PERMIT NUMBER: B 2004515

DATE ACCEPTED:

DEC 1 8 2020

سردونور تخطي	COMMER	CIAL BUILI	DING PERMIT	APPLICATION	LICENSES & PERMIT
LT	HOWARD COUNTY	DEPARTMENT OF I	NSPECTIONS, LICENSES,	, AND PERMITS	DIVISION
	3430 COURT HOUSE DRIVE, EI			410) 313-2455 OPTION #4	
			lcountymd.gov		
BUILDING	SITE ADDRESS REQUIRED				
Street Address:	41910 Carroll Mill Road 1201	5 Transc	o Rd.	Unit:	
City: Ellicott	City		State: MD	Zip Code: 21042	
Subdivision/Villa	age/Complex Name: 0000			SDP/WP/BA #:	
Lot:	Tax Map: 0023	Parcel: 0090	Grading Pe	rmit #:	
DESCRIPTION	ON OF WORK REQUIRED				
Existing Use: Te	elecommunications	Proposed Use: Te	lecommunications	Estimated Cost: \$	\$13,000
Trade Work to B	Be Completed (Separate Permits Required)	:   Mechanical (H	VACR)   Electrical	☐ Plumbing ☐ None	·
AT&T to add	an emergency self-contained 30	kw diesel gener	ator and 4'x10' conci	rete pad within the existin	g AT&T area
	_				
		IRED			
	(s) (As it appears on tax records): Trans	continental Gas	Pipe Line		
	Address: PO Box 2400				
City: Tulsa		1	State: OK	Zip Code: 74102	·
Phone: (918) 3		Email:			
	FORMATION REQUIRED				
	Crown Castle		Contact Name:		
	2000 Corporate Drive, 11th Floor				. '
City: Canonst			State: PA	Zip Code: 21042	
Phone: (804) 5			wncastle.com		
APPLICANT		AL WHO SIGNS T			
	General Dynamics / AT&T		Contact Name: Catheri	ne Conklin	
	4603 Kemper Street		·		·
City: Rockville		1 - " "	State: MD	Zip Code: 20853	
Phone: (301) 2	STATE OF STREET STATE OF STREET	Email: cath	erine.conklin@gdit.c	om	
	OR INFORMATION REQUIRED				
The second second of the second	Atlantic Power & Light	China State State	Lary was the control of the control		Control of the Contro
Licensee's Name			License #:	PANCELLINES AND RESPONSE	Acceptable, officed \$
	9717 Pulaski Highway		Chatas BAD	7in Code: 24220	
City: Baltimor	The same of the sa	F-reil-1	State: MD	Zip Code: 21220	
Phone: (443) 2	The second secon		dicord@atlanticpan		
Business Name:		REQUIRED - INDI	Name: Michael L. Pir		
	855 Community Drive		Name. Michael L. Pil	iske	
City: Sauk Cit			State: WI	Zip Code: 53583	,
Phone: (608) 6		Email: rama		- Esp Code: 30000	
			ALL THAT APPLY)		
Utilities: ■ Ele	de con 120. Charle al as it governor with the		The Annual Street Street Street Street Street Street Street	posal: Public Private (S	eptic)
	□ Electric □ Natural Gas □ Propane		The state of the s	ree Project:   No  Yes:#	
Sprinkler System			C 1992 2019 21 1	Yes □ No □ Voice Evac	The state of the s
	L COMMERCIAL INFORMATION		CT/COMPLETE'ALL TH		
Area of Construc		Gross Area:			of Stories:
Construction Cla			Use Group: IIB		
Was the tenant :	space previously occupied? ☐ Yes ☐	No	Shell Building Permit # (	for interior completions);	•
ADDITIONA	L MULTI-FAMILY INFORMATIO	N IF APPLICA	BLE		
# of efficiency u	nits (MF): # of 1 BR (MI		# of 2 BR (MF):	# of 3 BR (MF):	
Energy Method:	☐ Performance ☐ UA Alternative ☐ E	RI 🗆 A 90.1	Gross Area:	sq ft Occupiable Area:	sq ft
THE UNDERSIGNED H	/ DISCALIMER REQUIRED HERBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HONS OF HOWARD COUNTY WHICH ARE APPLICABLE TO ON; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE	HERETO; (4) THAT HE/SHE	WILL PERFORM NO WORK ON THE	E ABOVE REFERENCED PROPERTY NOT SPEC	IFICALLY DESCRIBED IN
- Cal	CINAL SIGNATURE	lea	DATE SIGNED		•
APPLICANT'S ORIG	SINAL SIGNATURE		DATE SIGNED		
FOR OFFICE		СН	ECKS PAYABLE TO: DIRECT	OR OF FINANCE OF HOWARD CO	UNTY
AGENCIES REQU	JIRED/APPROVALS:		6111		
PR	DPZ	DED	Li Health	SHA □ SHA	□ arb
SUBMITTAL FEE		MAE	ACCEPTED		
		MALE ALL			

## Real Property Data Search (w1)

## Search Result for HOWARD COUNTY

View Map View	v GroundRent	Redemptio	n		View GroundRe	ent Registr	ation
Special Tax Recapture: None	THE RESERVE THE PROPERTY OF TH		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	**************************************	The Residence of the Section of the	A THE RESERVE OF THE PROPERTY	
Account Identifier:	District - 03	Account Nu	mber - 2975	78			
		Owne	er Information				
Owner Name:	TRANSCON MD 46-4	TINENTAL G	SAS PIPE LIN		ipal Residence:	INDUSTR NO	IAL
Mailing Address:	PO BOX 240 TULSA OK 7			Deed	Reference:	/00220/ 00	0379
		Location & S	Structure Infor	mation			
Premises Address:	12015 TRAN ELLICOTT C		247	Lega	Description:	4.763 ACI 12015 TR GLENELO	ANSCO ROAD
Map: Grid: Parcel: Neight 0023 0013 0031 10000		Subdivision 0000	Section:	Block:	Lot: Assessn 2019	nent Year:	Plat No: Plat Ref:
Town: None	makemak Yili min "s						CONTRACTOR OF THE CONTRACTOR O
Primary Structure Built Ab	ove Grade Liv	ing Area	Finished Bas	sement A	rea Property L 4.7600 AC		County Use
Stories Basement Type	Exterior Q	uality Full	/Half Bath	Garage	Last Notice of	Major Impr	ovements
	,	Valu	e Information				
	Base Valu	ne	Value		Phase-in Asses	sments	
			As of 01/01/2019		As of 07/01/2020	As of 07/01.	/2021
Land:	0		0				
Improvements	0		0				
Total:	0		0		0	0	
Preferential Land:	0	·	0	<u>.</u>			
		Trans	fer Informatio	n			
Seller:		Date:			Price:		
Type:		Deed1:			Deed2:		
Seller:		Date:			Price:		
Type:		Deed1:			Deed2:		
Seller:	THE PARTY OF THE P	Date:			Price:		
Type:		Deed1:			Deed2:		
		Exemp	tion Informati	on			
Partial Exempt Assessments:	Class			07/01	/2020	07/01/202	21
County:	000			0.00			
State:	000			0.00			
Municipal:	000	na watering of the same	AND THE STREET AND TH	0.00	0.00	0.00 0.00	. · AMMERICAN SELECTION SE
Special Tax Recapture: None							
			pplication Inf	ormation			
Homestead Application Status							-1-5
			redit Applica				
Homeowners' Tax Credit Appl	lication Status	: No Applica	ition	Date			

<sup>1.</sup> This screen allows you to search the Real Property database and display property records.





# GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR **200A GENERAC ATS**

11910 CARROLL MILL ROAD **ELLIOTT CITY, MD 21042** 

# VICINITY MAP SITE LOCATION

SITE NAME: MOUNT ALBERT

**FA LOCATION CODE: 10072222** 

**CROWN BUN: 806015** 

# SCOPE OF WORK

ADD STANDBY GENERATOR, ASSOCIATED CONCRETE PAD, AND UTILITY EQUIPMENT TO EXISTING AT \$T EQUIPMENT AREA. THERE WILL BE NO CHANGE IN THE SIZE OR HEIGHT OF THE TOWER OR ANTENNAS.



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN MARYLAND

MISS UTILITY OF MARYLAND WEST OF CHESAPEAKE BAY 811 OR 1-800-257-7777 MISS UTILITY OF DELMARVA EAST OF CHESAPEAKE BAY 811 OR 1-800-282-8555

REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

# PROJECT INFORMATION

PROJECT MANAGER:

JOE JARVIS MARKET LEAD GENERAL DYNAMICS WIRELESS SERVICES 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406 joseph.jarvis@adit.com

ENGINEER:

RAMAKER & ASSOCIATES, INC. 855 COMMUNITY DRIVE SAUK CITY, WI 53583 PH.: (608) 643-4100 FAX: (608) 643-7999 CONTACT: TYLER BEATTY tbeatty@ramaker.com

APPLICANT INFORMATION: AT&T MOBILITY 7150 STANDARD DR HANOVER, MD 21076

SITE NAME: MOUNT ALBERT FA NUMBER: 10072222

CROWN CASTLE 2000 CORPORATE DR, 11TH FLR CANONSBURG, PA 15317

11910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

COUNTY: HOWARD

39.267176° -76.931937

GROUND ELEVATION: 443 FT AMSL

DO NOT SCALE DRAWINGS: 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.

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED

APPLICABLE BUILDING CODE & STANDARDS

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING LOCAL AUTHORITIES. NOTHING N THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2018
- 2. NATIONAL ELECTRIC CODE 2017
- 3. AMERICAN CONCRETE INSTITUTE (ACI) 3 | 8, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
- . TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL OWER AND ANTENNA SUPPORTING STRUCTURES
- S. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR FI FCOMMUNICATIONS

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#### GENERAL:

T- I TITLE SHEET

NOTES:

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SITE:

- A-I SITE PLAN
- A-2 SITE PLAN & EQUIPMENT LAYOUT
- S-I FOUNDATION DETAILS
- 5-2 H-FRAME DETAILS

#### ELECTRICAL # GROUNDING:

- E-I WIRING DETAILS
- E-2 PANEL AND PENETRATION DETAILS
- E-3 ATS, CONDUIT & GROUND ROD DETAILS E-4 GENERAC GENERATOR SPECIFICATIONS
- E-4. I GENERAC GENERATOR SPECIFICATIONS
- E-4.2 GENERAC GENERATOR SPECIFICATIONS
- E-5 GENERAC ATS SPECIFICATIONS E-5. I GENERAC ATS SPECIFICATIONS

# SIGNATURE BLOCK

DATE

DATE

AT¢T MGR.

GENERAL DYNAMICS CONSTRUCTION MGR

SITE ACQUISITION

DATE

RAMAKER

(608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

# GENERAL DYNAMICS

Information Technology, Inc.

661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland.

License No: 37842, Expiration Date: 9/8/2021



01/08/21 REVISED PER CLIENT COMMENTS ARK DATE DESCRIPTION

SUE FINAL

DATE | 2/04/2020

MOUNT ALBERT FA ID # 10072222

1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

TITLE SHEET

SCALE: NONE

48284

PROJECT NUMBER

MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.

- 2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES. FORM WORK, FTC. 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
- 3. THE SUBCONTRACTOR 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 SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR 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 SUBCONTRACTOR 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.
- 5. SITE GROUNDING SHALL COMPLY WITH AT\$T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS. LATEST EDITION. AND COMPLY WITH AT\$T TOWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE **ERECTION OF TOWER**
- 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 TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.
- 7. 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 SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
- 9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR
- I O. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- 1. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT 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 SUBCONTRACTOR'S EXPENSE.
- I 2. 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
- I 3. ALL SUITABLE BORROW 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 LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- 14. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- I G. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT
- I 7. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.
- THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER
- 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 HABITAT. (NO HANDICAP

- ACCESS IS REQUIRED)
- 4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2
- 6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH
- 7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
- 9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

#### ELECTRICAL NOTES: A. GENERAL

- 1. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.
- 3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED
- 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 AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, I 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
- COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'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
- 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'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
  - ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE) ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)
  - ETL (ELECTRICAL TESTING LABORATORY)
  - ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
  - MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
  - NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
  - NFPA (NATIONAL FIRE PROTECTION ASSOCIATION) UL (UNDERWRITER'S LABORATORY)
- IO. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE 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 AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.
- II. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'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.
- 12. 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 (380 DEGREES TOTAL) EXIST IN A CONDUIT RUN.
- 2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHNTHWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

- 3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP
- 4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352 46 300 4 F (3)
- 5. 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.
- 6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 9. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- 11. 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.
- 12. MAINTAIN MINIMUM 1'-O" VERTICAL AND 1'-O" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 13. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

#### 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

- I. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND
- 2. 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 CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
- 4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.
- 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 PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL
- PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (1999) 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
- PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

#### E. INSPECTION/DOCUMENTATION

- 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.
- 2. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS)
- 3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY AT\$T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL
- 4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT ULLISTING FOR THAT EQUIPMENT IS NOT VOIDED



PREPARED FOR:



CONSULTANT:

# GENERAL DYNAMICS

Information Technology, Inc.

**GENERAL DYNAMICS** 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland.

License No: <u>37842</u>, Expiration Date: <u>9/8/2021</u>



01/08/21 REVISED PER CLIENT COMMENTS ARK DATE DESCRIPTION

> MOUNT ALBERT FA ID # 10072222

DATE ISSUED | 2/04/2020

PROJECT INFORMATION 1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

GENERAL NOTES

SCALE: NONE

48284 PROJECT N-1

TIMES PER MONTH BY AT&T TECHNICIANS.

5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.

THE PROJECT SPECIFICATIONS.

10. INSTALL PULL STRING IN ALL CONDUIT.

SCALE: I" = 12.5'





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**GENERAL DYNAMICS** 

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Certification 4 Seal:

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland.

License No: 37842, Expiration Date: 9/8/2021



I 01/08/21 REVISED PER CLIENT COMMENTS MARK DATE DESCRIPTION DATE | 2/04/2020

MOUNT ALBERT FA ID # 10072222

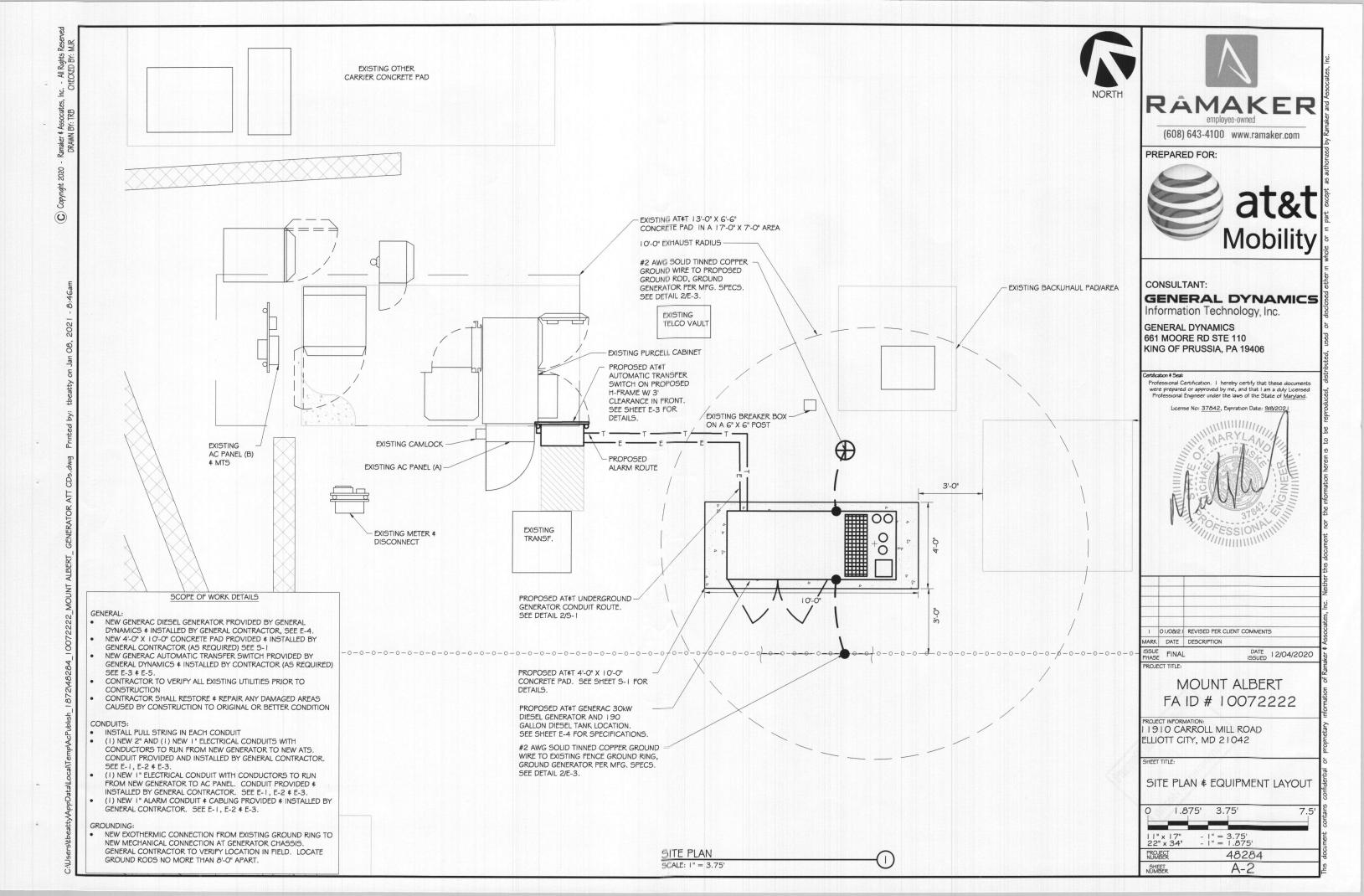
PROJECT INFORMATION: 1 1 9 1 0 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

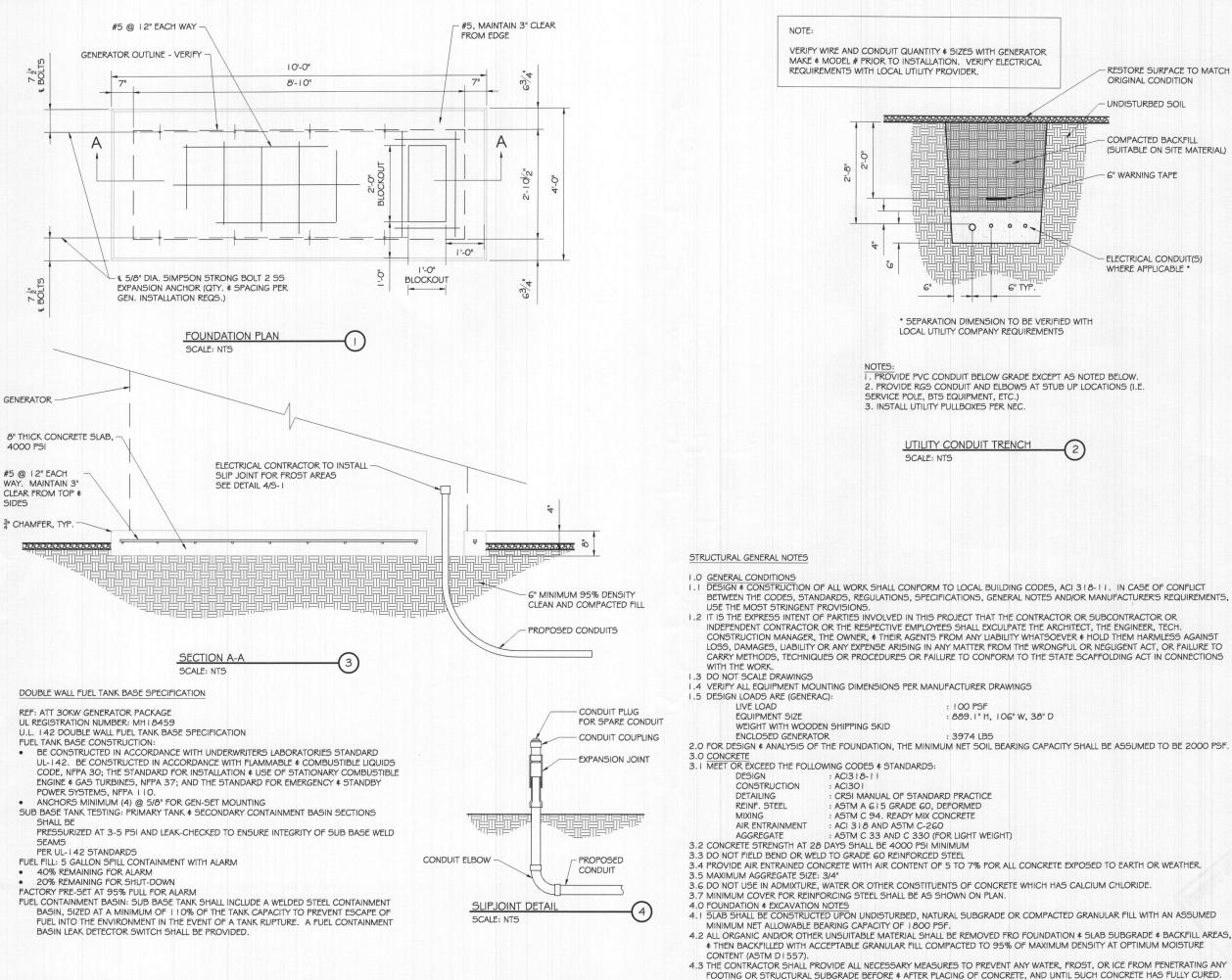
SITE PLAN

12.5 6.25 25 11" x 17" 22" x 34" - I" = 12.5' - I" = 6.25' PROJECT NUMBER 48284 SHEET A-1

EXISTING AT&T 13'-0" X 6'-6" CONCRETE PAD IN A 17'-O" X 7'-O" AREA PROPOSED AT\$T 4'-0" X 10'-0" CONCRETE PAD. SEE SHEET S-I FOR DETAILS. PROPOSED AT&T GENERAC 30kW DIESEL GENERATOR AND 190 GALLON DIESEL TANK LOCATION. SEE SHEET E-4 FOR SPECIFICATIONS. EXISTING BACKUHAUL PAD/AREA Approved for generator
Approved for generator
Site inspection completed

2/H/21-No Well & Septical
Observed onsite - EXISTING CONCRETE PAD (EMPTY) EXISTING OTHER CARRIER PLATFORM EXISTING GUYED TOWER EXISTING TELEPHONE -POST - EXISTING ICE BRIDGE (TYP) 60'-0" EXISTING OTHER CARRIER SHELTER SITE PLAN





(0)

RAMAKER

employee-owned

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PREPARED FOR:



CONSULTANT:

## **GENERAL DYNAMICS**

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GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

Certification # Se

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DE LES AV			
	01/08/21	REVISED PER CLIENT COMMENT	·e
1	01/00/21	REVISED FER CLIENT COMMENT	5
MARK	DATE	DESCRIPTION	
ISSUE	FΙΝΙΔΙ	DATE	12/04/202

PROJECT TITLE:

MOUNT ALBERT FA ID # 10072222

I 1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

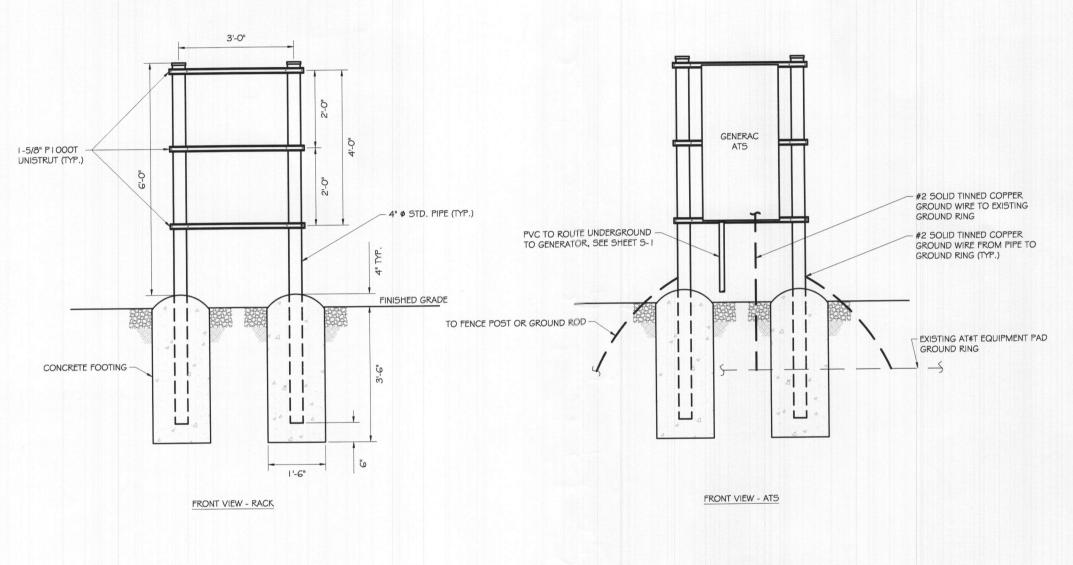
SHEET TITLE:

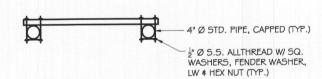
FOUNDATION DETAILS

SCALE: NONE

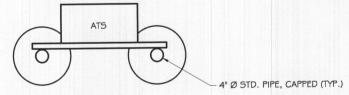
#### SCOPE OF WORK DETAILS

 PROVIDE NEW H-FRAME IF REQUIRED, MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME. USE ALL MAIEKIAL FUK CONSIGUCTION OF NEW HI-FRAME. USE ALL
GALVANIZED COMPONENTS, WHITE PLASTIC END CAPS ON
UNISTRUTS, WEATHER CAPS ON TOPS OF PIPE AND CONCRETE
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 OFF THE FORM.





TOP VIEW - RACK



TOP VIEW - ATS



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CONSULTANT:

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1	01/08/21	REVISED PER CLIENT COMMENTS
MARK	DATE	DESCRIPTION

DATE | 2/04/2020

MOUNT ALBERT FA ID # 10072222

PROJECT INFORMATION:
1 1 9 1 0 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

SHEET TITLE:

H-FRAME DETAILS

SCALE: NONE

48284 PROJECT NUMBER

5-2 SHEET

DIAGRAM	CIRCUIT	SCHEDULE	

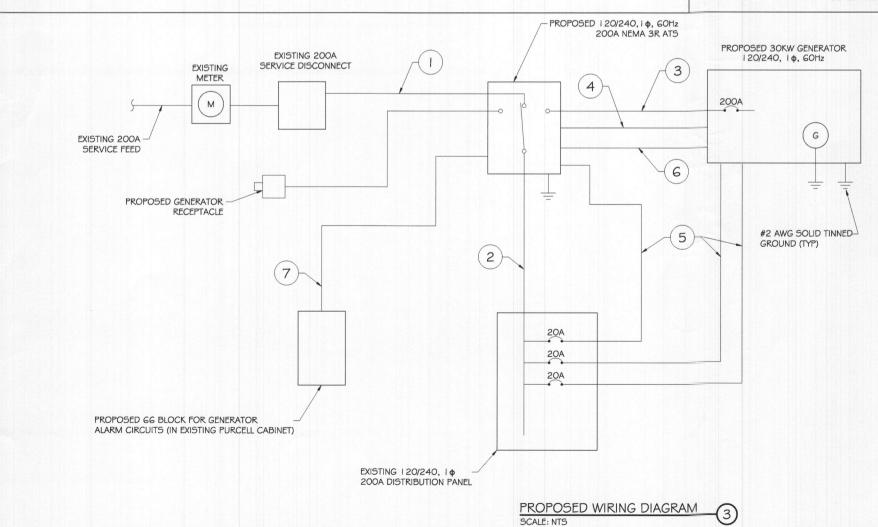
			DIAGRAINI CIRC	JUIT SCHLDUL		
NO.	FROM	то	WIRES	GROUND	CONDUIT SIZE	FUNCTION
	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(!) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(I) #I2 (I) #I2 (I) #I2	[ "	CIRCUIT FOR GENERATOR BLOCK HEATER \$ BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	12-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	I.a	ALARM CABLES (1) 12 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
7	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	l n	ALARM CABLES (1) I 2 PAIR 24 AWG (RUN TO PURCELL CABINET & INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

#### ALARM WIRE IDENTIFICATION CHART

WIRE	ALARM
BROWN BROWN / WHITE	GENERATOR RUNNING
GREEN GREEN / WHITE	CRITICAL FAULT
BLUE BLUE / WHITE	MINOR FAULT
ORANGE ORANGE / WHITE	LOW FUEL
BROWN * BROWN / WHITE *	FUEL LEAK

CIRCUIT DETAIL SCALE: NTS

ALARM WIRING IDENTIFICATION CHART 2





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I 01/08/21 REVISED PER CLIENT COMMENTS MARK DATE DESCRIPTION DATE | 2/04/2020

ISSUE FINAL PROJECT TITLE:

# MOUNT ALBERT FA ID # 10072222

PROJECT INFORMATION:
1 1 9 1 0 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

SHEET TITLE:

WIRING DETAILS

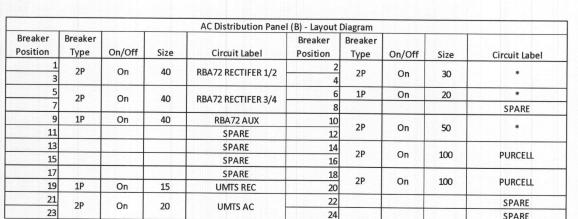
SCALE: NONE

48284 PROJECT NUMBER SHEET E-I

				<b>AC Distribution Panel</b>	(A) - Layout	Diagram			
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	1P	On	20	CB1 FRONT RECEPT	2	20	0-	20	RECTIFIER FEED 7
3	2P	On	20	AIR COND RECEPT	4	2P	On	30	SHELF 2
5	25	Oll	20	AIR COND RECEPT	6	2P	On	30	RECTIFIER FEED 8
7	2P	On	30	RECTIFIER FEED 1	8	2P	On	30	SHELF 2
9	21	Oll	30	SHELF 1	10	2P	On	30	RECTIFIER FEED 9
11	2P	On	30	RECTIFIER FEED 2	12	2P	On	30	SHELF 3
13	21	OII	30	SHELF 1	14	2P	00	30	RECTIFIER FEED 10
15	2P	On	30	RECTIFIER FEED 3 16 CUE	SHELF 3				
17	-1	OII	30	SHELF 1	18	2P	On	30	RECTIFIER FEED 11
19	2P	On	30	RECTIFIER FEED 4	20	ZF	Oll	30	SHELF 3
21	21	OII	30	SHELF 1	22	2P	On	30	NOVIA HEATED
23	2P	On	30	RECTIFIER FEED 5	24	ZF	Oli	30	NOKIA HEATER
25	-1	OII	30	SHELF 2	26	1P	ON	/20	ATS
27	2P	On	30	RECTIFIER FEED 6	28	1P	ON	/20	BLOCK HEATER
29	-	011	50	SHELF 2	30	1P	ON	20	BATTERY CHARGE

PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER AND BATTERY CHARGER ON NEW AT AT GENERATOR

EXISTING PANEL (A) SCHEDULE SCALE: NTS

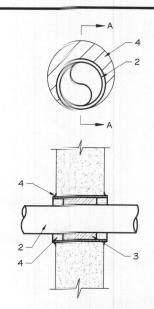


\* VERIFY ON FIELD

EXISTING PANEL (B) SCHEDULE SCALE: NTS

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



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

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

U.L. SYSTEM NO. C-AJ-1150 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902 F RATING = 3 HR T RATING = O 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 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

2. THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM O". (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" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER)

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

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 CPGO IS OR CPGO4 SEALANT IS

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP6015, CP604, CP606, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)



Type GR CABLE TAP TO THROUGH CABLE TO TOP OF GROUND ROD GROUND ROD.

HORIZONTAL CABLE TAP TO VERTICAL STEEL SURFACE OR THE SIDE OF

HORIZONTAL PIPE



Type VS CABLE TAP DOWN AT 45'TO VERTICAL STEEL SURFACE OR SIDE OF HORIZONTAL OR VERTICAL PIPE



GROUND ROD

VERTICAL CABLE

VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR

VERTICAL PIPE

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



Type GR CABLE TAP TO TOP OF GROUND ROD Туре ТА

AND TAP CABLES.

TEE OF HORIZONTAL RUN



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License No: 37842, Expiration Date: 9/8/2021



MARK DATE DESCRIPTION

ISSUE FINAL PROJECT TITLE

MOUNT ALBERT

FA ID # 10072222

DATE | 2/04/2020

PROJECT INFORMATION:
1 1 9 1 0 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

SHEET TITLE:

PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT 48284 E-2 SHEET

CADWELD DETAILS SCALE: NTS

CONDUIT (TYP)

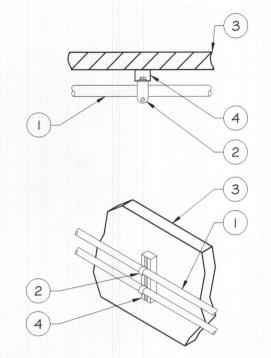
(2) BUTTERFLY CLAMP AS REQUIRED

(3) EXISTING WALL/CEILING

VERTICAL "UNISTRUT" PI 000 T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-20 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

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



- CADWELD GRADE #2 AWG BCW GROUND RING GROUND ROD COPPERWELD 5/8"Ø x 8'-0" LONG (MAX)

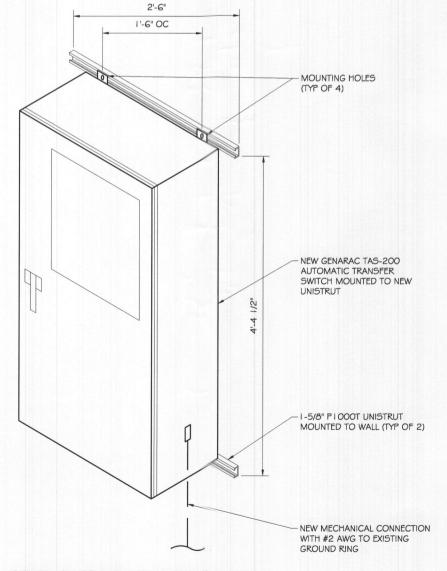
GROUND ROD DETAIL

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/16" DIA. HILTI HY-20 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	7/16" DIA. HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

CONDUIT WALL MOUNT

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





A MAXIMUM SPACING TWICE

WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2.000 OHM-CM.

SHALL BE GALVANIZED TO

CORROSION OF TOWER, (SEE ANSI/TIA-EIA-222-G)
6. PROVIDE (I) GROUND LEAD TO EACH SIDE OF THE

PREVENT GALVANIC

GENERATOR

THE LENGTH OF ROD

AVAILABLE A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL GROUND RODS INSTALLED

3. SEE RESISTIVITY REPORT FOR VERIFICATION AS

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PREPARED FOR:



CONSULTANT:

# **GENERAL DYNAMICS**

Information Technology, Inc.

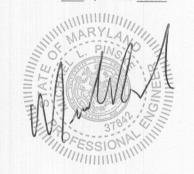
GENERAL DYNAMICS 661 MOORE RD STE 110 KING OF PRUSSIA, PA 19406

#### Certification # Seal:

Zethication 4 Seas:

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License No: 37842, Expiration Date: 9/8/2021



1	01/08/21	REVISED PER CLIENT COMMENTS
MARK	DATE	DESCRIPTION
ISSUE PHASE		DATE 12/04/2020

MOUNT ALBERT FA ID # 10072222

PROJECT INFORMATION:
1 1 9 1 0 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER	48284
SHEET NUMBER	E-3

GENERAC ATS MOUNTING DETAIL

SCALE: NTS

(0)

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC INDUSTRIAL

EPA Certified Stationary Emergency

Standby Power Rating 30 kW, 38 kVA, 60 Hz

**Prime Power Rating\*** 27 kW, 34 kVA, 60 Hz

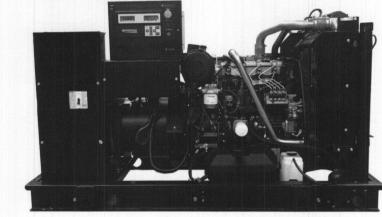


Image used for illustration purposes only

# **Codes and Standards**

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

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



UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



ANSI

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.

# SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

#### 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

CONTROL SYSTEM

GENERAC

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

#### **ENCLOSURE (If Selected)**

- · Rust-Proof Fasteners with Nylon Washers to
- High Performance Sound-Absorbing Material
- Gasketed Doors
- Stamped Air-Intake Louvers
- (Radiator and Exhaust)
- Stainless Steel Lockable Handles
- BhinoCoat™ Textured Polyester Powder Coat Paint

#### **FUEL TANKS (If Selected)**

- Double Wall
- Normal and Emergency Vents
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- RhinoCoat™ Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

- · Audible Alarms and Shutdowns Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- · Customizable Alarms, Warnings, and Events
- Modbus<sup>®</sup> Protocol
- Predictive Maintenance Algorithm
- Sealed Boards Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- · Alarm Information Automatically Annunciated on the Display

#### **Full System Status Display**

- Power Factor
- · kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power

- - Frequency

- Oil Pressure
- Coolant Level
- Engine Overspeed Battery Voltage
- Snap Shots of Key Operation Parameters During

Protect Finish

GENERAC INDUSTRIAL

- (Sound Attenuation Enclosures)
- Upward Facing Discharge Hoods
- Stainless Steel Lift Off Door Hinges

- UL 142/ULC S601
- Sloped Top
- Fuel Level
- Check Valve In Supply and Return Lines

- Coolant Temperature
- Battery Voltage

#### **Alarms and Warnings**

- Coolant Temperature
- Alarms and Warnings Time and Date Stamped
- Alarms and Warnings

- Oil Pressure
- · Coolant Level
- Engine Speed

Alarms and Warnings Spelled Out (No Alarm Codes)

MOUNT ALBERT FAID # 10072222

DATE | 2/04/2020

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GENERAL DYNAMICS

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PREPARED FOR:

CONSULTANT:

**GENERAL DYNAMICS** 

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS

 Date/Time Fault History (Event Log) Isochronous Governor Control

**Program Functions** 

Programmable Crank Limiter

• 7-Day Programmable Exerciser

Waterproof/Sealed Connectors

 RS-232/485 Communications All Phase Sensing Digital Voltage Regulator

Digital H Control Panel- Dual 4x20 Display

· 2-Wire Start Capability

Special Applications Programmable Logic Controller

· Power Output (kW)

All Phase AC Voltage

All Phase Currents

I 01/08/21 REVISED PER CLIENT COMMENTS

ARK DATE DESCRIPTION

1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

48284 PROJECT NUMBER

F-4

(0)

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC INDUSTRIAL

**EPA Certified Stationary Emergency** 

#### **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

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

#### **FUEL SYSTEM**

O NPT Flexible Fuel Line

# **ELECTRICAL SYSTEM**

- O 10A UL Listed Battery Charger
- O Battery Warmer

#### **ALTERNATOR SYSTEM**

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

#### **GENERATOR SET**

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

#### **ENGINEERED OPTIONS**

#### **ENGINE SYSTEM**

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

#### CONTROL SYSTEM

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

#### **CIRCUIT BREAKER OPTIONS**

- O Main Line Circuit Breaker
- O 2nd Main Line Circuit Breaker
  - O Shunt Trip and Auxiliary Contact
  - O 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
- O Steel Enclosure
- O Aluminum Enclosure
- O Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- O AC/DC Enclosure Lighting Kit
- O Door Alarm Switch
- O Enclosure Heater
- O Damper Alarm Contacts

## **WARRANTY (Standby Gensets Only)**

- O 2 Year Extended Limited Warranty
- O 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- O 10 Year Extended Limited Warranty

# **CONTROL SYSTEM**

- O NFPA 110 Compliant 21-Light Remote Annunciator
- O Remote Relay Assembly (8 or 16)
- O il Temperature Indication and Alarm O Remote E-Stop (Break Glass-Type, Surface Mount)
- O Remote E-Stop (Red Mushroom-Type.
- Surface Mount)
- O Remote E-Stop (Red Mushroom-Type, Flush Mount) O 100 dB Alarm Horn
- O Ground Fault Annunciation
- O 120V GFCI and 240V Outlets
- O 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
- O Tank Risers
- O Fuel Level Switch and Alarm
- O 12' Vent System O Fire Rated Stainless Steel Fuel Hose

# O 7 Year Extended Limited Warranty

O 3rd Breaker System

## **GENERATOR SET**

Special Testing

# ALTERNATOR SYSTEM

- **FUEL TANKS** O UL2085 Tank
- O Stainless Steel Tanks
- O Special Fuel Tanks
- O Vent Extensions

# SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

## APPLICATION AND ENGINEERING DATA

## **ENGINE SPECIFICATIONS**

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Make	Perkins	
EPA Emissions Compliance	Stationary Emergency	
EPA Emissions Reference	See Emission Data Sheet	
Cylinder #	4	
Type	In-Line	
Displacement - in <sup>3</sup> (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

Crankcase Capacity - qt (L)

Governor	Electronic Isochronous	
Frequency Regulation (Steady State)	±0.5%	
Lubrication System		
Oil Pump Type	Gear	
Oil Filter Type	Full-Flow	

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**

K0035124Y21	
4	
Revolving	
H	
Н	
<5% (3-Phase)	
< 50	
	4 Revolving H H <5% (3-Phase)

Standard Excitation	Brushless	
Bearings	Single Sealed	
Coupling	Direct via Flexible Disc	
Load Capacity - Standby	100%	
Prototype Short Circuit Test	Yes	
Voltage Regulator Type	Digital	
Number of Sensed Phases	All	
Regulation Accuracy (Steady State)	±0.25%	

# RAMAKER GENERAC INDUSTRIAL

(608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

# **GENERAL DYNAMICS**

Information Technology, Inc.

**GENERAL DYNAMICS** 661 MOORE RD STE 110 KING OF PRUSSIA. PA 19406

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland.

License No: 37842, Expiration Date: 9/8/2021



I 01/08/21 REVISED PER CLIENT COMMENTS ARK DATE DESCRIPTION

SSUE FINAL PROJECT TITLE:

MOUNT ALBERT FAID # 10072222

DATE | 2/04/2020

1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

48284 PROJECT NUMBER SHEET E-4.1

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

**SD030** | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC INDUSTRIAL

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\***

#### Diesel - gph (Lph)

Fuel Pump Lift- ft (m)	Percent Load	Standby	
3 (1)	25%	1.0 (3.7)	
	50%	1.4 (5.2)	
otal Fuel Pump Flow (Combustion + Return) - gph (Lph)	75%	2.0 (7.5)	
16.6 (63)	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 (m <sup>3</sup> /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 <sub>0</sub> O (kPa)	0.5 (0.12)

#### **COMBUSTION AIR REQUIREMENTS**

		Standby
Flow at Rated	Power scfm (m <sup>3</sup> /min)	88 (2.5)

ENGINE			EXHAUST			
		Standby			Standby	
Rated Engine Speed	RPM	1,800	Exhaust Flow (Rated Output)	scfm (m <sup>3</sup> /min)	296.6 (8.4)	
Horsepower at Rated kW**	hp	49	Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)	
Piston Speed	ft/min (m/min)	1,181 (360)	Exhaust Temp (Rated Output)	°F (°C)	892 (478)	
BMEP	psi (kPa)	159 (1.096)				

<sup>\*\*</sup> 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** 

**DIMENSIONS AND WEIGHTS\*** 



#### **OPEN SET (Includes Exhaust Flex)** Usable Weight Time Capacity LxWxH-in (mm) - lbs (kg) - Hours - Gal (L No Tank 76.0 (1,930) x 37.4 (950) x 44.8 (1,138) 1,641 (745) 19 54 (204) 76.0 (1,930) x 37.4 (950) x 57.8 (1,468) 2,121 (963) 132 (501) 76.0 (1,930) x 37.4 (950) x 69.8 (1,773) 2,351 (1,067) 76.0 (1.930) x 37.4 (950) x 81.8 (2.078)

300 (1,136) 92.9 (2,360) x 37.4 (950) x 81.8 (2,078)

GENERAC INDUSTRIAL

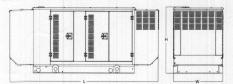
2.560 (1.162)

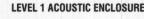


## **WEATHER PROTECTED ENCLOSURE**

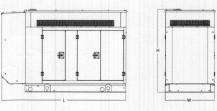
211 (799)

Run Time	Usable Capacity	Ł x W x H - in (mm)		t - lbs (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)		241 (110)
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	- 372 - (170)	
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	- (170)	
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)		





Run Time - Hours	L'anacity I v W v H - in (mm)	Weight - Ibs (kg) Enclosure 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)		
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)	(134)
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		



#### LEVEL 2 ACQUIETTO ENCLOSUDE

Run Time - Hours	Usable Capacity	L x W x H - in (mm)		- Ibs (kg) sure Only
- nours	- 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)	(202)	(100)
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



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PREPARED FOR:



CONSULTANT:

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> MOUNT ALBERT FA ID # 10072222

1910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 48284 E-4.2

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

**TTS Series Switches** 200 Amps

**600 VAC** 

**GENERAC** INDUSTRIAL

TAS200 TAS200

**TAS200** 

**200A Automatic Transfer Switch** 

1 of 3 2 of 3

# The Generac TAS200 Automatic Transfer Switch

Flexibility for multiple application installations

Multiple generator support with 3 source panel

Designed with a 6 inch touch screen controller for improved user interface

Camlock functionality for mobile generator sources



Image used for illustration purposes only.

## Features

- STEEL CONSTRUCTION
- NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS
- STAINLESS STEEL HARDWARE
- CAMLOCK "QUICK CONNECT" CAPABILITY
- OPERATIONAL STATUS VIEW VIA **6 INCH TOUCH SCREEN**
- TEST FUNCTION FAST TEST & NORMAL TEST
- UL1008 LISTED FOR EMERGENCY SYSTEMS

# **Optional Features**

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

# Codes and Standards

Generac products are designed to the following standards:



UL1008. UL508. UL50, CSA C22.2 No. 178



NEC 700, 701 and 702



**NEMA 250** 

# **Application and Engineering Data**

abinet Specifications	
Dimensions	24"W x 12"D x 48"H
Weight	210 lbs.
	Single Chamber with Main Door
	Steel
	UL Type / NEMA 3R Rated
Construction	Powder Coat Finish for Corrosion Resistance
	C-UL-US Listed - Automatic Transfer Switch
	Stainless Steel Hardware
	3-Point Latching System with Pad-Lockable Handles
Manuating Options	Wall
Mounting Options	H-frame
Installed	Pre-wired alarm terminal strip

Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A	
Breaker	Eaton 200 amp Utility Breaker	
Dieakei	Eaton 200 amp Generator Breaker	
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated	
Protective Device Continuous Rating (Max) Amp	200	
nput to Generator	350MCM - #6 AWG	
Output to Site	350MCM - #6 AWG	
Generator Annunciator Connector	Deutsch DTM04-12PA-L012	
	Generator Run Alarm	
	Generator Fail — Shutdown Alarm	
Allerm Torminal Doord	Generator Fail – Non Shutdown Alarm	
Alarm Terminal Board	Low Fuel Alarm	
	Generator Theft Alarm	
	AC Utility Fail Alarm	

Camlock Component		
Camlock Component	Shipped loose for multiple installation options	
Dimensions	9" W x 9.4" D x 24.25" H	GENERAC
	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	DENERAC
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	•
200A Camlock Generator Connection	Uses 4 CH E1016 Male Connectors	
	Mating Connector — CH E1016 Female	



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GENERAC ATS SPECIFICATIONS

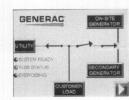
SCALE: NONE

PROJECT NUMBER 48284 E-5 SHEET

GENERAC ATS SPECIFICATIONS

## **Touch Screen Interface**





#### **INDICATORS AND BUTTONS**

- · System Ready indicator
- · Standby Operating indicator
- Utility Available indicator
- GEN/UTIL Switch Position indicator
- TVSS status

- Normal Test button
- Fast Test button
- Return to Normal button
- Reset button **Exercising indicator**

**DETAILS SCREEN** 

#### System Settings:

- System Voltage/Phases:
- 120/240V single phase (standard) - 120/208V three phase (optional)
- 120/240V three phase (optional)
- Utility Fail Monitor:
- Under Voltage: 75-95% of nominal voltage
- Over Voltage: 105%-125% of nominal voltage
- Pickup (hysteresis): fixed at 5 volts
- Delay time: 0-60s
- Utility Interrupt Delay: 0-60s
- Return to Utility Timer: 1-30 minutes
- · Transfer:
- In-phase, or
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments

## **Engine Settings:**

- Engine Warm-up timer: 0-20 minutes
- Generator Load Accept:
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments
- Voltage: 85-95% of nominal
- Frequency: 85-95% of nominal
- Engine Minimum Run Timer: 5-30 minutes
- Engine Cooldown Timer: 0-20 minutes

# **Exercise Settings:**

- · Time of day
- Day of week
- Exercise:
- Exercise with/without load
- Exercise once every 1, 2, or 4 weeks.
- Exercise time-of-day
- Exercise day of week
- Exercise duration: 15-30 minutes

#### Screen Settings:

- Brightness & Contrast button
- Screen Calibration button
- Startup/Clean screen

# Diagnostics:

- Digital I/O bits status
- Voltage A/D readings

## Mimic Diagram:

- System Ready
- Transfer switch position
- Utility available
- Standby available
- Maintenance/Auto switch position
- Generator source TS position TVSS status

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PREPARED FOR:



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ISSUE FINAL PROJECT TITLE:

MOUNT ALBERT

FA ID # 10072222

DATE | 2/04/2020

PROJECT INFORMATION: 11910 CARROLL MILL ROAD ELLIOTT CITY, MD 21042

GENERAC ATS SPECIFICATIONS

SCALE: NONE

48284 PROJECT NUMBER E-5.1 SHEET

GENERAC ATS SPECIFICATIONS