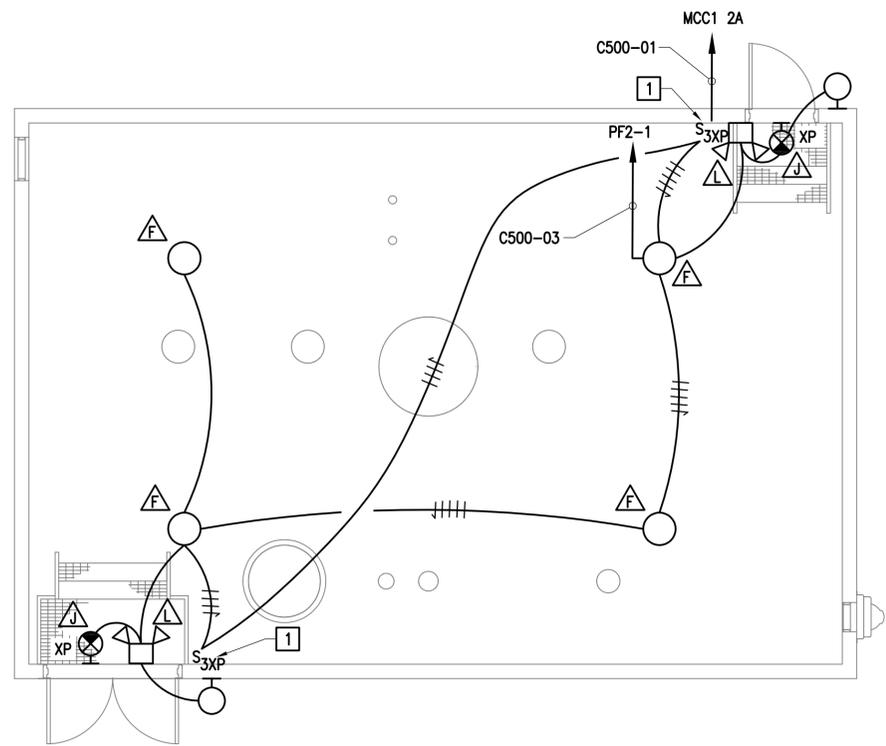
APPROVED
 FOR COMMANDER NAVFAC
 ACTIVITY
APPROVED BY ANDREA LEMON
 VIA EMAIL
 SATISFACTORY TO DATE 4/4/16
 DES: RJK | DRW: WMG | CHK: CHM
 PM/DM: LET/RES
 BRANCH MANAGER
 DESIGN DIRECTOR: R.B. FITCH, III P.E.
 FIRE PROTECTION

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
 LANT CAPITAL IMPROVEMENTS
 CAMP LEMONNIER
 DUBOULT AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
 PARTIAL SITE PLAN

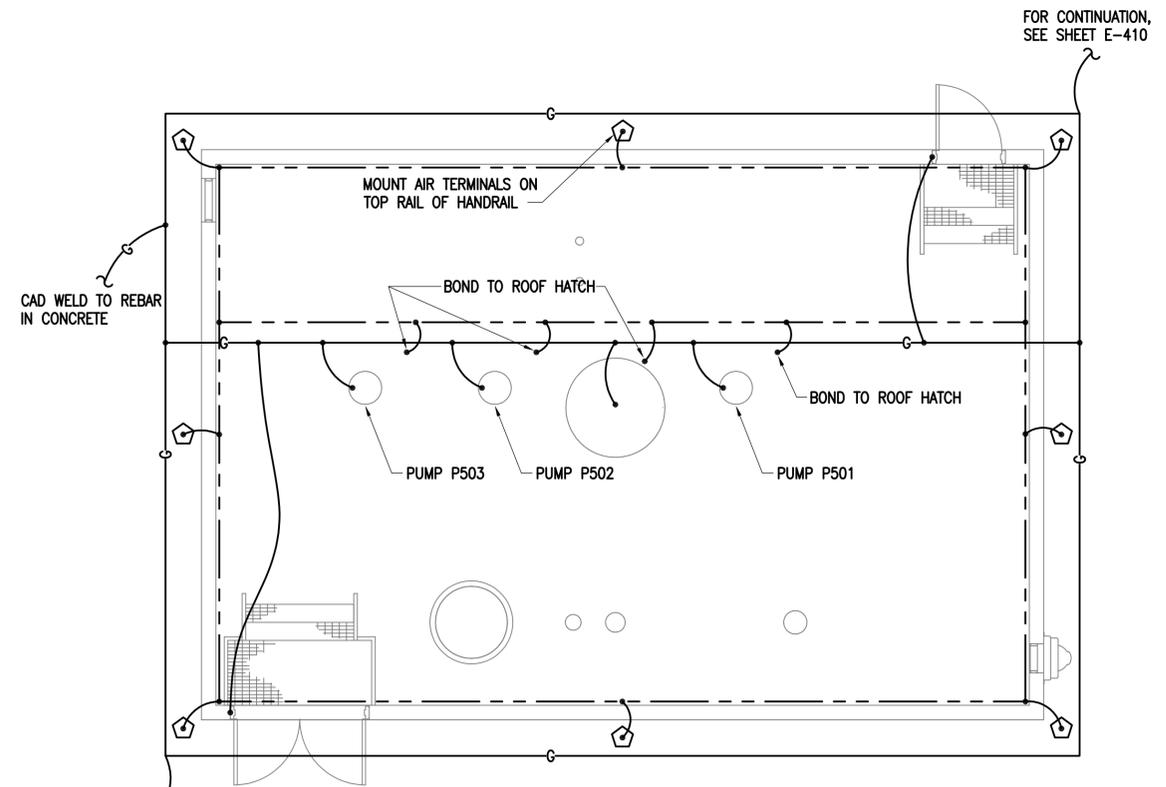
SCALE: AS NOTED
 PROJECT NO.: 1344008
 CONSTR. CONTR. NO.: N62470-16-R-6004
 NAVFAC DRAWING NO.: 14047119
 SHEET 155 OF 186
E-104

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-401 PUMPHOUSE PLANS.dwg LAYOUT NAME: PUMPHOUSE PLANS PLOTTED: Wednesday, May 11, 2016 - 1:00pm USER: rhopkins



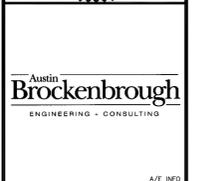
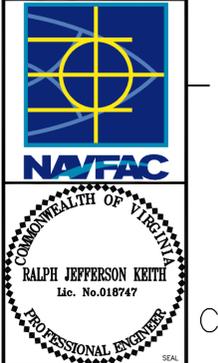
PLAN NORTH
NOTE: TANK 5 SHOWN, TANK 6 SIMILAR.
PUMPHOUSE LIGHTING PLAN
SCALE: 1:50
E-103



PLAN NORTH
NOTE: TANK 5 SHOWN, TANK 6 SIMILAR.
PUMPHOUSE GROUNDING PLAN
SCALE: 1:50
E-103

NEW WORK NOTES - THIS SHEET:
1. DOUBLE-POLE, DOUBLE THROW, EXPLOSIONPROOF SNAP SWITCH FOR CONTROL OF LIGHTS AND EXHAUST FAN. SEE EXHAUST FAN WIRING DIAGRAM ON E-602.

SYN	DESCRIPTION	DATE	APPR



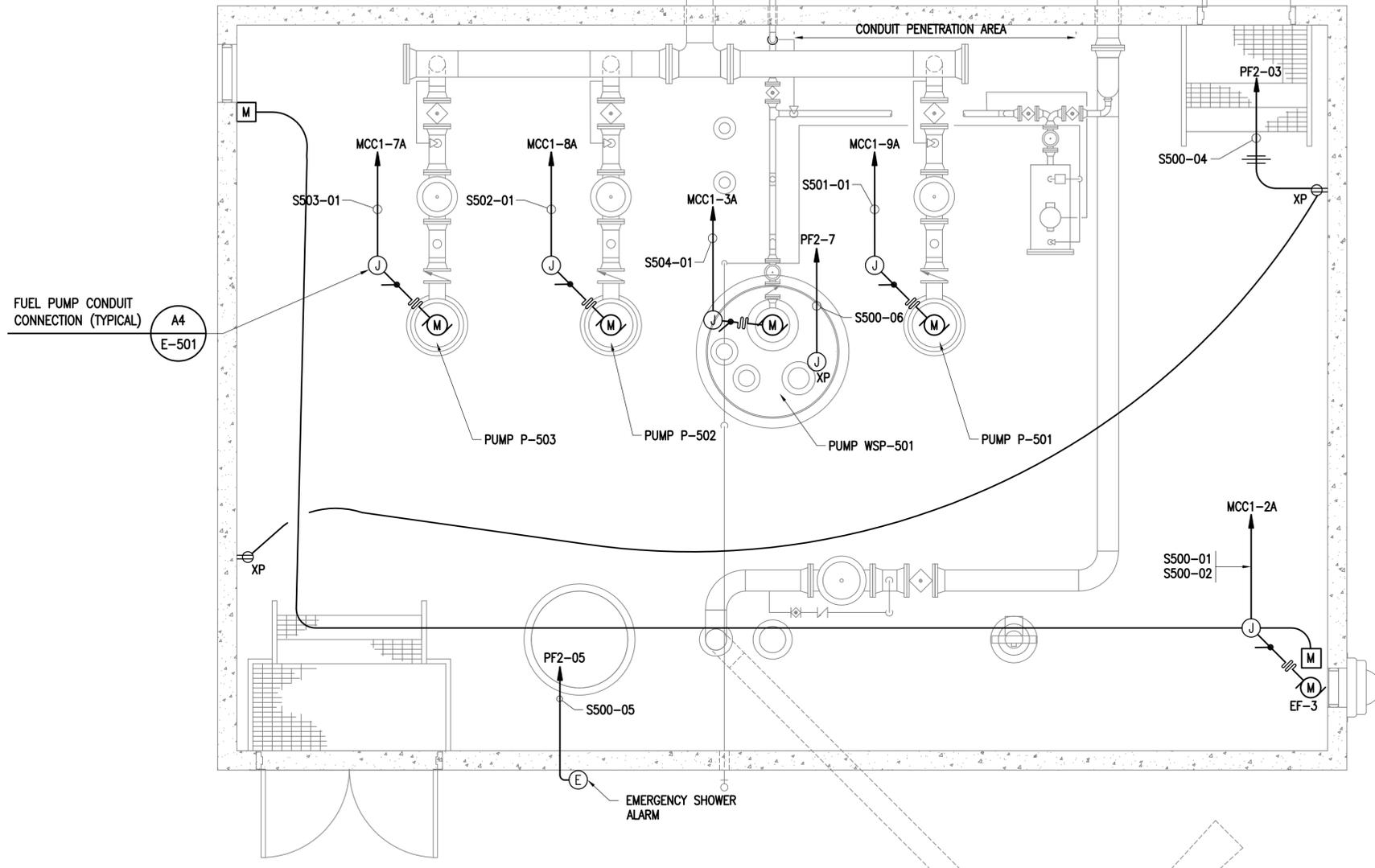
APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
APPROVED BY ANDREA LEMON VIA EMAIL
SATISFACTORY TO DATE 4/4/16
DES: RJK | DRW: WMG | CHK: CHM
PM/CM: LEY/RES
BRANCH MANAGER
DESIGN DIRECTOR: R.B. FITCH, III P.E.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
LANT CAPITAL IMPROVEMENTS
CAMP LEMONNIER
NAVFAC LANT
NAVFAC LANT AFRICA
DUBOULT AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
PUMPHOUSE PLANS

SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO.: N62470-16-R-6004
NAVFAC DRAWING NO.: 14047120
SHEET 156 OF 186
E-401

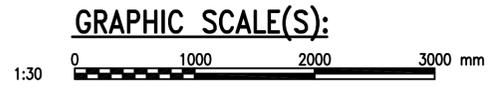


FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\040 AutoCAD\14-02 PUMPHOUSE POWER PLAN.dwg LAYOUT NAME: PUMPHOUSE POWER PLAN PLOTTED: Wednesday, May 11, 2016 - 1:00pm USER: mhp@nps



FUEL PUMP CONDUIT CONNECTION (TYPICAL)
A4
E-501

PLAN NORTH
NOTE: TANK 5 SHOWN, TANK 6 SIMILAR.
PUMPHOUSE POWER PLAN
SCALE: 1:30
B1
E-103



SYN	DESCRIPTION	DATE	APPR



Austin
Brockenbrough
ENGINEERING - CONSULTING

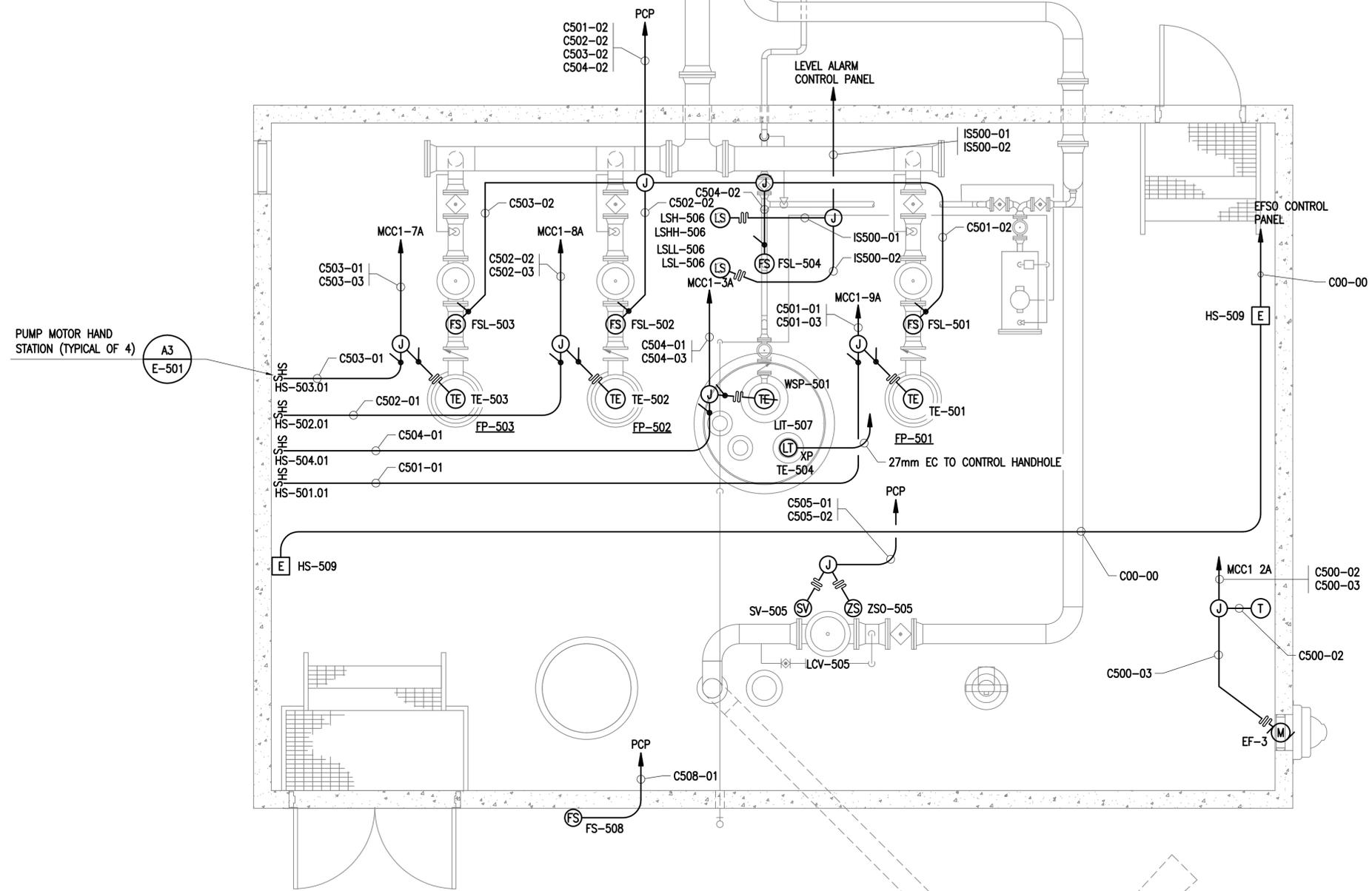
APPROVED
FOR COMMANDER NAVFAC
ACTIVITY
APPROVED BY ANDREA LEMON
VIA EMAIL
SATISFACTORY TO DATE 4/4/16
DES: RJK | DRW: WMC | CHK: CHM
PM/OM: LEY/PBR
BRANCH MANAGER
DESIGN DIRECTOR: R.B. FITCH, III P.E.

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
NAVFAC LANT CAPITAL IMPROVEMENTS
CAMP LEMONNIER
DIBOUTI AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
PUMPHOUSE POWER PLAN

SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO.
N62470-16-R-6004
NAVFAC DRAWING NO.: 14047121
SHEET 157 OF 186
E-402

DRAWING REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-013 PUMPHOUSE CONTROL PLAN.dwg LAYOUT NAME: PUMPHOUSE CONTROL PLAN PLOTTED: Wednesday, May 11, 2016 - 1:00pm USER: hopkins

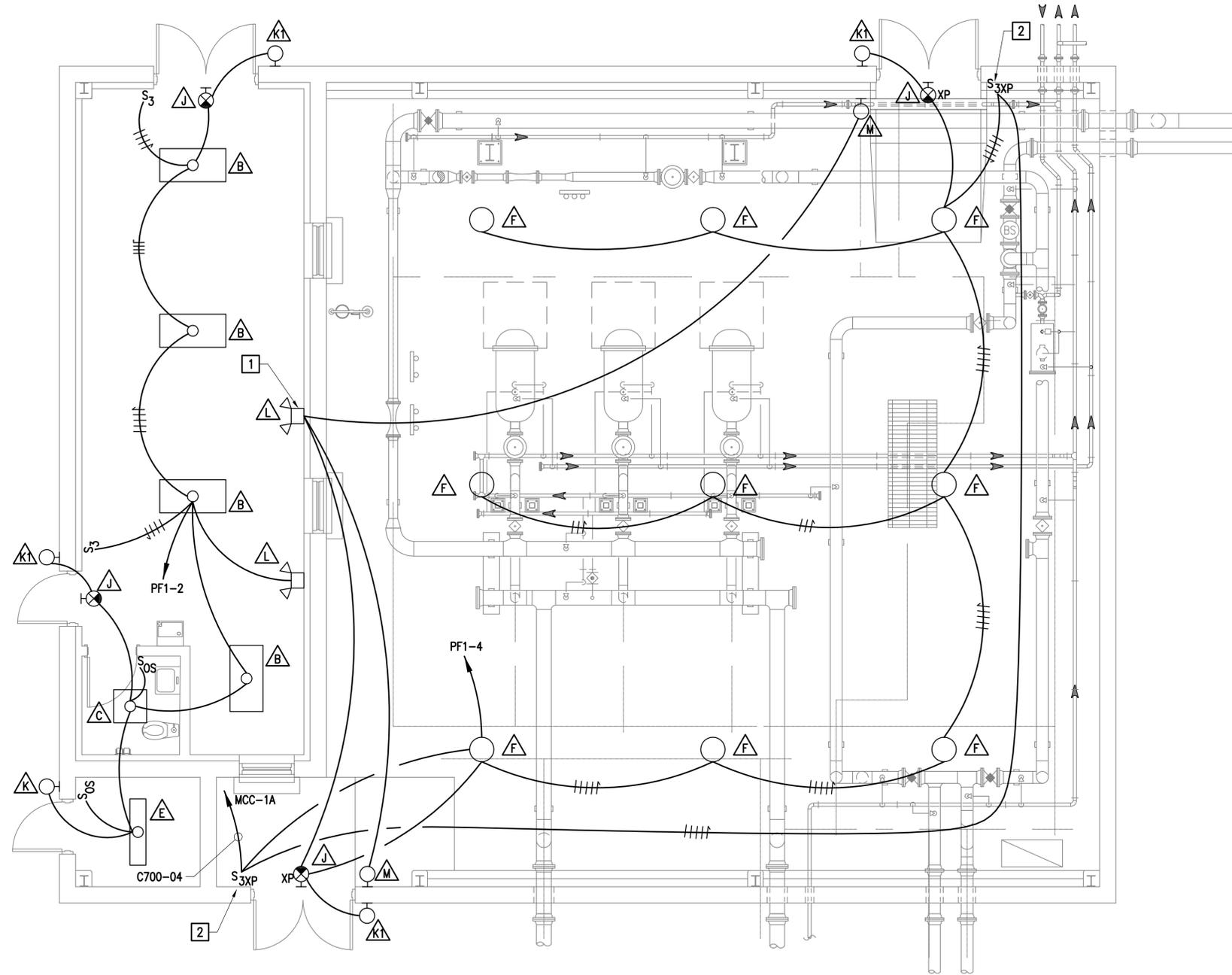


NOTE: TANK 5 SHOWN, TANK 6 SIMILAR.
 PLAN NORTH
PUMPHOUSE CONTROL PLAN
 SCALE: 1:30
 B1
 E-103



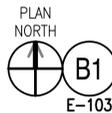
APPR	
DATE	
DESCRIPTION	
SYN	
 NAVFAC  COMMONWEALTH OF VIRGINIA RALPH JEFFERSON KEITH Lic. No. 018747 PROFESSIONAL ENGINEER SEAL	
Austin Brockenbrough ENGINEERING - CONSULTING A/E INFO	
APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL
SATISFACTORY TO	DATE 4/4/16
DES	RJK DRW WMG CHK CHM
PM/DM	LET/RES
BRANCH MANAGER	
DESIGN DIRECTOR	R.B. FITCH, III P.E.
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING COMMAND	DJIBOUTI AFRICA
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	NORFOLK, VIRGINIA
LANT CAPITAL IMPROVEMENTS	
CAMP LEMONNIER	
DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES PUMPHOUSE CONTROL PLAN	
SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.:	N62470-16-R-6004
NAVFAC DRAWING NO.:	14047122
SHEET	158 OF 186
E-403 DRAWING REVISION: 10 MARCH 2009	

FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-404_FILTER BLDG LIGHTING PLAN.dwg LAYOUT NAME: FILTER BLDG LIGHTING PLAN PLOTTED: Wednesday, May 11, 2016 - 1:00pm USER: hopkins



NEW WORK NOTES - THIS SHEET:

1. PROVIDE REMOTE HEADS ONLY FOR THIS FIXTURE.
2. DOUBLE POLE DOUBLE THROW EXPLOSION PROOF SNAP SWITCH.

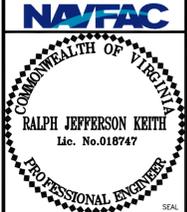


FILTER BUILDING LIGHTING PLAN

SCALE: 1:50



SYN	DESCRIPTION	DATE	APPR



APPROVED

FOR COMMANDER NAVFAC
ACTIVITY
APPROVED BY ANDREA LEMON VIA EMAIL

SATISFACTORY TO DATE 4/4/16
DES: **RJK** | DRW: **WMC** | CHK: **CHM**

PM/OM: LEY/RES
BRANCH MANAGER
DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
NORFOLK, VIRGINIA
CAMP LEMONNIER
DIBOUTI, AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
FILTER BLDG LIGHTING PLAN

SCALE: AS NOTED
PROJECT NO.: **1344008**

CONSTR. CONTR. NO.
N62470-16-R-6004

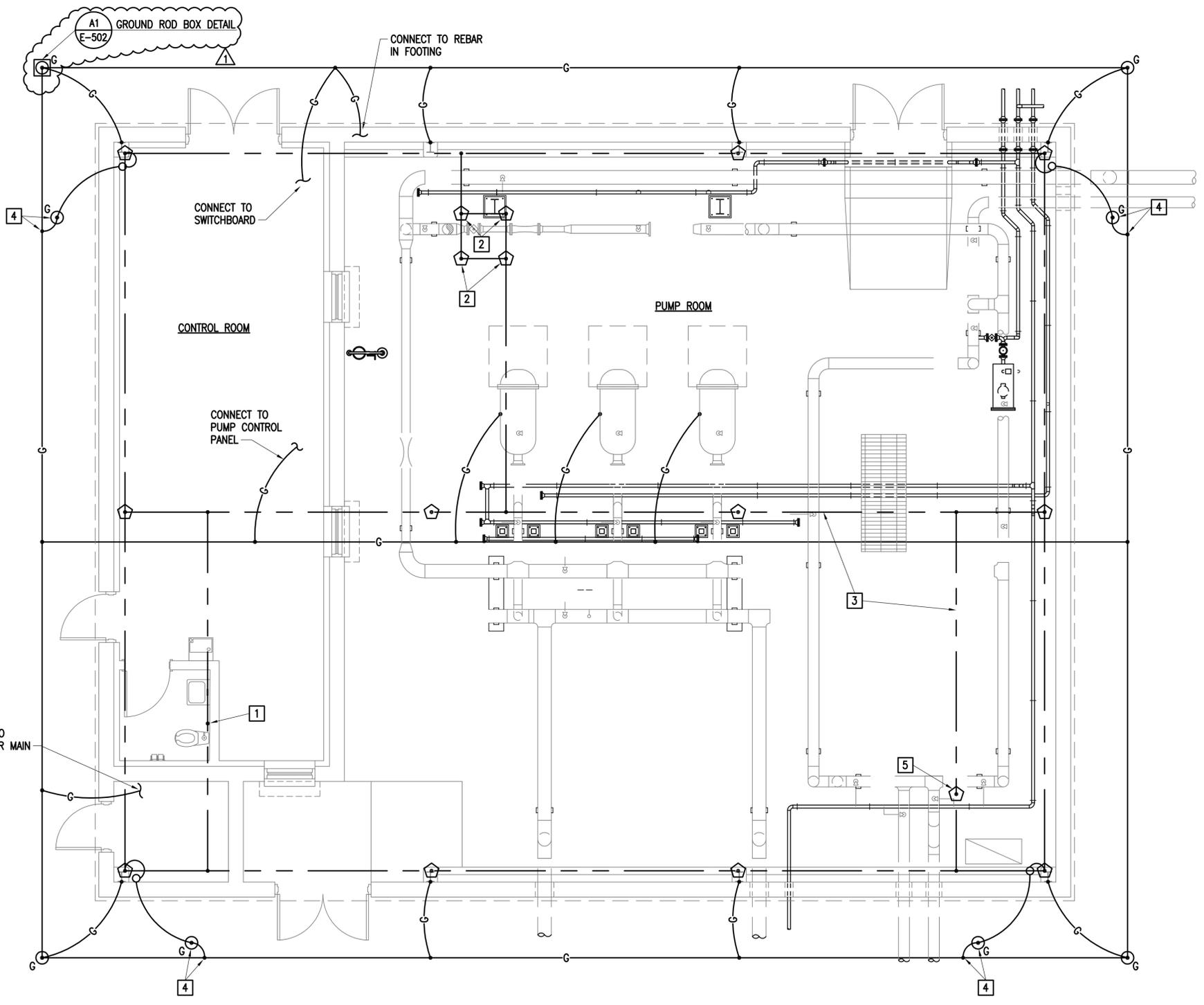
NAVFAC DRAWING NO.
14047123

SHEET **159** OF **186**
E-404

DRAWING REVISION: 10 MARCH 2009

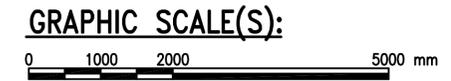
FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-013_FILTER BLDG GROUNDING PLAN - PLOTTED: Wednesday, May 11, 2016 - 1:01pm USER: rjopkins

1 2 3 4 5



- NEW WORK NOTES - THIS SHEET**
1. BOND TO ROOF VENT PIPE.
 2. MOUNT AIR TERMINALS ON LOUVERED MECHANICAL PENTHOUSE.
 3. ROUTE LIGHTNING PROTECTION ROOF CONDUCTORS ON UNDERSIDE OF STANDING SEAM METAL ROOF.
 4. LIGHTNING PROTECTION SYSTEM DEDICATED GROUNDING ELECTRODE. CONNECT TO ELECTRICAL SERVICE GROUND RING ELECTRODE.
 5. MOUNT AIR TERMINAL ON EXHAUST FAN.

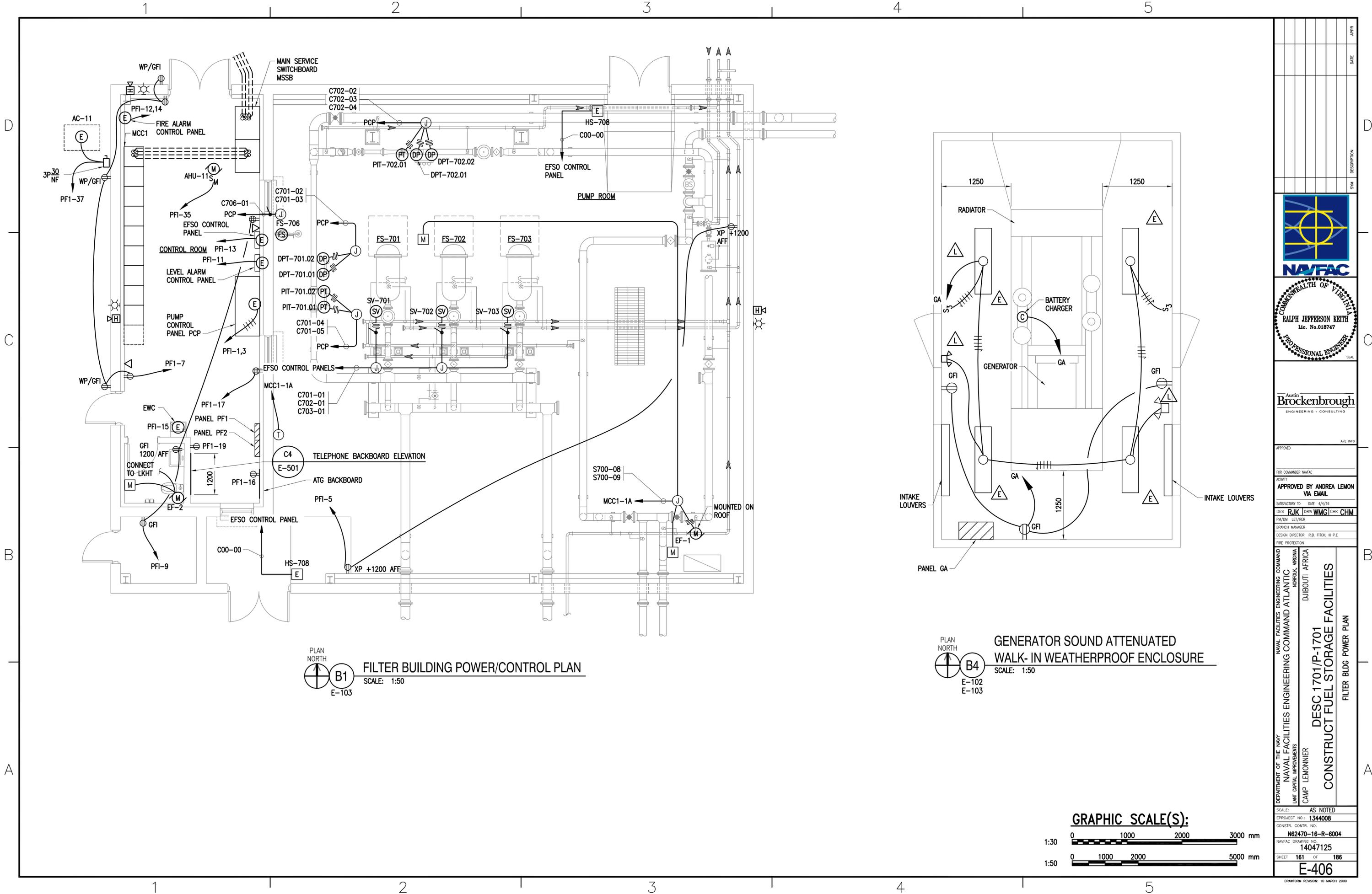
PLAN NORTH
A1
FILTER BUILDING GROUNDING PLAN
 SCALE: 1:50
 E-103



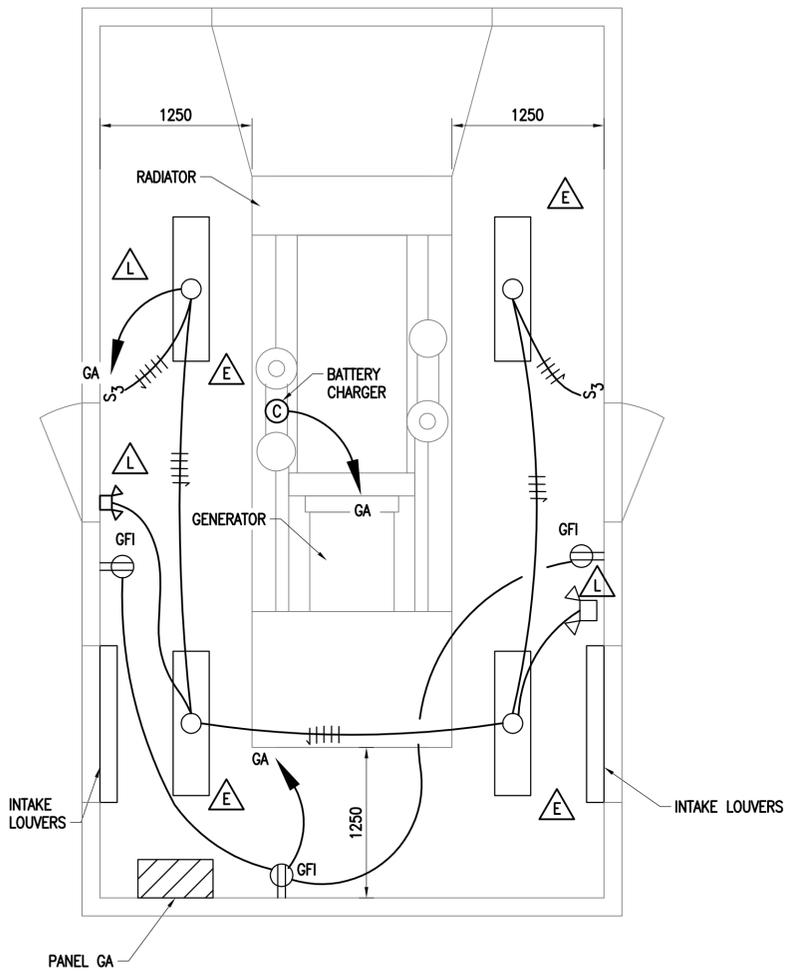
APPROVED	DATE	DESCRIPTION
	4/29/16	ADDED GROUND ROD BOX DETAIL
 NAVFAC COMMONWEALTH OF VIRGINIA RALPH JEFFERSON KEITH Lic. No. 018747 PROFESSIONAL ENGINEER		
Austin Brockenbrough ENGINEERING - CONSULTING		
APPROVED	A/E INFO	
FOR COMMANDER NAVFAC		
ACTIVITY		
APPROVED BY ANDREA LEMON VIA EMAIL		
SATISFACTORY TO	DATE	
DES RJK	DATE 4/4/16	
PM/DM	DRW WMG	CHK CHM
BRANCH MANAGER		
DESIGN DIRECTOR R.B. FITCH, III P.E.		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND LANT CAPITAL IMPROVEMENTS CAMP LEMONNIER DIBOUTI AFRICA DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES FILTER BLDG GROUNDING PLAN		
SCALE: AS NOTED		
PROJECT NO.: 1344008		
CONSTR. CONTR. NO. N62470-16-R-6004		
NAVFAC DRAWING NO. 14047124		
SHEET 160 OF 186		
E-405		
DRAWFORM REVISION: 10 MARCH 2009		

1 2 3 4 5

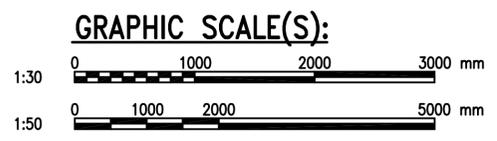
FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-013 Filter Bldg Power Plan.dwg LAYOUT NAME: FILTER BLDG POWER PLAN PLOTTED: Wednesday, May 11, 2016 - 1:01pm USER: rhopkins



PLAN NORTH
B1
 E-103
FILTER BUILDING POWER/CONTROL PLAN
 SCALE: 1:50

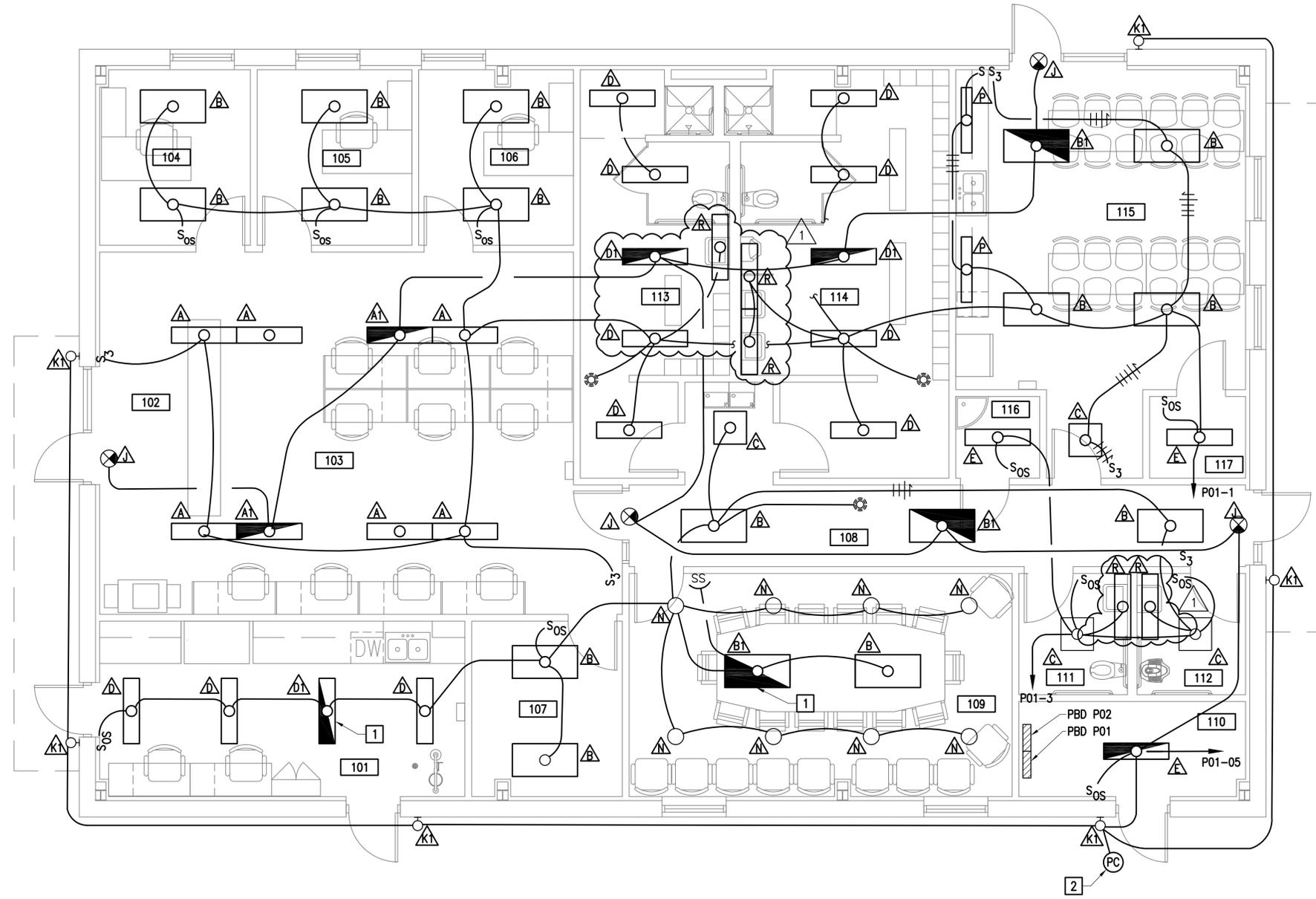


PLAN NORTH
B4
 E-102
 E-103
GENERATOR SOUND ATTENUATED WALK-IN WEATHERPROOF ENCLOSURE
 SCALE: 1:50



APPROVED	DATE	DESCRIPTION	SYN
 NAVFAC  RALPH JEFFERSON KEITH Lic. No. 018747 PROFESSIONAL ENGINEER			
 Austin Brockenbrough ENGINEERING - CONSULTING			
APPROVED			
FOR COMMANDER NAVFAC			
ACTIVITY			
APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO DATE 4/4/16			
DES	RJK	DRW	WMC
PM/OM	LET/RES	CHK	CHM
BRANCH MANAGER			
DESIGN DIRECTOR R.B. FITCH, III P.E.			
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING COMMAND			
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC			
NORFOLK, VIRGINIA			
DIBOUTI, AFRICA			
CAMP LEMONNIER			
DESC 1701/P-1701			
CONSTRUCT FUEL STORAGE FACILITIES			
FILTER BLDG POWER PLAN			
SCALE: AS NOTED			
PROJECT NO.: 1344008			
CONSTR. CONTR. NO.			
N62470-16-R-6004			
NAVFAC DRAWING NO.			
14047125			
SHEET 161 OF 186			
E-406			
DRAWING REVISION: 10 MARCH 2009			

FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-013 OPS BUILDING LIGHTING PLAN - PLOTTED: Wednesday, May 11, 2016 - 1:01pm USER: mhiggins



PLAN NORTH
 C1
 E-103
OPS BUILDING LIGHTING PLAN
 SCALE: 1:50

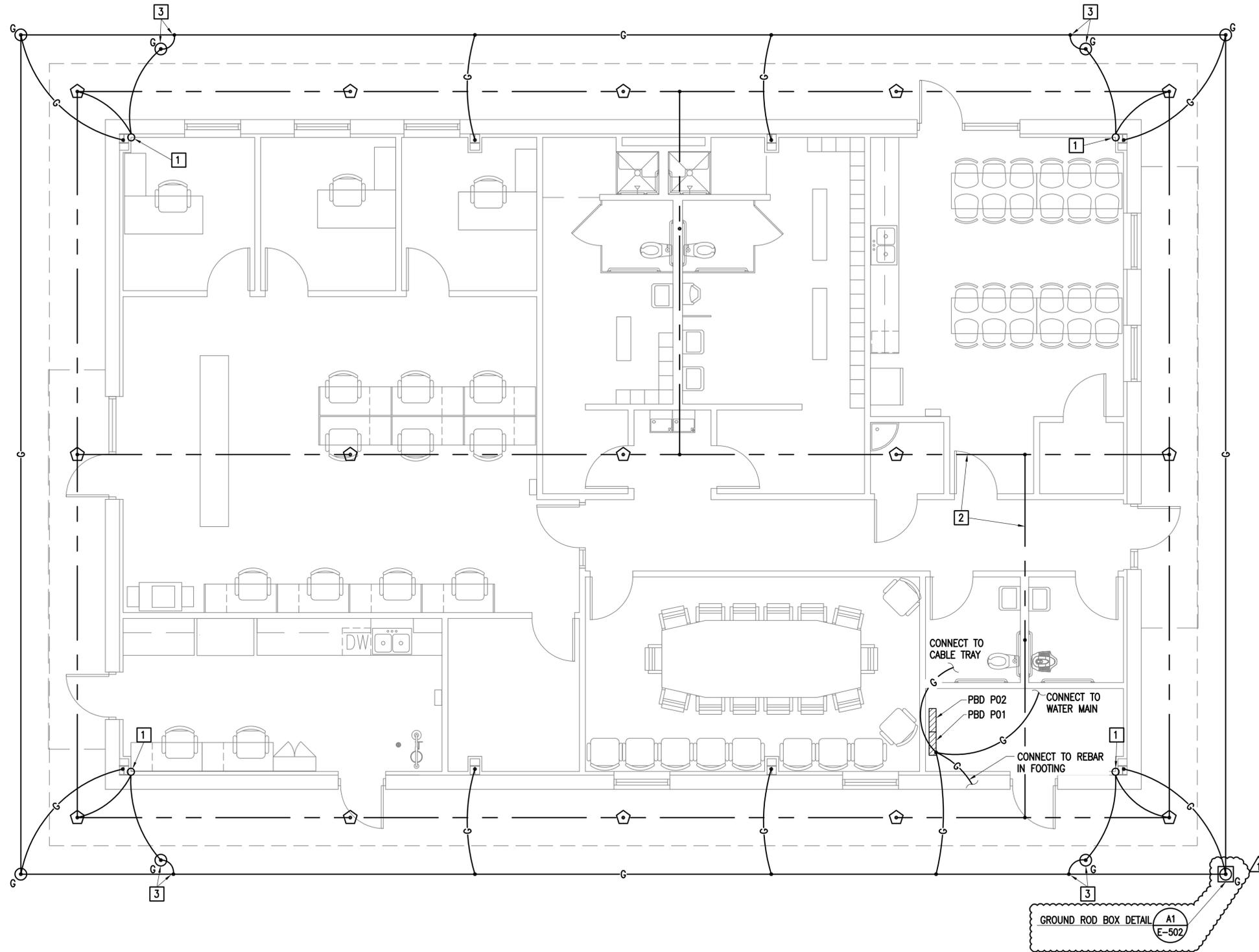
NEW WORK NOTES - THIS SHEET:

1. WIRE EMERGENCY BALLAST AHEAD OF SWITCH.
2. MOUNT PHOTOCELL AT EAVE OF BUILDING. SHIELD FROM ANY NIGHTTIME LIGHT SOURCE.



	DATE: 4/29/16 APPR:
 NAVFAC  COMMONWEALTH OF VIRGINIA RALPH JEFFERSON KEITH Lic. No. 018747 PROFESSIONAL ENGINEER	SYN DESCRIPTION 1 REVISED LIGHTING
 Austin Brockenbrough ENGINEERING - CONSULTING	
A/E INFO	
APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO DATE 4/4/16	
DES: RJK	DRW: WMG
PM/DM: LEY/PES	CHK: CHM
BRANCH MANAGER	
DESIGN DIRECTOR: R.B. FITCH, III P.E.	
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC NORFOLK, VIRGINIA DIBOUTI, AFRICA CAMP LEMONNIER DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES OPS BUILDING LIGHTING PLAN	
SCALE: AS NOTED	
PROJECT NO.: 1344008	
CONSTR. CONTR. NO.	
N62470-16-R-6004	
NAVFAC DRAWING NO. 14047126	
SHEET 162 OF 186	
E-407	
DRAWFORM REVISION: 10 MARCH 2009	

FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-E-408 OPS BUILDING GROUNDING PLAN.dwg LAYOUT NAME: OPS BUILDING GROUNDING PLAN PLOTTED: Wednesday, May 11, 2016 - 10:10pm USER: rhigkirts



PLAN NORTH
A1
E-103
OPS BUILDING GROUNDING PLAN
SCALE: 1:50

NEW WORK NOTES - THIS SHEET:

1. LIGHTNING PROTECTION SYSTEM DOWN CONDUCTOR. CONNECT TO STRUCTURAL STEEL COLUMN AT TOP AND BOTTOM OF COLUMN.
2. ROUTE LIGHTNING PROTECTION ROOF CONDUCTORS ON UNDERSIDE OF STANDING SEAM METAL ROOF.
3. LIGHTNING PROTECTION SYSTEM DEDICATED GROUNDING ELECTRODE. CONNECT TO ELECTRICAL SERVICE GROUND RING ELECTRODE.

APPR	
DATE	4/29/16
DESCRIPTION	ADDED GROUND ROD BOX DETAIL
SYN	



COMMONWEALTH OF VIRGINIA



Austin
Brockenbrough
ENGINEERING - CONSULTING

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY
APPROVED BY ANDREA LEMON
VIA EMAIL

SATISFACTORY TO DATE 4/4/16

DES: RJK | DRW: WMC | CHK: CHM

PM/DM: LET/RES

BRANCH MANAGER

DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
NORFOLK, VIRGINIA

DJIBOUTI AFRICA

CAMP LEMONNIER

DESC 1701/P-1701

CONSTRUCT FUEL STORAGE FACILITIES

OPS BUILDING GROUNDING PLAN

SCALE: AS NOTED

E-PROJECT NO.: 1344008

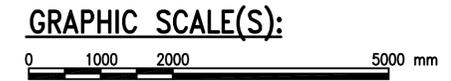
CONSTR. CONTR. NO.

N62470-16-R-6004

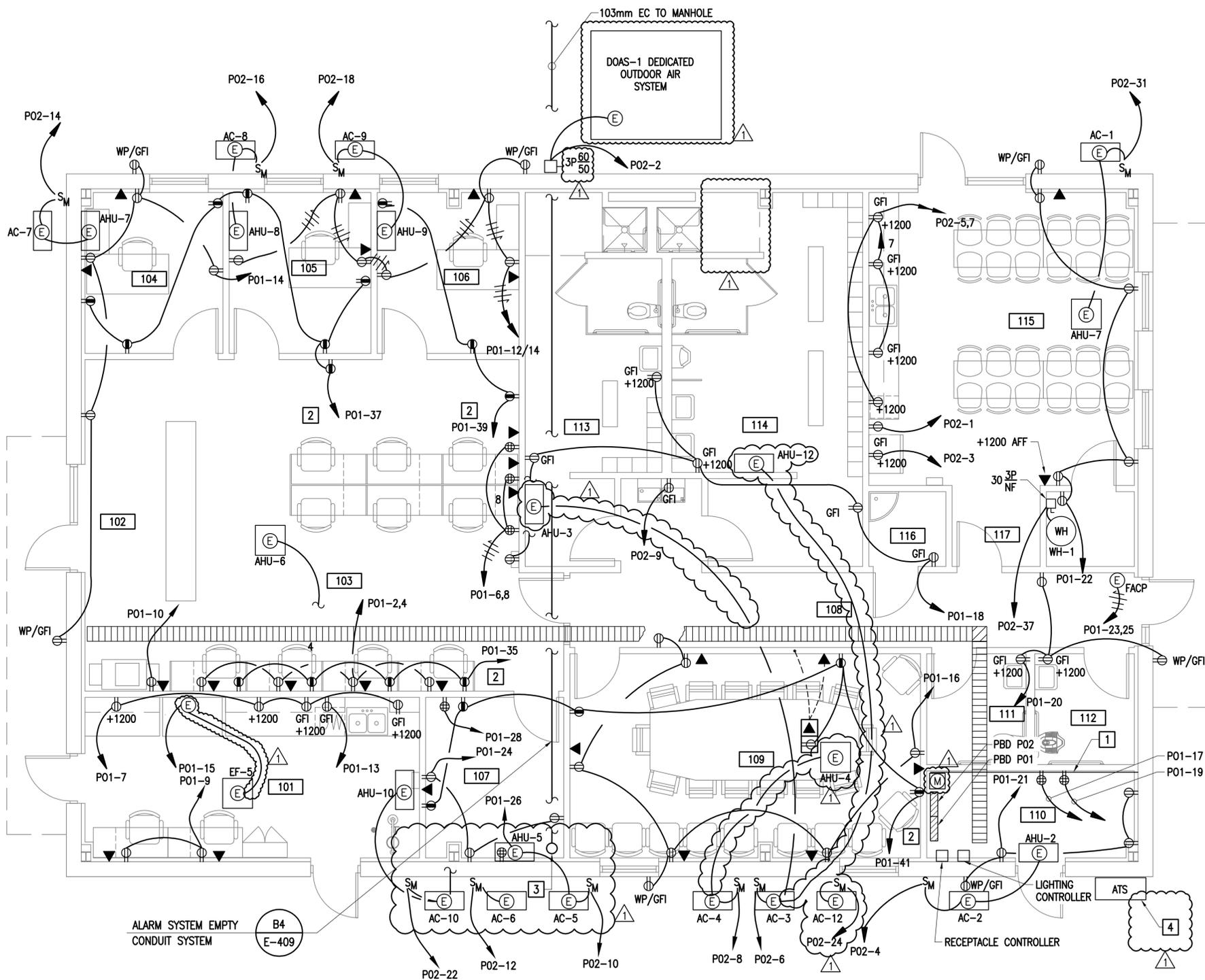
NAVFAC DRAWING NO. 14047127

SHEET 163 OF 186

E-408
DRAWN/REVISED: 10 MARCH 2009

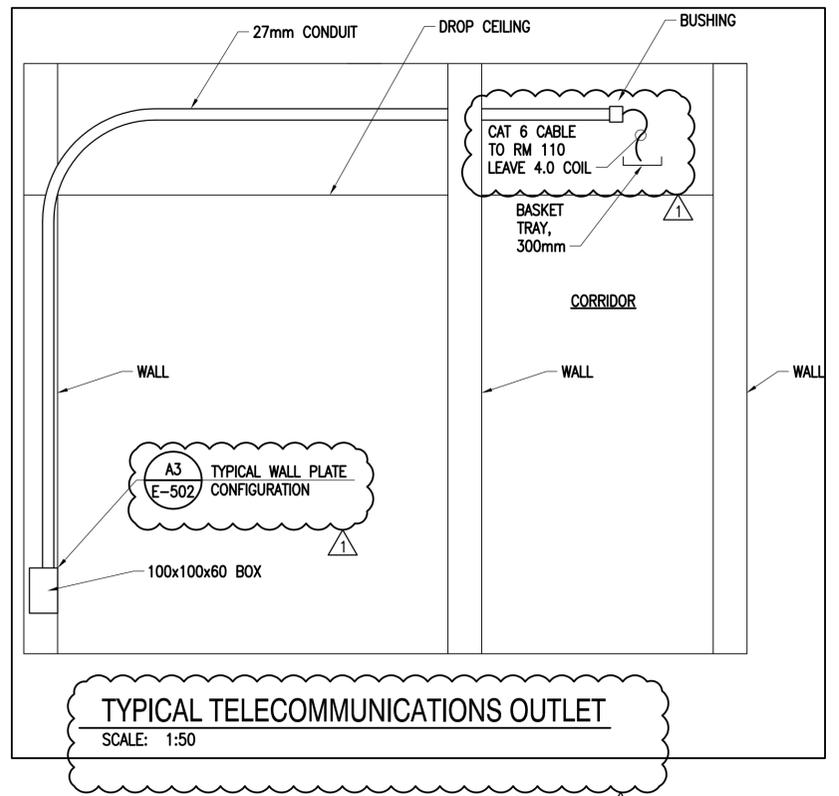


FILE NAME: G:\14 Jobs\14-013 Dhhout - Fuel Storage Facility - NAVFAC LANTCOM AutoCAD\E-409 OPS BUILDING POWER PLAN.dwg LAYOUT NAME: OPS BUILDING POWER PLAN PLOTTED: Wednesday, May 11, 2016 - 1:02pm USER: mhopkins

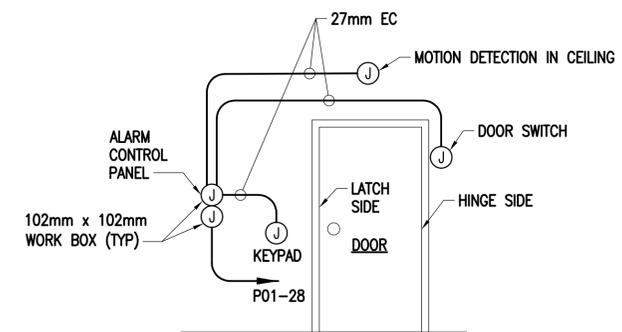


PLAN NORTH
A4 OPS BUILDING POWER PLAN
SCALE: 1:50
E-103

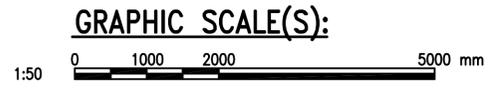
- NEW WORK NOTES - THIS SHEET**
1. PROVIDE 20mm FIRE RETARDANT TREATED PLYWOOD FOR LENGTH OF WALL, 2.40M FOOT HIGH.
 2. SWITCHED RECEPTACLE CIRCUIT. WIRE VIA CONTACTOR.
 3. PROVIDE 103mm CONDUITS STUBBED UP ABOVE FLOOR AND CONCRETE ENCASED TO MANHOLE C222. SEE E-103 FOR CONTINUATION.
 4. SERVICE ENTRANCE RATED AUTOMATIC TRANSFER SWITCH - NEMA 4X STAINLESS STEEL ENCLOSURE.



TYPICAL TELECOMMUNICATIONS OUTLET
SCALE: 1:50

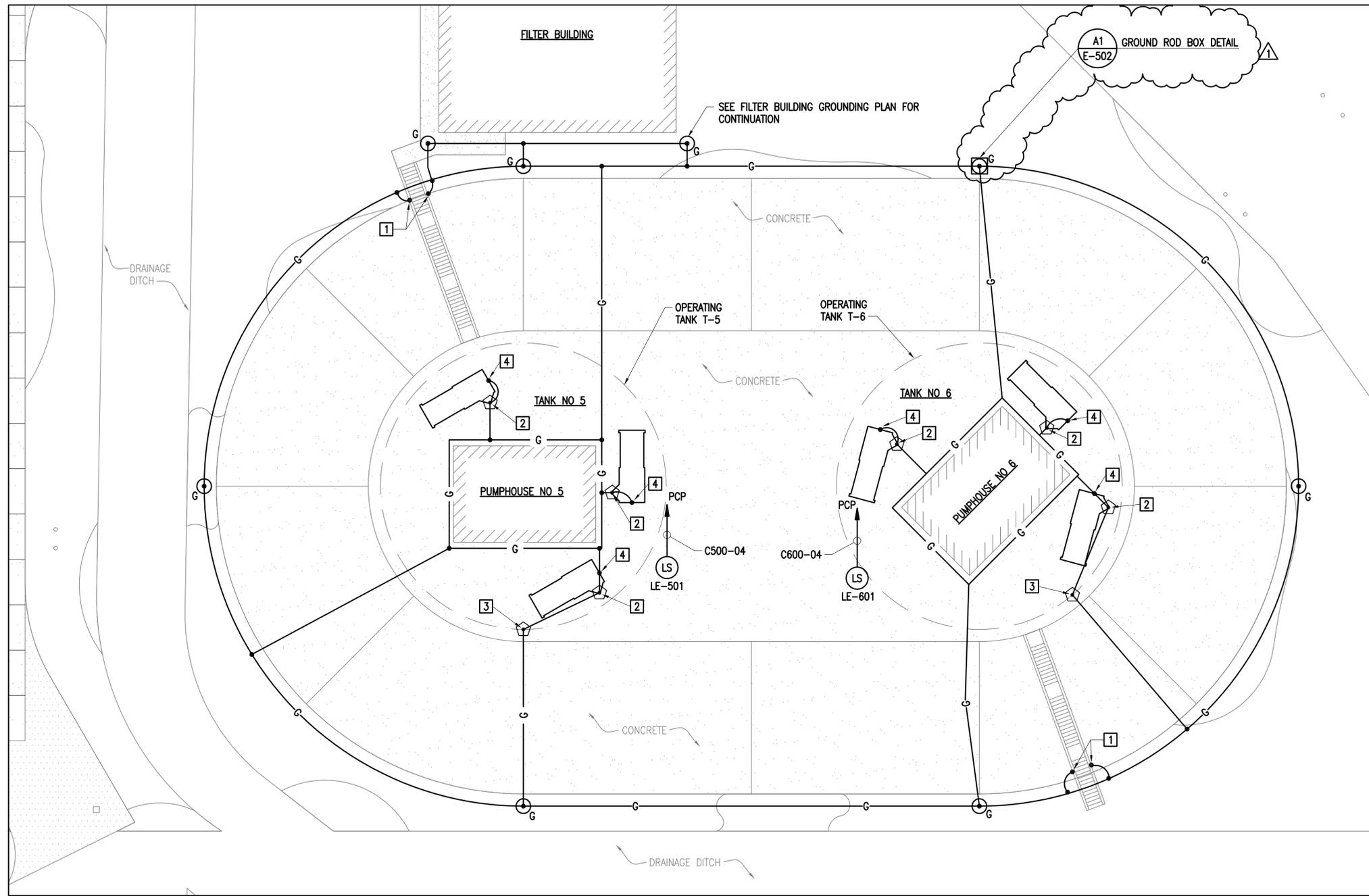


B4 ALARM SYSTEM EMPTY CONDUIT SYSTEM
SCALE: NONE
E-409



APPROVED	DATE	4/29/16			
COORDINATION REVISIONS	SYN	DESCRIPTION			
COMMONWEALTH OF VIRGINIA RALPH JEFFERSON KEITH Lic. No. 018747 PROFESSIONAL ENGINEER					
Austin Brockenbrough ENGINEERING - CONSULTING					
APPROVED	A/E INFO				
FOR COMMANDER NAVFAC	ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO	DATE	4/4/16			
DES	RJK	DRW	WMC	CHK	CHM
PM/CM	LET/RES				
BRANCH MANAGER					
DESIGN DIRECTOR	R.B. FITCH, III P.E.				
FIRE PROTECTION					
NAVAL FACILITIES ENGINEERING COMMAND	DUBOULT AFRICA				
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	NORFOLK, VIRGINIA				
LANT CAPITAL IMPROVEMENTS	CAMP LEMONNIER				
DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES OPS BUILDING POWER PLAN					
SCALE:	AS NOTED				
PROJECT NO.:	1344008				
CONSTR. CONTR. NO.:					
	N62470-16-R-6004				
NAVFAC DRAWING NO.:	14047128				
SHEET	164	OF	186		
E-409					
DRAWING REVISION: 10 MARCH 2009					

FILE NAME: G:\14_Jobs\14-013_Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\LE-410 TANKS NO 5 AND NO 6 GROUNDING PLAN LAYOUT NAME: TANKS NO 5 AND NO 6 GROUNDING PLAN PLOTTED: Wednesday, May 11, 2016 - 1:02pm USER: rhopkins



PLAN NORTH
OPERATING TANKS NO 5 AND NO 6 GROUNDING PLAN
 SCALE: 1:200

NEW WORK NOTES - THIS SHEET:

1. BOND TO GALVANIZED STEEL HANDRAILS.
2. MOUNT AIR TERMINAL ON TANK VENT.
3. MOUNT AIR TERMINAL ON INTERSTITIAL VENT.
4. BOND TO RAILS ON ROLLING COVER.

SYN	DESCRIPTION	DATE	APPR
1	ADDED GROUND ROD BOX DETAIL	4/29/16	



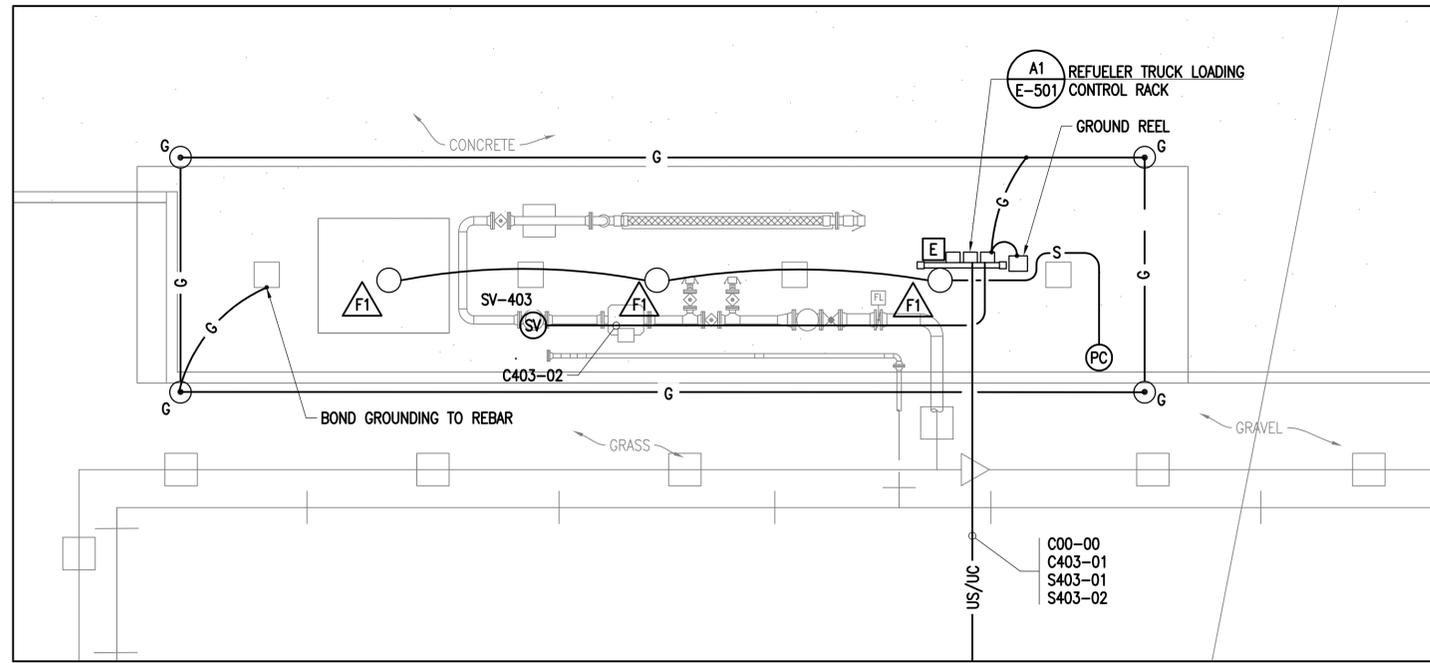
APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL
SATISFACTORY TO	DATE 4/4/16
DES RJK	DRW WMG
PM/DM	LET/RES CHM
BRANCH MANAGER	
DESIGN DIRECTOR	R.B. FITCH, III P.E.
FIRE PROTECTION	

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 LANT CAPITAL IMPROVEMENTS
 CAMPAIGN/OPERATION/REND NO 6 GROUNDING PLAN
 DUBOUTI AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
 TANKS NO 5 AND NO 6 GROUNDING PLAN

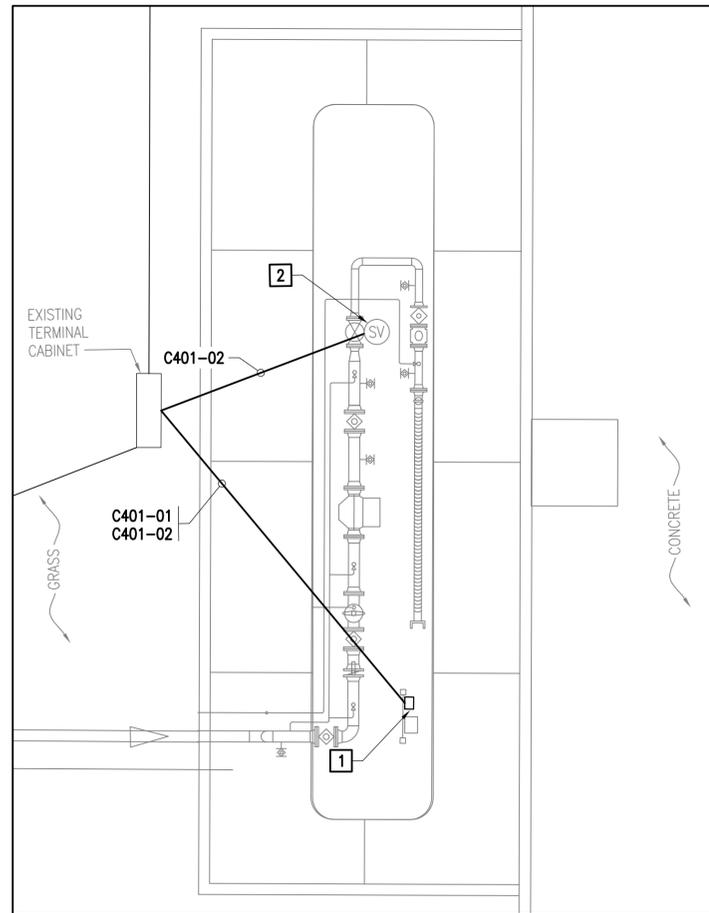
SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.:	N62470-16-R-6004
NAVFAC DRAWING NO.:	14047129
SHEET	165 OF 186
E-410	



FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-411 REFUELER TRUCK LOADING PLAN.dwg LAYOUT NAME: REFUELER TRUCK LOADING PLAN PLOTTED: Wednesday, May 11, 2016 - 1:03pm USER: rhopkins



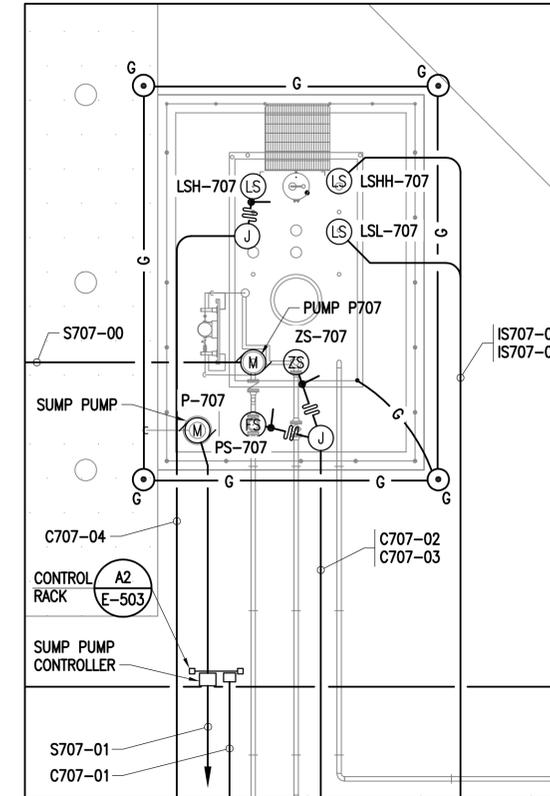
PLAN NORTH
 NOTE: REFUELER TRUCK LOADING STATION NO 4 SIMILAR.
C1 REFUELER TRUCK LOADING STATION NO 3
 E-102
 SCALE: 1:50



PLAN NORTH
A1 TRUCK OFF-LOADING STATION NO 1 (MODIFICATIONS TO EXISTING)
 E-102
 SCALE: 1:50

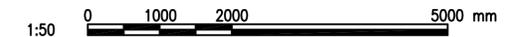
NEW WORK NOTES - THIS SHEET:

1. PROVIDE NEW START-STOP PUSHBUTTON WITH RUN LIGHT ON EXISTING RACK, USE EXISTING CONDUIT. WORK AT EXISTING REFUELER TRUCK LOADING STATION NO 2 SIMILAR.
2. WIRE SOLENOID DIRECT TO TRUCK GROUND VERIFICATION/DEADMAN PERMISSIVE CONTACT.



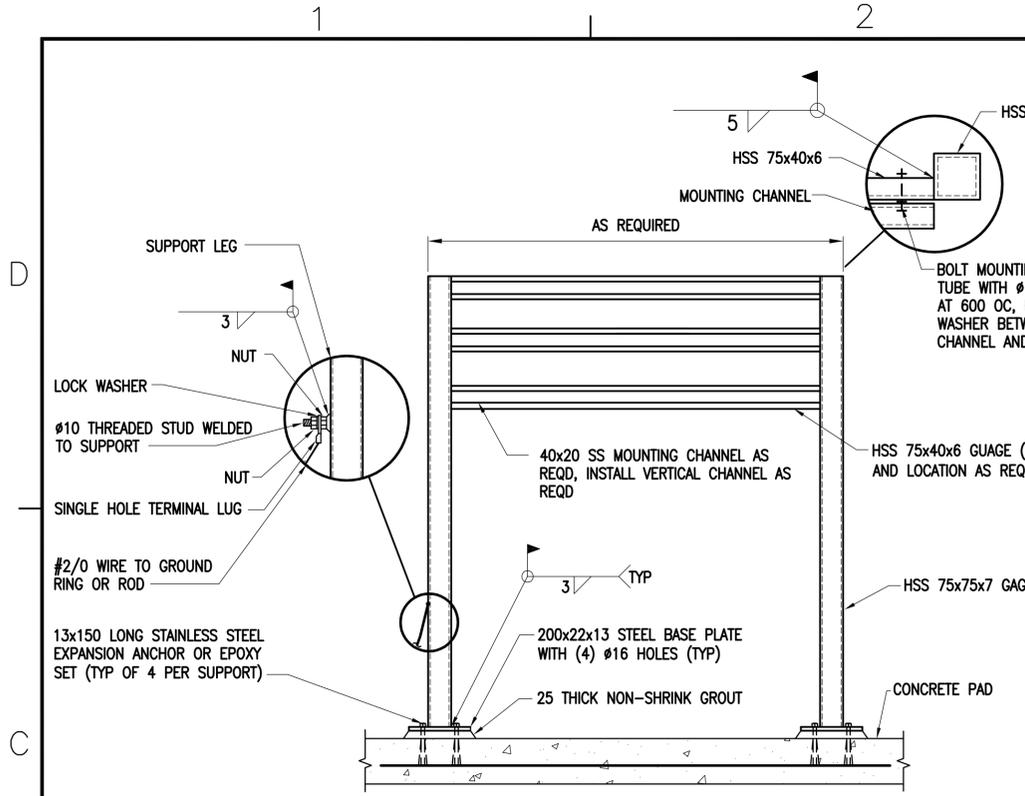
PLAN NORTH
C4 PRODUCT RECOVERY TANK
 E-102
 SCALE: 1:50

GRAPHIC SCALE(S):

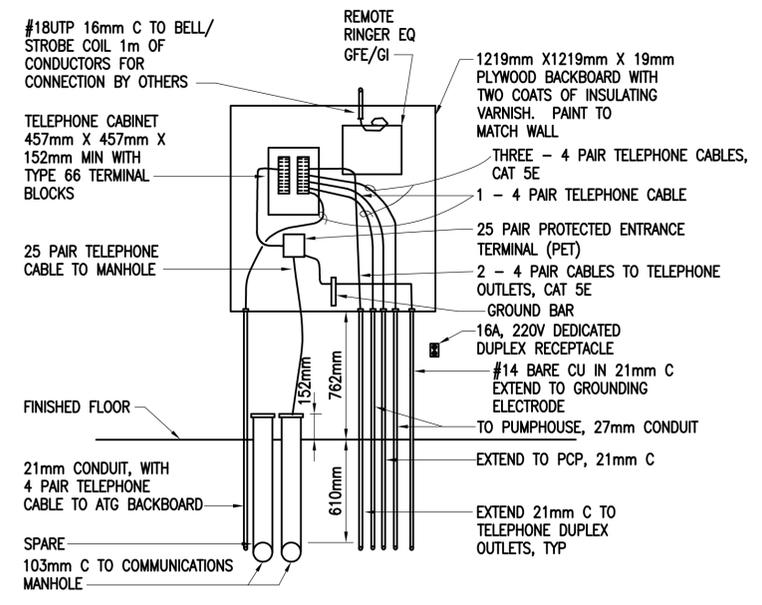


SYN	DESCRIPTION	DATE	APPR
  			
APPROVED			
FOR COMMANDER NAVFAC			
ACTIVITY			
APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO DATE 4/4/16			
DES	RJK	DRW	WMC
PM/DM	LET/RES	CHK	CHM
BRANCH MANAGER			
DESIGN DIRECTOR R.B. FITCH, III P.E.			
FIRE PROTECTION			
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC LANT CAPITAL IMPROVEMENTS CAMP LEMONNIER DUBOITI AFRICA DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES REFUELER TRUCK LOADING PLAN			
SCALE: AS NOTED			
PROJECT NO.: 1344008			
CONSTR. CONTR. NO.			
N62470-16-R-6004			
NAVFAC DRAWING NO. 14047130			
SHEET 166 OF 186			
E-411			
DRAWFORM REVISION: 10 MARCH 2009			

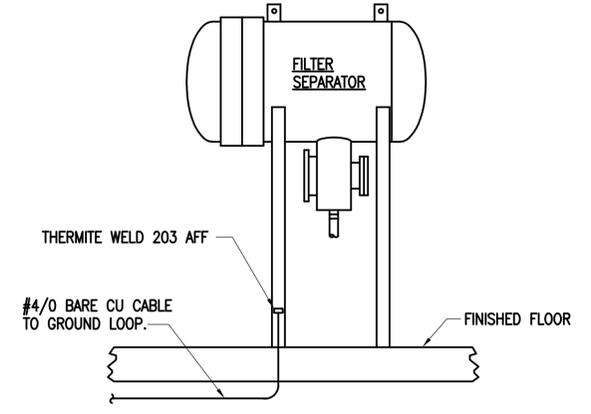
FILE NAME: G:\14 Jobs\14-013 Djbout\1 - Fuel Storage Facility - NAVFAC LANTCOM AutoCAD\E-501 ELECTRICAL DETAILS.dwg LAYOUT NAME: ELECTRICAL DETAILS PLOTTED: Wednesday, May 11, 2016 - 10:03am USER: rhopkins



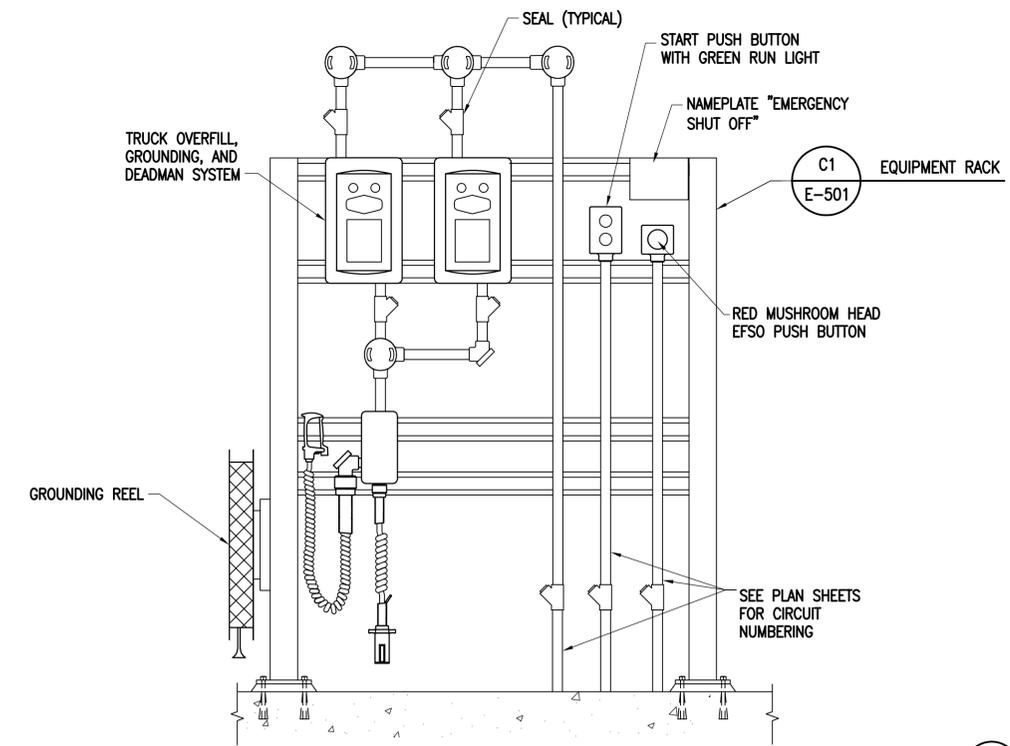
C1 EQUIPMENT RACK
SCALE: NONE
E-406



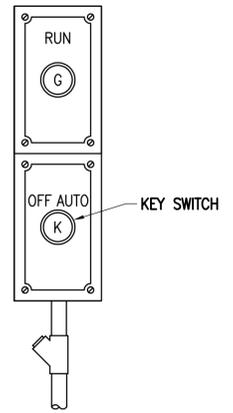
C4 TELEPHONE BACKBOARD ELEVATION
SCALE: NONE
E-406



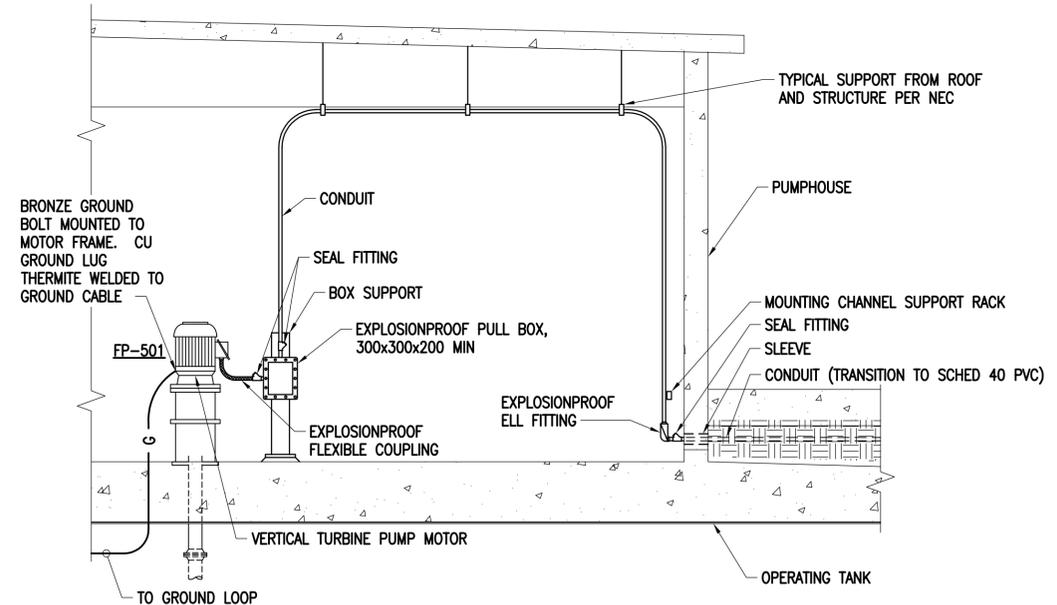
C5 FILTER SEPARATOR GROUNDING
SCALE: NONE



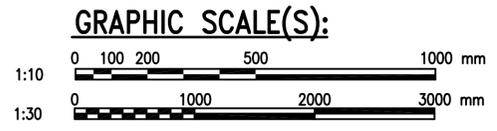
A1 REFUELER TRUCK LOADING CONTROL RACK
SCALE: 1:10
E-411



A3 PUMP MOTOR HAND STATION
SCALE: NONE
E-403

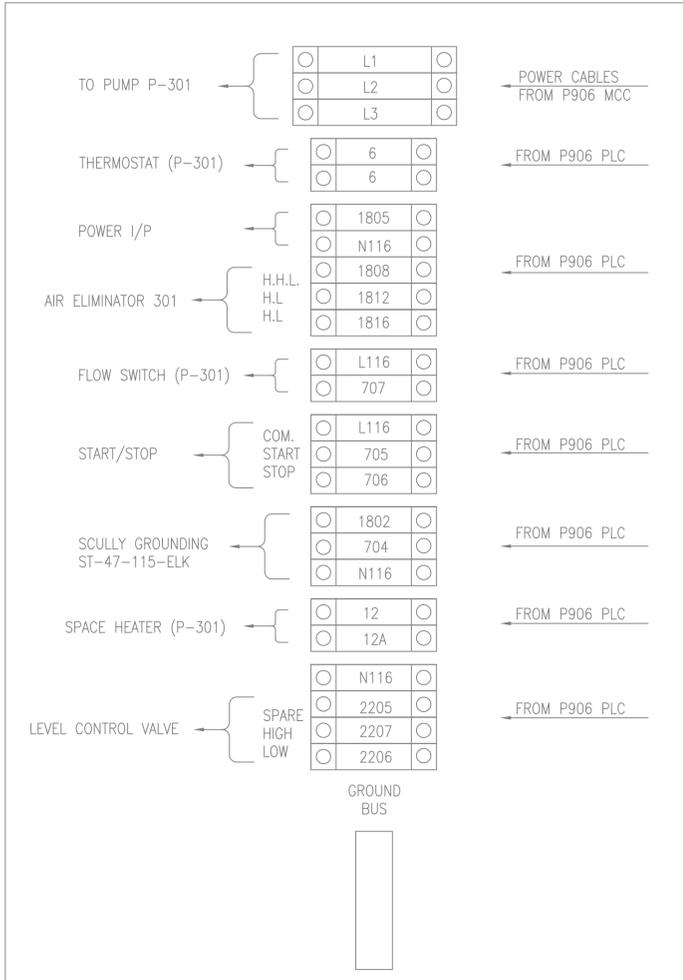


A4 FUEL PUMP CONDUIT CONNECTION
SCALE: 1:30
E-402



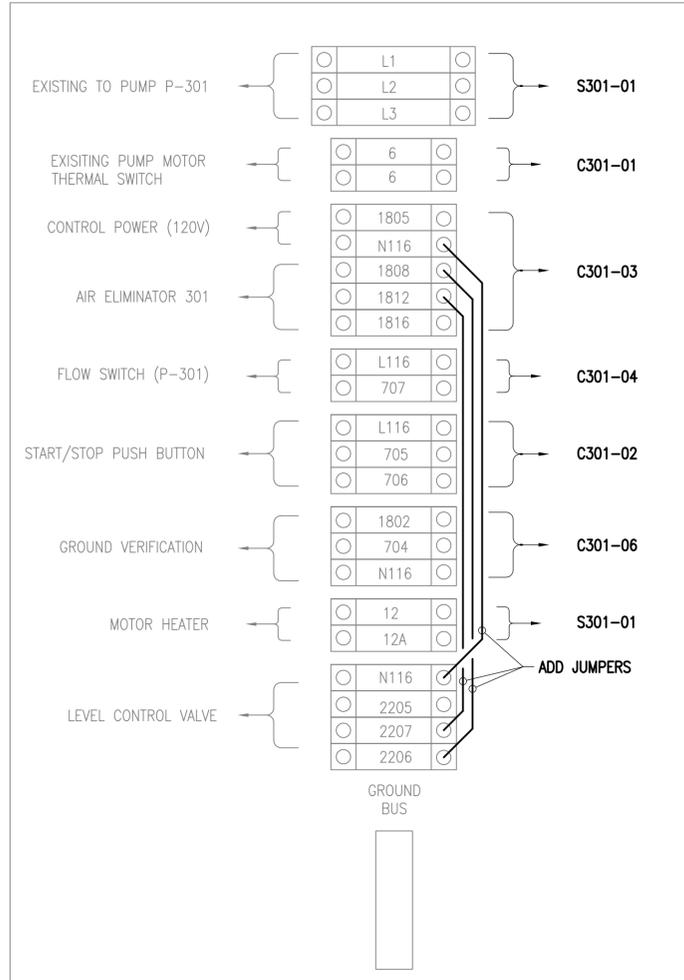
APPROVED	DATE	DESCRIPTION	SYN
Brockenbrough ENGINEERING - CONSULTING			
APPROVED			
FOR COMMANDER NAVFAC			
ACTIVITY			
APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO	DATE	DESIGNER	DRAWN
	4/4/16	RJK	WMC/CHM
PM/DM	LET/REP	BRANCH MANAGER	DESIGN DIRECTOR
		R.B. FITCH, III P.E.	
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING COMMAND			
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC			
LANT CAPITAL IMPROVEMENTS			
CAMP LEMONNIER			
DUBOULT AFRICA			
DESC 1701/P-1701			
CONSTRUCT FUEL STORAGE FACILITIES			
ELECTRICAL DETAILS			
SCALE: AS NOTED			
PROJECT NO.: 1344008			
CONSTR. CONTR. NO.			
N62470-16-R-6004			
NAVFAC DRAWING NO.			
14047131			
SHEET 167 OF 186			
E-501			
DRAWFORM REVISION: 10 MARCH 2009			

FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\VE-E-502 ELECTRICAL DETAILS.dwg LAYOUT NAME: ELECTRICAL DETAILS PLOTTED: Wednesday, May 11, 2016 - 1:03pm USER: rhopkins

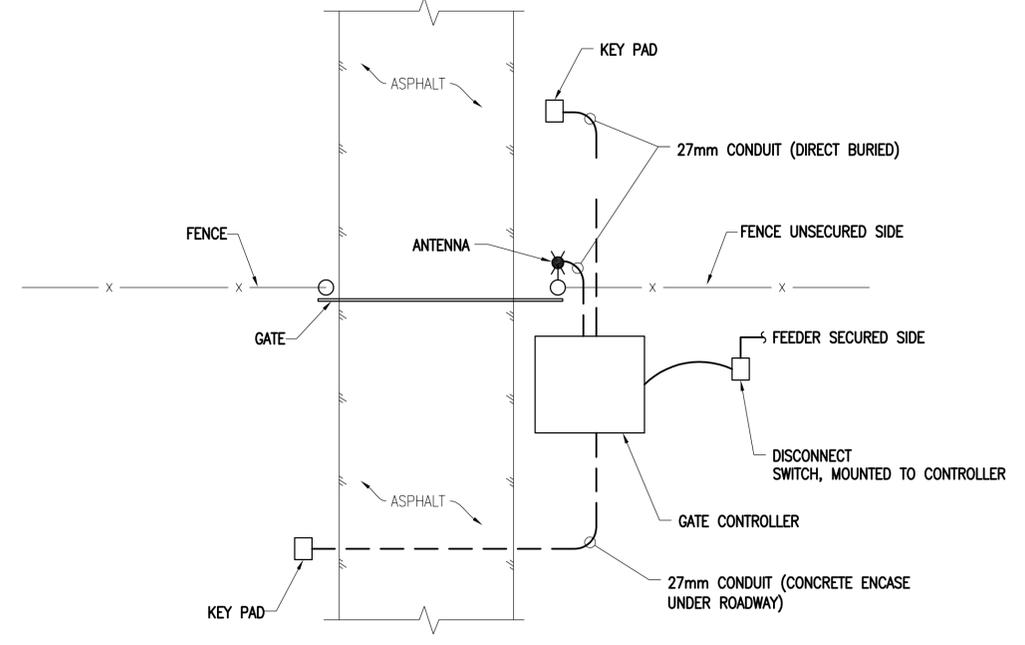


EXISTING/DEMOLITION

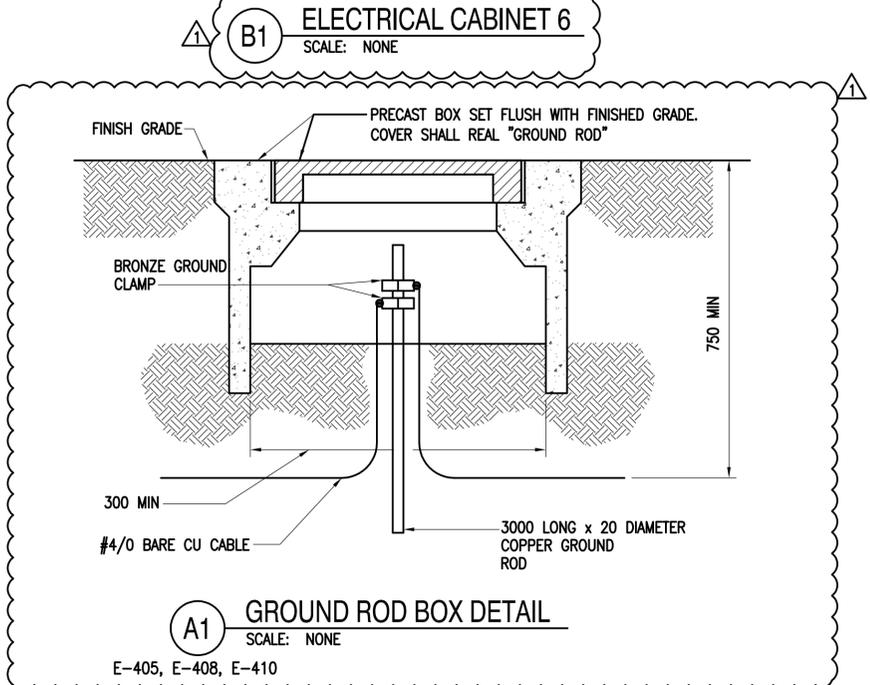
NOTE:
FOR DEMOLITION, REMOVE WIRING TO P906 PLC/MCC.



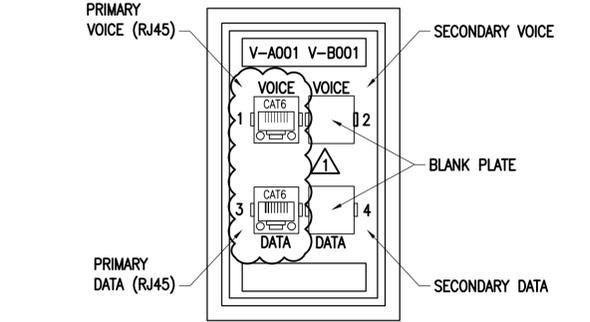
NEW WORK



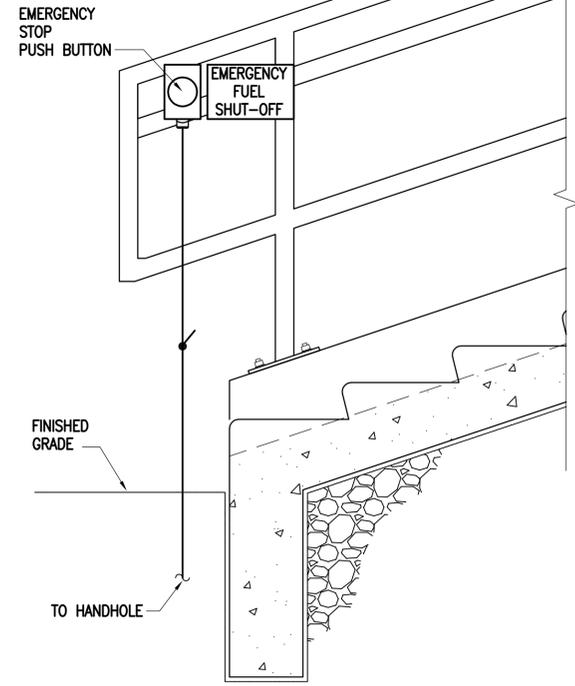
C4 GATE CONTROLLER ELECTRICAL INSTALLATION DIAGRAM
SCALE: NONE
E-104



A1 GROUND ROD BOX DETAIL
SCALE: NONE
E-405, E-408, E-410

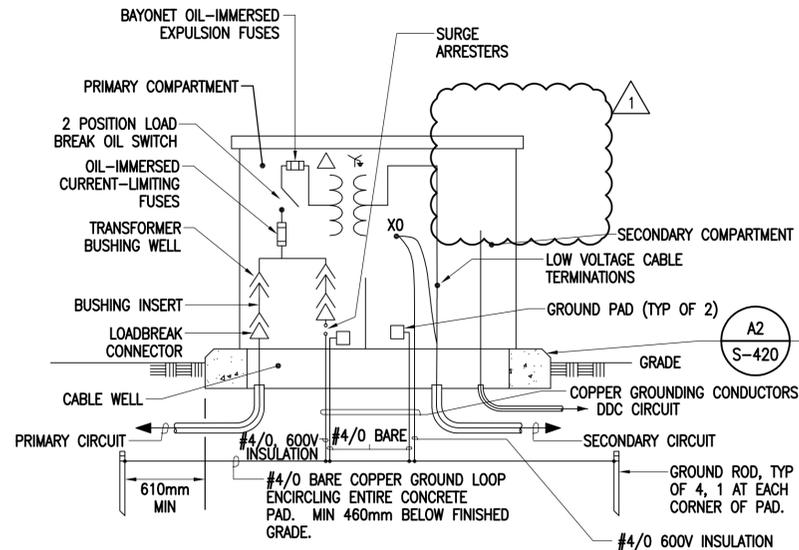


A3 TYPICAL WALL PLATE CONFIGURATION
SCALE: NONE
E-409



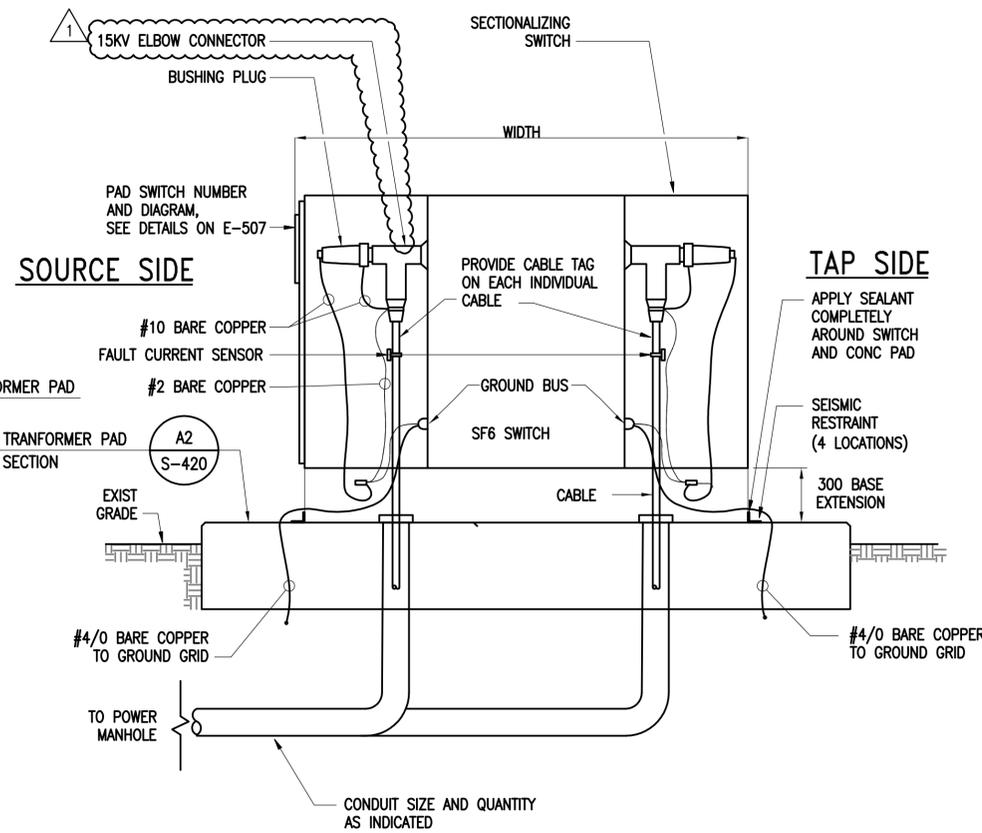
A4 EMERGENCY STOP
SCALE: NONE

DATE	4/29/16	APPR
DESCRIPTION	1 REVISED WALL PLATE	SYN
APPROVED	A/E INFO	
FOR COMMANDER NAVFAC		
ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO	DATE	4/4/16
DES	RJK	DRW WMG
PM/DM	LET/RES	CHK CHM
BRANCH MANAGER		
DESIGN DIRECTOR	R.B. FITCH, III P.E.	
FIRE PROTECTION		
NAVAL FACILITIES ENGINEERING COMMAND	DUBOULT AFRICA	
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	NORFOLK, VIRGINIA	
LANT CAPITAL IMPROVEMENTS	CAMP LEMONNIER	
DEPARTMENT OF THE NAVY	DESC 1701/P-1701	
	CONSTRUCT FUEL STORAGE FACILITIES	
	ELECTRICAL DETAILS	
SCALE:	AS NOTED	
PROJECT NO.:	1344008	
CONSTR. CONTR. NO.:	N62470-16-R-6004	
NAVFAC DRAWING NO.:	14047132	
SHEET	168	OF 186
E-502		
DRAWFORM REVISION: 10 MARCH 2009		



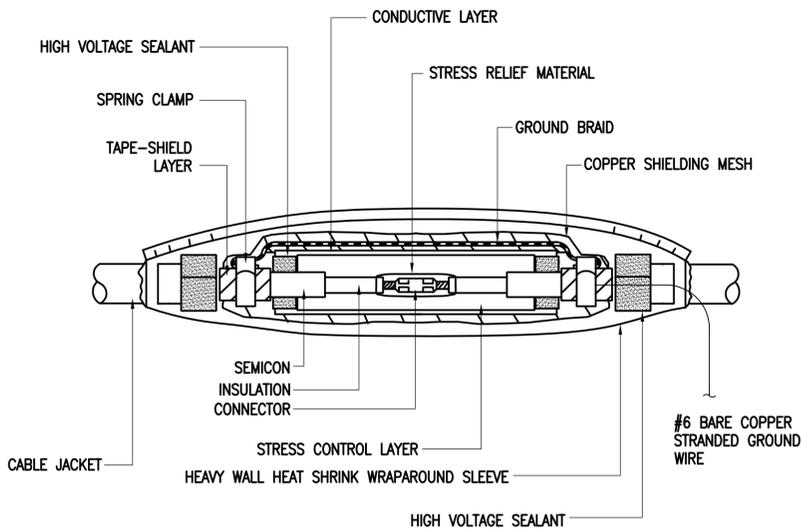
C1 PAD-MOUNTED TRANSFORMER
 SCALE: NONE

NOTE: PROVIDE CONCRETE TRANSFORMER PAD. DIMENSIONS PER MANUFACTURER'S REQUIREMENTS.



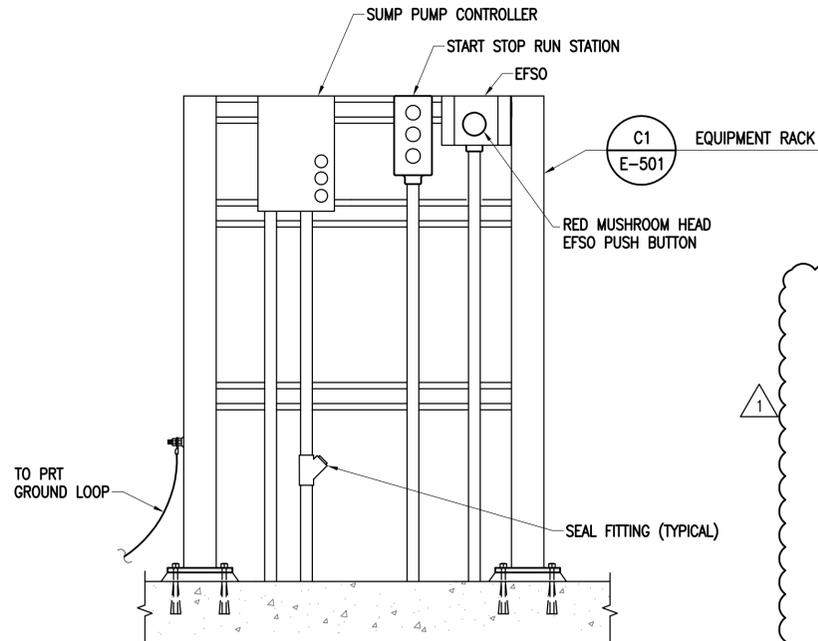
C3 SF6 SWITCH SECTION
 SCALE: NONE

NOTE: PROVIDE CONCRETE PAD. DIMENSIONS PER MANUFACTURER'S REQUIREMENTS.

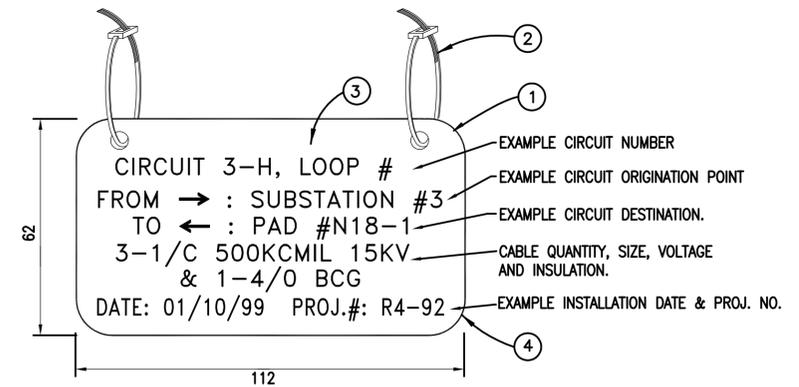


NOTE: CABLE SPLICE SHALL BE RATED FOR 25KV

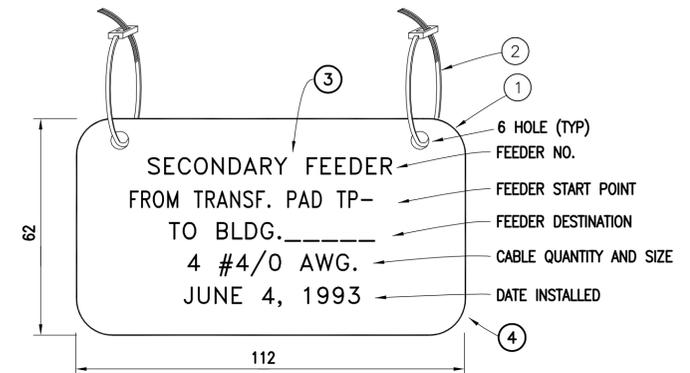
A1 TYPICAL 15KV IN-LINE CABLE SPLICE
 SCALE: NONE



A2 PRT CONTROL RACK
 SCALE: NONE
 E-411



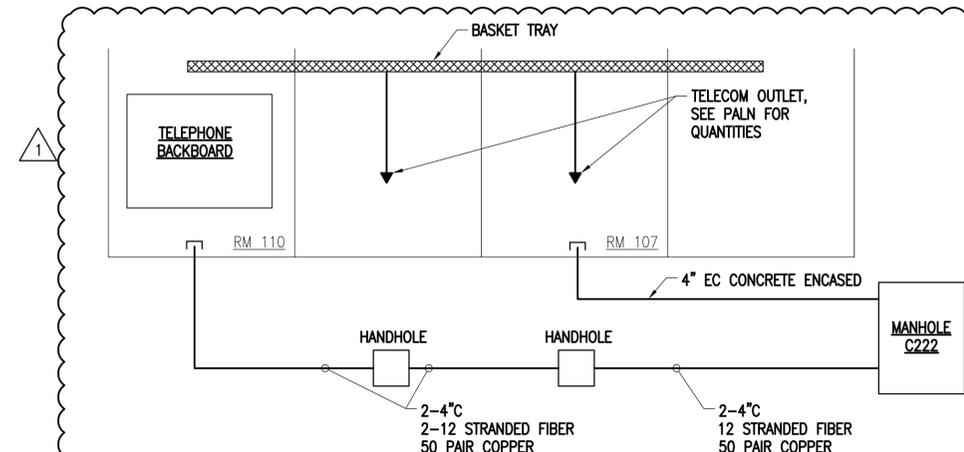
C4 SECONDARY CABLE TAG
 SCALE: NONE



C4 SECONDARY CABLE TAG
 SCALE: NONE

PRIMARY/SECONDARY CABLE TAG KEYED NOTES:

- 3mm THICK LAMINATED MELAMINE PLASTIC TAG. PROVIDE WITH MATTE WHITE BACKGROUND AND BLACK CHARACTERS.
- TYPICAL SELF-LOCKING TYPE NYLON TIES FOR ATTACHING TAGS TO EACH CABLE.
- ALL LETTERS AND NUMBERS 6 HIGH.
- PROVIDE FOR ALL NEW CABLES IN ALL MANHOLES AND HANDHOLES. REFER TO ELECTRICAL DRAWINGS FOR INFORMATION TO BE ENGRAVED. (ABOVE INFORMATION SAMPLE ONLY).



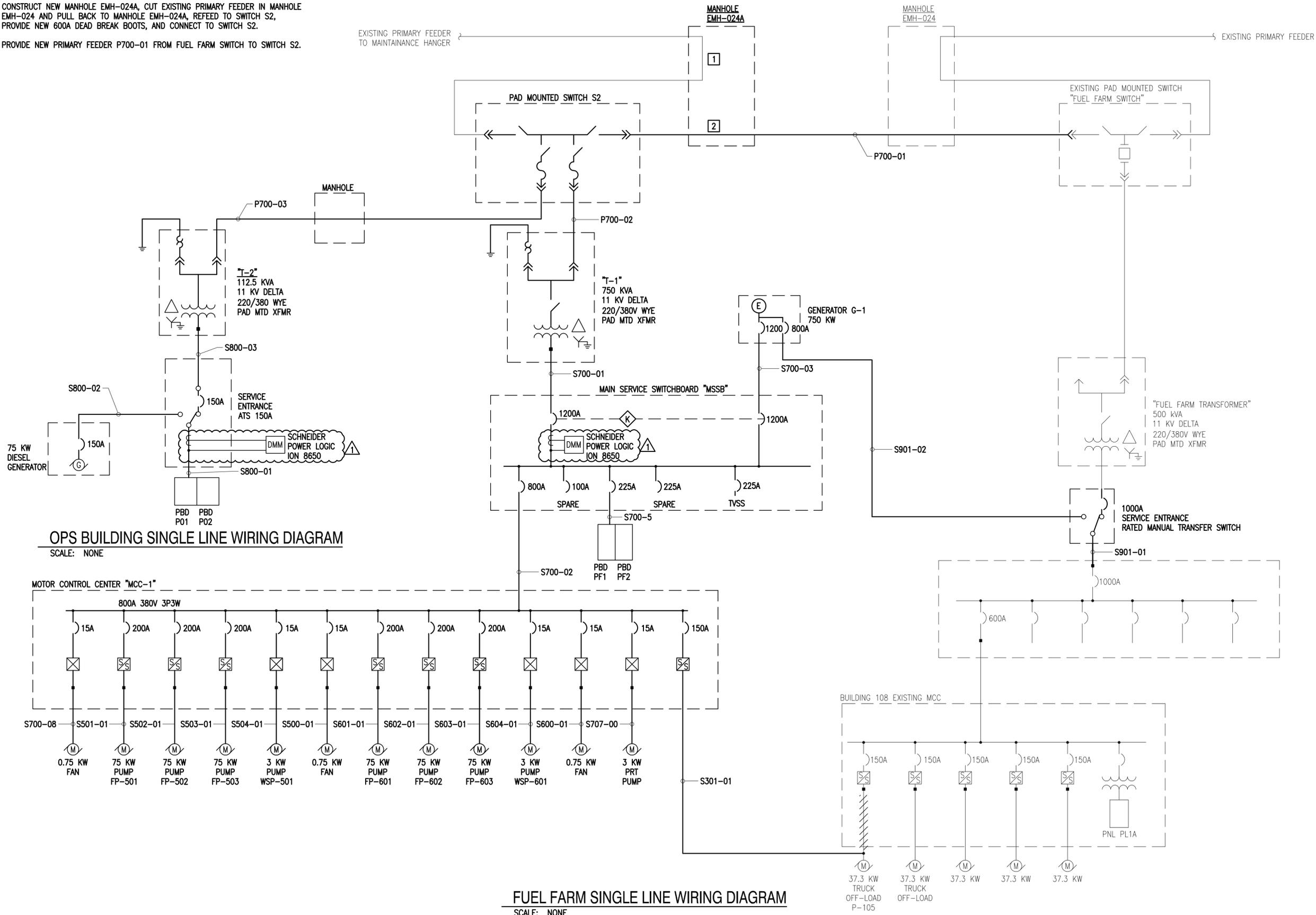
A4 OPS BUILDING TELEPHONE RISER DIAGRAM
 SCALE: NONE

APPROVED	DATE	5/10/16
REVISIONS	DESCRIPTION	
APPROVED	FOR COMMANDER NAVFAC	
ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO	DATE	4/4/16
DES	RJK	DRW
PM/DM	LET/RES	WMC/CHK
BRANCH MANAGER		CHM
DESIGN DIRECTOR	R.B. FITCH, III P.E.	
FIRE PROTECTION		
NAVAL FACILITIES ENGINEERING COMMAND	DUBOULT AFRICA	
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	NORFOLK, VIRGINIA	
LANT CAPITAL IMPROVEMENTS		
CAMP LEMONNIER		
DEPARTMENT OF THE NAVY		
DESC 1701/P-1701		
CONSTRUCT FUEL STORAGE FACILITIES		
DETAILS		
SCALE:	AS NOTED	
PROJECT NO.:	1344008	
CONSTR. CONTR. NO.:		
	N62470-16-R-6004	
NAVFAC DRAWING NO.:	14047133	
SHEET	169	OF 186
E-503		
DRAWING REVISION: 10 MARCH 2009		

FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\VE-E-503 DETAILS.dwg LAYOUT NAME: DETAILS PLOTTED: Wednesday, May 11, 2016 - 1:04pm USER: rhopkins

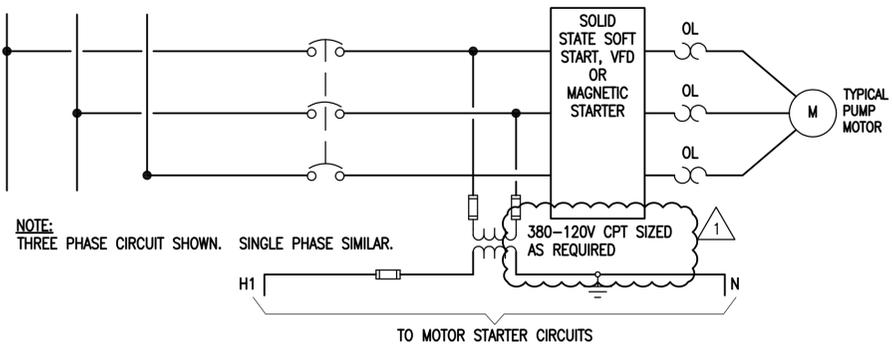
NEW WORK NOTES - THIS SHEET:

1. CONSTRUCT NEW MANHOLE EMH-024A, CUT EXISTING PRIMARY FEEDER IN MANHOLE EMH-024 AND PULL BACK TO MANHOLE EMH-024A, REFEED TO SWITCH S2, PROVIDE NEW 600A DEAD BREAK BOOTS, AND CONNECT TO SWITCH S2.
2. PROVIDE NEW PRIMARY FEEDER P700-01 FROM FUEL FARM SWITCH TO SWITCH S2.

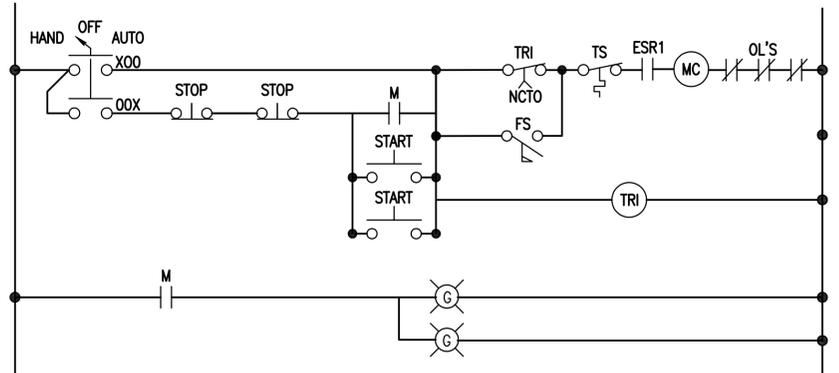


FILE NAME: G:\14 Jobs\14-013 Dhhout - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\LEVEL-601 SINGLE LINE DIAGRAMS.dwg LAYOUT NAME: SINGLE LINE DIAGRAMS.dwg PLOTTED: Wednesday, May 11, 2016 - 1:04pm USER: rhparkers

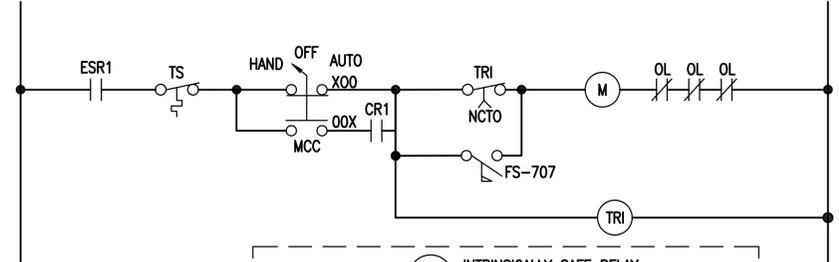
APPR	DATE	4/29/16
UPDATE METER INFO	DESCRIPTION	
APPROVED	A/E INFO	
FOR COMMANDER NAVFAC	ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL
SATISFACTORY TO	DATE	4/4/16
DES	RJK	DRW
PM/DM	LET/RES	WMC
BRANCH MANAGER	CHK	CHM
DESIGN DIRECTOR	R.B. FITCH, III P.E.	
FIRE PROTECTION		
NAVAL FACILITIES ENGINEERING COMMAND	NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	DUBOULT AFRICA
LANT CAPITAL IMPROVEMENTS	CAMP LEMONNIER	DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES		
SINGLE LINE DIAGRAMS		
SCALE:	AS NOTED	
PROJECT NO.:	1344008	
CONSTR. CONTR. NO.:	N62470-16-R-6004	
NAVFAC DRAWING NO.:	14047134	
SHEET	170	OF 186
E-601		
DRAWFORM REVISION: 10 MARCH 2009		



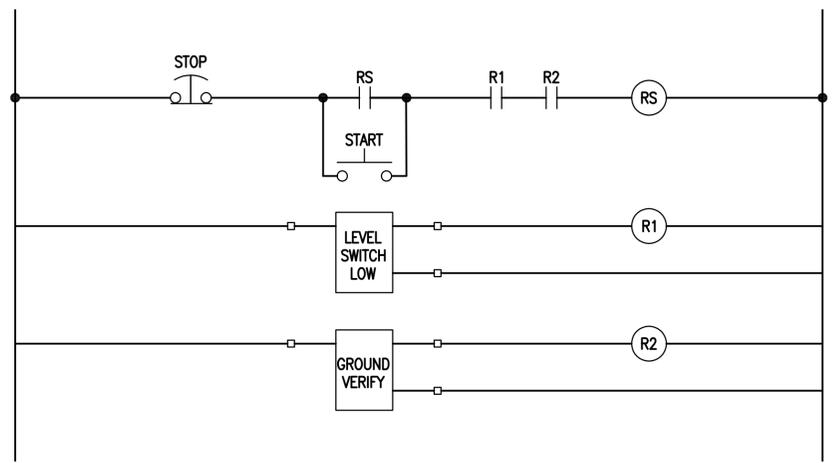
TYPICAL MOTOR STARTER CIRCUIT
SCALE: NONE



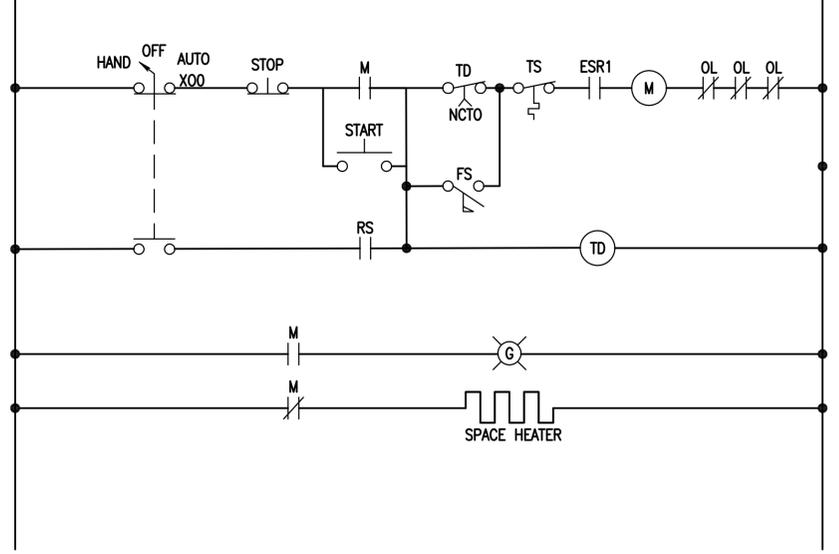
PUMPS WSP-501 AND WSP-601
SCALE: NONE



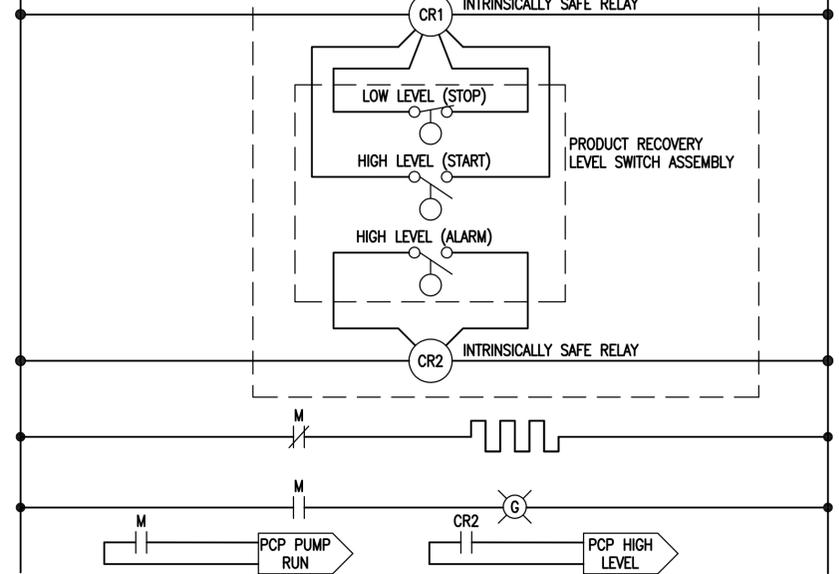
PRODUCT RECOVERY TANK P-707
SCALE: NONE



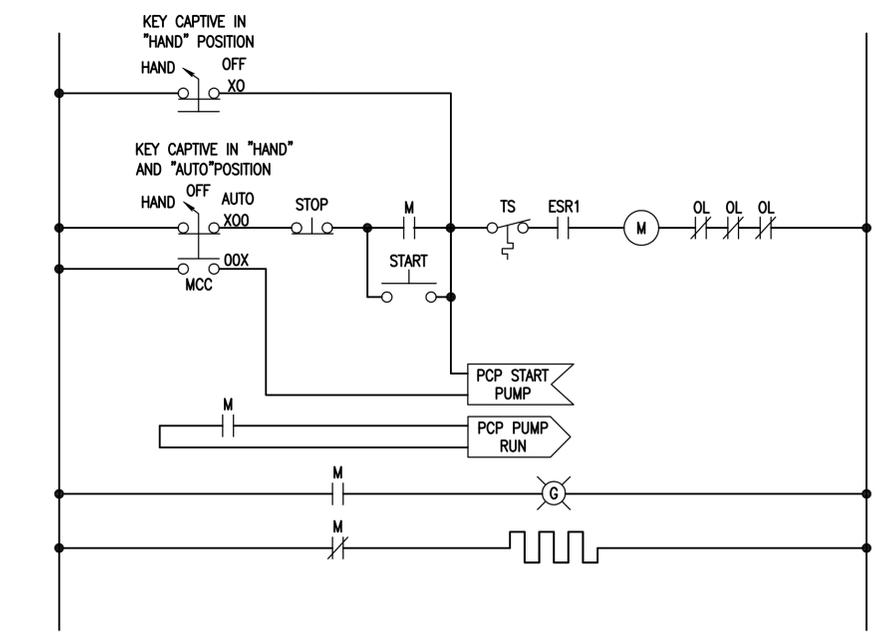
PLC
MCC



TRUCK OFF-LOAD
SCALE: NONE



PUMPHOUSE AND FILTER BLDG EXHAUST FAN
SCALE: NONE



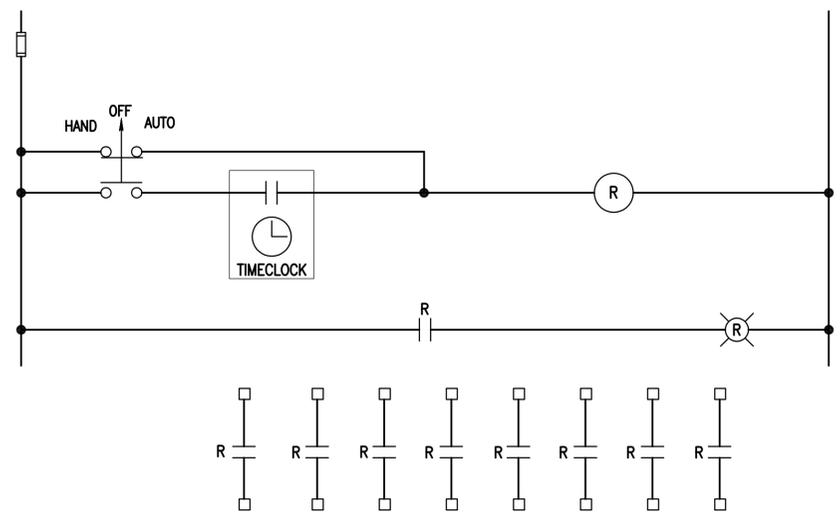
FUEL PUMP FP-501, 502, 503, 601, 602, 603
SCALE: NONE

KEYED LOCKS FOR LOCAL HAND-AUTO SWITCHES AND CORRESPONDING MCC HOA SWITCHES SHALL BE KEYED ALIKE. KEYED LOCKS FOR HAND AUTO SWITCHES AND NON-CORRESPONDING MCC HOA SWITCHES SHALL NOT BE KEYED ALIKE.

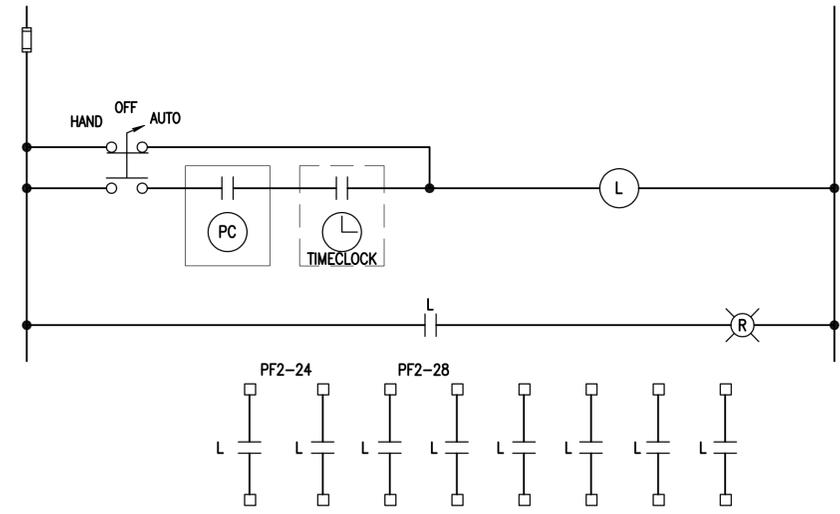
DATE	4/29/16
APPR	
REVISED INFO	1
DESCRIPTION	
APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	APPROVED BY ANDREA LEMON VIA EMAIL
SATISFACTORY TO	DATE 4/4/16
DESIGNER	RJK
DRW	WMC
CHK	CHM
PM/DM	LET/RES
BRANCH MANAGER	
DESIGN DIRECTOR	R.B. FITCH, III P.E.
FIRE PROTECTION	
DEPARTMENT OF THE NAVY	NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC	NORFOLK, VIRGINIA
LANT CAPITAL IMPROVEMENTS	DUBOULT, AFRICA
CAMP LEMONNIER	
DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES MOTOR CONTROL CIRCUIT WIRING DIAGRAMS	
SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.:	N62470-16-R-6004
NAVFAC DRAWING NO.:	14047135
SHEET	171 OF 186
E-602	
DRAWFORM REVISION: 10 MARCH 2009	

FILE NAME: G:\14_jobs\14-013_Duboult - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-602 MOTOR CONTROL CIRCUIT WIRING DIAGRAMS.dwg LAYOUT NAME: MOTOR CONTROL CIRCUIT WIRING DIAGRAMS PLOTTED: Wednesday, May 11, 2016 - 1:04pm USER: rjphipps

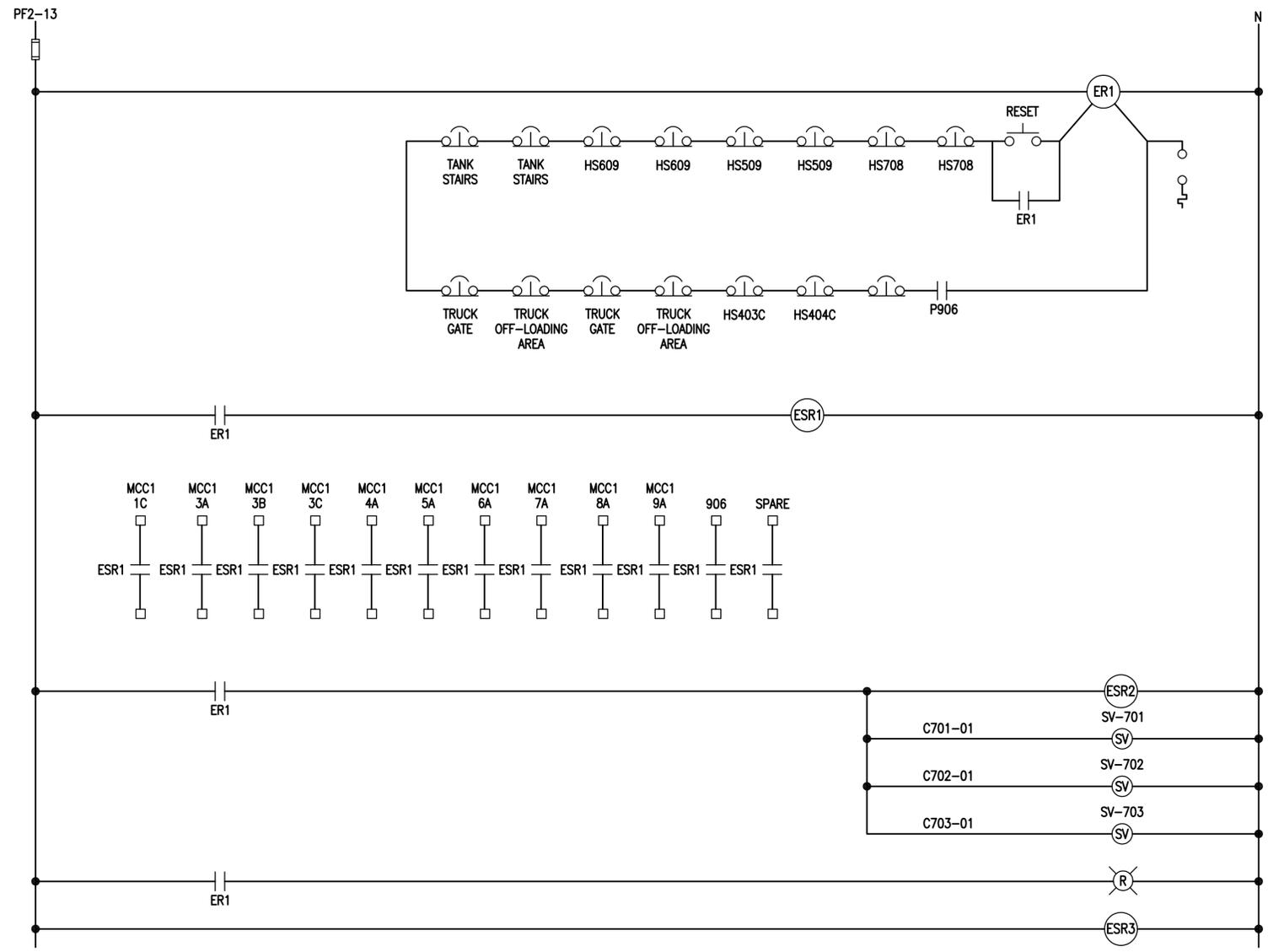
FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-603 MOTOR CONTROL CIRCUIT WIRING DIAGRAMS.dwg LAYOUT NAME: MOTOR CONTROL CIRCUIT WIRING DIAGRAMS.dwg PLOTTED: Wednesday, May 11, 2016 - 1:04pm USER: nroplina



RECEPTACLE CONTROL
SCALE: NONE



SITE LIGHTING CONTROL
SCALE: NONE



EMERGENCY FUEL SHUT OFF (ESFO) WIRING DIAGRAM
SCALE: NONE

APPR	
DATE	
SYN	DESCRIPTION
  	
APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO	DATE 4/4/16
DES RJK	DRW WMG
PM/DM	LET/RES CHM
BRANCH MANAGER	
DESIGN DIRECTOR R.B. FITCH, III P.E.	
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC NORFOLK, VIRGINIA CAMP LEMONNIER DUBOULT AFRICA DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES MOTOR CONTROL CIRCUIT WIRING DIAGRAM	
SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.:	
	N62470-16-R-6004
NAVFAC DRAWING NO.:	14047136
SHEET	172 OF 186
E-603	
DRAWN/REVISED: 10 MARCH 2009	

PANELBOARD PF1 SCHEDULE

225 M.C.B., 380/220-VOLT, 3-PHASE, 4-WIRE, 14 KAIC MINIMUM, SURFACE MOUNT, PROVIDE FEED THRU LIGS

LOAD SERVED	LOAD (AMPS)			BKR TRIP	WIRE SIZE	CKT NO.	PHASE			CKT NO.	WIRE SIZE	BKR TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
PUMP CONTROL PANEL	6.0			20	#12	1				2	#12	20	2.5			CONTROL ROOM LIGHTS
PUMP CONTROL PANEL		6.0		20		3				4	#12	20		9.7		FILTER ROOM LIGHTS
FILTER ROOM RECEPTACLES			3.0	20		5				6		20			0.0	SPARE
CONTROL ROOM RECEPTACLES	7.5			20		7				8		20				SPARE
CONTROL ROOM RECEPTACLES		6.0		20		9				10		20			0.0	SPARE
LEVEL ALARM CONTROL PANEL			2.0	20		11				12	#12	20			4.0	FIRE ALARM CONTROL PANEL*
EFSO PANEL	2.0			20		13				14	#12	20	4.0			FIRE ALARM CONTROL PANEL*
WATER COOLER		5.0		20		15				16		20			0.0	ATG BACKBOARD
OPERATORS STATION RECEPTACLE			3.0	20		17				18		20			0.0	SPARE
TELEPHONE RECEPTACLE	3.0			20		19				20		20	0.0			SPARE
SPARE		0.0		20		21				22		20			0.0	SPARE
SPARE			0.0	20		23				24		20			0.0	SPARE
SPACE	0.0			25		25				26		20			0.0	SPACE
SPACE		0.0		27		27				28		20			0.0	SPACE
SPACE			0.0	29		29				30		20			0.0	SPACE
SPACE	0.0			31		31				32		20			0.0	SPACE
SPACE		0.0		33		33				34	#6	60		15.0		PANELBOARD GA
AHU-11	7.1		1.0	15	#12	35				36	#8	40		1.0		SPURGE PROTECTIVE DEVICE
AC-11		7.1		15	#12	37				38	#8	40		1.0		SPURGE PROTECTIVE DEVICE
			7.1			39				40	#8	40		1.0		SPURGE PROTECTIVE DEVICE
						41				42					1.0	SPURGE PROTECTIVE DEVICE
TOTAL	25.6	24.1	16.1										7.5	25.7	20.0	TOTAL

TOTAL CONNECTED AMPS A: 33.1 B: 49.8 C: 36.1

*PROVIDE RED HANDLE LOCK DEVICE.

PANELBOARD PF2 SCHEDULE

225A MLO, 380/220-VOLT, 3-PHASE, 4-WIRE, 14 KAIC MINIMUM, SURFACE MOUNT

LOAD SERVED	LOAD (AMPS)			BKR TRIP	WIRE SIZE	CKT NO.	PHASE			CKT NO.	WIRE SIZE	BKR TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
PUMPHOUSE 5 LIGHTS	3.7			20	#10	1				2	#10	20	3.7			PUMPHOUSE 6 LIGHTS
PUMPHOUSE 5 RECEPTACLES		3.0		20	#10	3				4	#10	20		3.0		PUMPHOUSE 6 RECEPTACLES
PUMPHOUSE 5 SHOWER ALARM			1.5	20	#10	5				6	#10	20			1.5	PUMPHOUSE 6 ALARMS
PUMPHOUSE 5 ATG	1.5			20	#10	7				8	#10	20	1.5			PUMPHOUSE 6 ATG
TRUCK FILL 403 DEADMAN		1.5		20	#10	9				10	#10	20		1.0		PERSONEL GATE
TRUCK FILL 403 CANOPY LIGHTS			2.8	20	#10	11				12	#10	20			1.0	PERSONEL GATE
TRUCK FILL 404 DEADMAN	1.5			20	#10	13				14	#10	20	1.0			PERSONEL GATE
TRUCK FILL 404 CANOPY LIGHTS		2.8		20	#10	15				16		20			0.0	SPARE
PRT SUMP PUMP			5.0	20	#10	17				18		20			0.0	SPARE
TRUCK FILL STAND SHOWER ALRM	1.5			20	#10	19				20		20	0.0			SPARE
SPARE		0.0		20		21				22		20			0.0	SPARE
SPACE			0.0			23				24	#8	15			7.0	TRUCK PARKING LIGHTING
SPACE	0.0					25				26	#8	15		4.5		TRUCK FILL STAND LIGHTING (NOTE 1)
SPACE		0.0				27				28	#8	15		4.5		TRUCK FILL STAND LIGHTING (NOTE 1)
SPACE			0.0			29				30					4.5	TRUCK FILL STAND LIGHTING (NOTE 1)
SPACE	3.0					31				32	#10	15	3.0			MOTORIZED GATE
MOTORIZED GATE		3.0		15	#10	33				34				3.0		MOTORIZED GATE
			3.0			35				36				3.0		MOTORIZED GATE
SPACE						37				38						SPACE
SPACE						39				40						SPACE
SPACE						41				42						SPACE
TOTAL	11.2	10.3	12.3										16.2	11.5	17.0	TOTAL

TOTAL CONNECTED AMPS A: 27.4 B: 21.8 C: 29.3

NOTE:
1. CONTROL VIA LIGHTING CONTACTOR PANEL.

PANELBOARD PO1 SCHEDULE

150A, M.C.B., 380Y/220-VOLT, 3 PHASE, 4 WIRE, 14 KAIC MINIMUM, SURFACE MOUNT, PROVIDE FEED THRU LIGS

LOAD SERVED	LOAD (AMPS)			BKR TRIP	WIRE SIZE	CKT NO.	PHASE			CKT NO.	WIRE SIZE	BKR TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
LIGHTING NORTH	8.5			20	#12	1				2	#12	20	5.0			WORK STATION RECEPTACLES
LIGHTING SOUTH		4.0		20	#12	3				4	#12	20		5.0		WORK STATION RECEPTACLES
EGRESS LIGHTING			3.1	20	#12	5				6	#12	20			5.0	WORK STATION RECEPTACLES
FUEL LAB RECEPTACLES	5.0			20	#12	7				8	#12	20	5.0			WORK STATION RECEPTACLES
FUEL LAB RECEPTACLES		5.0		20	#12	9				10	#12	20		6.0		COPIER RM 103
FUEL LAB RECEPTACLES			5.0	20	#12	11				12	#12	20			6.0	RECEPTACLES RM 105, 106
FUEL LAB DISHWASHER	5.5			20	#12	13				14	#12	20	6.0			RECEPTACLES RM 102, 104
FUEL LAB HOOD		5.0		20	#12	15				16	#12	20		6.0		RECEPTACLES RM 109
TELECOM RECEPTACLES			5.0	20	#12	17				18	#12	20		0.0		RECEPTACLES RM 113, 114, 108
TELECOM RECEPTACLES	5.0			20	#12	19				20	#12	20	0.0			RECEPTACLES RM 111, 112, 108
ELECT ROOM RECEPTACLES		5.0		20	#12	21				22	#12	20		0.0		RECEPTACLES RM 115
FIRE ALARM CONTROL PANEL*			0.0	20	#12	23				24	#12	20			4.5	RECEPTACLES RM 107
FIRE ALARM CONTROL PANEL*	0.0			20	#12	25				26	#12	20	0.0			QUAD RECEPTACLE RM 107
SPARE		0.0		20		27				28	#12	20		0.0		ALARM RM 107
SPACE			0.0			29				30		20			0.0	SPARE
SPACE	0.0					31				32		20	0.0			SPARE
SPACE		0.0				33				34		20		0.0		SPARE
SWITCHED RECEPTACLES 103			6.0	20	#12	35				36		20				SPARE
SWITCHED RECEPTACLES 105,106	9.0			20	#12	37				38		40	1.0			SPURGE PROTECTIVE DEVICE
SWITCHED RECEPTACLES 103,106		6.0		20	#12	39				40	#8			1.0		SPURGE PROTECTIVE DEVICE
SWITCHED RECEPTACLES 107,109			9.0	20	#12	41				42					1.0	SPURGE PROTECTIVE DEVICE
TOTAL	33.0	25.0	28.1										17.0	18.0	16.5	TOTAL

TOTAL CONNECTED AMPS A: 50.0 B: 43.0 C: 44.6

*PROVIDE RED HANDLE LOCK DEVICE.

PANELBOARD PO2 SCHEDULE

225A, MAIN LUGS ONLY, 380Y/220-VOLT, 3 PHASE, 4 WIRE, 14 KAIC MINIMUM, SURFACE MOUNT

LOAD SERVED	LOAD (AMPS)			BKR TRIP	WIRE SIZE	CKT NO.	PHASE			CKT NO.	WIRE SIZE	BKR TRIP	LOAD (AMPS)			LOAD SERVED
	A	B	C				A	B	C				A	B	C	
RM 115 ICEMAKER	6.0			20	#12	1				2	#12	15				SPARE
RM 115 REFRIGERATOR		6.0		20	#12	3				4	#12	15		3.1		AC-2/AHU-2
RM 115 COUNTER RECEPTACLES			6.0	20	#12	5				6	#10	25			2.6	AC-3/AHU-3
RM 115 COUNTER RECEPTACLES	6.0			20	#12	7				8	#12	15	5.7			AC-4/AHU-4
EWAC		3.0		20	#12	9				10	#12	15		3.1		AC-5/AHU-5
SPARE				20		11				12	#12	15			7.9	AC-6/AHU-6
SPARE				20		13				14	#12	15	3.1			AC-7/AHU-7
SPARE				20		15				16	#12	15		3.1		AC-8/AHU-8
SPARE		0.0		20		17				18	#12	15			3.1	AC-9/AHU-9
SPARE	0.0			20		19				20	#12	15	3.1			AC-10/AHU-10
SPARE		0.0		20		21				22	#12	15		12.0		AC-11/AHU-11
SPACE			0.0			23				24	#12	20			2.6	AC-12/AHU-12
SPACE	0.0					25				26		20	0.0			SPARE
PARKING LOT LIGHTING		2.1		15	#12	27				28		20		0.0		SPARE
			2.1			29				30		20		0.0		SPARE
AC-1	7.4			15	#12	31				32		20				SPARE
		7.4				33				34		20				SPARE
			7.4			35				36		20				SPARE
WATER HEATER WH-1	6.8			15	#12	37				38	#8	50		34.4		DEDICATED OUTSIDE AIR SUPPLY DOAS-1
		6.8				39				40	#8	50		34.4		DEDICATED OUTSIDE AIR SUPPLY DOAS-1
			6.8			41				42				34.4		DEDICATED OUTSIDE AIR SUPPLY DOAS-1
TOTAL	26.2	25.3	22.3										46.3	55.7	50.6	TOTAL

TOTAL CONNECTED AMPS A: 72.5 B: 81 C: 72.9

INTRINSICALLY SAFE CONTROL CIRCUIT SCHEDULE

CKT NO	SOURCE	DESTINATION	CONDUCTORS	CONDUIT	REMARKS
IS500-01	LEVEL SWITCH LSHH-506, LSH-506	PUMP CONTROL PANEL	6C/#12	21mm	
IS500-02	LEVEL SWITCH LSL-506, LSL-506	PUMP CONTROL PANEL	6C/#12	21mm	
IS600-01	LEVEL SWITCH LSHH-606, LSH-606	PUMP CONTROL PANEL	6C/#12	21mm	
IS600-02	LEVEL SWITCH LSL-606, LSL-606	PUMP CONTROL PANEL	6C/#12	21mm	

4/29/16 DATE

REVISED SCHEDULES

NAVFAC

COMMONWEALTH OF VIRGINIA
RALPH JEFFERSON KEITH
Lic. No. 018747
PROFESSIONAL ENGINEER

Austin
Brockenbrough
ENGINEERING - CONSULTING

APPROVED BY ANDREA LEMON VIA EMAIL

DESIGNER: RJK
DRAWN: WMC
CHECKED: CHM

BRANCH MANAGER
DESIGN DIRECTOR: R.B. FITCH, III P.E.
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
LANT CAPITAL IMPROVEMENTS
CAMP LEMONIER

DUBOULT AFRICA

DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES

SCHEDULES

SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO.: N62470-16-R-6004
NAVFAC DRAWING NO.: 14047137
SHEET 173 OF 186
E-604
DRAWING REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Dlubout - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\14-604 SCHEDULES.dwg LAYOUT NAME: SCHEDULES PLOTTED: Wednesday, May 11, 2016 - 1:04pm USER: rjphkins

FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT/CAD AutoCAD\LEVEL-605 MCC & SWITCHBOARD SCHED & ELEVATIONS PLOTTED: Wednesday, May 11, 2016 - 1:05pm USER: rhopkins

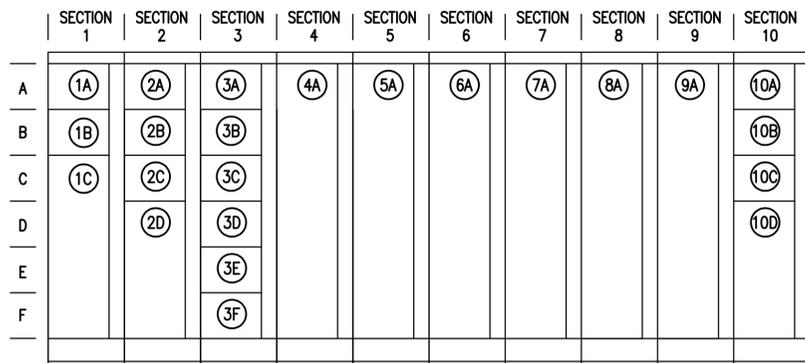
MOTOR CONTROL CENTER 'MCC1' SCHEDULE

NO	LOAD	LOAD (AMPS)	LOAD KW	FEEDERS			CIRCUIT VOLTAGE PHASE	STARTER SIZE/TYPE	OVERCURRENT PROTECTION		CIRCUIT NUMBER	REMARKS
				WIRE	GND	CONDUIT			TYPE	CONT AMPS		
1A	BLANK											
1B	BLANK											
1C	TRUCK OFF LOAD PUMP P-105	83	38	#2/0	#6	41mm	380/3	RVSS	CB	150		
2A	FAN	2.3	0.75	#12	#12	19mm	380/3	1/FVNR	CB	70		
2B	FAN	2.3	0.75	#12	#12	19mm	380/3	1/FVNR	CB	60		
2C	SPARE						380/3	2/FVNR	CB	30		
2D	BLANK											
3A	PUMP WTP-504	6.1	3	#12	#12	19mm	380/3	1/FVNR	CB	15		
3B	PUMP WTP-604	6.1	3	#12	#12	19mm	380/3	1/FVNR	CB	15		
3C	PUMP P-707	6.1	3	#12	#12	19mm	380/3	1/FVNR	CB	15		
3D	SPARE						380/3	1/FVNR	CB	15		
3E	BLANK											
3F	BLANK											
4A	FUEL PUMP FP-603	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
5A	FUEL PUMP FP-602	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
6A	FUEL PUMP FP-601	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
7A	FUEL PUMP FP-503	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
8A	FUEL PUMP FP-502	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
9A	FUEL PUMP FP-501	165	75	#4/0	#2	76mm	380/3	RVSS	CB	350		
10A	SPARE	--	--	--	--	--	380/3	1/FVNR	CB	15		
10B	METERING	--	--	--	--	--						NOTE 1
10C	SPD	--	--	--	--	--						NOTE 1
10D	INCOMING	--	--	--	--	--			MLO	1200		

TOTAL CONNECTED LOAD 1096A

NOTES:

1. MANUFACTURER SHALL INSTALL STANDARD OCPD FOR THIS EQUIPMENT.



MOTOR CONTROL CENTER (MCC1) SCHEDULE & ELEVATION

SCALE: NONE

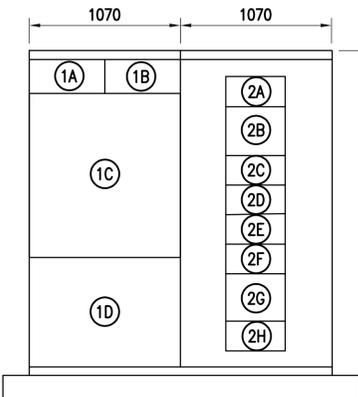
SWITCHBOARD MSSB

VOLTS:360/220 3 PHASE 4 WIRE BUS: 1200A NEUT:1200A GND BUS BRACING: 65,000A

NO	LOAD	AMPS FRAME	AMPS TRIP	DEVICE	FEEDERS					REMARKS	
					CIRCUIT NUMBER	NO CONDUITS	CONDUIT SIZE	WIRE	GND		
1A	MULTI METER										
1B	SURGE PROTECTION DEVICE										
1C	MAIN BREAKER	1200	1200	ICCB							NOTE 1
1D	INCOMING TERMINATION	1200	--	ML		4	78mm	4 - #350 KCMIL	#3/0		
2A	SPACE										
2B	GENERATOR BREAKER	1200	1200	MCCB		4	78mm	4 - #350 KCMIL	#3/0		NOTE 1
2C	SPACE										
2D	PANELBOARD	225	225	MCCB		1	78mm	4 - #4/0	#4		
2E	SPARE	225	225	MCCB							
2F	SPARE	225	100	MCCB							
2G	MCC 1	1200	1200	MCCB		4	78mm	4 - #350 KCMIL	#3/0		
2H	SPACE										

NOTE:

1. KIRK KEY INTERLOCK



MAIN SERVICE SWITCHBOARD SCHEDULE & ELEVATION

SCALE: NONE

LIGHTING FIXTURE SCHEDULE

FIXTURE SYMBOL	SKETCH NO & TYPE	NUMBER AND TYPE OF LAMPS	VOLTAGE	MOUNTING	NOTES
A	DETAIL A1/E-701	LED	220	PENDENT +2.13m AFF	A1 SAME W/NOTE1
B	DETAIL C1/E-701	LED	220	RECESSED	B1 SAME W/NOTE1
C	DETAIL C2/E-701	LED	220	RECESSED	-
D	DETAIL C4/E-701	LED	220	SURFACE CEILING	D1 SAME W/NOTE1
E	DETAIL A2/E-702	LED	220	SURFACE CEILING	NOTE 1
F	NL-69	(1) 175W MH	220	PENDENT +4.27m AFF	-
G	NL-69	(1) 50W LED	220	SURFACE CEILING	CLASS I, DIV II
H	XL-03	LED	380	POLE +9.0m AFG	TYPE 3 DISTRIBUTION
I	XL-03	LED	380	POLE +9.0m AFG	TYPE 4 DISTRIBUTION
J	NL-63	LED	220	UNIVERSAL	-
K	DETAIL A3/E-701	LED	220	WALL +3m AFF	-
L	DETAIL A3/E-701	LED	220	WALL +3m AFF	WITH 900 LUMEN REMOTE EMERGENCY BALLAST
M	NL-65	(2) 12W HALOGEN	220	WALL +2.5m AFF	CLASS 1 DIV 1 LOCATION
N	NL-66	(1) 12W HALOGEN	220	WALL +2.5m AFF	CLASS 1 DIV 1 LOCATION
O	DETAIL C3/E-701	LED	220	RECESSED CEILING	-
P	DETAIL A4/E-701	LED	220	UNDERCABINET	-
Q	DETAIL C2/E-703	LED	220	RECESSED	-

NOTE 1: PROVIDE 1100 LUMENS EMERGENCY BALLAST

DATE	4/29/16
DESCRIPTION	REVISED LIGHTING SCHEDULE
SYN	1



APPROVED FOR COMMANDER NAVFAC

ACTIVITY APPROVED BY ANDREA LEMON VIA EMAIL

SATISFACTORY TO DATE 4/4/16

DES RJK | DRW WMC | CHK CHM

BRANCH MANAGER

DESIGN DIRECTOR R.B. FITCH, III P.E.

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC

LANT CAPITAL IMPROVEMENTS

CAMP LEMONNIER

DUBOULT AFRICA

DESC 1701/P-1701

CONSTRUCT FUEL STORAGE FACILITIES

MCC & SWITCHBOARD SCHED & ELEVATIONS

SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO. N62470-16-R-6004
NAVFAC DRAWING NO. 14047138

SHEET 174 OF 186
E-605
DRAWING REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT/CDR AutoCAD\14-013 E-606 CONTROL SCHEDULES.dwg LAYOUT NAME: CONTROL SCHEDULES PLOTTED: Wednesday, May 11, 2016 - 1:05pm USER: rhopkins

POWER SCHEDULE

CKT NO	SOURCE	DESTINATION	NUMBER	CONDUIT	CONDUCTOR	REMARKS
P700-01	EXIST FUEL FARM SWITCH	FUEL FARM PAD SWITCH S2	1	155mm	3-500KCMIL, #4/0 G	MV-105
P700-02	FUEL FARM PAD SWITCH S2	FUEL FARM XFMR T-1	1	155mm	3-#4/0, #4/0 G	MV-105
P700-03	FUEL FARM PAD SWITCH S2	OPS BUILDING XFMR T-2	1	155mm	3-#4/0, #4/0 G	MV-105
S301-01	MCC1-1C	EXIST TRUCK OFF LOAD PUMP P-105	1	41mm	3-#2/0, #6 G 2-#10	
S403-01	PANELBOARD PF2-9	TRUCK FILLSTAND 403 DEADMAN	1	21mm	2-#10, #10 G	
S403-02	PANELBOARD PF2-11	TRUCK FILLSTAND 403 CANOPY LIGHTS	1	21mm	2-#10, #10 G	
S404-01	PANELBOARD PF2-13	TRUCK FILLSTAND 404 DEADMAN	1	21mm	2-#10, #10 G	
S404-02	PANELBOARD PF2-15	TRUCK FILLSTAND 404 CANOPY LIGHTS	1	21mm	2-#10, #10 G	
S404-03	PANELBOARD PF2-28	TRUCK FILLSTAND AREA LIGHTING	1	35mm	2-#8, #8G	
S404-04	PANELBOARD PF2-10	AIRFIELD PERSONNEL GATE	1	21mm	2-#10, #10 G	
S405-01	PANELBOARD PF2-19	TRUCK FILLSTAND SHOWER ALARM	1	21mm	2-#10, #10 G	
TANK 5						
S500-01	MCC1-2A	FAN	1	21mm	3-#12, #12 G	
S500-02	MCC1-2A	MOTORIZED DAMPER	1	21mm	2-#12, #12 G	
S500-03	PANELBOARD PF2-1	PUMP ROOM 5 LIGHTS	1	21mm	2-#12, #12 G	
S500-04	PANELBOARD PF2-3	PUMP ROOM 5 RECEPTACLES	1	21mm	2-#12, #12 G	
S500-05	PANELBOARD PF2-5	PUMP ROOM 5 ALARMS	1	21mm	2-#12, #12 G	
S500-06	PANELBOARD PF2-7	PUMP ROOM 5 ATG	1	21mm	2-#12, #12 G	
S501-01	MCC1-9A	PUMP FP-501	1	78mm	3-#4/0, #2 G 2-#10	
S502-01	MCC1-8A	PUMP FP-502	1	78mm	3-#4/0, #2 G 2-#10	
S503-01	MCC1-7A	PUMP FP-503	1	78mm	3-#4/0, #2 G 2-#10	
S504-01	MCC1-3A	PUMP WSP-501	1	21mm	3-#12, #12 G,	
TANK 6						
S600-01	MCC1-2B	FAN	1	21mm	3-#12, #12 G	
S600-02	MCC1-2B	MOTORIZED DAMPER	1	21mm	2-#12, #12 G	
S600-03	PANELBOARD PF2-2	PUMP ROOM 6 LIGHTS	1	21mm	2-#12, #12 G	
S600-04	PANELBOARD PF2-4	PUMP ROOM 6 RECEPTACLES	1	21mm	2-#12, #12 G	
S600-05	PANELBOARD PF2-6	PUMP ROOM 6 ALARMS	1	21mm	2-#12, #12 G	
S600-06	PANELBOARD PF2-8	PUMP ROOM 6 ATG	1	21mm	2-#12, #12 G	
S601-01	MCC1-6A	PUMP FP-601	1	78mm	3-#4/0, #2 G 2-#10	
S602-01	MCC1-5A	PUMP FP-602	1	78mm	3-#4/0, #2 G 2-#10	
S603-01	MCC1-4A	PUMP FP-603	1	78mm	3-#4/0, #2 G 2-#10	
S604-01	MCC1-3B	PUMP WSP-601	1	21mm	3-#12, #12 G,	
FILTER BUILDING						
S700-01	TRANSFORMER T-1	SWITCHBOARD MSSB	4	103mm	4-#350 KCMIL	
S700-02	SWITCHBOARD MSSB	MCC1-10D	4	78mm	4-#350 KCMIL, #3/0 G	
S700-03	SWITCHBOARD MSSB	GENERATOR G-1	4	78mm	4-#350 KCMIL, #3/0 G	
S700-04	SWITCHBOARD MSSB	GENERATOR G-1 ACC PANEL PG1	1			
S700-05	SWITCHBOARD MSSB	PANEL PF1	1	78mm	4-#4/0, #4 G	
S700-06	PANELBOARD PF2-12	PERSONNEL GATE			2-#10, #10 G	
S700-07	PANELBOARD PF2-14	PERSONNEL GATE			2-#10, #10 G	
S700-08	MCC1-1A	EXHAUST FAN EF-1	1	21mm	3-#12, #12 G	
S700-09	MCC1-1A	MOTORIZED DAMPERS	1	21mm	3-#12, #12 G	
S700-10	PANELBOARD PF2-16	PERSONNEL GATE				
S700-11	PANELBOARD PF2-18	PERSONNEL GATE				
S707-00	MCC1-3C	PRODUCT RECOVERY PUMP P-707	1	21mm		
S707-01	PANELBOARD PF2-17	PRODUCT RECOVERY SUMP PUMP	1	21mm	3-#12, #12G	
S800-01	TRANSFORMER T-2	OPS BLDG SERVICE LISTED ATS	1	53mm	4 #1/0	
S800-02	GENERATOR G-2	OPS BLDG SERVICE LISTED ATS	1	53mm	4 #1/0, #6 G	
S800-03	OPS BLDG SERVICE LISTED ATS	PANEL P01	1	53mm	4 #1/0, #6 G	
S901-01	P901 SERVICE LISTED ATS	PANEL MDP	3	78mm	4 500KCMIL, #3/0 G	
S901-02	GENERATOR G1	P901 SERVICE LISTED ATS	2	103mm	4-500 KCMIL, #2/0 G	

CABLE SCHEDULE

EXIST CABLE IDENTIFICATION	NEW CABLE IDENTIFICATION	DESCRIPTION	CONDUIT SIZE	REMARKS
	1	C00-00	53	
	2	C00-01	53	
	3	C00-00, C00-01	53	
	4	155 EMPTY CONDUIT	155	
	5	103 EMPTY CONDUIT	103	
	6	53 EMPTY CONDUIT	53	
	7	P700-01	155	
	8	P700-02	155	
P	9	S700-01	103	
	10	C301-02, C301-03, C301-04, C301-06	53	
	11	S301-01	53	
	12	C403-01, C404-01, C405-01	53	
	13	S403-01, S403-02, S404-01, S404-02	53	
	14	S700-04	53	
	15	GENERATOR CONTROLS	53	
	16	S501-01	78	
	17	S502-01	78	
	18	S503-01	78	
	19	S500-01, S500-02, S504-01	53	
	20	S500-01, S500-02, S500-03, S500-04, S500-05, S500-06	53	
	21	C501-01, C501-03, C502-01, C502-03, C503-01, C503-03, C504-01, C504-03	53	
	22	C501-02, C502-02, C503-02, C504-02, C500-04, C505-01, C505-02, C508-01	53	
	23	P700-03	53	
A		7-4mm2, 1-4mm2 G	27	
B		2-4mm2, 1-4mm2 G	27	
C		7-4mm2, 1-4mm2 G	27	
D		2-4mm2, 1-4mm2 G	27	
E		EMPTY DUCT	27	
	24	C401-01, C402-02	27	
	25	C402-01	27	
	26	S601-01	78	
	27	S602-01	78	
	28	S603-01	78	
	29	S600-01, S600-02, S604-01	53	
	30	S600-03, S600-04, S600-05, S608-01	53	
	31	C601-01, C601-03, C602-01, C602-03, C603-01, C603-03, C604-01, C604-03	53	
	32	C601-02, C602-02, C603-02, C604-02, C600-04, C605-01, C605-02, C605-03	53	
	33	S700-03	103	
	34	S901-02	103	
	35	S404-03, S404-04, S4005-01	53	
	36	C906-02	53	
	37	C906-01	53	
	38	C906-01, C906-02	53	
	39	C500-01, C500-02, C500-03	53	
	40	C600-01, C600-02, C600-03	53	
	41	S800-01	53	
	42	S800-02	53	
	43	C301-01, S301-05	53	
	44	C301-01, C703-02, C703-04, S301-05	53	
	45	S403-01, S403-02, S404-04, S405-01	53	
	46	C403-01, C405-01	53	
	47	T 100-01	103	
	48	T 100-02	103	
	49	T 100-03	53	

DATE: 4/29/16

REVISED CABLE SCHEDULE

SYN



COMMONWEALTH OF VIRGINIA

RALPH JEFFERSON KEITH

Lic. No. 018747

PROFESSIONAL ENGINEER

Austin

Brockenbrough

ENGINEERING • CONSULTING

A/E INFO

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

APPROVED BY ANDREA LEMON

VIA EMAIL

SATISFACTORY TO DATE 4/4/16

DES: RJK | DRAW: WMC | CHK: CHM

PM/DM: LET/RES

BRANCH MANAGER

DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC

NORFOLK, VIRGINIA

DUBOUI: AFRICA

CAMP LEMONNIER

DESC 1701/P-1701

CONSTRUCT FUEL STORAGE FACILITIES

CONTROL SCHEDULES

SCALE: AS NOTED

PROJECT NO.: 1344008

CONSTR. CONTR. NO. N62470-16-R-6004

NAVFAC DRAWING NO. 14047139

SHEET 175 OF 186

E-606

DRAWING REVISION: 10 MARCH 2009

CONTROL CIRCUIT SCHEDULE

CKT NO	SOURCE	DESTINATION	CONDUCTORS	CONDUIT	REMARKS
C00-00	P1701 ESTOP CONTROL PANEL	ESTOP STATION	4C/#12	21mm	
C00-01	P1701 ESTOP CONTROL PANEL	P906 ESTOP CONTROL PANEL	4C/#12	21mm	
C00-02	P906 ESTOP CONTROL PANEL	P1701 ESTOP CONTROL PANEL	4C/#12	21mm	
C00-03	MCC1	P1701 ESTOP CONTROL PANEL	20-#12	53mm	
P906 PUMP PAD CONTROLS MODIFICATIONS					
C101-01	START/STOP SWITCH HS-101.02	P906 PLC	6C/#12	21mm	
	P906 PLC	RUN LIGHT 103.02			
C102-01	START/STOP SWITCH HS-102.02	P906 PLC	6C/#12	21mm	
	P906 PLC	RUN LIGHT 103.02			
C103-01	START STOP SWITCH HS-103.02	P906 PLC	6C/#12	21mm	
	P906 PLC	RUN LIGHT 103.02			
TRUCK OFF-LOADING STATION 301					
C301-01	PUMP P301 THERMAL SWITCH	MCC1-1C	4C/#12	21mm	
C301-02	START/STOP SWITCH HS301.01	PUMP CONTROL PANEL	4C/#12	21mm	
C301-03	HIGH-HIGH LSHH-301.01	PUMP CONTROL PANEL	6C/#12	21mm	
	HIGH LSH-301.01	PUMP CONTROL PANEL			
	LOW LSL-301.01	PUMP CONTROL PANEL			
C301-04	FLOW SWITCH FS-301.01	PUMP CONTROL PANEL	4C/#12	21mm	
C301-05	NOT USED				
C301-06	GROUND VERIFICATION PERMIT	PUMP CONTROL PANEL	4C/#12	21mm	
REFUELER TRUCK LOADING					
C401-01	START STOP SWITCH HS-401	PUMP CONTROL PANEL	6C/#12	21mm	
C401-02	GROUND/OVERFILL PROTECTION PANEL	SOLENOID SV-401	4C/#12	21mm	
C402-01	START STOP SWITCH HS-402	PUMP CONTROL PANEL	6C/#12	21mm	
C402-02	GROUND/OVERFILL PROTECTION PANEL	SOLENOID SV-402	4C/#12	21mm	
C403-01	START/STOP SWITCH HS-403	PUMP CONTROL PANEL	6C/#12	21mm	
C403-02	GROUND/OVERFILL PROTECTION PANEL	SOLENOID SV-403	4C/#12	21mm	
C404-01	START/STOP SWITCH HS-404	PUMP CONTROL PANEL	6C/#12	21mm	
C404-02	GROUND/OVERFILL PROTECTION PANEL	SOLENOID SV-404	4C/#12	21mm	
C405-01	FLOW SWITCH FS-405	PUMP CONTROL PANEL	4C/#12	21mm	
PUMPHOUSE NO 5					
C500-01	PUMPHOUSE WALL SWITCH	MCC1-2A	4C/#12	21mm	
C500-02	PUMPHOUSE THERMOSTAT	MCC1-2A	4C/#12	21mm	
C500-03	FAN THERMAL SWITCH	MCC1-2A	4C/#12	21mm	
C500-04	LEVEL SWITCH LE501	PUMP CONTROL PANEL	4C/#12	21mm	
	HAND SWITCH HS-501.02	MCC1-9A			
C501-01	MCC1-9A	RUN LIGHT 501.02	6C/#12	21mm	
	FLOW SWITCH FSL-501	PUMP CONTROL PANEL			
C501-02	THERMAL SWITCH TE-501	MCC1-9A	4C/#12	21mm	
C502-01	HAND SWITCH HS-502.02	MCC1-8A	6C/#12	21mm	
	MCC1-8A	RUN LIGHT 502.02			
C502-02	FLOW SWITCH FSL-502	PUMP CONTROL PANEL	4C/#12	21mm	
C502-03	THERMAL SWITCH TE-502	MCC1-8A	4C/#12	21mm	
	HAND SWITCH HS-503.02	MCC1-7A			
C503-01	MCC1-7A	RUN LIGHT 503.02	6C/#12	21mm	
	FLOW SWITCH FSL-503	PUMP CONTROL PANEL			
C503-02	THERMAL SWITCH TS-503	MCC1-7A	4C/#12	21mm	
C504-01	HAND SWITCH HS-504.02	MCC1-3A	6C/#12	21mm	
	MCC1-3A	RUN LIGHT 504.02			
C504-02	FLOW SWITCH FSL-504	PUMP CONTROL PANEL	4C/#12	21mm	
C504-03	THERMAL SWITCH TS-504	MCC1-3A	4C/#12	21mm	
C505-01	PUMP CONTROL PANEL	LCV-505 SOLENOID SV-505	4C/#12	21mm	
C505-02	LCV-505 LIMIT SWITCH ZSO-505	PUMP CONTROL PANEL	4C/#12	21mm	
C508-01	EMERGENCY EYEWASH/SHOWER FS-508	PUMP CONTROL PANEL	4C/#12	21mm	

CONTROL CIRCUIT SCHEDULE

CKT NO	SOURCE	DESTINATION	CONDUCTORS	CONDUIT	REMARKS
PUMPHOUSE NO 6					
C600-01	PUMPHOUSE WALL SWITCH	MCC1-2B	4C/#12	21mm	
C600-02	PUMPHOUSE THERMOSTAT	MCC1-2B	4C/#12	21mm	
C600-03	FAN THERMAL SWITCH	MCC1-2B	4C/#12	21mm	
C600-04	LEVEL SWITCH LE601	PUMP CONTROL PANEL	4C/#12	21mm	
C601-01	HAND SWITCH HS-601.02	MCC1-6A	6C/#12	21mm	
	MCC1-6A	RUN LIGHT 601.02			
C601-02	FLOW SWITCH FSL-601	PUMP CONTROL PANEL	4C/#12	21mm	
C601-03	THERMAL SWITCH TS-601	MCC1-6A	4C/#12	21mm	
C602-01	HAND SWITCH 602.02	MCC1-5A	6C/#12	21mm	
	MCC1-5A	RUN LIGHT 602.02			
C602-02	FLOW SWITCH FSL-602	PUMP CONTROL PANEL	4C/#12	21mm	
C602-03	THERMAL SWITCH TS-602	MCC1-5A	4C/#12	21mm	
C603-01	HAND SWITCH 603.02	MCC1-4A	6C/#12	21mm	
	MCC1-4A	RUN LIGHT 603.02			
C603-02	FLOW SWITCH FSL-603	PUMP CONTROL PANEL	4C/#12	21mm	
C603-03	THERMAL SWITCH TS-603	MCC1-4A	4C/#12	21mm	
C604-01	HAND SWITCH 604.02	MCC1-3B	6C/#12	21mm	
	MCC1-3B	RUN LIGHT 604.02			
C604-02	FLOW SWITCH FSL-604	PUMP CONTROL PANEL	4C/#12	21mm	
C604-03	THERMAL SWITCH TS-604	MCC1-3B	4C/#12	21mm	
C605-01	PUMP CONTROL PANEL	LCV-605 SOLENOID SV-605	4C/#12	21mm	
C605-02	LCV-605 LIMIT SWITCH ZSO-605	PUMP CONTROL PANEL	4C/#12	21mm	
C608-01	EMERGENCY EYEWASH/SHOWER FS-608	PUMP CONTROL PANEL	4C/#12	21mm	
FILTER BUILDING					
C700-01	GENERATOR G1	GENERATOR ANNUNCIATOR PANEL			
C700-02	EF1 THERMAL SWITCH	MCC1-1A	4C/#12	21mm	
C700-03	FILTER BUILDING THERMOSTAT	MCC1-1A	4C/#12	21mm	
C700-04	FILTER BUILDING WALL SWITCH	MCC1-1A	4C/#12	21mm	
C701-01	EF50 CONTROL PANEL	SOLENOID SV-701	4C/#12	21mm	
C701-02	DPT 701.01	PUMP CONTROL PANEL	2x#18 STP	21mm	
C701-03	DPT 701.02	PUMP CONTROL PANEL	2x#18 STP	21mm	
C701-04	PIT 701.01	PUMP CONTROL PANEL	2x#18 STP	21mm	
C701-05	PIT 701.02	PUMP CONTROL PANEL	2x#18 STP	21mm	
C702-01	EF50 CONTROL PANEL	SOLENOID SV-702	4C/#12	21mm	
C702-02	DPT 702.01	PUMP CONTROL PANEL	2x#18 STP	21mm	
C702-03	DPT 702.02	PUMP CONTROL PANEL	2x#18 STP	21mm	
C702-04	PIT 702.02	PUMP CONTROL PANEL	2x#18 STP	21mm	
C703-01	EF50 CONTROL PANEL	SOLENOID SV-703	4C/#12	21mm	
C703-02	LEAK DETECTION LE701	PUMP CONTROL PANEL	4C/#12	21mm	
C703-03	LEAK DETECTION LE702	PUMP CONTROL PANEL	4C/#12	21mm	
C703-04	LEAK DETECTION LE703	PUMP CONTROL PANEL	4C/#12	21mm	
C706-01	EMERGENCY EYEWASH/SHOWER	PUMP CONTROL PANEL	4C/#12	21mm	
PRODUCT RECOVERY TANK					
C707-01	HAND SWITCH HS-707	MCC1	6C/#12	21mm	
	MCC1	RUN LIGHT 707			
C707-02	OV-707 POSITION SWITCH Z-707	PUMP CONTROL PANEL	4C/#12	21mm	
C707-03	FLOW SWITCH FSL-707	PUMP CONTROL PANEL	4C/#12	21mm	
LEAK DETECTION					
C701-09	CROSSING 1 LE701	PUMP CONTROL PANEL			
C702-09	CROSSING 2 LE702	PUMP CONTROL PANEL			
C703-09	CROSSING 3 LE703	PUMP CONTROL PANEL			
C906-01	PUMP CONTROL PANEL	P906 PLC	12 STRAND FIBER	21mm	
C906-02	GENERATOR TRANSFER SWITCH	GENERATOR	4C/#12	21mm	
T100-01	OPERATION BUILDING TEL BACKBOARD	MANHOLE C222	12 STRAND FIBER 50 PAIR COPPER		
T100-02	FILTER BUILDING	MANHOLE C231	12 STRAND FIBER 25 PAIR COPPER		
T100-03	FILTER BUILDING	OPS BUILDING	12 STRAND FIBER		

REVISED	DATE	DESCRIPTION
1	4/29/16	CONTROL CIRCUIT SCHED



APPROVED BY ANDREA LEMON VIA EMAIL

DATE 4/4/16

DESIGNED BY RJK DRAWN BY WMC CHECKED BY CHM

BRANCH MANAGER

DESIGN DIRECTOR R.B. FITCH, III P.E.

FIRE PROTECTION

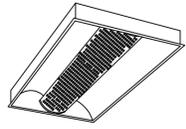
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
LANT. CAPITAL IMPROVEMENTS
CAMP LEMONIER

DUBOULT, AFRICA

DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
CONTROL SCHEDULES

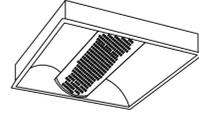
SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO.: N62470-16-R-6004
NAVFAC DRAWING NO.: 14047140
SHEET 176 OF 186
E-607
DRAWING REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Dhh\out - Fuel Storage Facility - NAVFAC LANTCOM AutoCAD\E-701 PLATE DETAILS.dwg LAYOUT NAME: PLATE DETAILS PLOTTED: Wednesday, May 11, 2016 - 1:05pm USER: rhopkins



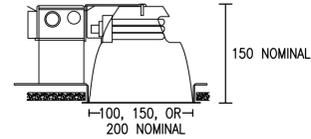
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- REFLECTORS - TWO-PIECE CURVED ALUMINUM WITH MATTE WHITE FINISH.
- LIGHT BASKET - PERFORATED STEEL (HOLES OR SLOTS) WITH SAME FINISH AS HOUSING, AND WHITE OPAL ACRYLIC OVERLAY.
- OPTICS - 3500K (CRI AT LEAST 70) LIGHT ENGINE. 3000 NOMINAL LUMENS. 90% LED LUMEN MAINTENANCE AT 60,000 HOURS. AT LEAST 89% EFFICIENCY, LOW EMI, DIMMABLE TO 1%.
- EQUIPPED WITH LUMEN MANAGEMENT SYSTEM TO ACTIVELY MANAGE LED LIGHT SOURCE SO THAT LUMEN OUTPUT IS MAINTAINED OVER THE SYSTEM LIFE, PREVENTING ENERGY WASTE CREATED BY OVER-LIGHTING.
- CERTIFICATION - UL LISTED AND LABELED.



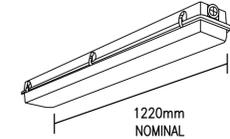
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- REFLECTORS - TWO-PIECE CURVED ALUMINUM WITH MATTE WHITE FINISH.
- LIGHT BASKET - PERFORATED STEEL (HOLES OR SLOTS) WITH SAME FINISH AS HOUSING, AND WHITE OPAL ACRYLIC OVERLAY.
- OPTICS - 3500K (CRI AT LEAST 70) LIGHT ENGINE. 3000 NOMINAL LUMENS. 90% LED LUMEN MAINTENANCE AT 60,000 HOURS. AT LEAST 89% EFFICIENCY, LOW EMI, DIMMABLE TO 1%.
- EQUIPPED WITH LUMEN MANAGEMENT SYSTEM TO ACTIVELY MANAGE LED LIGHT SOURCE SO THAT LUMEN OUTPUT IS MAINTAINED OVER THE SYSTEM LIFE, PREVENTING ENERGY WASTE CREATED BY OVER-LIGHTING.
- CERTIFICATION - UL LISTED AND LABELED.



LUMINAIRE REQUIREMENTS:

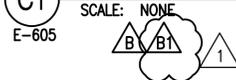
- HOUSING - ONE-PIECE, DIE-STAMPED, COLD ROLLED STEEL OR ACRYLIC-ENAMELED ALUMINUM. PROVIDE WITH PRE-WIRED JUNCTION BOX HAVING SNAP-ON ACCESS COVER. ACCESS TO JUNCTION BOX FROM BELOW CEILING SHALL BE PROVIDED THROUGH FIXTURE AFTER REMOVAL OF REFLECTOR.
- REFLECTOR AND TRIM - ONE-PIECE, SELF-FLANGED, CLEAR, SPUN ALUMINUM, IRIDESCENCE-SUPPRESSED TRIM. LOWER REFLECTOR AVAILABLE IN SEMI-SPECULAR, MATTE-DIFFUSE OR SPECULAR TYPES. SEE LIGHTING FIXTURE SCHEDULE.
- OPTICS - 3500K, 70% LED LUMEN MAINTENANCE AT 60,000 HOURS, 0-10V DIMMING DRIVER.
- CERTIFICATION - UL LISTED AND LABELED.
- FIXTURE TYPES -
 - TYPE N - 4" NOMINAL APERTURE, 600 NOMINAL LUMENS, MATTE-DIFFUSE REFLECTOR, WIDE DISTRIBUTION, 15.8W
 - TYPE N1 - 4" NOMINAL APERTURE, WALLWASH, 1000 NOMINAL LUMENS, SEMI-SPECULAR REFLECTOR, 20.7W
 - TYPE N2 - 4" NOMINAL APERTURE, 1400 NOMINAL LUMENS, MATTE-DIFFUSE REFLECTOR, WIDE DISTRIBUTION, 26.4W
 - TYPE O - 6" NOMINAL APERTURE, 1000 NOMINAL LUMENS, SEMI-SPECULAR REFLECTOR, 18.4W
 - TYPE P - 8" NOMINAL APERTURE, 1800 NOMINAL LUMENS, MATTE-DIFFUSE REFLECTOR, 34.8W



LUMINAIRE REQUIREMENTS:

- HOUSING - ONE-PIECE, IMPACT-RESISTANT, FIBERGLASS REINFORCED POLYESTER WITH ENCLOSED COLD-ROLLED STEEL WIREWAY.
- FINISH - STEEL REFLECTOR WITH MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- LENS - 100% CLEAR ACRYLIC/DR OPTICAL DIFFUSER. STIPPLED INTERIOR SURFACES AND SMOOTH EXTERIOR. CLOSED CELL NEOPRENE GASKET WITH CAPTIVE NONMETALLIC, SNAP ACTION CAM LATCHES TO SECURE LENS TO HOUSING.
- LAMPS - LINEAR FLUORESCENT T8, TYPICALLY WITH WATTAGES AS INDICATED. SEE LIGHTING FIXTURE SCHEDULE.
- BALLAST - CLASS P, THERMALLY-PROTECTED, HIGH POWER FACTOR (≥.95), ELECTRONIC TYPE WITH SOUND RATING A. SEE SPECIFICATION OR LIGHTING FIXTURE SCHEDULE FOR BALLAST OPTIONS AND SPECIFICS.
- CERTIFICATION - UL LISTED AND LABELED. SUITABLE FOR DAMP OR WET LOCATION AS DESIGNATED IN LIGHTING FIXTURE SCHEDULE.

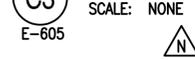
C1 DIRECT/INDIRECT RECESSED 2' X 4' LED



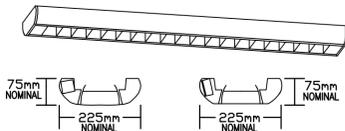
C2 DIRECT/INDIRECT RECESSED 2' X 2' LED



C3 RECESSED LED DOWNLIGHT

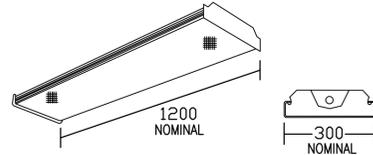


C4 DAMP WET LOCATION LED



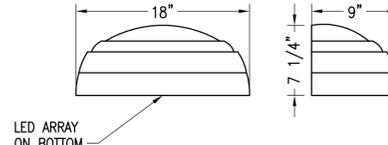
LUMINAIRE REQUIREMENTS:

- HOUSING-
 - TYPE A (PREMIUM): BODY FORMED FROM ONE-PIECE EXTRUDED ALUMINUM WITH DIE-CAST ALUMINUM END CAPS MECHANICALLY ATTACHED WITHOUT VISIBLE FASTENERS. ENDCAPS SHALL PROVIDE ZERO TOLERANCE ALIGNMENT BETWEEN FIXTURE ENDS, RESULTING IN A CONSISTENT STRAIGHT ROW WITHOUT ANY VISIBLE "SNAKING".
 - TYPE B (STANDARD): BODY FORMED FROM ONE-PIECE, DIE-FORMED, COLD-ROLLED STEEL WITH DIE-CAST ALUMINUM OR FLAT STEEL END CAPS MECHANICALLY ATTACHED WITHOUT VISIBLE FASTENERS. ENDCAPS SHALL PROVIDE ZERO TOLERANCE ALIGNMENT BETWEEN FIXTURE ENDS, RESULTING IN A CONSISTENT STRAIGHT ROW WITHOUT ANY VISIBLE "SNAKING".
- FINISH - SATIN ANODIZED ALUMINUM FOR TYPE A OR MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISH WITH MATTE WHITE, BAKED POWDER COAT FINISH FOR TYPE B FIXTURES. CABLE FASTENERS FOR BOTH TYPES SHALL BE CHROME.
- REFLECTORS - BAKED WHITE ENAMEL WITH MINIMUM 85% REFLECTANCE OR DIE-FORMED SPECULAR ALUMINUM.
- LOUVERS- PARABOLIC SHAPE CONSTRUCTED FROM SEMI-SPECULAR ANODIZED ALUMINUM.
- MOUNTING- TOTALLY ADJUSTABLE AIRCRAFT CABLE SYSTEM.
- LEDS: 40,000 LUMENS, 39K, MIN 80 LUMENS PER WATT
- CERTIFICATION- UL LISTED AND LABELED.
- FIXTURE TYPES-
 - TYPE A- EXTRUDED ALUMINUM HOUSING
 - TYPE B- COLD-ROLLED STEEL HOUSING



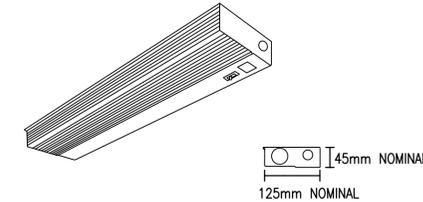
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SHALL BE SAME MATERIAL AS HOUSING, SECURED WITH TABS, SCREWS OR RIVETS. FIXTURE SHALL NOT PERMANENTLY DEFORM OUT OF "SQUARE" WHEN PICKED UP FROM ANY CORNER.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- LENS - 100% ACRYLIC, CLEAR PRISMATIC, #19 PATTERN, 0.156" THICK, LENS SHALL BE HINGED TO ALLOW ACCESS TO DRIVERS AND COMPONENTS.
- OPTICS - 3500K (CRI AT LEAST 70) LIGHT ENGINE. 2000 NOMINAL LUMENS. 90% LED LUMEN MAINTENANCE AT 60,000 HOURS. AT LEAST 89% EFFICIENCY, LOW EMI, DIMMABLE TO 1%.
- EQUIPPED WITH LUMEN MANAGEMENT SYSTEM TO ACTIVELY MANAGE LED LIGHT SOURCE SO THAT LUMEN OUTPUT IS MAINTAINED OVER THE SYSTEM LIFE, PREVENTING ENERGY WASTE CREATED BY OVER-LIGHTING.
- CERTIFICATION - UL LISTED AND LABELED.
- MOUNTING - SURFACE MOUNTED.



LUMINAIRE REQUIREMENTS:

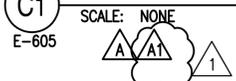
- HOUSING - DIE-CAST, LOW-COPPER ALUMINUM CONFIGURED FOR SURFACE MOUNTING. MANUFACTURED FOR INSTALLATION IN CONCRETE OR HOLLOW WALLS. INTEGRAL JUNCTION BOX WITH 4 - 3/4" CONDUIT TAPS.
- FINISH - MULTI-STAGE PRE-TREATMENT, FINISHED WITH BAKED-ON PESTICIDE RESISTANT POWDER COAT. FIXTURE SHALL PASS 2500 HOUR SALT SPRAY TEST FOR CORROSION RESISTANCE. DARK BRONZE OR WHITE STANDARD FINISHES. OTHER FINISHES AVAILABLE.
- OPTICS - MOLDED ACRYLIC LENS. 4000K (CRI AT LEAST 70) LIGHT ENGINE. ZERO UPLIGHT CONSISTENT WITH LEED CRITERIA. TYPE II DISTRIBUTION.
- ELECTRICAL - LIGHT ENGINE CONSISTS OF 10 HIGH-EFFICIENCY LEDS MOUNTED TO A METAL-CORE CIRCUIT BOARD AND INTEGRAL ALUMINUM HEAT SINKS. CLASS 2 ELECTRONIC DRIVER WITH POWER FACTOR >90%, THD <20%.
- SURGE PROTECTION - MEETS MINIMUM CATEGORY B (PER ANSI/IEEE C62.41.2).
- CERTIFICATION - UL LISTED AND LABELED FOR WET LOCATIONS.
- OPTIONS - MOTION/AMBIENT LIGHT SENSOR.
- EMERGENCY BALLAST - REMOTE MOUNTED.



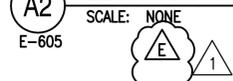
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY. ENDCAPS SECURED WITH TABS, SCREWS OR RIVETS.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH REFLECTANCE (MINIMUM 85%), BAKED WHITE ENAMEL FINISH.
- LENS - 100% ACRYLIC, CLEAR PRISMATIC OR WHITE TRANSLUCENT DIFFUSER WITH LINEAR RIBS FOR EVEN ILLUMINATION.
- LAMPS - LED WITH 1500 LUMENS, 39K COLOR TEMPERATURE, MIN 80 LUMENS PER WATT.
- CERTIFICATION - UL LISTED AND LABELED.

C1 LED PENDENT MOUNTED DIRECT/INDIRECT



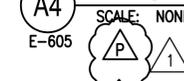
A2 LED WRAPAROUND - UTILITY AREAS



A3 LED EXTERIOR WALL-MOUNTED FIXTURE



A4 LED UNDER CABINET TASK LIGHT



DATE	4/29/16
DESCRIPTION	REVISED LIGHT CALL-OUTS
SYN	1
APPR	




Austin
Brockenbrough
ENGINEERING - CONSULTING

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY

APPROVED BY ANDREA LEMON VIA EMAIL

SATISFACTORY TO DATE 4/4/16

DESIGNER: RJK | DRAWN: WMC | CHECKED: CHM

PM/DM: LET/RES

BRANCH MANAGER

DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC

LANT CAPITAL IMPROVEMENTS

CAMP LEMONNIER

DUBOULT AFRICA

DESC 1701/P-1701

CONSTRUCT FUEL STORAGE FACILITIES

PLATE DETAILS

SCALE: AS NOTED

PROJECT NO.: 1344008

CONSTR. CONTR. NO.

N62470-16-R-6004

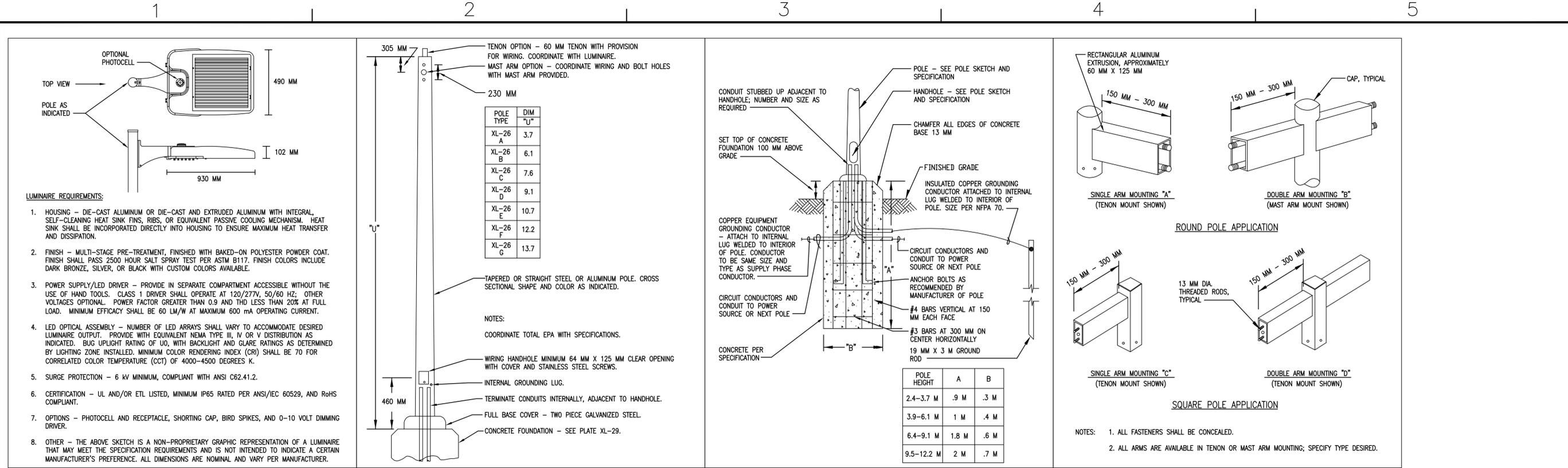
NAVFAC DRAWING NO. 14047141

SHEET 177 OF 186

E-701

DRAWFORM REVISION: 10 MARCH 2009

FILE NAME: G:\14 Jobs\14-013 Dhhout - Fuel Storage Facility - NAVFAC LANTCOM AutoCAD\14-013 PLATE DETAILS - PLATE DETAILS - PLATE DETAILS - PLOTTED: Wednesday, May 11, 2016 - 1:06pm USER: rhopkins



REVISED: MARCH 2013	LUMINAIRE PLATE: XL-03	REVISED: MARCH 2013	LUMINAIRE PLATE: XL-27	REVISED: MARCH 2013	LUMINAIRE PLATE: XL-29	REVISED: MARCH 2013	LUMINAIRE PLATE: XL-31
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APPROVED: [Signature]

FOR COMMANDER NAVFAC

ACTIVITY: APPROVED BY ANDREA LEMON VIA EMAIL

SATISFACTORY TO: DATE 4/4/16

DES: RJK | DRW: WMG | CHK: CHM

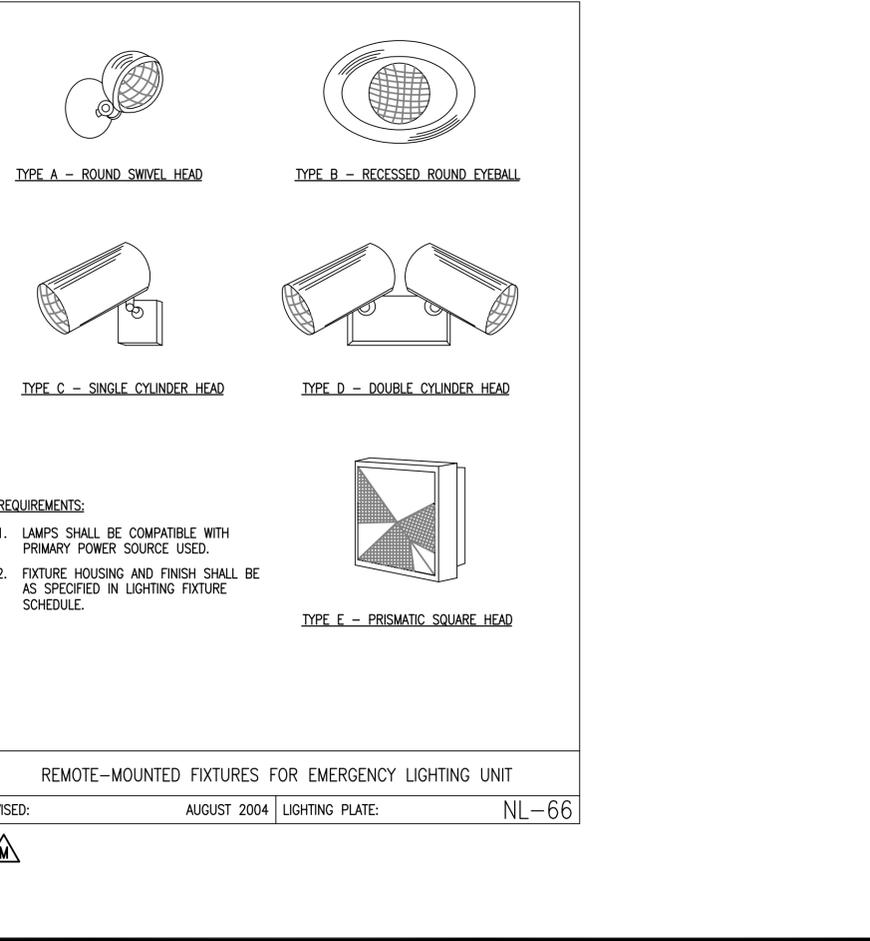
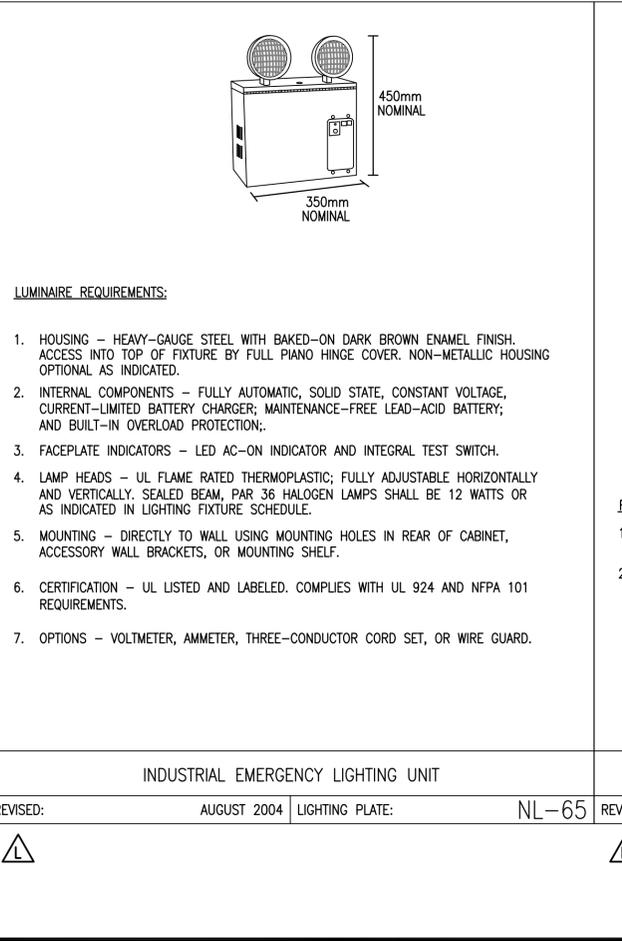
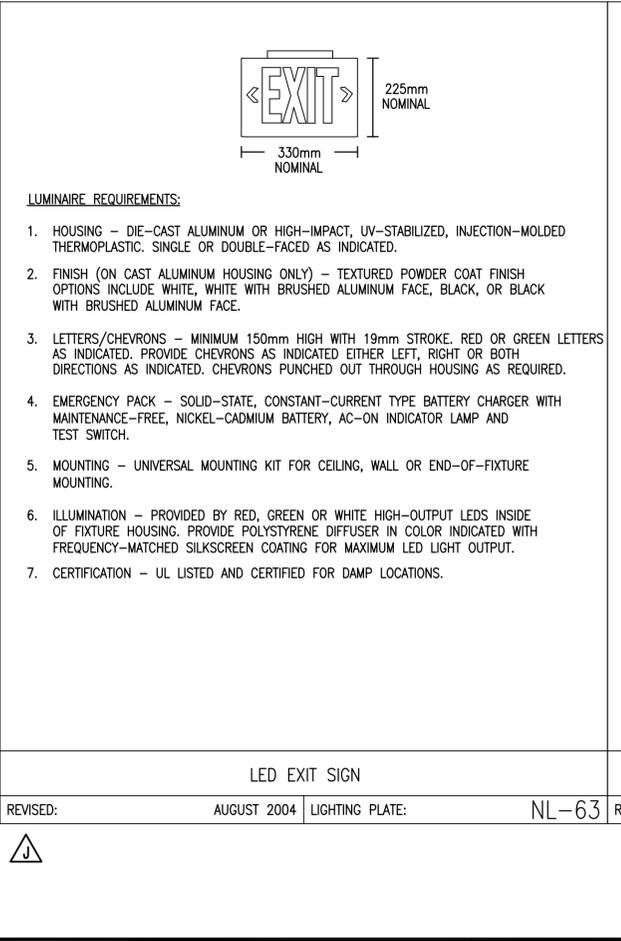
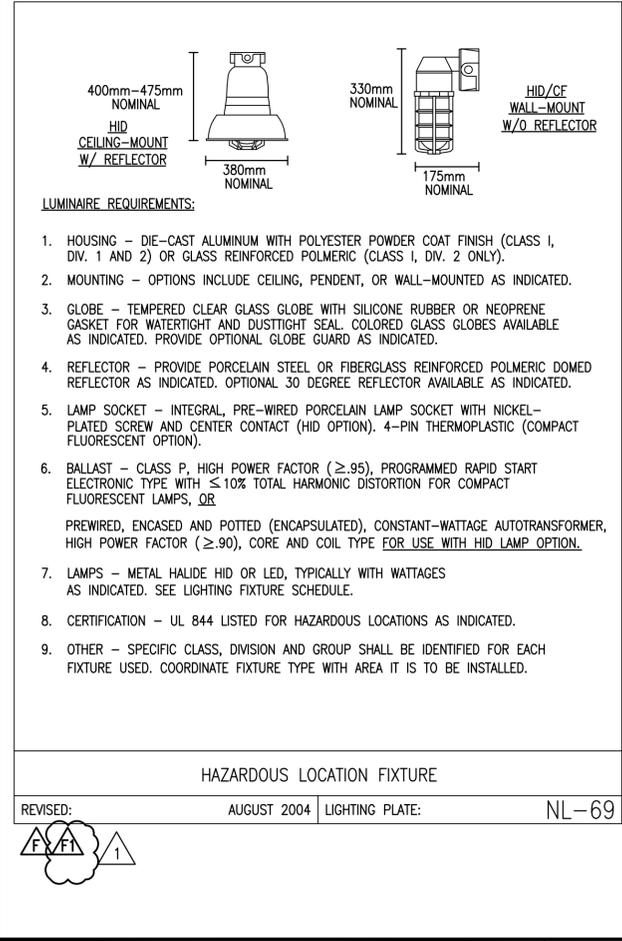
PM/DM: LET/REB

BRANCH MANAGER

DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

NAVFAC LANTCOM AutoCAD\14-013 PLATE DETAILS - PLATE DETAILS - PLATE DETAILS - PLOTTED: Wednesday, May 11, 2016 - 1:06pm USER: rhopkins



APPROVED: [Signature]

FOR COMMANDER NAVFAC

ACTIVITY: APPROVED BY ANDREA LEMON VIA EMAIL

SATISFACTORY TO: DATE 4/4/16

DES: RJK | DRW: WMG | CHK: CHM

PM/DM: LET/REB

BRANCH MANAGER

DESIGN DIRECTOR: R.B. FITCH, III P.E.

FIRE PROTECTION

NAVFAC LANTCOM AutoCAD\14-013 PLATE DETAILS - PLATE DETAILS - PLATE DETAILS - PLOTTED: Wednesday, May 11, 2016 - 1:06pm USER: rhopkins

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
LANT CAPITAL IMPROVEMENTS
CAMP LEMONNIER
DUBOULT AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
PLATE DETAILS

SCALE: AS NOTED
PROJECT NO.: 1344008
CONSTR. CONTR. NO.
N62470-16-R-6004
NAVFAC DRAWING NO.: 14047142
SHEET 178 OF 186
E-702
DRAWFORM REVISION: 10 MARCH 2009

HAZARDOUS AREA CLASSIFICATION SCHEDULE

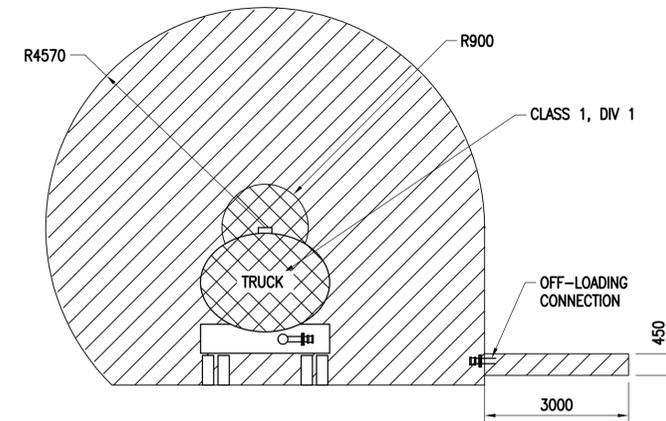
CLASS I, GROUP D, DIVISION	SYMBOL	TYPE OF EQUIPMENT/AREA	LIMITS OF HAZARDOUS BOUNDARY
1		FUEL TANKS	ABOVE FUEL LEVEL AND WITHIN THE TANK SHELL WITHIN 1.5M OF OPEN END OF TANK VENTS AND OTHER OPENINGS EXTENDING IN ALL DIRECTIONS
		PUMPHOUSE - INDOORS	ENTIRE AREA
		UNDERGROUND AREAS BELOW DIVISION 1 OR DIVISION 2 AREAS	ENTIRE AREA
		TRUCK LOADING POSITIONS	WITHIN 1.5M OF TRUCK VENT
		DROP INLETS, TRENCH DRAINS, SUMPS AND PITS	ENTIRE DROP INLET, TRENCH DRAIN, SUMP OR PIT WITHIN A DIVISION 1 OR 2 AREA
		EQUIPMENT PAD	ENTIRE AREA
		2	
WITHDRAWAL FITTINGS, AIR RELIEF VENTS, METERS AND SIMILAR DEVICES LOCATED WITHIN PIPELINES	WITHIN 1.0M OF EXTERIOR SURFACE OF DEVICE EXTENDING 500 ABOVE GRADE LEVEL AND WITHIN 3.0M HORIZONTALLY OF ANY SURFACE OF THE DEVICE		
FUEL TANKS	WITHIN 3.0M OF TANK SHELL, ENDS AND ROOF BETWEEN 1.5M AND 3.0M FROM OPEN END OF VENTS AND OTHER OPENINGS		
CONTAINMENT DIKE	INSIDE OF DIKE TO TOP OF DIKE		
VALVES, METERS, FLANGES, SCREWED	WITHIN 1.0M OF SOURCE OF RELEASE		
TRUCK LOADING CONNECTIONS	BETWEEN 500 ABOVE GRADE AND WITHIN 3.0M HORIZONTALLY FROM THE TRUCK LOAD CONNECTION BETWEEN 1.0M AND 4.5M FROM POINT OF VENTING EXTENDING IN ALL DIRECTIONS		

1. INSIDE OF TRUCK TANK
2. BETWEEN 1.5M AND 4.6M IN ALL DIRECTIONS OF TRUCK VENT

HAZARDOUS AREA EQUIPMENT SCHEDULE

CLASS I, GROUP D, DIVISION	TYPE OF EQUIPMENT	EQUIPMENT RATING (MIN.)
1	MOTORS	CLASS I, DIVISION 1, GROUP D
	SWITCHES AND SPARKING DEVICES	CLASS I, DIVISION 1, GROUP D
	CONDUIT (ABOVEGROUND)	RIGID STEEL
	CONDUIT (UNDERGROUND)	RIGID STEEL, PVC COATED OR PVC
	CONDUIT BOXES AND TERMINAL BOXES	CLASS I, DIVISION 1, GROUP D
	FLEXIBLE CONNECTIONS	CLASS I, DIVISION 1, GROUP D
2	LIGHTING FIXTURES	CLASS I, DIVISION 1, GROUP D
	NON-SWITCHING/SPARKING DEVICES	CLASS I, DIVISION 1, GROUP D
	MOTORS	CLASS I, DIVISION 1, GROUP D
	SWITCHES AND SPARKING DEVICES	CLASS I, DIVISION 1, GROUP D
	CONDUIT (ABOVEGROUND)	RIGID STEEL
	CONDUIT (UNDERGROUND)	RIGID STEEL, PVC COATED OR PVC
2	CONDUIT BOXES AND TERMINAL BOXES	CLASS I, DIVISION 1, GROUP D
	FLEXIBLE CONNECTIONS	CLASS I, DIVISION 1, GROUP D
	LIGHTING FIXTURES	CLASS I, DIVISION 2, GROUP D
	NON-SWITCHING/SPARKING DEVICES	CLASS I, DIVISION 1, GROUP D

NOTE: RATINGS SHOWN ARE A MINIMUM AND MAY EXCEED NATIONAL ELECTRICAL CODE REQUIREMENTS. INSTALLATION SHALL MEET ALL PROVISIONS OF THE NATIONAL ELECTRICAL CODE FOR TYPE OF EQUIPMENT INSTALLED. ADDITIONAL EQUIPMENT RATINGS ARE AS INDICATED.



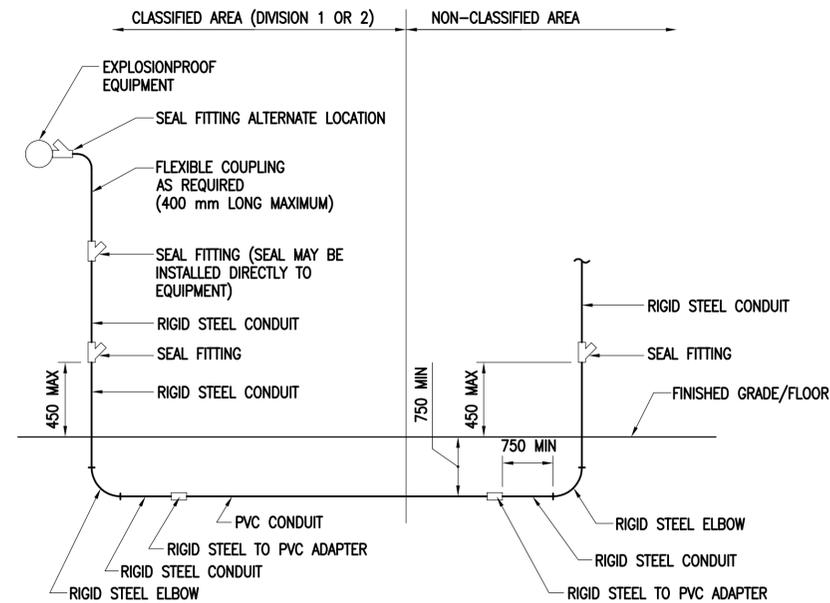
FUEL TRUCK HAZARDOUS AREA
SCALE: NONE

CONDUIT SEAL FITTINGS

CLASS I, GROUP D, DIVISION	AREA
1	WITHIN 0.45M OF EXPLOSIONPROOF ENCLOSURE
	WITHIN 3.0M OF BOUNDARY ON EITHER SIDE OF BOUNDARY
	WITHIN 0.45M OF GRADE FOR CONDUITS ENTERING SLAB OR GROUND
2	WITHIN 0.45M OF EXPLOSIONPROOF ENCLOSURE
	WITHIN 3.0M OF BOUNDARY WITH UNCLASSIFIED AREA. SEAL ON EITHER SIDE OF BOUNDARY
	WITHIN 0.45M OF GRADE FOR CONDUITS ENTERING SLAB OR GROUND
NC*	WITHIN 0.45M OF EXISTING GROUND FOR ALL UNDERGROUND CONDUIT ORIGINATING IN A CLASSIFIED AREA UNLESS OTHERWISE SEALED AT A MANHOLE OR HANDHOLE

NC* = NON-CLASSIFIED

- NOTES:
1. CONDUIT SEAL LOCATIONS SHOWN ARE MINIMUM REQUIREMENTS AND MAY EXCEED NATIONAL ELECTRICAL CODE PROVISIONS. ADDITIONAL SEAL FITTINGS SHALL BE PROVIDED WHERE REQUIRED BY THE NATIONAL ELECTRICAL CODE.
 2. CONDUIT SEALS ARE GENERALLY RATED FOR 25% FILL. IF CONDUIT FILL EXCEEDS 25%, CONTRACTOR SHALL INCREASE TO A LARGER TRADE SIZE FITTING OR PROVIDE FITTINGS RATED FOR THE FILL.



NOTES:

1. VERTICAL SEAL FITTINGS AT EQUIPMENT SHALL BE PROVIDED WITH AUTOMATIC DRAINS LISTED FOR USE IN CLASS I, DIVISION 1, GROUP D LOCATIONS.
2. ALL UNDERGROUND CONDUIT ORIGINATING IN A CLASSIFIED AREA SHALL BE PROVIDED WITH A SEAL FITTING WITHIN 0.5M OF EXISTING GRADE IN A NON-CLASSIFIED AREA. INCLUDING CONDUIT TERMINATING IN HANDHOLES.

CONDUIT SEAL FITTINGS HAZARDOUS AREAS

SCALE: NONE

APPR	DATE
SYN	DESCRIPTION



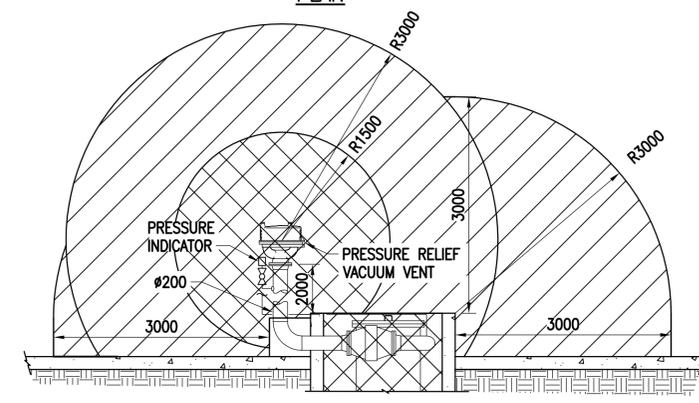
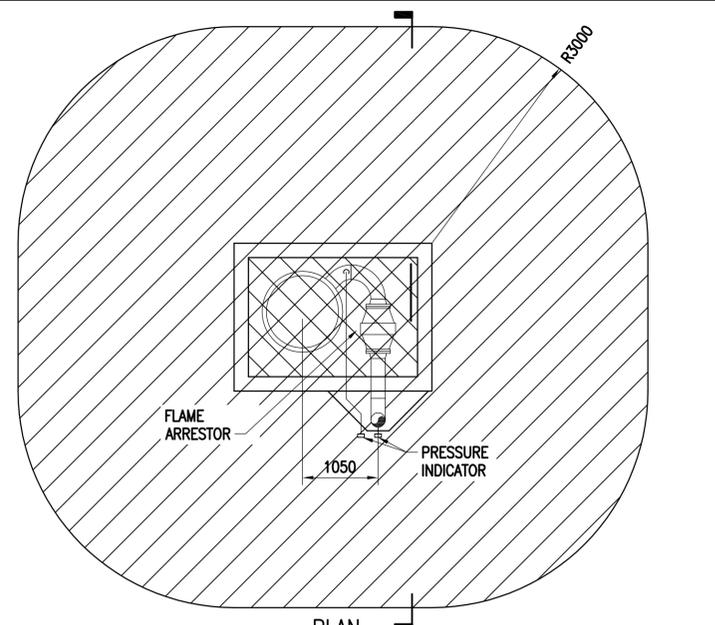
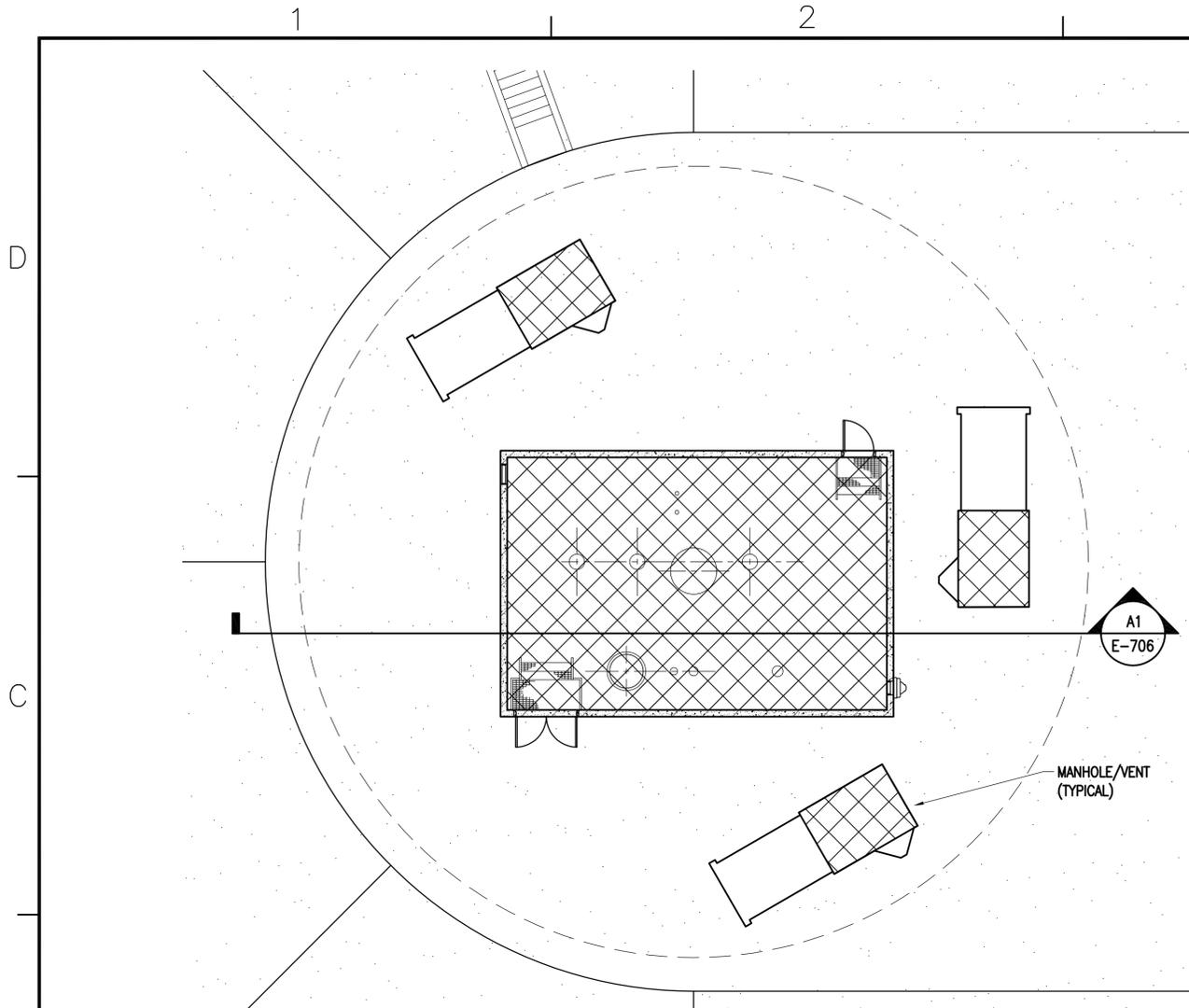
APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO DATE 4/4/16	
DES RJK DRW WMC CHK CHM	
PM/DM LET/RES	
BRANCH MANAGER	
DESIGN DIRECTOR R.B. FITCH, III P.E.	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
NAVFAC LANT
NAVFAC LANT CAPITAL IMPROVEMENTS
CAMP LEMONIER
DUBOULT AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
HAZARDOUS AREA PLAN

SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.:	N62470-16-R-6004
NAVFAC DRAWING NO.:	14047144
SHEET 180 OF 186	
E-704	

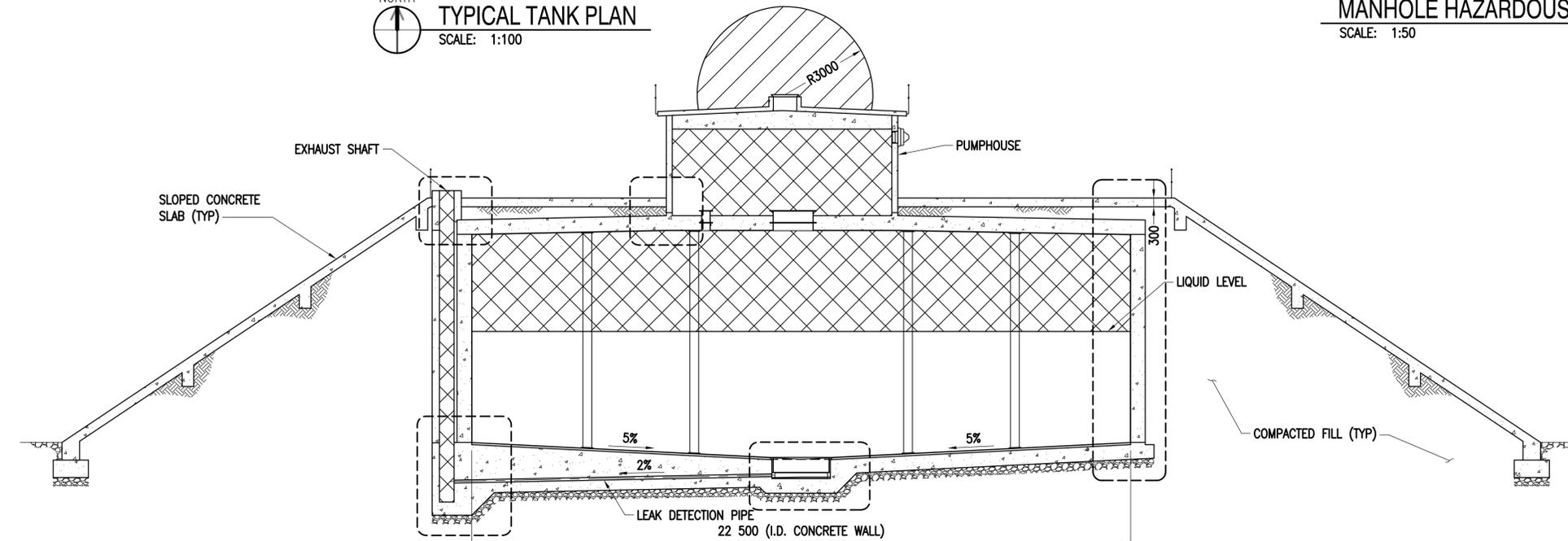
FILE NAME: G:\14 Jobs\14-013 Djbouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\VE-E-704 HAZARDOUS AREA PLAN.dwg LAYOUT NAME: HAZARDOUS AREA PLAN PLOTTED: Wednesday, May 11, 2016 - 1:05pm USER: rhopkins

FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-706 TANKS 5 AND 6 HAZARDOUS AREAS.dwg LAYOUT NAME: TANKS 5 AND 6 HAZARDOUS AREAS PLOTTED: Wednesday, May 11, 2016 - 1:07pm USER: rhopkins

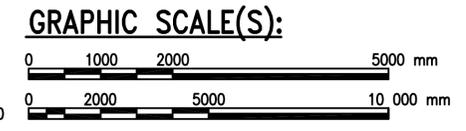


NOTE:
PRESSURE INDICATOR
SHALL HAVE A RANGE OF
OF -2.5 kPa TO 2.5 kPa

MANHOLE HAZARDOUS AREA PLAN
SCALE: 1:50

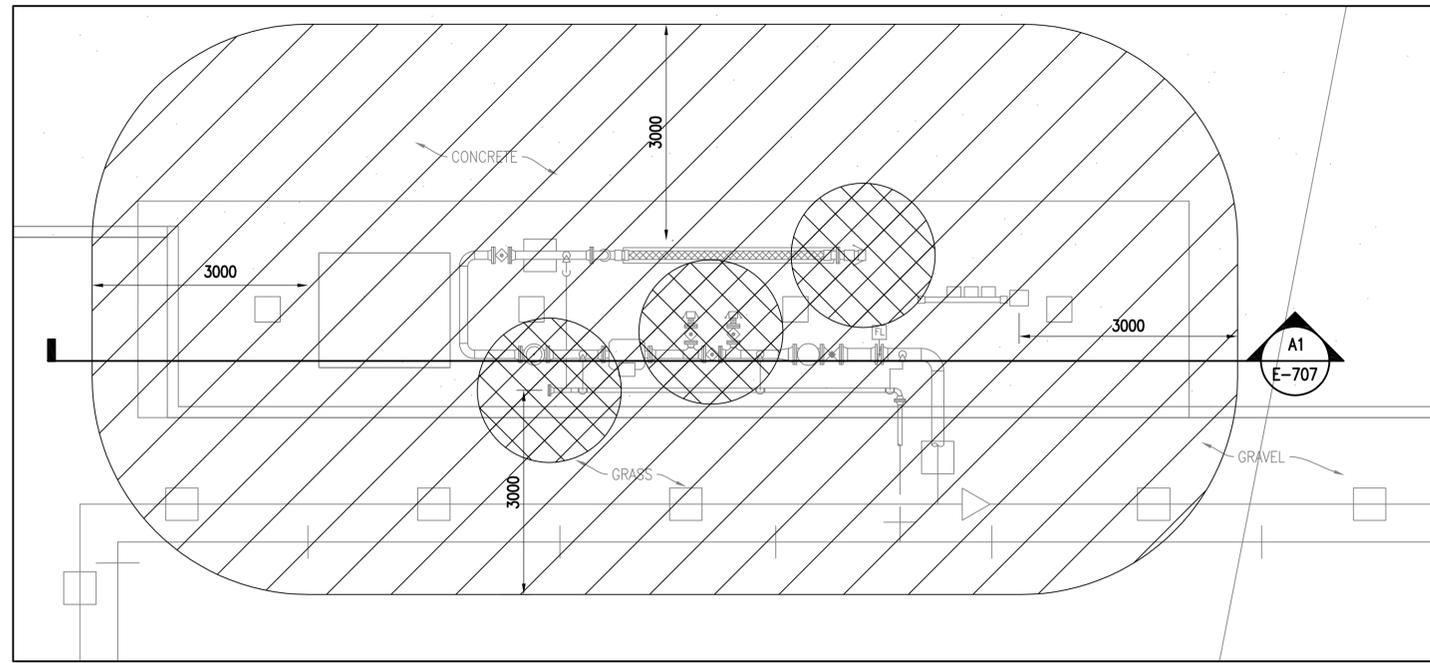


A1
E-706
TANKS 5 AND 6 HAZARDOUS AREA SECTION
SCALE: 1:100

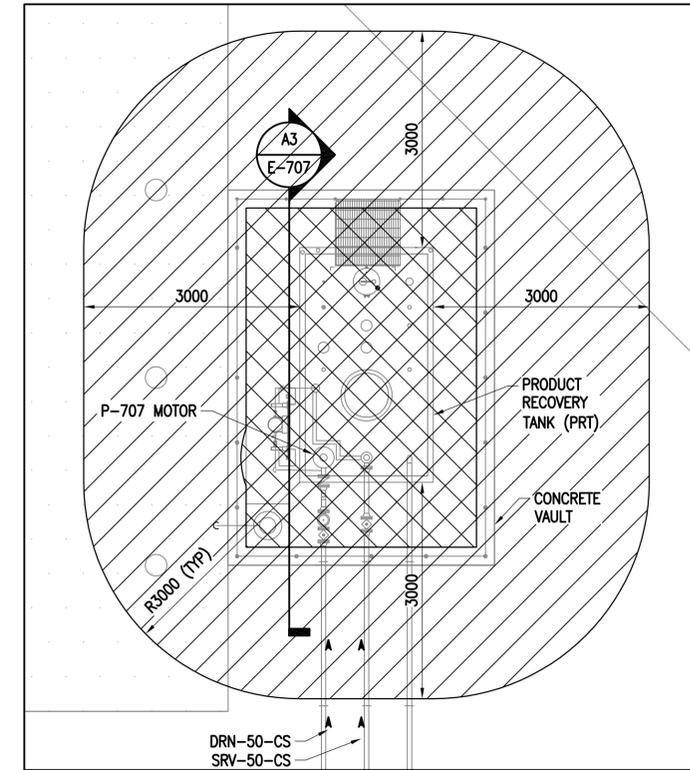


SYN	DESCRIPTION	DATE	APPR
APPROVED			
FOR COMMANDER NAVFAC			
ACTIVITY			
APPROVED BY ANDREA LEMON VIA EMAIL			
SATISFACTORY TO DATE 4/1/16			
DES	RJK	DRW	WMC CHK CHM
PM/DM	LET/RES		
BRANCH MANAGER			
DESIGN DIRECTOR R.B. FITCH, III P.E.			
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING COMMAND NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC NORFOLK, VIRGINIA DIBOUTI, AFRICA CAMP LEMONNIER DESC 1701/P-1701 CONSTRUCT FUEL STORAGE FACILITIES TANKS 5 AND 6 HAZARDOUS AREAS			
SCALE: AS NOTED			
PROJECT NO.: 1344008			
CONSTR. CONTR. NO.			
N62470-16-R-6004			
NAVFAC DRAWING NO. 14047146			
SHEET 182 OF 186			
E-706			
DRAWFORM REVISION: 10 MARCH 2009			

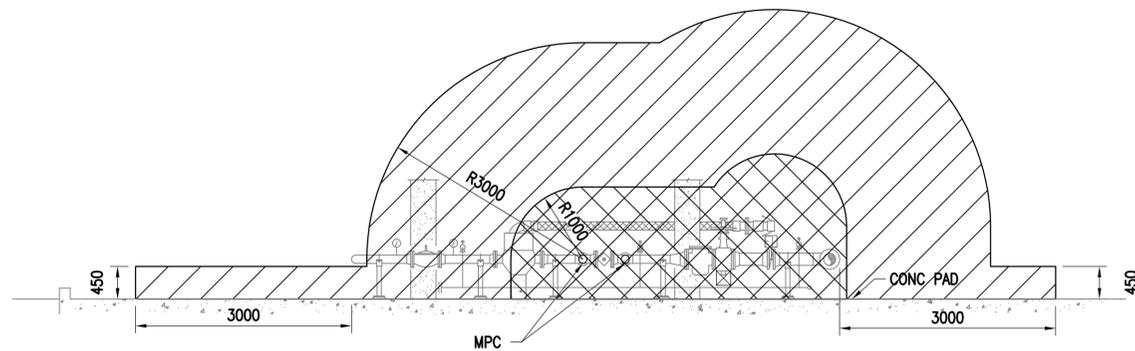
FILE NAME: G:\14 Jobs\14-013 Djibouti - Fuel Storage Facility - NAVFAC LANT\CAD AutoCAD\E-707 TRUCK LOADING AND PRT TRUCK LOADING AND PRT HAZARDOUS LOCATION - PLOTTED: Wednesday, May 11, 2016 - 10:07pm USER: rhpkins



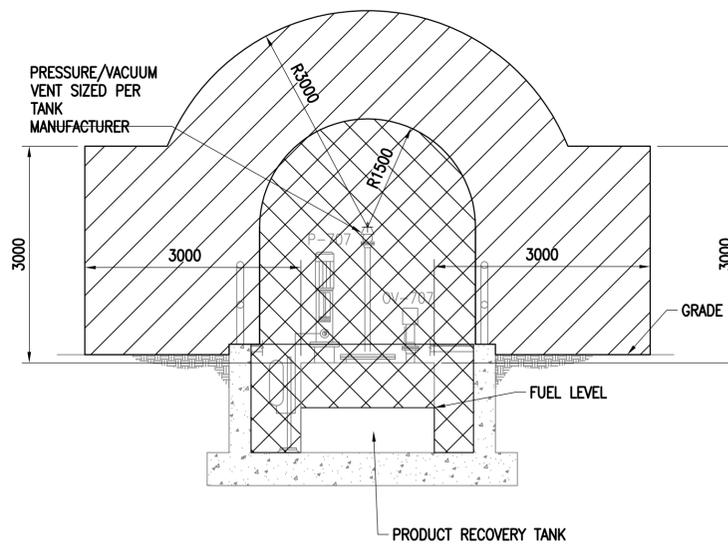
PLAN NORTH
REFUELER TRUCK LOADING STATION NO 3
 SCALE: 1:50



PLAN NORTH
PRODUCT RECOVERY TANK
 SCALE: 1:50

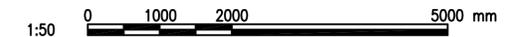


A1 SECTION
 E-707
 SCALE: 1:50



A3 SECTION
 E-707
 SCALE: 1:50

GRAPHIC SCALE(S):



SYN	DESCRIPTION	DATE	APPR



APPROVED	A/E INFO
FOR COMMANDER NAVFAC	
ACTIVITY	
APPROVED BY ANDREA LEMON VIA EMAIL	
SATISFACTORY TO DATE 4/4/16	
DES RJK	DRW WMG
CHK CHM	
PM/DM LEY/RES	
BRANCH MANAGER	
DESIGN DIRECTOR R.B. FITCH, III P.E.	

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC
 LANT CAPITAL IMPROVEMENTS
 CAMP LEMONNIER
 DIBOUTI, AFRICA
DESC 1701/P-1701
CONSTRUCT FUEL STORAGE FACILITIES
 TRUCK LOADING AND PRT HAZARDOUS LOCATION

SCALE:	AS NOTED
PROJECT NO.:	1344008
CONSTR. CONTR. NO.	N62470-16-R-6004
NAVFAC DRAWING NO.	14047147
SHEET	183 OF 186
E-707	

DRAWFORM REVISION: 10 MARCH 2009