



at&t Mobility

SITE NAME: STOW-GLEASONDALE RD
FA LOCATION CODE: 10141344

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

501 GLEASONDALE RD
STOW, MA 01775



PREPARED FOR:



CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
661 MOORE RD STE 110
KING OF PRUSSIA, PA 19406

Certification & Seal:
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Massachusetts.



James R. Skowronski
Registered Civil Engineer Signature: 9/03/2021
Date:

MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED 09/02/2021

PROJECT TITLE:

STOW-GLEASONDALE RD
FA ID # 10141344

PROJECT INFORMATION:
501 GLEASONDALE RD
STOW, MA 01775

SHEET TITLE:

TITLE SHEET

SCALE: NONE

PROJECT NUMBER 52833

SHEET NUMBER T-1

VICINITY MAP



AERIAL VIEW OF SITE



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 MASSACHUSETTS

DIG SAFE SYSTEM, INC.
811 OR 1-888-344-7233

MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40 REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

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 IN THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

1. INTERNATIONAL BUILDING CODE 2015
2. NATIONAL ELECTRIC CODE 2020
3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
4. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
5. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
6. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

PROJECT INFORMATION

PROJECT MANAGER:

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

ENGINEER:

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

APPLICANT INFORMATION:

AT&T MOBILITY
7150 STANDARD DR
HANOVER, MD 21076

SITE DATA:

SITE NAME: STOW-GLEASONDALE RD
FA NUMBER: 10141344

PROPERTY OWNER:

FLB INC
501 GLEASONDALE RD
STOWMA 01775

ADDRESS:

501 GLEASONDALE RD
STOW, MA 01775

COUNTY: HARTFORD

LAT.: 42.404806°
LONG.: -71.527083°

GROUND ELEVATION: 196 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.

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SIGNATURE BLOCK

AT&T MGR. DATE

GENERAL DYNAMICS DATE

SITE ACQUISITION DATE

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SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL

Standby Power Rating
30 kW, 38 kVA, 60 Hz

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



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

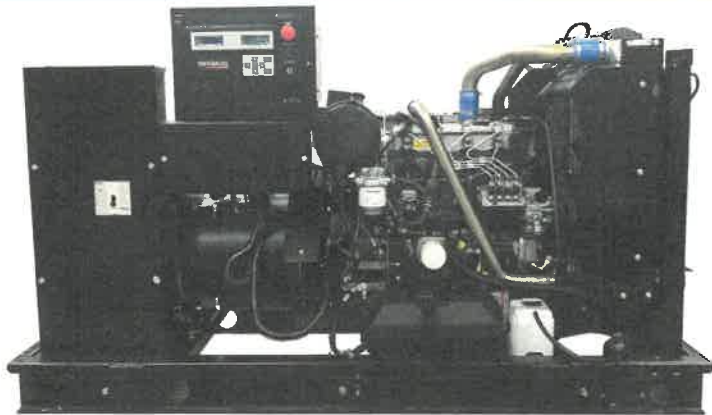


Image used for illustration purposes only

Codes and Standards

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

		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
		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

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
- 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 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

- 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® 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 Output (kW)
- Power Factor
- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- 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 Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)



RAMAKER
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(608) 643-4100 www.ramaker.com

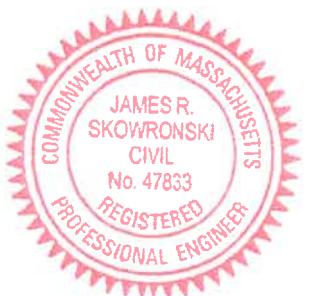
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James R. Skowronski 9/03/2021
Registered Civil Engineer Signature: Date:

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PHASE		ISSUED	

PROJECT TITLE:
**STOW-GLEASONDALE RD
FA ID # 10141344**

PROJECT INFORMATION:
501 GLEASONDALE RD
STOW, MA 01775

SHEET TITLE:
**GENERAC 30KW GENERATOR
SPECIFICATIONS**

SCALE: NONE

PROJECT NUMBER	52833
SHEET NUMBER	E-4

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SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary Emergency

GENERAC INDUSTRIAL

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)
	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 (50.2)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (kW)	126,638 (135)
Inlet Air	scfm (m ³ /hr)	2,800 (14,757)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0187500SSB	
Maximum Radiator Backpressure	in. H ₂ O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

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

ENGINE

Standby		
Rated Engine Speed	RPM	1,800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1,181 (360)
BMEP	psi (kPa)	159 (1.096)

EXHAUST

Standby		
Exhaust Flow (Rated Output)	scfm (m ³ /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
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GENERAC INDUSTRIAL

DIMENSIONS AND WEIGHTS*



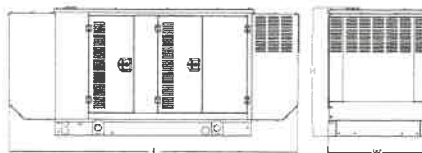
OPEN SET (Includes Exhaust Flex)

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
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)
47	132 (501)	76.0 (1,930) x 37.4 (950) x 89.8 (1,773)	2,351 (1,067)
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,560 (1,162)
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)	2,623 (1,190)



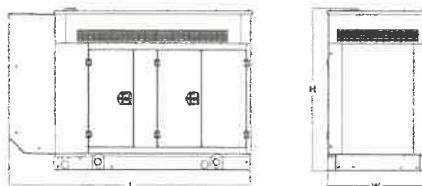
WEATHER PROTECTED ENCLOSURE

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



LEVEL 1 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Enclosure Only	
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)	505 (230)	338 (154)
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)		
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)		



LEVEL 2 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)	
			Enclosure Only	
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
P: (262) 544-4811 ©2018 Generac Power Systems, Inc. All rights reserved. All specifications are subject to change without notice.

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

GENERAC 30KW GENERATOR SPECIFICATIONS
SCALE: NTS



PREPARED FOR:



CONSULTANT:

GENERAL DYNAMICS
Information Technology, Inc.

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

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SHEET NUMBER E-4.2