INTEROFFICE MEMORANDUM

To: Tad M. Miller, City Clerk

John F. Spirk, Jr., Esq., City Solicitor From:

Fifth Amendment to Tower Lease Agreement Re:

Lessee Name: New Cingular Wireless PCS, LLC (successor in interest to

Pennsylvania Cellular Telephone Corporation d/b/a AT&T

Wireless Services)

Location: South Mountain Park

June 30, 2022 Date:

Attached is a proposed Resolution and associated Fifth Amendment to Tower Lease Agreement for Council's consideration. The Amendment adds additional area to the leased premises for a generator and a corresponding rent increase for the additional premises, and otherwise modifies the lease as provided therein.

Please place this matter on City Council's agenda for review and appropriate action.

John J. Spirk, Jr.
John F. Spirk, Jr., Esq., Solicitor

Cc: J. William Reynolds, Mayor

Michael Alkhal, Director, Public Works

Gregory Cryder, City Electrician

RESOLUTION NO. 2022-____

Authorization For Fifth Amendment to City of Bethlehem Tower Lease Agreement

BE IT RESOLVED by the Council of the City of Bethlehem that the Mayor and the Controller and/or such other City officials as deemed appropriate by the City Solicitor, are hereby authorized to execute the Fifth Amendment to City of Bethlehem Tower Lease Agreement between the City of Bethlehem and New Cingular Wireless PCS, LLC, a Delaware limited liability company, successor in interest to Pennsylvania Cellular Telephone Corporation d/b/a AT&T Wireless Services, and such other agreements and documents as are deemed by the City Solicitor to be necessary and/or related thereto, according to the terms and conditions indicated therein and made a part hereof, as it relates to the South Mountain Park tower site.

Spon	sored by	
ADOPTED by Council this	day of	, 2022.
	Presid	ent of Council
ATTEST:		
City Clerk		

Market: <u>RPHL</u> Cell Site Number: <u>2164</u>

Cell Site Name: <u>FOUNTAIN HILL</u> **Fixed Asset Number: <u>10084307</u>**

FIFTH AMENDMENT TO CITY OF BETHLEHEM TOWER LEASE AGREEMENT

THIS FIFTH AMENDMENT TO CITY OF BETHLEHEM TOWER LEASE AGREEMENT dated as of the latter of the signature dates below, is by and between City of Bethlehem, having a mailing address of 10 East Church Street, Bethlehem, PA 18018 ("**Lessor**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, successor in interest to Pennsylvania Cellular Telephone Corporation d/b/a AT&T Wireless Services, having a mailing address of 1025 Lenox Park Boulevard NE, 3rd Floor Atlanta, GA 30319 ("**Lessee**").

WHEREAS, Lessor and Lessee entered into a City of Bethlehem Tower Lease Agreement dated February 11, 1993, an Amendment No. 1 to Contract dated October 26, 1994, a Second Amendment to Tower Lease Agreement dated July 15, 2002, a Third Amendment to Tower Lease dated September 16, 2004, and a Fourth Amendment to Tower Lease Agreement dated June 8, 2007, whereby Lessor leased to Lessee certain Premises, therein described, that are a portion of the Property located in South Mountain Park on University Avenue, Bethlehem, PA 18015 ("Agreement"); and

WHEREAS, Lessor and Lessee desire, in their mutual interest, wish to amend the Agreement as set forth below.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Lessor and Lessee agree as follows:

- 1. New Premises Area. The definition of Demised Premise shall be amended to include the additional premises described on attached Exhibit 1-A ("New Premises Area"). Lessor's execution of this Amendment will signify Lessor's review and approval of Exhibit 1-A.
- **2. Generator.** Section 1 of the Agreement shall be amended to include the following sentence: Lessee shall have the right to install, repair, maintain, modify, replace, remove, utilize and operate (including but not limited to operate as may be required by applicable law) equipment within the New Premises Area, including without limitation a concrete pad and generator thereon, including back-up power supply. The generator shall remain the property of Lessee.
- **3. Rent.** The Annual Rent shall be increased by Four Thousand Two Hundred Dollars (\$4,200.00), and each monthly installment of such Rent shall increase by Three Hundred Fifty and No/100 Dollars (\$350.00) per month, subject to further adjustments, if any, commencing on the first day of the month following commencement of the work relating to the installation of the New Premises Area.

- 4. Other. Lessor represents and warrants that, to its knowledge, no conditions exist within the New Premises Area or otherwise on the Demised Premises that would adversely impact Lessee's permitting and/or installation of a generator within the New Premises Area. Lessor authorizes Lessee to prepare, execute and file all required applications to obtain any government approvals for Lessee's use of the New Premises Area under this Agreement and agrees, at Lessee's request, to reasonably assist Lessee with such applications and with obtaining and maintaining the government approvals. Where applicable law governs how the generator will be used, Lessee may use the generator in the manner set forth in applicable law. Lessee may terminate this Amendment by written notice to Lessor at any time, and the rent increase set forth in Section 3 shall not take effect or shall be cancelled, as applicable, thirty (30) days following any such termination. Within one hundred twenty days (120) after termination of this Amendment, Lessee shall remove the generator from the New Premises Area; provided that any portions of the generator that Lessee fails to remove within such period and cessation of Lessee's operations at the New Premises Area shall be deemed abandoned. Lessee shall repair, at its sole expense, any damage, less ordinary wear and tear, to the New Premises Area caused by its removal activities. Nothing herein shall alter or modify the indemnification obligations of Lessee under Section 14 of the Agreement.
- **5.** Section 21 of the Agreement, as amended, is hereby deleted in its entirety and replaced with the following:

Notices. All notices, requests, demands and communications hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows.

If to I ECCOD.

II to LESSOR:	City of Bethlenem	II to LESSEE:	New Cingular Wireless PCS, LLC
	10 East Church Street		Attn: TAG - LA
	Bethlehem, PA 18018		Re: Cell Site # <u>2164</u>
	Attn: Director of		Cell Site Name: FOUNTAIN HILL (PA)
	Public Works		Fixed Asset #: <u>10084307</u>
			1025 Lenox Park Blvd NE
			3rd Floor
			Atlanta, GA 30319

With copy to: New Cingular Wireless PCS, LLC

Attn: Legal Department Re: Cell Site # 2164

Cell Site Name:(FOUNTAIN HILL PA)

Fixed Asset #: 10084307 208 S. Akard Street Dallas, Texas, 75202-4206

The copy sent to the Legal Department is an administrative step which alone does not constitute legal notice. Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

6. Memorandum of Lease. Either party will, at any time upon thirty (30) days prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum of Lease. Either party may record this memorandum at any time, in its absolute discretion.

- 7. Other Terms and Conditions Remain. In the event of any inconsistencies between the Agreement and this Fifth Amendment, the terms of this Fifth Amendment shall control. Except as expressly set forth in this Fifth Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this Fifth Amendment. The rights granted to Lessee herein are in addition to and not intended to limit any rights of Lessee in the Agreement. Unless otherwise specified herein or unless the context requires otherwise, the terms in the Agreement shall apply to the New Premises Area.
- **8. Capitalized Terms.** All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.

IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute and seal this Fifth Amendment on the dates set forth below.

LESSOR: City of Bethlehem	LESSEE: New Cingular Wireless PCS, LLC,				
	a Delaware limited liability company				
	By: AT&T Mobility Corporation Its: Manager				
By:	By:				
Print Name: J. William Reynolds	Print Name:				
Its: <u>Mayor</u>	Its:				
Date:	Date:				
Attest:					
Print Name: George Yasso					
Its: Controller					
Date:					

LESSEE ACKNOWLEDGEMENT

STATE OF	
COUNTY OF)ss:)
, and	of, 20 before me personally appeared acknowledged under oath that he is the of of of named in the attached
instrument, and as such was	authorized to execute this instrument on behalf of the
	Notary Public:
LESSOR ACKNOWLEDGEME	NT
COMMONWEALTH OF PENNS	
COUNTY OF NORTHAMPTON	: SS: N)
	<u>ACKNOWLEDGMENT</u>
a Notary Public, personally appea Pennsylvania, known to me to	
IN WITNESS WHEREO	F, I hereunto set my hand and official seal.
	Notary Public:
	My Commission Expires:

EXHIBIT 1-A

Additional Premises Area

See attached



SITE INFORMATION

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR.

LIGHTNING PROTECTION CODE 2020

IBC 2021, NEC 2020, ANSI/TIA-222 STRUCTURAL STANDARD, & NFPA 780

GOVERNING CODE:

PROPERTY OWNER

SCOPE OF WORK:

UTILITY INFORMATION:

GENERAL SITE INFORMATION:

Walbert

ersville Macungie

Shimerville

Allentown

Alton Park

E N N S Y/L V

Émmaus

era Cruz

PROPERTY OWNER CONTACT:

SITE ADDRESS

COUNTY:

APPLICANT:

FOUNTAIN HILL

FA#: 10084307

USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR.

BETHLEHEM. PA 18015

GENERATOR UPGRADE

T-1

DESCRIPTION

TITLE SHEET

SHEET INDEX



GENERAL DYNAMICS

Wireless Services

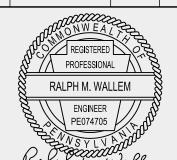
12906 SHELBYVILLE ROAD, STE. 230 LOUSIVILLE, KY 40243 502-653-6963

BENCHMARK SERVICES, INC.

Consulting Engineers Land Surveyors PO Box 5 318 North Main Street Huntingburg, Indiana 47542 Phone: (812) 683-3049

DRAWING REVISIONS

1	REV.	DESCRIPTION	DATE	BY
1	0	100% CDs	2/25/22	MCB
1	1	SS	3/28/22	DSB
1				
1				



REV. NO.

BETHLEHEM, PA 18015 SP-1 **GENERAL NOTES** NORTHAMPTON A-1 OVERALL SITE PLAN UNSPECIFIED EQUIPMENT PLAN A-2 GENERAL DYNAMICS CONSTR. MGR LINSPECIFIED S-1 FOUNDATION DETAILS AT&T MOBILITY E-1 WIRING DIAGRM 8372 E. BROAD STREET D-1 PANEL, GROUNDING, & PENETRATION DETAILS REYNOLDSBURG, OH 43068 PROPERTY OWNER D-5 ATS, CONDUIT, TRENCH, & GROUND ROD DETAILS INSTALL NEW GENERAC 30KW DIESEL GENERATOR ON NEW CONCRETE PAD. INSTALL NEW AUTOMATIC TRANSFER SWITCH (ATS) ON SHELTER EXTERIOR. INTEGRATE EXISTING ALARM AND ELECTRICAL CONNECTIONS WITH NEW G-1 GENERATOR DETAILS GENERATOR DETAILS SITE ACQUISITION GENERATOR DETAILS G-3 THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURE, ABOVE GROUND GENERAC ATS DETAILS G-4 STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL CONTRACTOR LITH ITIES PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIEY STATE AND LOCAL LITHTY NOTIFICATION SERVICES BEFORE DIGGING OR DRILLING, ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER CONTRACTOR AND ENGINEER AT THE CONTRACTOR'S EXPENSE [1] FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. (2) HANDICAP ACCESS IS NOT REQUIRED. (3) FACILITY HAS NO PLUMBING OR PARKING. CONTRACTOR (4) NO GRADING WILL BE REQUIRED FOR THIS SITE PROJECT TEAM VICINITY MAP AREA MAP Mountain Dr S ENGINEER: MARKET LEAD:

Rising Sun Northampton Wilson Hanoverville Palmer Heights Hokendaugua eetown Catasauqua Old Orchard Evergreen Park Freemansburg Bethlehem

lellertown

-riedensville

NIA

Center Valley

Coopersburg

Leithsville

Graversville

Summit

Lawn

BENCHMARK SERVICES, INC. GARY VAN WINKLE PO BOX 318 NORTH MAIN STREET HUNTINGBURG, IN 47542 TEL: 812-683-3049

Durha

Eurnac

Springtown

Bursonville

MATTHEW HIGGINS GENERAL DYNAMICS WIRELESS SERVICES 2586 INDUSTRY LN., STE. 100 NORRISTOWN, PA 19403 OFFICE 606-676-0120 EMAIL: matthew.higgins@adit.com

378

50 Lr

Seidersville

Hes Ln

E University Ave

Star Village

Seidersville Rd

Kistler Ave

GENERATOR UPGRADE

FOUNTAIN HILL

UNIVERSITY DR. 1200'S. OF MOUNTAIN DR.

BETHLEHEM, PA 18015

FA#: 10084307

USID: 2164

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME:

TITLE SHEET

SHEET NO.:

REVISION NUMBER

T-1

TO YOUR DESTINATION IN LOWER SAUCON TOWNSHIP, TRAVEL 3.8 MI

DRIVING DIRECTIONS

APPROVALS

LATITUDE: 40.595 LONGITUDE: -75.37639 DRIVING DIRECTIONS

TOWER COORDINATES

AT&T CONSTRUCTION MANAGER

START NEAR INTERSECTION OF US-78 AND PA-33

WWW.BENCHMARKSERVICESINC.BIZ

- TAKE I-78 W TO SILVEX RD IN
- BETHLEHEM. TAKE EXIT 67 FROM I-78 W, TRAVEL 5.1 3.
- TAKE COLLEGE DR AND MOUNTAIN DR S

- IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING,
 SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE AND
 LOCAL ORDINANCES TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE
 FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- THE CONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK.
- 4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED. IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- SITE GROUNDING SHALL COMPLY WITH AT&T MOBILITY WIRELESS SERVICES
 TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS,
 LATEST EDITION, AND COMPLY WITH AT&T MOBILITY TOWERS GROUNDING
 CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE
 MORE STRINGENT, THEY SHALL GOVERN.
- 6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF FAA LIGHTING AND MARKING IS PRESENT ON SITE AND IS POWERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
- THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
- 10. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIME. SILT FENCE AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- 12. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, FTC.
- 13. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWING WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
- 14. RECORD PHOTOS: INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE DEPTH VERIFICATION.
- 15. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
- 17. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- 18. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL NOTIFY GENERAL DYNAMICS WIRELESS SERVICES OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 19. CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- 20. ALL SUITABLE MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATION APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

21. SEEDING AND MULCHING OF THE SITE SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A MINIMUM PERIOD OF ONE YEAR.

GENERAL NOTES

- THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.
- 2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
- 3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITATION. NO HANDICAP ACCESS IS
- OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
- 5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 7. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- 8. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL NOTIFY AT&T OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES:

A. GENERA

- COORDINATE LOCATION AND PROPER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T MOBILITY AND EQUIPMENT SUPPLIES PRIOR TO INSTALLATION
- COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE PROPERTY REPRESENTATIVE, ATAT MOBILITY AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE BEGI INFEMENTS. EXACT CONDUIT BOILTING TO BE DETERMINED IN THE FIFE D.
- 3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED.
- 4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED BY CONTRACTOR AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED, THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.
- COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN
 CASE OF INTERFERENCE, AT&T MOBILITY'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED,
 REGARDLESS OF WHICH WAS FIRST INSTALLED.
- 6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
- 7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T MOBILITY'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
- ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
- A. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
- B. ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS)
- C. ETL (ELECTRICAL TESTING LABORATORY)
 D. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
- E. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
- F. NBFÜ (NATIONAL BOARD OF FIRE UNDERWRITERS)
 G. NESC (NATIONAL ELECTRICAL SAFETY CODE)
- H. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
- J. UL (UNDERWRITERS LABORATORY)
- 10. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFIRM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE PROPERLY LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY ATAT MOBILITY OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE CONTRACT DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.
- 11. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T MOBILITY'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

B. WIRING/CONDUIT

- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) EXIST IN/ON CONDUIT RUN.
- ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS. UNLESS NOTED OTHERWISE.
- CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
- 4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE. ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.
- 8. INSTALL PULL STRING IN ALL CONDUIT.
- FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATION FROM ANY MECHANICAL GAS PIPING.
- 11. ALL WIRING ROUTED IN PLENUM TO BE PLENUM RATED OR IN METALLIC FLEX (LIQUIDTITE) CONDUIT.
- 12. INSPECTION WINDOWS ARE REQUIRED ON ALL INDOOR LUGS.

C. EQUIPMENT

- 1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.
- 2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED.

D. **GROUNDING**

- ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE
 STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A
 TYPE AS TO NOT CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE
 REPAINTED WITH COLD GALVANIZE SPRAY FOLLOWING BONDING.
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
- EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A
 LIBERAL PROTECTIVE COATING OF ANTHOXIDE COMPOLIND.
- 5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
- 6. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON THE PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTIONS CABLES AS SHORT AS POSSIBLE. USE EXISTING GROUNDING LOCATION ON ATS IF AVAILABLE.
- 7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.
- 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

E. <u>INSPECTION/DOCUMENTATION</u>

- INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE VERIFICATION FOR ALL BURIED CONDUIT.
- THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
- 3. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RESISTIVITY (MAX. 5 OHMS).
- 4. AN ELECTRICAL INSPECTION SHALL BE MADE BY AN INSPECTING AGENCY APPROVED BY AT&T MOBILITY'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL.
- CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.



GENERAL DYNAMICS

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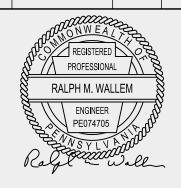


Land Surveyors

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Huntingburg, Indiana 47542
Phone: (812) 683-3049

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1	SS	3/28/22	DSB



FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAM

GENERAL NOTES

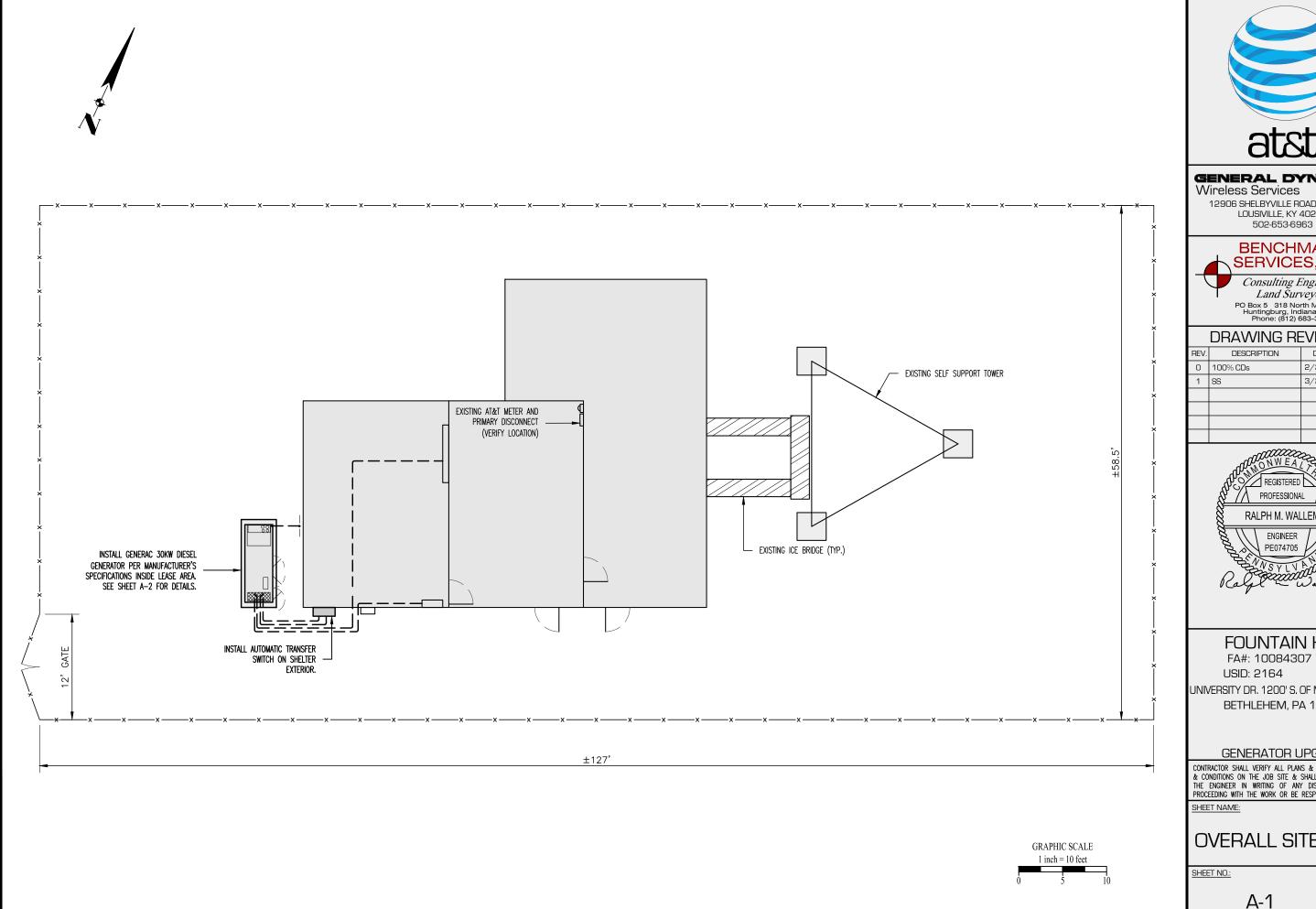
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REVISION

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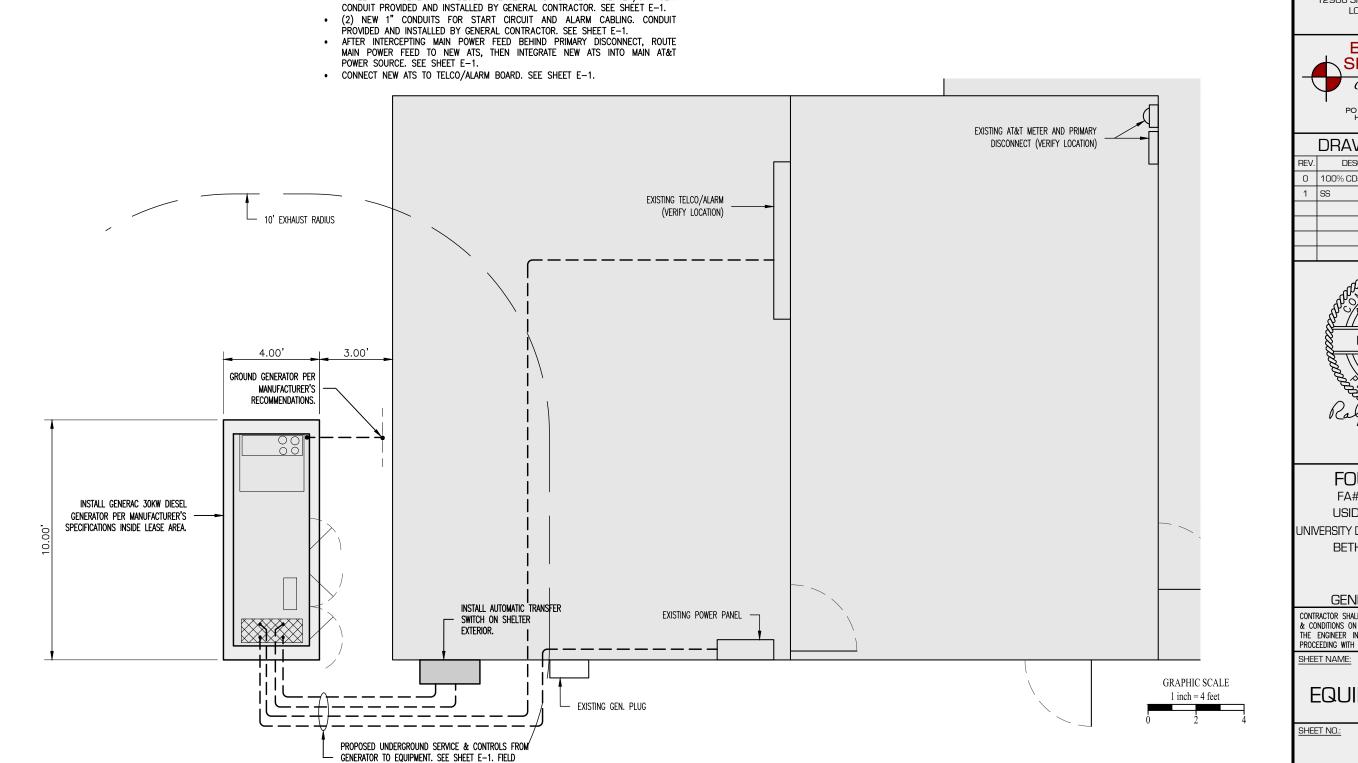
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OVERALL SITE PLAN

SCOPE OF WORK NOTES VERIFY LOCATION OF ALL EQUIPMENT ON SITE. NEW GENERAC 30KW DIESEL PROVIDED BY GENERAL DYNAMICS AND INSTALLED BY NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY NEW CONCRETE PAD PROVIDED AND INSTALLED BY GENERAL CONTRACTOR (AS LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 16'-0" APART. REQUIRED). SEE S-1. NEW AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS AND H-FRAME: • PROVIDE NEW H-FRAME IF REQUIRED, MATCH EXISTING H-FRAME MATERIAL FOR INSTALLED BY CONTRACTOR (AS REQUIRED) CONSTRUCTION OF NEW H-FRAME. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. USE ALL GALVANIZED COMPONENTS, WHITE PLASTIC CAPS ON UNI-STRUTS, CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY WEATHER CAPS ON TOPS OF PIPE AND CONCRETE. CONSTRUCTION TO ORIGINAL OR BETTER CONDITION. SUPPORTS BELOW FROST LINE. TOP OF FOOTING SHOULD BE AT LEAST 2" ABOVE EXISTING GROUND LEVEL. SLOPE THE GROUND AWAY FROM THE H-FRAME FOR POSITIVE WATER DRAINAGE . INSTALL PULL STRING IN EACH CONDUIT. OFF OF THE FORM. (1) NEW 2" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1. (1) NEW 1" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL FOR GENERATOR BLOCK HEATER AND BATTERY HEATER/CHARGER. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE SHEET E-1. (2) NEW 1" CONDUITS FOR START CIRCUIT AND ALARM CABLING. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR, SEE SHEET E-1. AFTER INTERCEPTING MAIN POWER FEED BEHIND PRIMARY DISCONNECT, ROUTE MAIN POWER FEED TO NEW ATS, THEN INTEGRATE NEW ATS INTO MAIN AT&T POWER SOURCE. SEE SHEET E-1. CONNECT NEW ATS TO TELCO/ALARM BOARD. SEE SHEET E-1.

LOCATE EXISTING UTILITIES & GROUND RING.





GENERAL DYNAMICS

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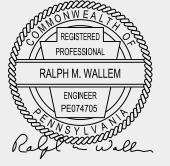
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FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

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EQUIPMENT PLAN

REVISION NUMBER

A-2

1

STRUCTURAL GENERAL NOTES

- GENERAL CONDITIONS
- DESIGN AND CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS.USE THE MOST STRINGENT PROVISIONS.
- IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH. CONSTRUCTION MANAGER, THE OWNER, AND THEIR AGENTS FROM ANY LIABILITY WHATSOEVER AND HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTION WITH THE WORK.
- DO NOT SCALE DRAWINGS.
- VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
- DESIGN LOAD: 250 PSF DISTRIBUTED LIVE LOAD
 FOR DESIGN AND ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- CONCRETE
- MEET OR EXCEED THE FOLLOWING CODES AND STANDARDS:

DESIGN:	ACI
CONSTRUCTION:	ACI 301
DETAILING:	CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL:	ASTM A1064
MIXING:	ASTM C 94. READY MIX CONCRETE
AIR ENTRAINMENT:	ACI 318 AND ASTM C-260
AGGREGATE:	ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)

- CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM.
- PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
- MAXIMUM AGGREGATE SIZE: 3/4*
- DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
- MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- FOUNDATION AND EXCAVATION NOTES
- SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF
- ALL ORGANIC AND / OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION AND SLAB SUBGRADE AND BACKFILL AREAS, AND THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
- THE CONTRACTOR SHALL PROVIDE ALL NEĆESSARY MEASURES TO PREVENT ANY WATER FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

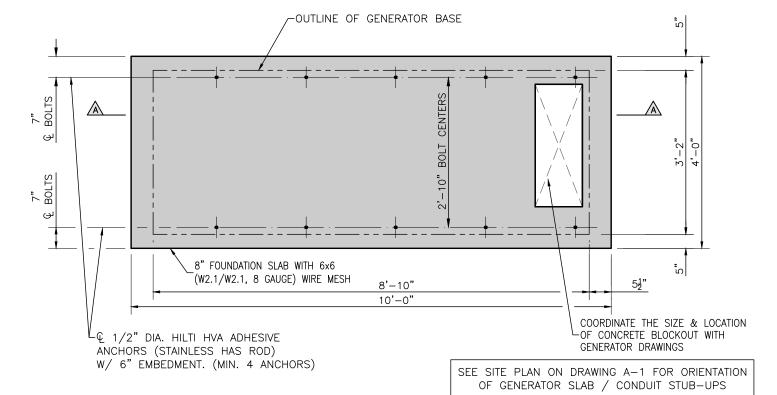
DOUBLE WALL FUEL TANK BASE SPECIFICATION

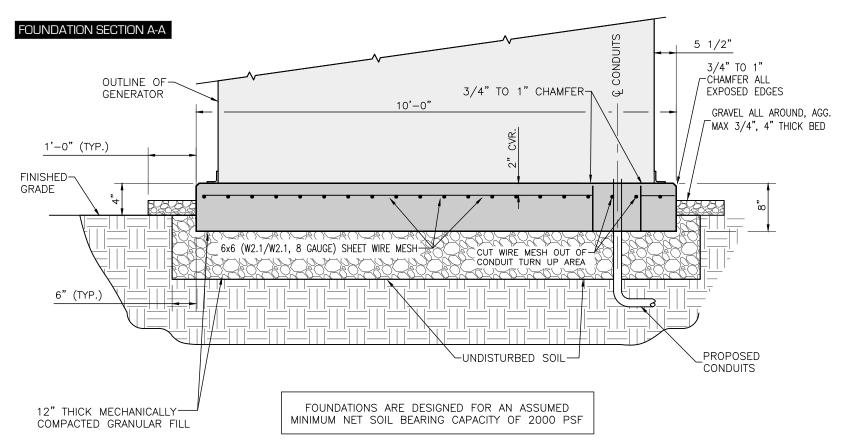
U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION

FUEL TANK BASE CONSTRUCTION:

- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION AND USE OF STATIONARY COMBUSTIBLE ENGINE AND GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING
- SUB BASE TANK TESTING: PRIMARY TANK AND SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS
- FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM
 - 40% REMAINING FOR ALARM
 - 20% REMAINING FOR SHUT-DOWN
 - FACTORY PRE-SET AT 95% FULL FOR ALARM
- FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

FOUNDATION PLAN VIEW







GENERAL DYNAMICS

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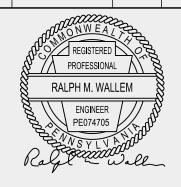
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FOUNTAIN HILL

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UNIVERSITY DR. 1200'S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

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FOUNDATION DETAILS

S-1

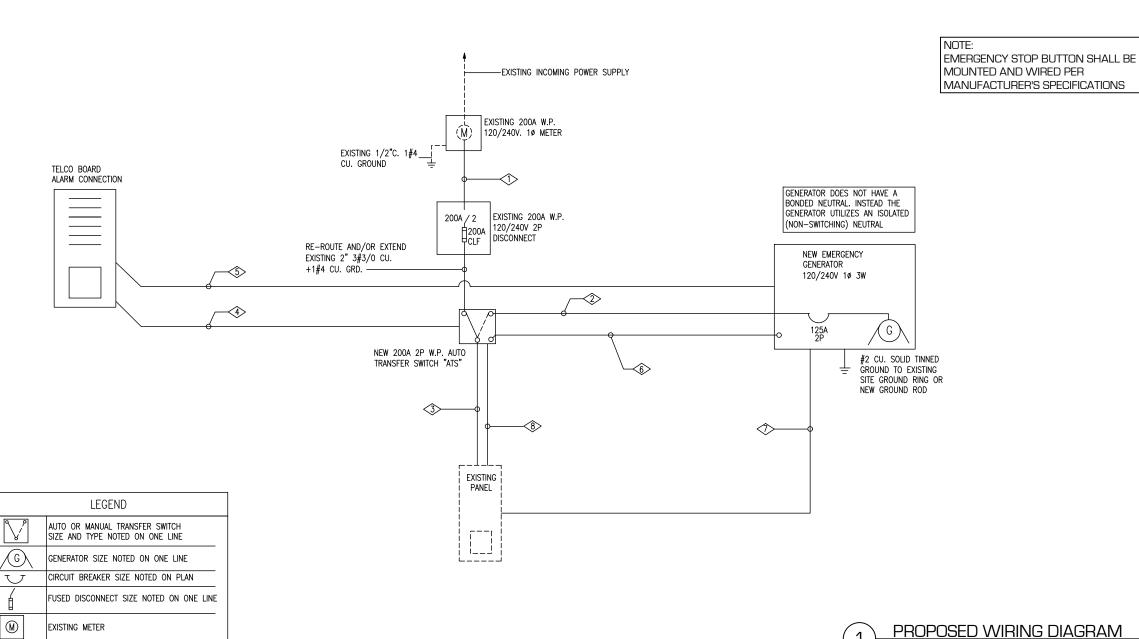
SHEET NO.:

NOTE: VERIFY LOCATION OF ALL EQUIPMENT ON SITE

GROUND SIZE ON ONE LINE

		COLOR CODE CHART	·
Pair #	Colors	AT&T Nomenclature	GenDyn cards nomenclature
1	Blue White	Generator Rupture Basin	Critical Failure
	White		
2	Orange White	Generator Overfill	Fuel Leak/Overflow
	White		
3	Green White	Generator Running	Generator Running
	White		
4	Brown White	Generator Low Fuel	Low Fuel
	White		
5	Slate White	Generator Shutdown	Major Fault
	White		
6	Red Blue	Generator Common	Minor Fault
	Red		
7	BLUE WHITE WHITE	Commercial Power Fail	Commercial Power Fail
	white	Commercial Power Fail	Commercial Power Fail

	DIAGRAM CIRCUIT SCHEDULE					
NO.	FROM	то	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	METER	ATS	(3) #3/0	(1) #4	2"	POWER FEED
2	ATS	GEN.	(3) #1/0	(1) #4	2"	POWER FEED
3	ATS	PNL	(3) #3/0	(1) #4	2"	POWER FEED
4	ATS	TELCO BOARD	12 PAIR 24 AWG	N/A	1"	ALARM CABLES
5	GEN	TELCO BOARD	12-PAIR 24 AWG	N/A	1"	ALARM CABLES
6	ATS	GEN	(2) #14	N/A	1"	START CIRCUIT
7	PANEL	GEN	(4) #12	(2) #12	1"	2–20 AMP CIRCUITS FOR (1) GEN. BLOCK HEATER AND BATTERY CHARGER
8	PANEL	ATS	(2) #12	(1) #12	1"	20 AMP CIRCUIT FOR ATS POWER



Consult.
Lana
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GENERAL DYNAMICS Wireless Services 12906 SHELBYVILLE ROAD, STE. 230 LOUSWILLE, KY 40243

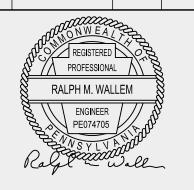
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SHEET NAME:

WIRING DETAILS

SHEET NO.:

REVISION NUMBER

-1

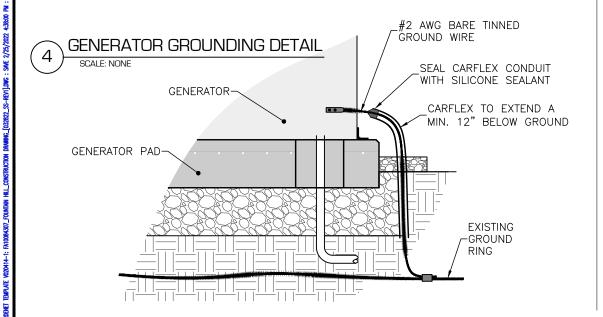
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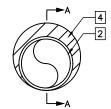


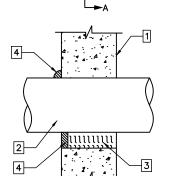
NOTE: CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR SIMILAR LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS

*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER, AND BLOCK HEATER









SECTION A - A

U.L. SYSTEM NO. C-AJ-1150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = 3 HR • T RATING = 0 HR

1. FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS (CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:

- A. STEEL PIPE-NOMINAL 6" DIAMTER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
- B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
- C. CONDUIT-NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR CAVITY MATERIAL*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CP601S OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

NOTE: IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HOUR U.L. PENETRATION APPROPRIATE FOR THE EXISTING 2WALL TYPE SHALL BE CONSTRUCTED

GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)



TYPE VS CABLE TAP DOWN AT 45° TO VERTICAL STEEL SURFACE

OR SIDE OF

HORIXONTAL OR

VERTICAL PIPE.



TYPE W THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE.



TYPE HS HORIZONTAL CABLE TAP TO HORIZONTAL STEEL SURFACE OR PIPE CABLE OFF SURFACE.



TYPE TA TEE OF HORIZONTAL RUN AND TAP CABLES.



TYPE GR CABLE TAP TO TOP OF GROUND ROD



TYPE VN HORIZONTAL CABLE TAP TO VERTICAL STEEL SURFACE OR THE SIDE OF HORIZONTAL PIPE



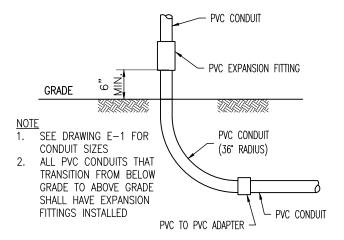
TYPE GT THROUGH CABLE TO TOP OF GROUND ROD



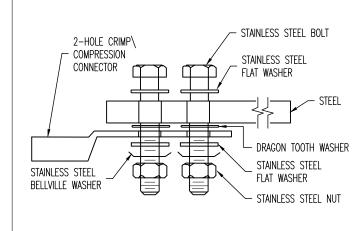


TYPE GY THROUGH CABLE TO SIDE OF









GROUND WIRE CONNECTION DETAIL SCALE: NONE



GENERAL DYNAMICS

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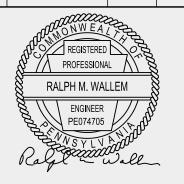
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SHEET NAME:

PANEL, GROUNDING, & PENETRATION DETAILS

D-1

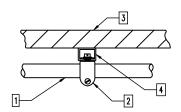
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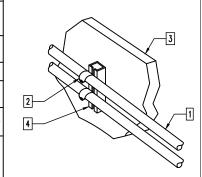


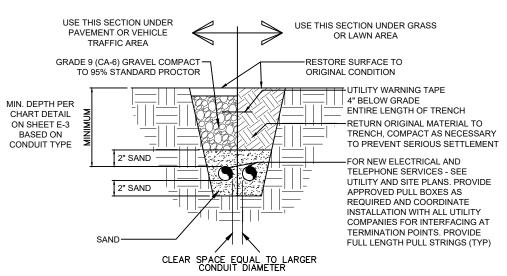
- 2 BUTTERFLY CLAMP AS REQUIRED
- 3 EXISTING WALL / CEILING
- VERTICAL "UNISTRUT" P1000 'T'
 SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

UNISTRU	UNISTRUT MOUNTING CHART			
WALL CONSTRUCTION TYPE	USE			
HOLLOW	3/8"ø TOGGLE BOLT			
HOLLOW, AT STUD	3/8"ø LAG SCREW			
CONCRETE BLOCK(HOLLOW)	3/8" Ø HILTI HY-20 WITH SCREEN, MIN. EMBEDMENT 2-1/2"			
CONCRETE (SOLID)	3/8"ø HILTI HY-150 WITH SCREEN, MIN. EMBEDMENT 2-1/2'			

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-0" O.C. LENGTH OF RUN







- INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE DEPTH VERIFICATION.
- CONDUIT SIZE, TYPE, QUANTITY AND SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.

MINIMUM COVER REQUIREMENTS, 0 TO 600 VOLTS, NOMINAL, BURIAL IN INCHES		
TYPE OF WIRING METHOD OR CIRCUIT		
LOCATION OF WIRING METHOD OR CIRCUIT	DIRECT BURIAL CABLES OR CONDUCTORS	RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT
ALL LOCATIONS NOT SPECIFIED BELOW	24 INCHES	6 INCHES
IN TRENCH BELOW 2 INCH THICK CONCRETE OR EQUIVALENT	18 INCHES	6 INCHES
UNDER STREETS OR HIGHWAYS	24 INCHES	24 INCHES
CROWN COMPOUNDS	30 INCHES	30 INCHES
COVER IS DEFINED AS MEASURED BETWEEN A DIRECT-BURIED CONDUC RECEWAY AND THE TOP CONCRETE. OR SIMILAR	CTOR, CABLE, CO SURFACE OF F	DISTANCE IN INCHES TOP SURFACE OF ANY DNDUIT, OR OTHER INISHED GRADE,

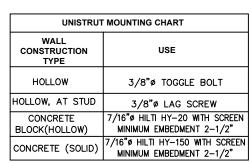
INSTALL WARNING TAPE 4" BELOW GRADE FOR THE ENTIRE LENGTH OF TRENCH.

PROVIDE AT LEAST 2 " OF SAND BED ABOVE CONDUIT AND 2" OF SAND BED BELOW THE CONDUIT.

CONDUIT WALL MOUNT

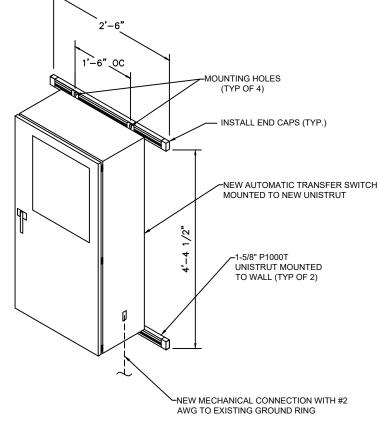


CONDUCTOR BURIAL REQUIREMENTS

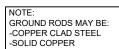


USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS

GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



INTERSECT ATS MOUNTING DETAIL

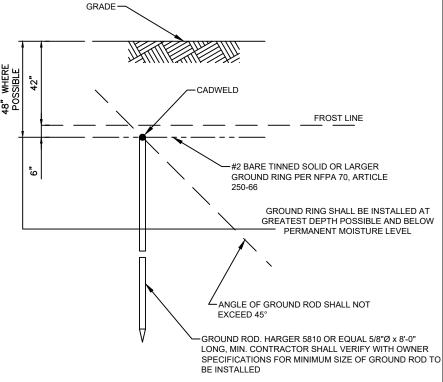


GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD

SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE

NOTE: A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL

GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER, (SEE ANSI/TIA-EIA-222-G)



GROUND ROD DETAIL



GENERAL DYNAMICS

Wireless Services

12906 SHELBYVILLE ROAD, STE. 230 LOUSIVILLE, KY 40243 502-653-6963

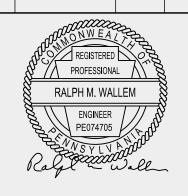


Consulting Engineers Land Surveyors

PO Box 5 318 North Main Street Huntingburg, Indiana 47542 Phone: (812) 683-3049

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDs	2/25/22	MCB
1	SS	3/28/22	DSB



FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200'S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME:

ATS, CONDUIT, TRENCH & GROUND ROD DETAILS

D-2

SHEET NO.:

INDUSTRIAL DIESEL GENERATOR SET

GENERAC | INDUSTRIAL

Prime Power Rating* 27 kW. 34 kVA. 60 Hz



*EPA Certified Prime ratings are not available in the US or its Territories

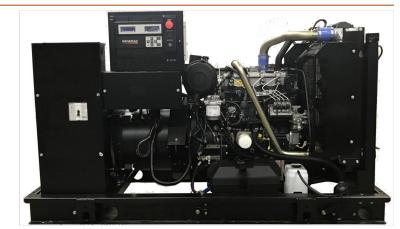


Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.





CSA C22.2



BS5514 and DIN 6271

UL2200, UL508, UL489, UL142



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

Powering Ahead

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

2.2L SD030 | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL

STANDARD FEATURES

ENGINE SYSTEM

- · Oil Drain Extension
- Air Cleaner Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- · Critical Silencer (Enclosed Unit Only) Engine Coolant Heater

Fuel System

- Fuel Lockoff Solenoid
- Primary Fuel Filter

Cooling System

- · Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene Glycol Antifreeze

Electrical System

- · Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- · Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect[™]
- Class H Insulation Material 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- · Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator
- · Protective Thermal Switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits High/Low Voltage Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping

(Enclosed Unit Only)

- · Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units) Silencer Mounted in the Discharge Hood

ENCLOSURE (If Selected)

- · Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- · Stamped Air-Intake Louvers
- . Upward Facing Discharge Hoods
- (Radiator and Exhaust) · Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ Textured Polyester Powder Coat Paint

FUEL TANKS (If Selected)

- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- · Sloped Bottom Factory Pressure Tested
- · Rupture Basin Alarm Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™- Textured Polyester Powder Coat Paint
- · Stainless Steel Hardware

CONTROL SYSTEM



Digital H Control Panel- Dual 4x20 Display

Program Functions

- · Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log) Isochronous Governor Control
- · Waterproof/Sealed Connectors

- NFPA110 Level I and II (Programmable)
- Modbus[®] Protocol
- · Predictive Maintenance Algorithm
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- on the Display

Full System Status Display

- Power Output (kW)
- Power Factor
- · kW Hours, Total, and Last Run
- · Real/Reactive/Apparent Power
- All Phase Currents

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- · Coolant Level Engine Overspeed
- Battery Voltage

Alarms and Warnings

- · Alarms and Warnings Time and Date Stamped Snap Shots of Key Operation Parameters During
- Alarms and Warnings Spelled Out (No Alarm Codes)

Consulting Engineers Land Surveyors

BENCHMARK

SERVICES, INC.

GENERAL DYNAMICS

12906 SHELBYVILLE ROAD, STE. 230

LOUSIVILLE. KY 40243

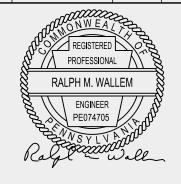
502-653-6963

Wireless Services

PO Box 5 318 North Main Street Huntingburg, Indiana 47542 Phone: (812) 683-3049

DRAWING REVISIONS

REV. DESCRIPTION		DATE	BY
0	100% CDs	2/25/22	MCB
1	SS	3/28/22	DSB
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FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME:

SHEET NO.:

GENERATOR DETAILS

NUMBER

REVISION

G-1

 Audible Alarms and Shutdowns Not in Auto (Flashing Light)

 Auto/Off/Manual Switch • E-Stop (Red Mushroom-Type)

• Customizable Alarms, Warnings, and Events

Sealed Boards

Alarm Information Automatically Annunciated

- All Phase AC Voltage



INDUSTRIAL DIESEL GENERATOR SET **EPA Certified Stationary Emergency**

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Oil Heater
- Critical Silencer (Open Set Only)
- O Radiator Stone Guard
- Level 1 Fan and Belt Guards (Open Set Only)

FUEL SYSTEM

O NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- O 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- O Anti-Condensation Heater
- Tropical Coating
- O Permanent Magnet Excitation

GENERATOR SET

- Extended Factory Testing
- O 8 Position Load Center
- Pad Vibration Isolation

ENGINEERED OPTIONS

CIRCUIT BREAKER OPTIONS

- O Main Line Circuit Breaker
- O 2nd Main Line Circuit Breaker O Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE

- O Weather Protected Enclosure
- O Level 1 Sound Attenuation
- O Level 2 Sound Attenuation O Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- O Aluminum Enclosure
- O Up to 200 MPH Wind Load Rating (Contact Factory
- O Door Alarm Switch

WARRANTY (Standby Gensets Only)

- O 5 Year Limited Warranty
- 5 Year Extended Limited Warranty O 7 Year Extended Limited Warranty

- for Availability)
- O AC/DC Enclosure Lighting Kit
- Enclosure Heater
- O Damper Alarm Contacts

- O 2 Year Extended Limited Warranty

- O NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- O Oil Temperature Indication and Alarm
- O Remote E-Stop (Break Glass-Type, Surface Mount)
- O Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount) 100 dB Alarm Horn

CONTROL SYSTEM

- Ground Fault Annunciation
- 120V GFCI and 240V Outlets Remote Communication - Modem
- O 10A Engine Run Relay

FUEL TANKS (Size On Last Page)

- O 8 in (203.2 mm) Fill Extension
- O 13 in (330.2 mm) Fill Extension
- O 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve
- O 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box
- Tank Risers
- Fuel Level Switch and Alarm
- 12' Vent System
- O Fire Rated Stainless Steel Fuel Hose

O 10 Year Extended Limited Warranty

ENGINE SYSTEM

- O Coolant Heater Isolation Ball Valves
- O Fluid Containment Pan

CONTROL SYSTEM

- O Spare Inputs (x4) / Outputs (x4)
- O Battery Disconnect Switch

ALTERNATOR SYSTEM

- O 3rd Breaker System
- **GENERATOR SET** Special Testing

FUEL TANKS

- O UL2085 Tank
- Stainless Steel Tanks
- Special Fuel Tanks Vent Extensions

SD030 | 2.2L | 30 kW

APPLICATION AND ENGINEERING DATA

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC INDUSTRIAL

ENGINE SPECIFICATIONS

_	'n	_	m	

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Туре	In-Line
Displacement - in ³ (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronou
Frequency Regulation (Steady State)	+0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - gt (L)	11.2 (10.6)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed - RPM	1,980
Fan Diameter - in (mm)	18 (457)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel #2
Fuel Specifications	ASTM
Fuel Filtering (Microns)	5
Fuel Inject Pump	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line - in (mm)	0.31 (7.9) ID
Fuel Return Line - in (mm)	0.2 (4.8) ID

Engine Electrical System

System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0035124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	Н
Insulation Class - Stator	Н
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50

andard Excitation	Brushless
earings	Single Sealed
oupling	Direct via Flexible Disc
oad Capacity - Standby	100%
rototype Short Circuit Test	Yes
oltage Regulator Type	Digital
umber of Sensed Phases	All
egulation Accuracy (Steady State)	±0.25%

GENERAL DYNAMICS

Wireless Services

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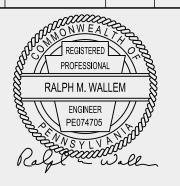


BENCHMARK SERVICES, INC.

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DRAWING REVISIONS

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0	100% CDs	2/25/22	MCB
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FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

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SHEET NAME:

GENERATOR DETAILS

SHEET NO.:

G-2



EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

		Standby
Single-Phase 120/240 VAC @1.0pf	30 kW	Amps: 125
Three-Phase 120/208 VAC @0.8pf	30 kW	Amps: 104
Three-Phase 120/240 VAC @0.8pf	30 kW	Amps: 90
Three-Phase 277/480 VAC @0.8pf	30 kW	Amps: 45
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

277/480 VAC	30%	208/240 VAC	30%
K0035124Y21	61	K0035124Y21	46
K0040124Y21	76	K0040124Y21	58
K0050124Y21	98	K0050124Y21	75

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m)	
3 (1)	
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	

16.6 (63)

Diesel - gph (Lph)

Percent Load	Standby
25%	1.0 (3.7)
50%	1.4 (5.2)
75%	2.0 (7.5)
100%	2.8 (10.5)

^{*} Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	14.9 (56.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	128,638 (136)
Inlet Air	scfm (m³/hr)	2,800 (4,757)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199280SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby	
Flow at Rated Power scfm (m³/min)	88 (2.5)	
EXHAUST		

ENGINE

		Standby
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1,181 (360)
BMFP	nsi (kPa)	159 (1 096)

		Standby
Exhaust Flow (Rated Output)	scfm (m³/min)	296.6 (8.4)
Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	892 (478)

^{**} Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB

Prime - See Bulletin 0187510SSB

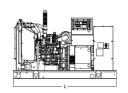
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC INDUSTRIAL

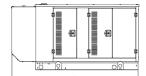
DIMENSIONS AND WEIGHTS*





OPEN SET (Includes Exhaust Flex)

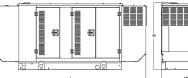
Ru Tim - Ho	ne Capacity	L x W x H - in (mm)	Weight - Ibs (kg)
No T	ank -	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,641 (745)
19	9 54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	2,121 (963)
47	7 132 (501)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,351 (1,067)
75	5 211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,560 (1,162)
10	7 300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)	2,623 (1,190)





WEATHER PROTECTED ENCLOSURE

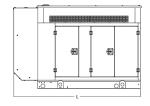
Run Time	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	070	0.44
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	372 (170)	241 (110)
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	(170)	(110)
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		

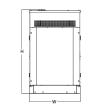




LEVEL 1 ACOUSTIC ENCLOSURE

	110000110	LITOLOGOTTL		
Run Time	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) sure Only
- 110015	- Gal (L)		Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)		
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)		000
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	505 (230)	338 (154)
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	(200)	(154)
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		





LEVEL 2 ACOUSTIC ENCLOSURE

Run Time	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) sure Only
- Hours	- Gal (L)		Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)		
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	510 (232)	341 (155)
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)		
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)		

^{*} All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53189

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Part No. 10000024842 Rev. B 08/27/18

GENERAL DYNAMICS

Wireless Services

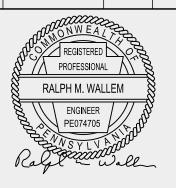
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DRAWING REVISIONS

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FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

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SHEET NAME:

GENERATOR DETAILS

G-3

SHEET NO.:

Model G0063113-120/240V, Two Pole, Single Phase with Camlock Component

Model G0063123-120/208V, Three Pole, Three Phase

Model G0063133-120/208V, Three Pole, Three Phase with Camlock Component



Image used for illustration purposes only

FEATURES

CODES AND STANDARDS



ETL Listed



NEC700, 701, 702



NEMA 250

STANDARD FEATURES

- Flexibility for Multiple Application Installations
- Multiple Generator Support with Three Source Panel
- LCD Display with Mimic Diagram
- · Camlock Functionality for Mobile Generator Sources Steel Construction
- NEMA 3R Enclosure with Hinged "Padlocking" Doors
- · Stainless Steel Hardware
- · Camlock "Quick Connect" Capability
- Optional Status View via Controller
- Three-position Test Mode: Fast Test, Auto and Normal Test
- USB Port for Easy Updates and Data Collection
- Programmable Relay Option

CONFIGURABLE OPTIONS

- Extended Warranty
- Three Phase Voltage Configurations

CONTROLLER INTERFACE

Display

• 2.9 Inch Graphical LCD

Indicators

- Standby Operating Indicator
- Utility Available Indicator
- Generator/Utility Switch Position Indicator
- Auto/Manual Status
- Normal Test and Fast Test Functions
- Return to Normal Button on HMI
- Reset Button on HMI
- · Exercising Indicator Alarm

Exercise Settings

- Time of Day
- Day of Week · Exercise Options
 - With or without Load
 - Daily, Weekly, Bi-monthly or Monthly - Duration: 0 - 10 Hours

- Digital I/O Bits Status (via Modbus Only)
- Voltage A/D Readings

Mimic Diagram

- Transfer Switch Position
- Utility Available
- Standby Available
- · Generator Source TS Position

USB Port

- Easy Firmware Updates
- Download Historical Data

Automatic Transfer Switch

200 Amps

Telecom Transfer Switch - TAS200



SYSTEM SETTINGS

	120/240 VAC Single Phase (Standard)
System Voltage/Phases	120/208 VAC Three Phase (Optional)
	120/240 VAC Three Phase (Optional)
Utility Fail Monitor	
Drop Out	Over Voltage 105 - 120%
Diop Out	Under Voltage 50 - 97%
Distance	Over Voltage Drop Out Setting -2%
Pickup	Under Voltage Drop Out Setting +2%
Under Frequency	54 - 58 Hz
Over Frequency	61 - 66 Hz
Utility Interrupt Delay	0 - 120 Seconds
Return to Utility Timer	0 - 30 Minutes
Transfer	Inphase or Time Delay Neutral:
	0.0 - 120.0 Seconds in 1 Second Increments
Generator Load Accept	
Voltage	85 - 95% of Nominal
Frequency	51 - 57 Hz

ENGINE SETTINGS

Engine Warm-up Time	0 - 30 Minutes
Engine Minimum Run Timer	5 - 30 Minutes
Engine Cooldown Timer	0 - 30 Minutes

ELECTRICAL SPECIFICATIONS

	120/240 Single Phase, 200A	
Voltage/Phase/Amps	120/208 Three Phase, 200A	
	120/240 Three Phase, 200A	
Utility Breaker	Eaton 200A	
Generator Breaker	Eaton 200A	
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated	
Protective Device Continuous Rating (Max) Amp	200	
Input to Generator	350 MCM - #6 AWG	
Output to Site	350 MCM - #6 AWG	
Generator Annunciator Connector	Deutsch DTM04-12PA-L012	
	Generator Run Alarm	
	Generator Fail - Shutdown Alarm	
Alarm Terminal Board	Generator Fail - Non-shutdown Alarm	
Alaini Terriiriai boaru	Low Fuel Alarm	
	Generator Theft Alarm	
	AC Utility Fail Alarm	

CABINET SPECIFICATIONS

Dimensions (W x D x H)	24 in (609.6 mm) x 12 in (304.8 mm) x 48 in (1,219.2 mm)
Weight	210 lbs (95 kg)
Construction	Single Chamber with Main Door, with 3-Point Latching System with Padlockable Handles
Material	Steel
Rating	ETL Type/NEMA 3R
Finish	Powder Coat for Corrosion Resistance
Listing	ETL-US - Automatic Transfer Switch
Hardware	Stainless Steel
Mounting Options	Wall or H-Frame
Installed	Pre-wired Alarm Terminal Strip

GENERAC | INDUSTRIAL

CAMLOCK COMPONENT

Shipped Loose for Multiple Installation Options				
Dimensions (W x D x H) 9 in (228.6 mm) x 9.4 in (238.8 mm) x 24 in (609.6 mm)				
Rating	200A			
Generator Connections				
Single Phase	Black L1, Red L2, White-Neutral, Green-Ground			
Three Phase	Black L1, Red L2, Blue L3, White-Neutral, Green-Ground			
Uses 4 CH E1016 Male Connectors				
Mating Connector - CH E1016 Female				



* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

Generac Power Systems, Inc. | P.O. Box 8 | Waukesha, WI 53189 P: (262) 544-4811 ©2020 Generac Power Systems, Inc. All rights reserved. All specifications are subject to change without notice. Part No. A0000384980 Rev. A 04/17/2020



GENERAL DYNAMICS

Wireless Services

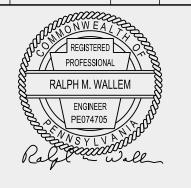
12906 SHELBYVILLE ROAD, STE. 230 LOUSIVILLE, KY 40243 502-653-6963



Land Surveyors PO Box 5 318 North Main Street Huntingburg, Indiana 47542 Phone: (812) 683-3049

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDs	2/25/22	MCB
1	SS	3/28/22	DSB



FOUNTAIN HILL

FA#: 10084307 USID: 2164

UNIVERSITY DR. 1200' S. OF MOUNTAIN DR. BETHLEHEM, PA 18015

GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME:

GENERAC ATS DETAILS

G-4

SHEET NO.: