



GENERAL NOTES:
 (THIS SHEET ONLY)
 A. SEE ALSO RISER DIAGRAM, SHEET E1.2.

ATS/MECHANICAL CONTROLS
 (THIS SHEET ONLY)
 CONTRACTOR TO PROVIDE CONTROL AND EXERCISE CIRCUITS FROM MEDIUM VOLTAGE ATS TO GENERATOR. CIRCUITS SHALL BE INSTALLED IN CONDUITS PROVIDED IN THIS CONTRACT FROM ATS TO EXISTING POLYMER PULL BOX, THEN IN EXISTING 1" CONDUITS TO GENERATOR.
 CONTRACTOR IS RESPONSIBLE FOR PROVIDING NORMAL AND EMERGENCY POWER STATUS CONTACT SIGNAL FROM ATS TO VA'S TRIDIUM CONTROL SYSTEM FOR THE EXISTING CHILLER PLANT IN BUILDING 27. CONTACTS SHALL BE PROVIDED IN THE ATS TO IDENTIFY WHEN GENERATOR POWER IS IN USE AND WHEN NORMAL POWER HAS BEEN RESTORED. WHEN GENERATOR POWER IS SUPPLYING THE CHILLER PLANT, CHILLERS AND ALL ASSOCIATED PUMPS SHALL BE ON MANUAL CONTROL. WHEN NORMAL POWER IS RESTORED, CHILLER PLANT SHALL REVERT TO AUTOMATIC OPERATION.
 CONTRACTOR SHALL UTILIZE MECHANICAL SYSTEMS AND SERVICES, INC. (MSS) FOR PROGRAMMING AND SETTINGS OF THE VA'S TRIDIUM SYSTEM. THE CONTACT IS BO BLAND, MSS PROJECT MANAGER, AT (404) 597-8477. MSS SHALL PROVIDE ANY SOFTWARE AND HARDWARE NEEDED FOR OPERATION AS STATED ABOVE AS PART OF THIS CONTRACT.
 CONTRACTOR SHALL COORDINATE NECESSARY OUTPUTS FROM ATS WITH MSS PRIOR TO PROVIDING ATS SUBMITTALS. CONNECTIONS FROM THE ATS TO TRIDIUM CONTROLS IN BUILDING 27 ARE THE CONTRACTOR'S RESPONSIBILITY.
 CONTRACTOR TO PROVIDE DATA CIRCUIT FROM GENERATOR CONTROL PANEL IN EXISTING 1" CONDUIT THROUGH EXISTING PULL BOX TO GENERATOR ANNUNCIATOR IN BUILDING 27 CONTROL ROOM. SEE NOTE 15, THIS SHEET.
 CONTRACTOR TO PROVIDE DATA CIRCUIT FROM GENERATOR CONTROL PANEL IN EXISTING 1" CONDUIT THROUGH EXISTING PULL BOX TO GENERATOR ANNUNCIATOR IN BUILDING 27 CONTROL ROOM. SEE NOTE 15, THIS SHEET.

SITE LEGEND OF SYMBOLS	
---	EXISTING POTABLE WATER PIPING
SA	EXISTING UNDERGROUND SANITARY SEWER PIPING
SO	EXISTING UNDERGROUND STORM SEWER PIPING
ST	EXISTING UNDERGROUND STEAM PIPING
NG	EXISTING UNDERGROUND NATURAL GAS PIPING
E	EXISTING UNDERGROUND ELECTRICAL
C	EXISTING UNDERGROUND CABLE/TELEPHONE/OTHER
*	EXISTING LIGHT POLE
○	EXISTING UTILITY POLE
⊙	MANHOLE (SANITARY, STORM, ELECTRICAL, SIGNAL/COMMUNICATION)
⊠	GAS METER
DI	STORM DRAIN DROP OUTLET
DI	BACKFLOW PREVENTER
#1-30	HYDRANT WITH DESIGNATED NUMBER
⊠	POST INDICATOR VALVE
⊠	VALVE
⊠	CHECK VALVE

- NOTES:**
 (THIS SHEET ONLY)
- PROVIDE 4160V, 3-POLE, 4W MEDIUM VOLTAGE AUTOMATIC TRANSFER SWITCH (ATS) IN A WALK-IN ENCLOSURE ON A CONCRETE PAD. SEE SHEET E1.2 FOR RISER DIAGRAM.
 - PROVIDE 4" 4-WAY CONCRETE-ENCASED DUCT BANK. SEE DETAILS, SHEET E1.1.
 - PROVIDE CONCRETE VAULT. SEE DETAILS, SHEET E1.1.
 - PROVIDE 3#500KCMIL CU, TAPE SHIELD, TYPE MOV, 15KV CABLES WITH #1 CU XHHW NEUTRAL, FROM TRANSFORMER TO EMERGENCY SIDE OF ATS. THERE IS AN EXISTING 5" RGS CONDUIT STUBBED OUT TO 3' OUTSIDE OF EXISTING TRANSFORMER PAD PRIMARY OPENING TOWARDS ATS. EXTEND CONDUIT INTO NEW ATS PAD.
 - PROVIDE 600A, DEADFRONT TERMINATION IN PRIMARY SIDE OF TRANSFORMER. SEE DETAILS, SHEET E1.1.
 - PROVIDE 3#500KCMIL CU, TAPE SHIELD, TYPE MOV, 15KV CABLES WITH #1 CU XHHW NEUTRAL, AND 600A DEADFRONT TERMINATIONS FROM NORMAL SIDE OF ATS TO SPLICE TO FEEDER #2, SWITCHGEAR SECTION IN MANHOLE #1A.
 - PROVIDE 3#500KCMIL CU, TAPE SHIELD, TYPE MOV, 15KV CABLES WITH #1 CU XHHW NEUTRAL, AND 600A DEADFRONT TERMINATIONS FROM LOAD SIDE OF ATS TO SPLICE TO FEEDER #2, CHILLER PLANT SECTION, IN MANHOLE #1A.
 - PROVIDE 1" CONDUIT FOR SIGNAL FROM ATS CONTROLS TO EXISTING PULL BOX. PROVIDE NORMAL AND EMERGENCY POWER STATUS CONTACT SIGNALS FROM ATS THROUGH PULL BOX TO TRIDIUM DDC CONTROL PANEL IN BUILDING 27. SEE NOTE 16, THIS SHEET.
 - PROVIDE 1" CONDUIT FOR DATA FROM ATS CONTROLS TO EXISTING PULL BOX. PROVIDE COMMUNICATIONS CABLE FOR ANNUNCIATOR THROUGH PULL BOX TO ATS ANNUNCIATOR IN CONTROL ROOM IN BUILDING 27. SEE NOTE 15, THIS SHEET.
 - EXISTING POLYMER CONCRETE PULL BOX. TWO (2) 1" CONDUITS ARE EXISTING FROM PULL BOX INTO BUILDING 27.
 - EXISTING 10,000 GALLON ABOVE GROUND DIESEL FUEL TANK FOR 2000KW GENERATOR.
 - EXISTING TO REMAIN 225A, 120/208V NEMA 3R PANEL WITH 200A M.B.
 - PROVIDE 11'W X 18'L X 12"D CONCRETE PAD FOR MEDIUM VOLTAGE TRANSFER SWITCH. SEE DETAIL, SHEET E1.2. NOTE: PAD TO BE CONSTRUCTED OVERSIZE FOR FUTURE REPLACEMENT WITH 15KV GEAR. DO NOT MODIFY PAD SIZE FOR 4,160V ATS. PAD SHALL ABUT EXISTING GENERATOR AND FUEL TANK PAD.
 - TWO (2) 1" CONDUITS ARE EXISTING AND PROVIDED FROM LOCATION OF GENERATOR CONTROL PANEL TO PULL BOX, ONE FOR EXERCISER AND GENERATOR CONTROL, AND ONE FOR GENERATOR ANNUNCIATOR.
 - EXTEND 1" CONDUIT FROM BUILDING ENTRANCE TO CONTROL ROOM AND PROVIDE COMMUNICATION CONNECTION TO GENERATOR ANNUNCIATOR AND TO ATS ANNUNCIATOR. COORDINATE LOCATIONS OF ANNUNCIATORS WITH COTR.
 - EXTEND 1" CONDUIT FROM BUILDING ENTRANCE TO TRIDIUM CONTROL PANEL. PROVIDE ATS NORMAL AND EMERGENCY POWER STATUS CONTACT WIRING TO TRIDIUM PANEL AND INTEGRATE CONTROL SIGNAL AS STATED IN ATS/MECHANICAL CONTROL NOTES ABOVE.
 - ATS AND GENERATOR ANNUNCIATORS ARE MOUNTED TO THIS WALL OF CONTROL ROOM. EXACT LOCATION FOR ANNUNCIATORS AND FOR TRIDIUM CONTROLS SHALL BE COORDINATED WITH COTR.

ELECTRICAL SITE PLAN
 SCALE: 1" = 10'-0"

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

Revisions	Date

APPLIED ENGINEERING SOLUTIONS, INC.
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Blank area for project details and notes.

Professional Engineer Seal for Randy B. Peacock, State of Georgia, License No. 12345.

SITE PLAN ELECTRICAL
 Approved Project Director: [Signature]
FINAL SUBMITTAL

CONNECT 500 TON CHILLER TO EES
 Building Number: [Blank]
 Checked: GSW
 Drawn: SJB
 Location: CARL VINSON VA MEDICAL CENTER DUBLIN, GEORGIA

Date: January 27 2012
 Project No.: 557-09-109
 Drawing No.: **E3.1**
 Dwg. 4 Of 4

Veterans Administration