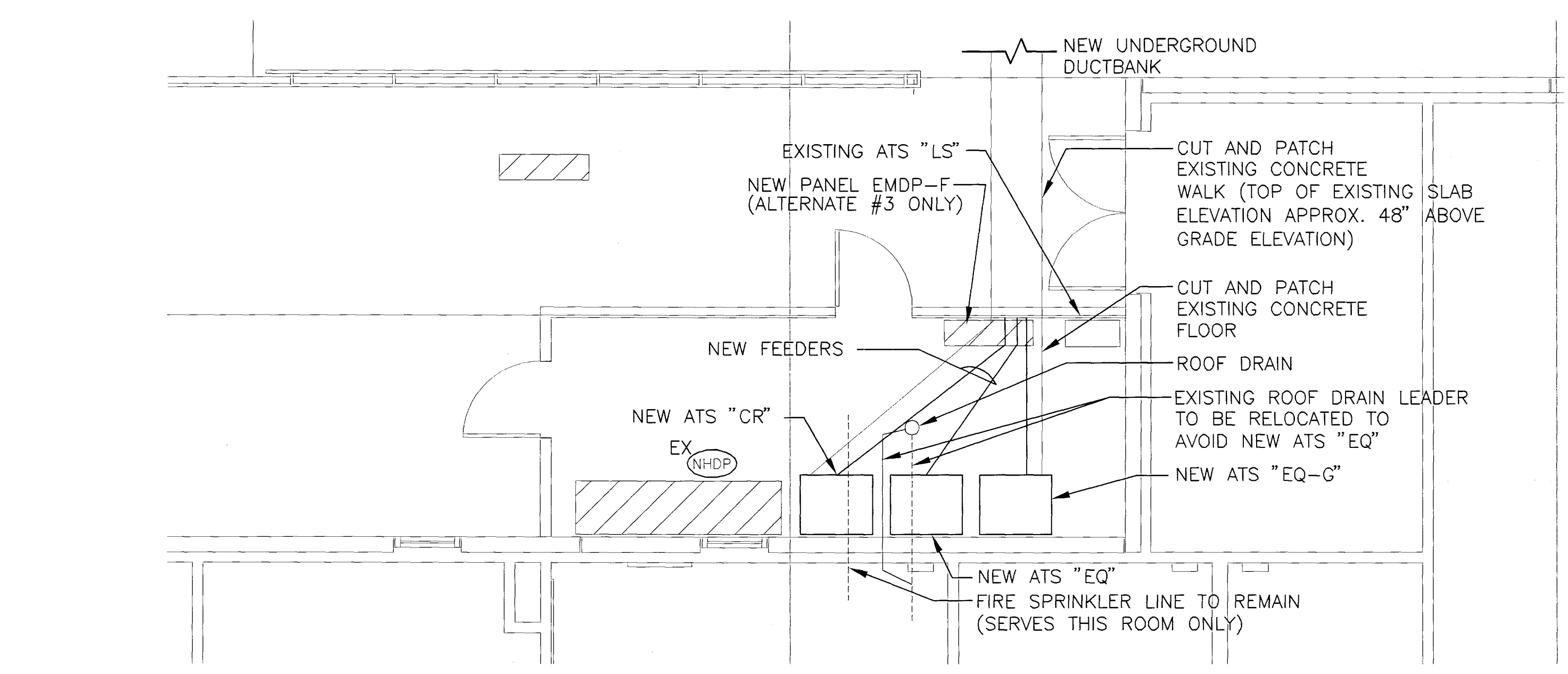


D1 ENLARGED DEMOLITION PLAN ELECTRICAL ROOM D602  
SCALE: 1/4" = 1'-0"

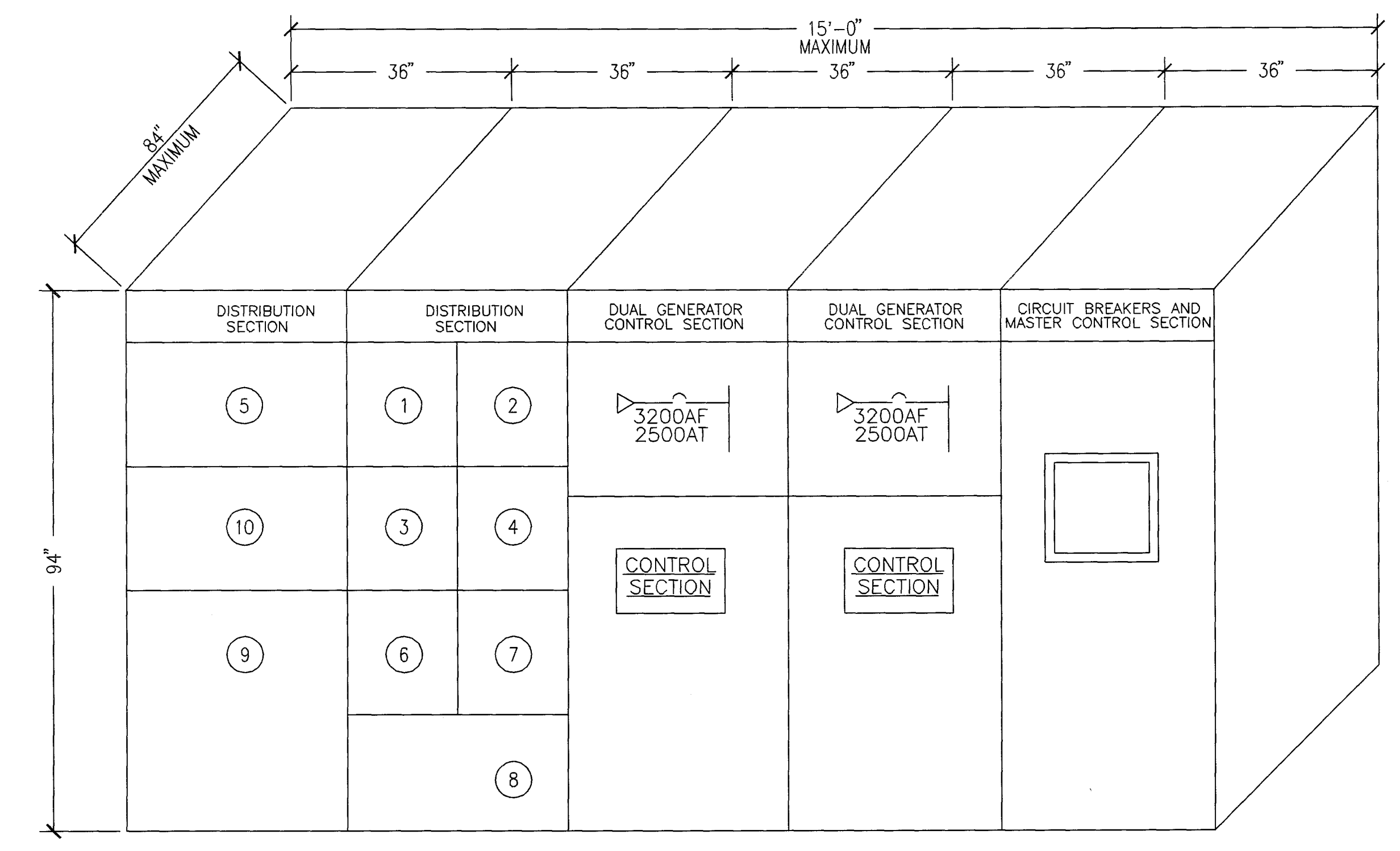
D4 ENLARGED PLAN ELECTRICAL ROOM D602  
SCALE: 1/4" = 1'-0"



F6 ENLARGED ELECTRICAL ROOM F-WING  
SCALE: 1/4" = 1'-0"

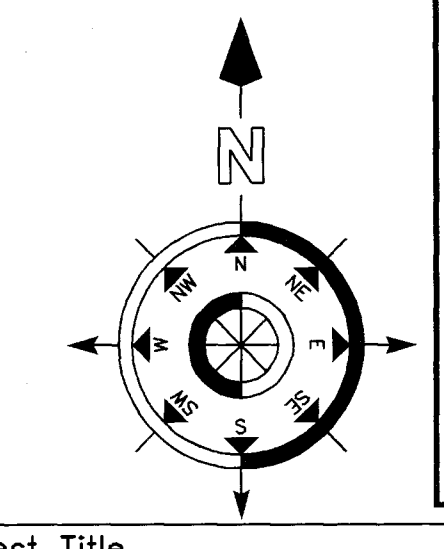
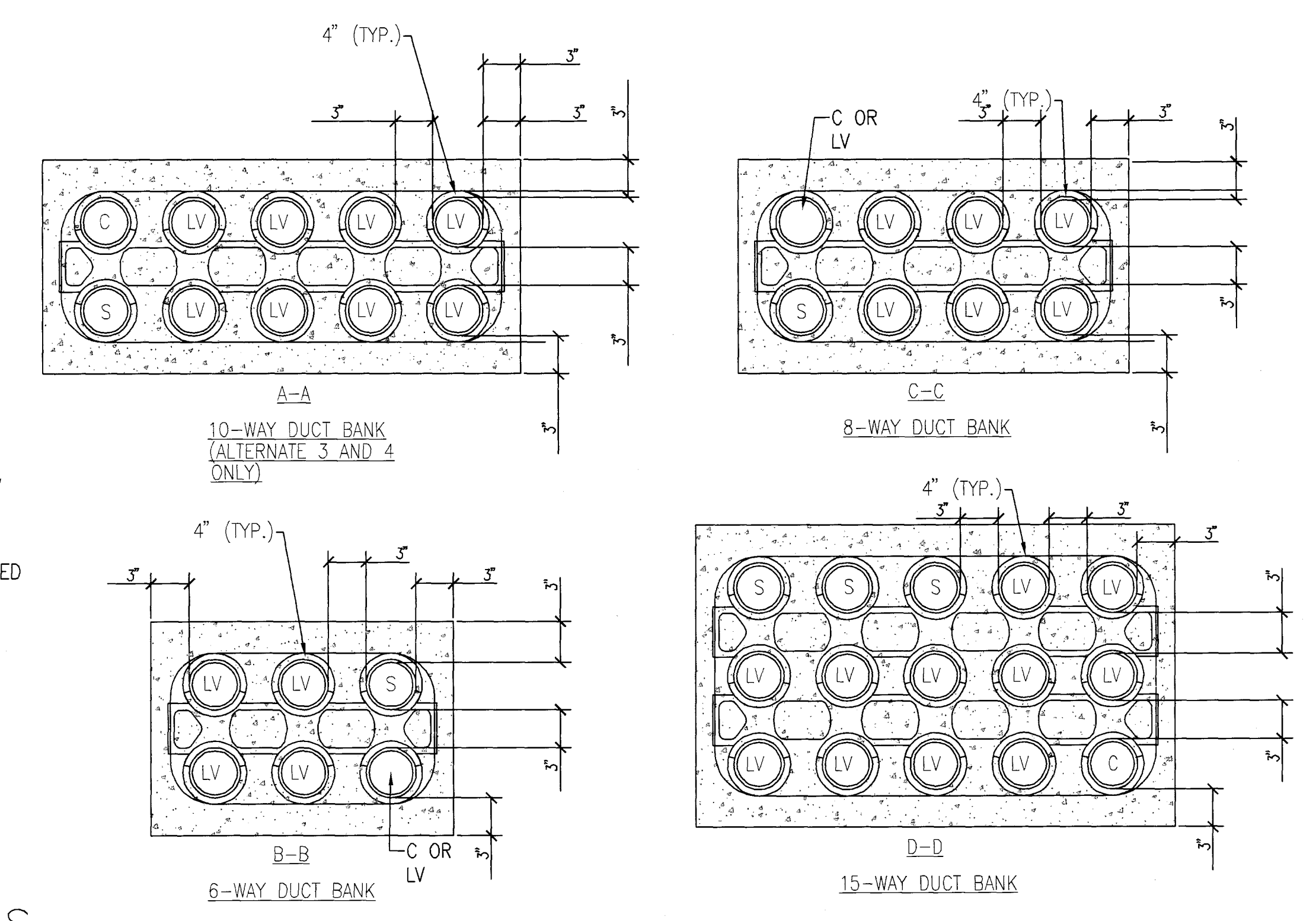
- ABBREVIATIONS**
- S - SPARE
  - LV- LOW (480V) ACTIVE CONDUIT
  - C- CONTRACTORS CONDUIT
- DUCT BANK NOTES:**
- CONCRETE SHALL BE 2000 P.S.I. @ 28 DAYS, OR AS SPECIFIED.
  - PROVIDE REINFORCING RODS ON TOP AND BOTTOM OF DUCTS WHEN CROSSING OR PLACED IN ROADWAYS.
  - MINIMUM COVER SHALL BE 36".

D5 DUCT BANK DETAILS  
SCALE: NONE



3 PARALLELING GEAR "PGR" ELEVATION  
SCALE: NONE  
NOTE: WEATHER-PROOF ENCLOSURE NOT SHOWN

PARALLELING GEAR SCHEDULE							
PGR							
BUS NUMBER: SERVED FROM: GENERATOR MINIMUM KAIC: 65		AMPERE RATING: 5000 MAIN TYPE: MAIN LUGS		VOLTAGE (L-L): 480 VOLTAGE (L-N): 277		PHASE: 3 WIRE: 4	
REMARKS: ALL BREAKERS SHALL BE DRAW OUT LT/ST/INST RATED							
MARK	LOAD DESCRIPTION	C O D E	LOAD KVA	CIRCUIT BREAKER FRAME OR FUSED SWITCH SIZE	CIRCUIT BREAKER TRIP OR FUSE SIZE	DEVICE TYPE	REMARKS
1	TRANSFER SWITCH ATS-NF			800	400	CIRCUIT BRKR	NEW TRANSFER LOCATED IN "F" WING
2	TRANSFER SWITCH ATS-EGF			800	600	CIRCUIT BRKR	NEW TRANSFER LOCATED IN "F" WING
3	TRANSFER SWITCH ATS-CRF			800	250	CIRCUIT BRKR	NEW TRANSFER LOCATED IN "F" WING
4	TRANSFER SWITCH ATS-LS			800	100	CIRCUIT BRKR	EXISTING TRANSFER SWITCH LOCATED IN "F" WING
5	SPACE ONLY			800	--	CIRCUIT BRKR	
6	TRANSFER SWITCH ATS-CRITICAL			800	400	CIRCUIT BRKR	EXISTING TRANSFER SWITCH LOCATED IN MAIN BUILDING
7	TRANSFER SWITCH ATS-EQUIPMENT			800	600	CIRCUIT BRKR	EXISTING TRANSFER SWITCH LOCATED IN MAIN BUILDING
8	TRANSFER SWITCH ATS-CH		1600	1200		CIRCUIT BRKR	NEW TRANSFER SWITCH LOCATED IN CHILLER YARD
9	TRANSFER SWITCH ATS-NORMAL			2000	2000	CIRCUIT BRKR	EXISTING TRANSFER SWITCH LOCATED IN MAIN BUILDING
10	SPACE ONLY			800	--	CIRCUIT BRKR	



GENERAL SHEET NOTES

A. REFER TO E001 FOR TYPICAL SYMBOLS AND ABBREVIATIONS USED ON THIS DRAWING.

SHEET KEYNOTES

- EXISTING SWITCHBOARD "MDP" IS SQUARE D TYPE QED 2, 4000A, 480V/277V, 3Ø, 4W, PLANT CODE 46, CATALOG OR DRAWING NO. 11050928 001.
- CONDUCTORS FROM SWITCHBOARD TO PULL BOX TO BE REUSED. DEMOLISH CONDUIT TO THE EXTENT NECESSARY TO MODIFY FOR NEW LOCATION FOR "EMDP". RECONNECT TO EXISTING FEEDER.

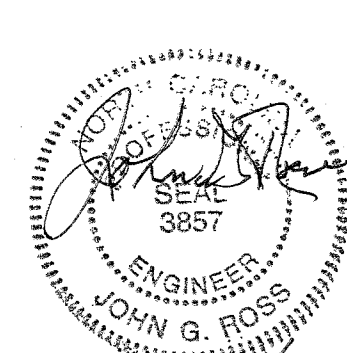
<b>REVISIONS</b>		 <b>Department of Veterans Affairs</b> <b>Viera VAMC</b> 2900 Veterans Way Viera, FL 32940		<b>Architect/Engineer Address</b>  <b>HARRELL</b> DESIGN GROUP, P.C. 8016 TOWER POINT DRIVE CHARLOTTE, NC 28227 P 704.814.1320 F 704.321.0833 WWW.HARRELLDC.COM COPYRIGHT © 2015 HARRELL DESIGN GROUP, PC HDC PROJECT # 13005	<b>Recommended Approvals:</b>		<b>Drawing Title</b> ENLARGED ELECTRICAL ROOMS		<b>Project Title</b> INSTALL EMERGENCY GENERATOR, VIERA		Date 05-01-2016
1									Project Number 675-12-101		
2		<b>BID DOCUMENTS</b>		<b>Drawn</b> GG		<b>Building Number</b>		<b>AutoCAD File Name</b>		<b>DRAWING No.</b> E401	
3											
4		<b>Checked</b>		<b>Reviewed</b> JGR		<b>Const. Contract No.</b>					
5											
6											
7											
8											
9											
10											

1. ALL LIGHTING, RECEPTACLES, AND EQUIPMENT POWER SHALL BE FURNISHED PRE-WIRED COMPLETE BY ENCLOSURE MANUFACTURER.
2. COORDINATE EXACT STEP DIMENSIONS WITH FINISHED GRADE PRIOR TO MANUFACTURE.
3. DUPLEX RECEPTACLES SHALL BE GROUND FAULT CIRCUIT INTERRUPTER, 20 AMP, 120 VOLT, HEAVY-DUTY RATED.
4. LOCAL SWITCHES ARE TO BE 20 AMP HEAVY DUTY RATED.
5. FLUORESCENT FIXTURES ARE TO BE 120V. EQUAL TO LITHONIA - DMW 232.

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[illegible]

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Architect/Engineer Address



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HDC PROJECT # 13005

Recommended Approvals:	
1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COR

Drawing Title  
ENLARGED  
EQUIPMENT  
ENCLOSURES

BID  
DOCUMENTS

Project Title	INSTALL EMERGENCY GENERATOR, VIERA
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Drawn	GG
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Building Number
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AutoCAD File Name

05-01-2016

Project Number  
675-12-101DRAWING No.  
E501

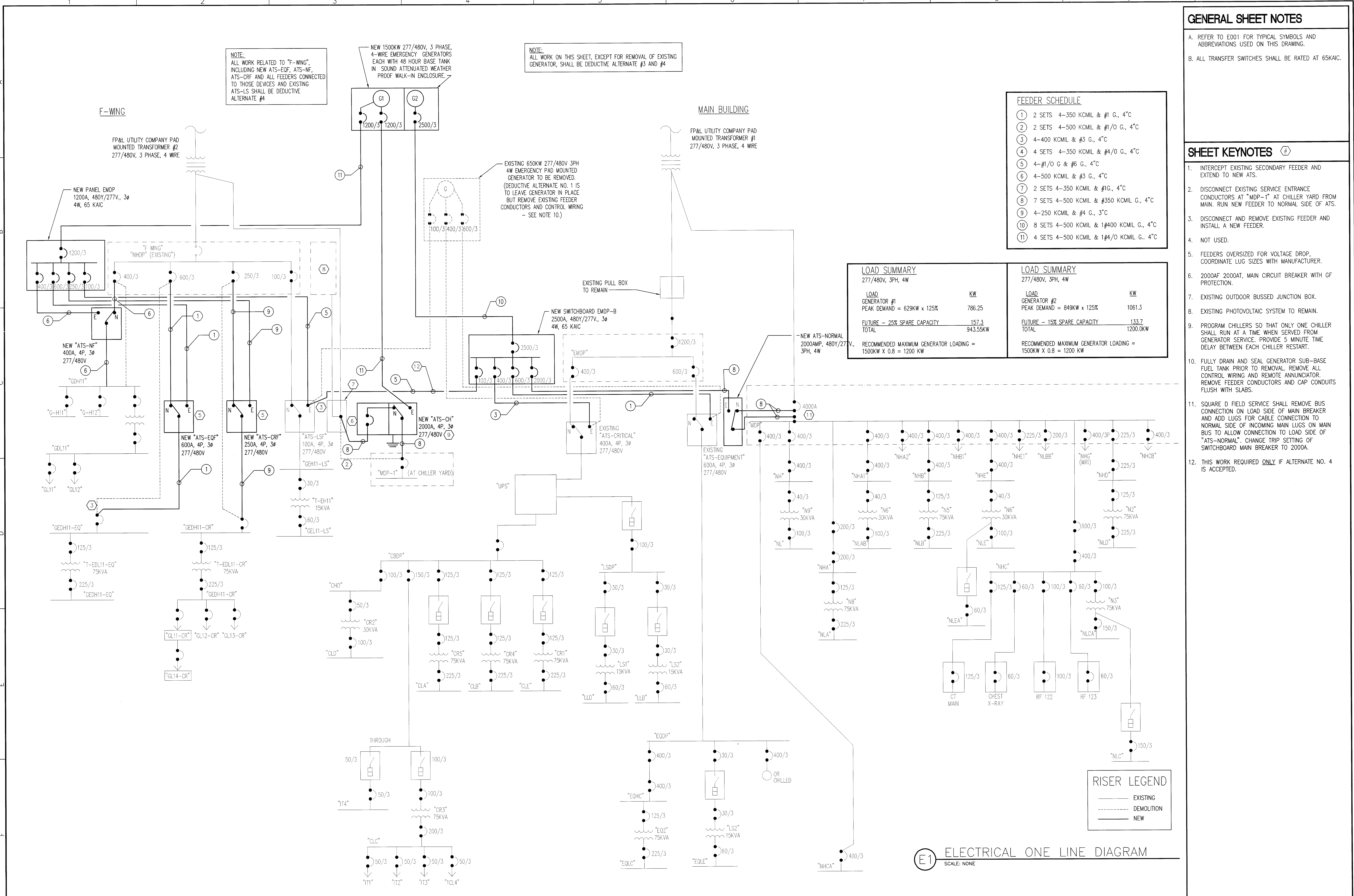
E301







three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



NOTE:  
ALL WORK RELATED TO "F-WING",  
INCLUDING NEW ATS-EQ, ATS-NF,  
ATS-CR, AND ALL FEEDERS CONNECTED  
TO THOSE DEVICES AND EXISTING  
ATS-S SHALL BE DEDUCTIVE  
ALTERNATE #4

NOTE:  
ALL WORK ON THIS SHEET, EXCEPT FOR REMOVAL OF EXISTING  
GENERATOR, SHALL BE DEDUCTIVE ALTERNATE #3 AND #4

## FEEDER SCHEDULE

①	2 SETS	4-350 KCMIL & #1 G., 4°C
②	2 SETS	4-500 KCMIL & #1/O G., 4°C
③	4-400 KCMIL & #3 G., 4°C	
④	4 SETS	4-350 KCMIL & #4/O G., 4°C
⑤	4-#1/O G & #6 G., 4°C	
⑥	4-500 KCMIL & #3 G., 4°C	
⑦	2 SETS	4-350 KCMIL & #1G., 4°C
⑧	7 SETS	4-500 KCMIL & #350 KCMIL G., 4°C
⑨	4-250 KCMIL & #4 G., 3°C	
⑩	8 SETS	4-500 KCMIL & 1#400 KCMIL G., 4°C
⑪	4 SETS	4-500 KCMIL & 1#4/O KCMIL G., 4°C

**LOAD SUMMARY**  
277/480V, 3PH, 4W

LOAD	KW
GENERATOR #1	
PEAK DEMAND = 629KW x 125%	786.25
FUTURE - 25% SPARE CAPACITY	157.3
TOTAL	943.55KW
RECOMMENDED MAXIMUM GENERATOR LOADING =	1500KW X 0.8 = 1200 KW

**LOAD SUMMARY**  
277/480V, 3PH, 4W

LOAD	KW
GENERATOR #2	
PEAK DEMAND = 849KW x 125%	1061.3
FUTURE - 15% SPARE CAPACITY	133.7
TOTAL	1200.0KW
RECOMMENDED MAXIMUM GENERATOR LOADING =	1500KW X 0.8 = 1200 KW

**GENERAL SHEET NOTES**

- A. REFER TO E001 FOR TYPICAL SYMBOLS AND ABBREVIATIONS USED ON THIS DRAWING.
- B. ALL TRANSFER SWITCHES SHALL BE RATED AT 65KAIC.

**SHEET KEYNOTES**

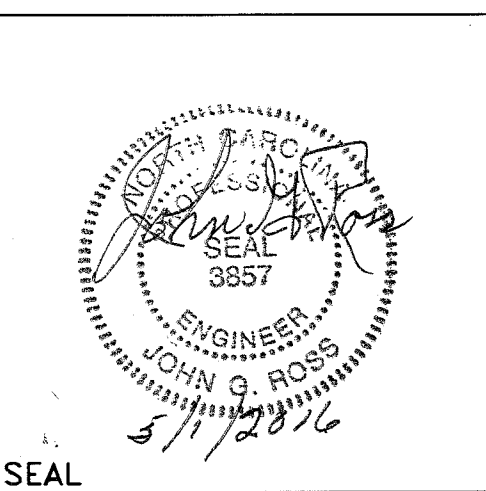
- INTERCEPT EXISTING SECONDARY FEEDER AND EXTEND TO NEW ATS.
- DISCONNECT EXISTING SERVICE ENTRANCE CONDUCTORS AT "MDP-1" AT CHILLER YARD FROM MAIN. RUN NEW FEEDER TO NORMAL SIDE OF ATS.
- DISCONNECT AND REMOVE EXISTING FEEDER AND INSTALL A NEW FEEDER.
- NOT USED.
- FEEDERS OVERSIZED FOR VOLTAGE DROP. COORDINATE LUG SIZES WITH MANUFACTURER.
- 2000AF 2000AT, MAIN CIRCUIT BREAKER WITH GF PROTECTION.
- EXISTING OUTDOOR BUSSED JUNCTION BOX.
- EXISTING PHOTOVOLTAIC SYSTEM TO REMAIN.
- PROGRAM CHILLERS SO THAT ONLY ONE CHILLER SHALL RUN AT A TIME WHEN SERVED FROM GENERATOR SERVICE. PROVIDE 5 MINUTE TIME DELAY BETWEEN EACH CHILLER RESTART.
- FULLY DRAIN AND SEAL GENERATOR SUB-BASE FUEL TANK PRIOR TO REMOVAL. REMOVE ALL CONTROL WIRING AND REMOTE ANNUNCIATOR. REMOVE FEEDER CONDUCTORS AND CAP CONDUITS FLUSH WITH SLABS.
- SQUARE D FIELD SERVICE SHALL REMOVE BUS CONNECTION ON LOAD SIDE OF MAIN BREAKER AND ADD LUGS FOR CABLE CONNECTION TO NORMAL SIDE OF INCOMING MAIN LUGS ON MAIN BUS TO ALLOW CONNECTION TO LOAD SIDE OF "ATS-NORMAL". CHANGE TRIP SETTING OF SWITCHBOARD MAIN BREAKER TO 2000A.
- THIS WORK REQUIRED ONLY IF ALTERNATE NO. 4 IS ACCEPTED.

**E1 ELECTRICAL ONE LINE DIAGRAM**  
SCALE: NONE

**REVISIONS**

REVISION NO.	REVISION DESCRIPTION	By	Date

**Department of Veterans Affairs**  
**Viera VAMC**  
2900 Veterans Way  
Viera, FL 32940



Architect/Engineer Address  
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HDP PROJECT # 13050

**Recommended Approvals:**

1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COR

Drawing Title  
**ELECTRICAL ONE LINE DIAGRAM - DEDUCTIVE ALTERNATE NO. 3&4 ONLY**

BID DOCUMENTS

Project Title  
**INSTALL EMERGENCY GENERATOR, VIERA**

Drawn GG	Building Number	AutoCAD File Name
Checked	Reviewed	Const. Contract No.

Date 05-01-2016  
Project Number 675-12-101  
DRAWING No. **E601A**





SWITCHBOARD EMDP-B SCHEDULE NOTES:  
1. REFER TO THE ELECTRICAL ONE-LINE ON SHEET E601A FOR CONDUIT AND WIRE SIZES.

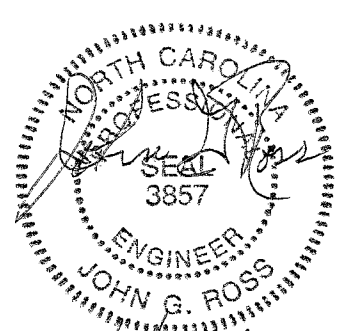
PANELBOARD EMDP-F SCHEDULE NOTES:  
1. REFER TO THE ELECTRICAL ONE-LINE ON SHEET E601A FOR CONDUIT AND WIRE SIZES.

A. REFER TO E001 FOR TYPICAL SYMBOLS AND ABBREVIATIONS USED ON THIS DRAWING.

## 1.



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2900 Veterans Way  
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Architect/Engineer Address



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HDG PROJECT # 13005

**Recommended Approvals:**

1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COR

Drawing Title  
**ELECTRICAL  
SCHEDULES**

BID  
DOCUMENTS

Project Title  
**INSTALL EMERGENCY  
GENERATOR, VIERA**

Drawn	GG
-------	----

Building Number

AutoCAD File Name

Date	05-01-2016
------	------------

Project Number	675-12-101
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DRAWING No.

E701

