App No: 2023022106

Revisions received 2.13.23 - JE
Revisions received 5.2.23 - JE
Revisions received 5.11.23 - JE

Application General Information

Applicant Name	General Dynamics	Received	2/8/2023
Application Type	Minor Modification	Ann. Plan?	Yes
Carrier	AT&T Wireless	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Solution Type	Generator		
Existing	Existing	Gvt. Use Desc.	

Application Description

Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Site Information

Site Id	2	Zoning	CR-3.0 C-1.5 R-2.5 H-100
Structure Type	Watertank	Latitude	39.043617
Street Address	11400 Woodglen Dr & Executive Blvd	Longitude	-77.114128
County Site Name	Well Lane Water Tank	Ground Elevation	396
Carrier Site Name	Overlay - White Flint	City	Rockville
Site Owner	WSSC	Lease Status	In Process
Structure Owner	WSSC	Does the structure require an antenna structure registration under FCC Title 47 part 17?	No
Existing Structure Height	105'		
Provide the proposed height of the replacement structure without any antenna (New Apps Only)		Distance to Residential Property (New, Colocation Only)	
		Distance to Commercial Property (New, Colocation Only)	

Justification of why this site was selected:

Existing

Nearby Sites (New Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

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Screening considerations (New, Colocation Apps Only):

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1:43:51 PM

App No: 2023022106

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only): No

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

Will the proposed installation require more the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets?YN

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

Does the structure or current installation have concealment elements/measures?: No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

If yes, describe how the proposed installation does not defeat the existing concealment.: Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Small Wireless Facility Information

Is this a Small Wireless Facility?: No

Is the structure 10% taller than adjacent structures?

Please list adjacent structure heights

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet: ~~0~~

Cumulative volume of the proposed antenna(s) exclusive of equipment in cubic feet: ~~0~~

ROW Information

PROW?: No

ROW owner

ROW width

Pole Number

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Antenna Information

Antenna Compliance	No
Compliance Desc	
Antenna Location	No
Antenna Loc. Desc.	
Env. Assessment	
Cat. Excluded?	checked
Routine Env. Evaluation	

Antenna Model

Frequency

RAD Center | Max ERP | Antenna Dimension | Quantity

Wednesday, February 8, 2023

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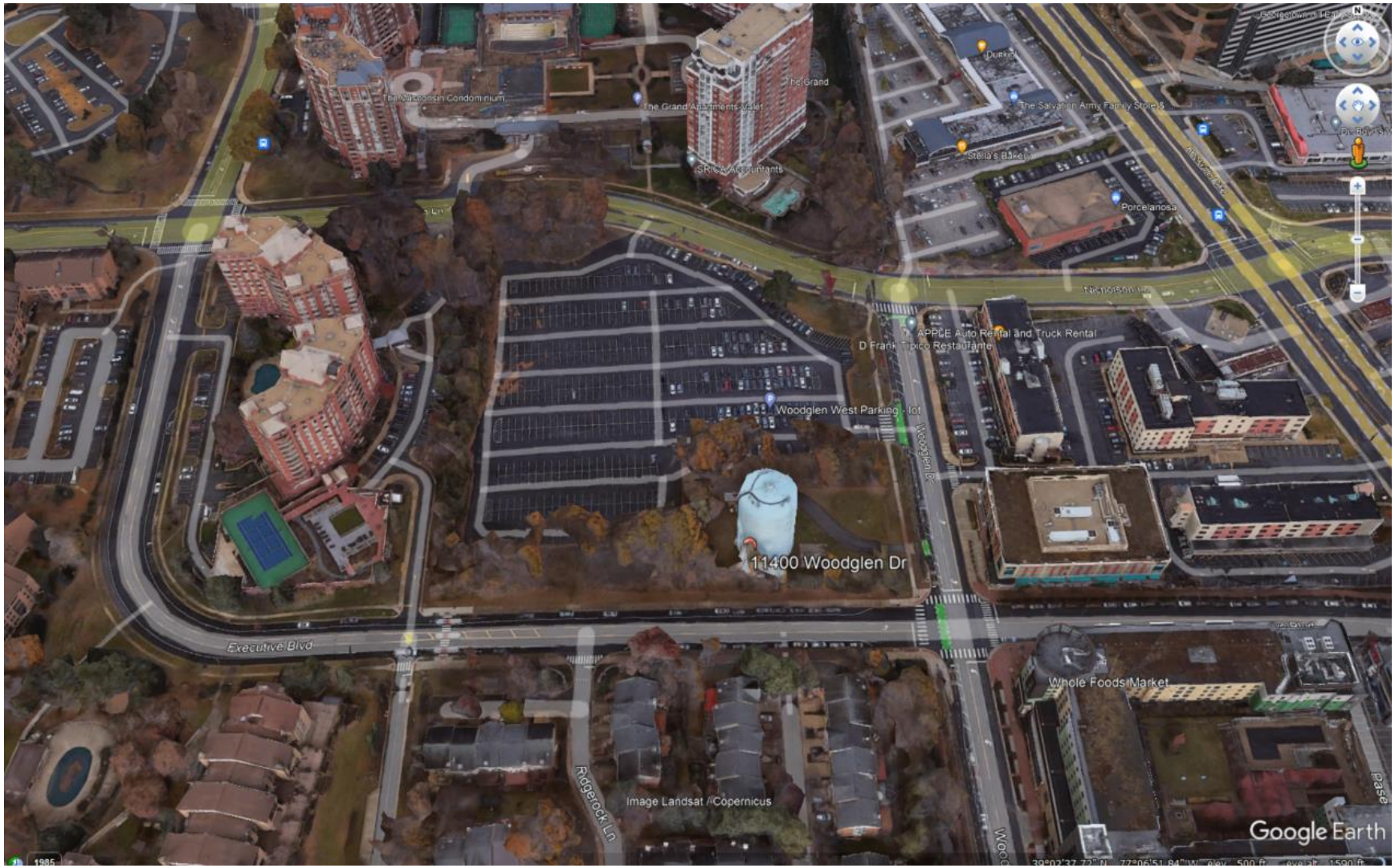
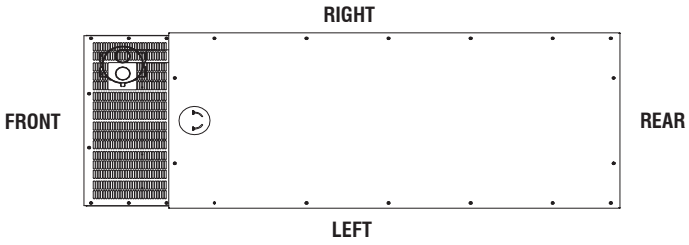

The Grand
The Grand Apartments Valet
Stella's Bakery
Porcelanosa
APPCE Auto Rental and Truck Rental
D Frank Tapico Restaurante
Woodglen West Parking - lot
Woodglen Dr
11400 Woodglen Dr
Executive Blvd
Whole Foods Market
Ridgerock Ln
Image Landsat / Copernicus
Google Earth

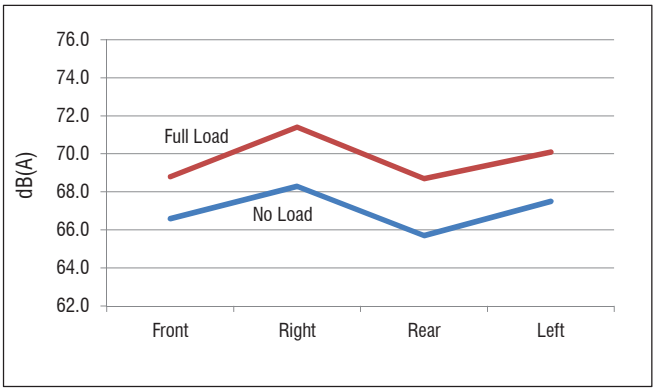
The generator is automatically set to be tested twice a month for approximately 30 minutes. This is a 20 minutes running time and 10 minute cool down. Usually every other Monday/Tuesday around 9:00am. The only other time it will run is during a power outage.

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

Decibel Scale (dBA)*

Civilization V opening theme

Chainsaw 110

Motorcycle 100

Lawn Mower 90

Vacuum Cleaner 80

Conversation 65

Floor Fan 50

Refrigerator Hum 40

Rustling Leaves 30

Pin Falling 15

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

Dark Souls 2 Grass 150

Jet Takeoff 140

Pneumatic Riveter 124

Hammer Drill 114

Rock Concert 105

Tractor/Hand Drill 97

City Traffic 78

Air Conditioning Unit 60

Electrical Transformer 45

*Source:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

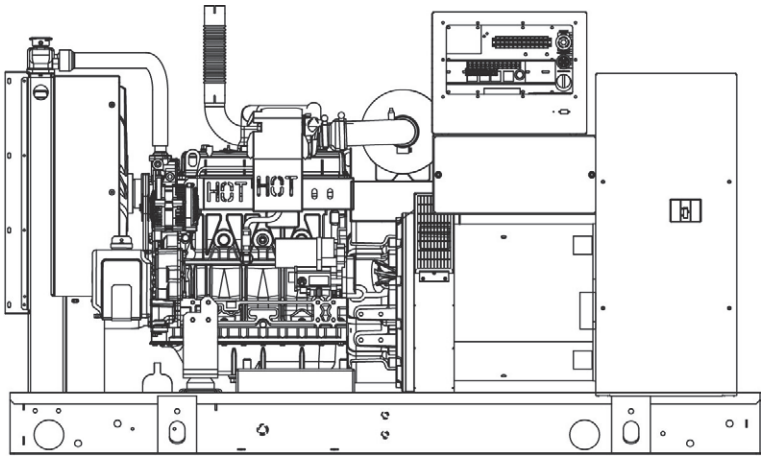
GENERAC | INDUSTRIAL POWER

STANDBY POWER RATING

30 kW, 38 kVA, 60 Hz

PRIME POWER RATING*

27 kW, 34 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

**Certain options or customization may not hold certification valid.

Image used for illustration purposes only

CODES AND STANDARDS

Generac products are designed to the following standards:

UL2200, UL508, UL142, UL498

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA ICS10, MG1, 250, ICS6, AB1

ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

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

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

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
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM

Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- 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
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- O Oil Heater
- O Industrial Exhaust Silencer

Fuel System

- O Flexible fuel lines
- O Primary fuel filter

Engine Electrical System

- O 10A UL battery charger
- O 2.5A UL battery charger
- O Battery Warmer

ALTERNATOR SYSTEM

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

CIRCUIT BREAKER OPTIONS

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

GENERATOR SET

- O Gen-Link Communications Software (English Only)
- O 8 Position Load Center
- O 2 Year Extended Warranty
- O 5 Year Warranty
- O 5 Year Extended Warranty

ENCLOSURE

- O Weather Protected
- O Level 1 Sound Attenuation
- O Level 2 Sound Attenuation
- O Steel Enclosure
- O Aluminum Enclosure
- O 150 MPH Wind Kit
- O 12 VDC Enclosure Lighting Kit
- O 120 VAC Enclosure Lighting Kit
- O AC/DC Enclosure Lighting Kit
- O Door Alarm Switch

TANKS (Size on last page)

- O Electrical Fuel Level
- O Mechanical Fuel Level
- O 54 Gal (204.4 L) Usable Capacity
- O 132 Gal (499.7 L) Usable Capacity
- O 211 Gal (798.7 L) Usable Capacity
- O 300 Gal (1135.6 L) Usable Capacity
- O 8” Fill Extension
- O 13” Fill Extension
- O 19” Fill Extension

CONTROL SYSTEM

- O 21-Light Remote Annunciator
- O Remote Relay Panel (8 or 16)
- O Oil Temperature Sender with Indication 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 Remote Communication - Modem
- O Remote Communication - Ethernet
- O 10A Run Relay
- O Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- O Coolant heater ball valves
- O Block Heaters
- O Fluid containment pans

ALTERNATOR SYSTEM

- O 3rd Breaker Systems

CONTROL SYSTEM

- O Spare inputs (x4) / outputs (x4) - H Panel Only
- O Battery Disconnect Switch

GENERATOR SET

- O Special Testing
- O IBC Seismic Certification

ENCLOSURE

- O Motorized Dampers
- O Door switched for intrusion alert
- O Enclosure ambient heaters

TANKS

- O Overfill Protection Valve
- O UL2085 Tank
- O ULC S-601 Tank
- O Stainless Steel Tank
- O Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- O Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu In)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminium

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Standard Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	7.94 (0.31)
Fuel Return Line mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, 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%

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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: 46
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
3 (1)

Total Fuel Pump Flow (Combustion + Return)
4.5 gph

	Diesel - gph (lph)
Percent Load	gph (lph)
25%	0.92 (3.5)
50%	1.45 (5.5)
75%	1.96 (7.4)
100%	2.74 (10.4)

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

COOLING

		Standby
Coolant Flow per Minute	gpm (lpm)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	111,000
Inlet Air	cfm (m3/hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H_2O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m3/min)	90 (2.55)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	153

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	230 (391)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	850 (454)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

** 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 consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

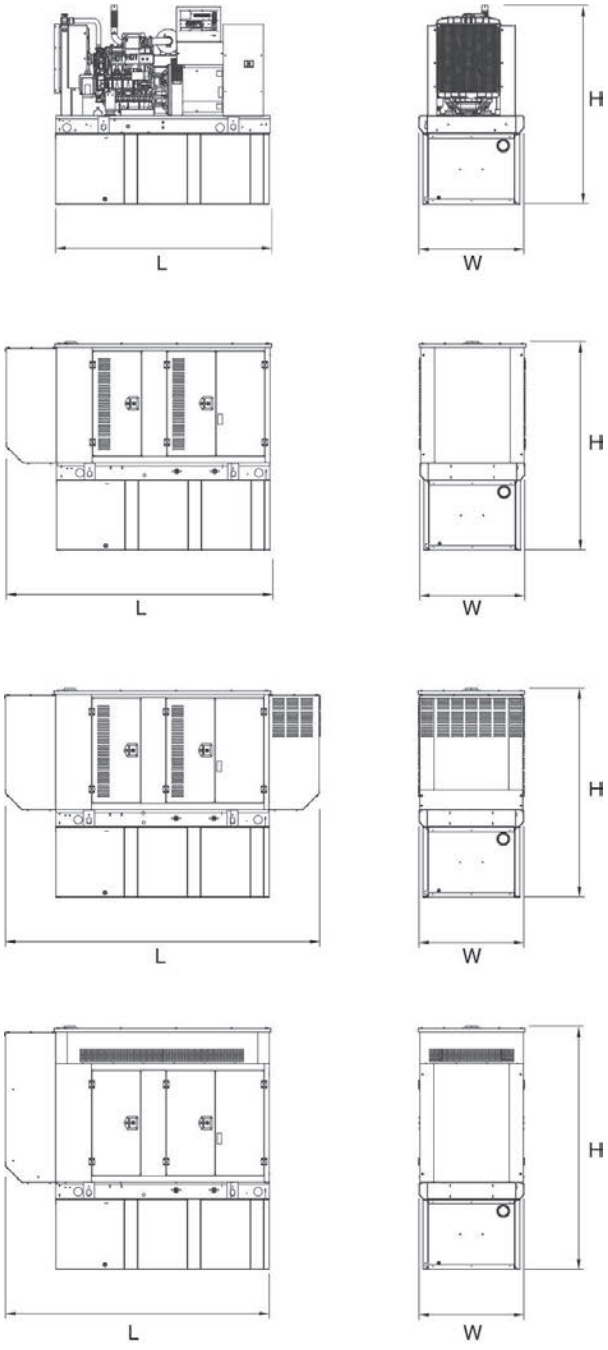
SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set
NO TANK	-	76 (1930.4) x 37.4 (949.9) x 42.2 (1072.1)	2060 (934)
19	54 (204.4)	76 (1930.4) x 37.4 (949.9) x 55.2 (1402.1)	2540 (1152)
48	132 (499.7)	76 (1930.4) x 37.4 (949.9) x 67.2 (1706.9)	2770 (1257)
77	211 (798.7)	76 (1930.4) x 37.4 (949.9) x 79.2 (2011.7)	2979 (1351)
109	300 (1135.6)	92.9 (2360) x 37.4 (949.9) x 82.7 (2100.6)	3042 (1380)

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 74.5 (1892.3)	302 (137)	191 (87)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 90 (2286)		

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112.5 (2857.1) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	112.5 (2857.1) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	112.5 (2857.1) x 38 (965.2) x 74.5 (1892.3)	455 (206)	288 (131)
77	211 (798.7)	112.5 (2857.1) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	112.5 (2857.1) x 38 (965.2) x 90 (2286)		

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 62 (1573.9)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 75 (1905)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 87 (2209.8)	460 (209)	291 (132)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 99 (2514.6)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 102.5 (2603.5)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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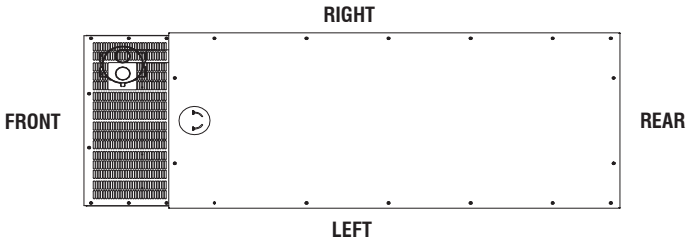
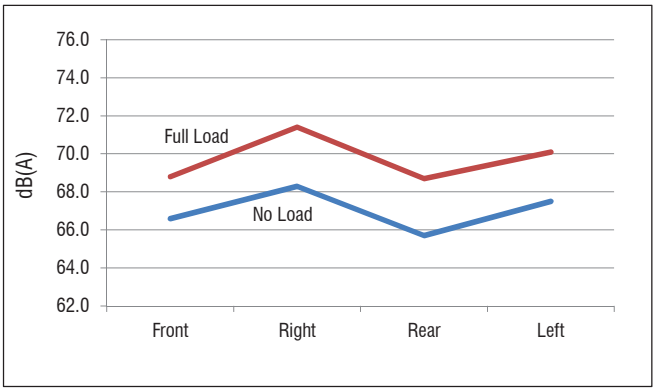
Part No 0K5085
Rev. D 08/19/15

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

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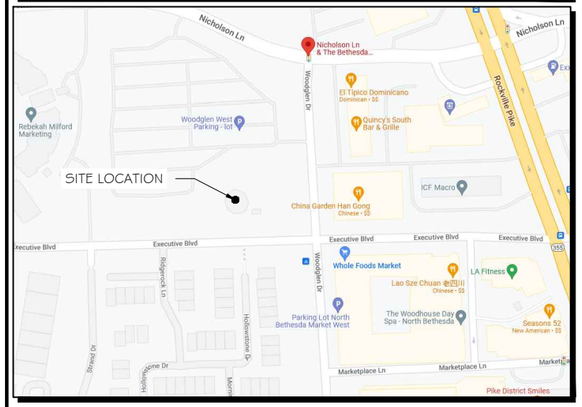
at&t Mobility

SITE NAME: OVERLAY - WHITE FLINT
FA LOCATION CODE: 10004923

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

VICINITY MAP



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.

GENERATOR TANK USABLE CAPACITY 190 GAL.

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

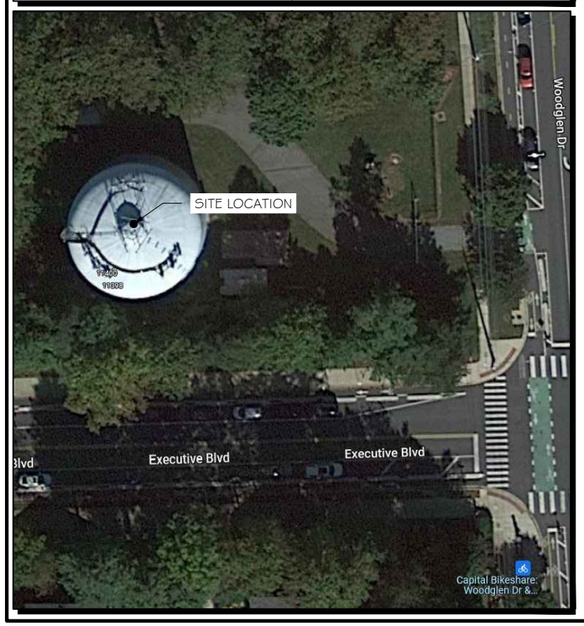
REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

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 2018
2. NATIONAL ELECTRIC CODE 2017
3. INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2018, PG COUNTY SUBTITLE 9
4. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
5. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
6. TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
7. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER:

BRIAN K SILBERT
SR. REGIONAL MANAGER
GENERAL DYNAMICS WIRELESS SERVICES
101 STATION DRIVE
WESTWOOD, MA 02090
EMAIL: Brian.Silbert@GDIT.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: OVERLAY - WHITE FLINT
FA NUMBER: 10004923

PROPERTY OWNER:
WASHINGTON SUBURBAN SANITARY COMMISSION
14501 SWITZER LANE
LAUREL, MD 20707

ADDRESS:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

COUNTY: MONTGOMERY

LAT.: 39.043609°
LONG.: -77.114156°

GROUND ELEVATION: 396 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 CONSTRUCTION MGR. DATE

SITE ACQUISITION DATE

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
1	03/16/23	REVISED CDs
0	02/07/23	FINAL CDs
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 54144

SHEET NUMBER: T-1

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NOTES TO SUBCONTRACTOR:

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE 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, 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.

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 TO BID SUBMITTAL..

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. 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.

12. 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 SUBCONTRACTOR.

13. 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 PERIOD.

15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

16. 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.

17. 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.

GENERAL NOTES:

1. 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 AND TOWER.

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 TIMES PER MONTH BY AT&T TECHNICIANS.

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

6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

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.

2. 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

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 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.

5. 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 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'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. 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. ASTIM (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. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
   g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
   h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
   i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
   j. UL (UNDERWRITER'S LABORATORY)

10. 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.

11. 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

1. 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 THHN/THWN 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

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'-0" VERTICAL AND 1'-0" 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

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

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 BONDING.

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.

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 PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.

7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC 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.

9. 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

1. 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 UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023
Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAL NOTES

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: N-1

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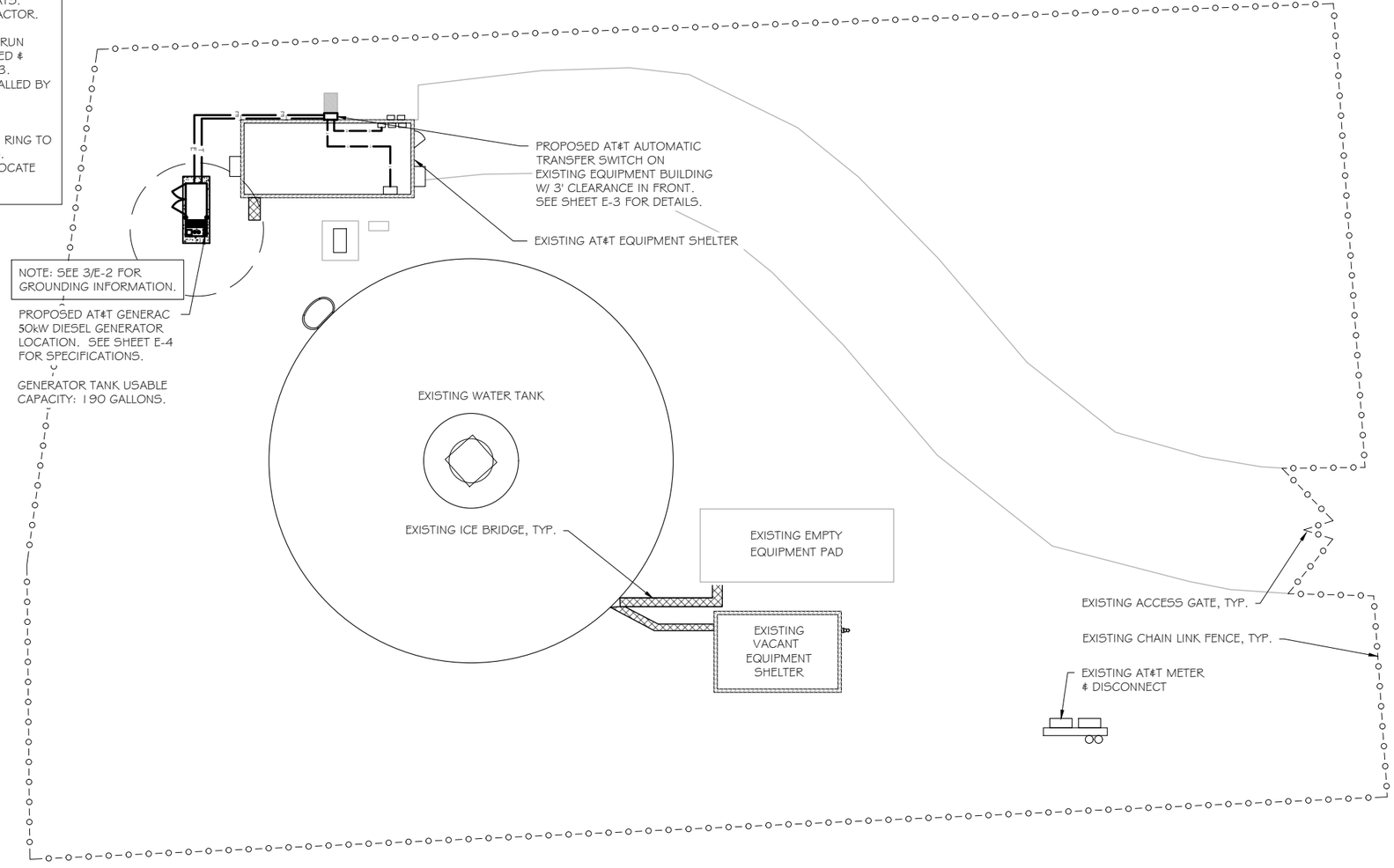
SCOPE OF WORK DETAILS

GENERAL:
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

CONDUITS:
- INSTALL PULL STRING IN EACH CONDUIT
- (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.



SITE PLAN
SCALE: 1" = 20'

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PREPARED FOR:
at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

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License No: 37842 Expiration Date: 9/8/2023
Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
1	03/16/23	REVISED CDs
0	02/07/23	FINAL CDs
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 10' 20' 40'
11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

PROJECT NUMBER: 54144
SHEET NUMBER: A-1

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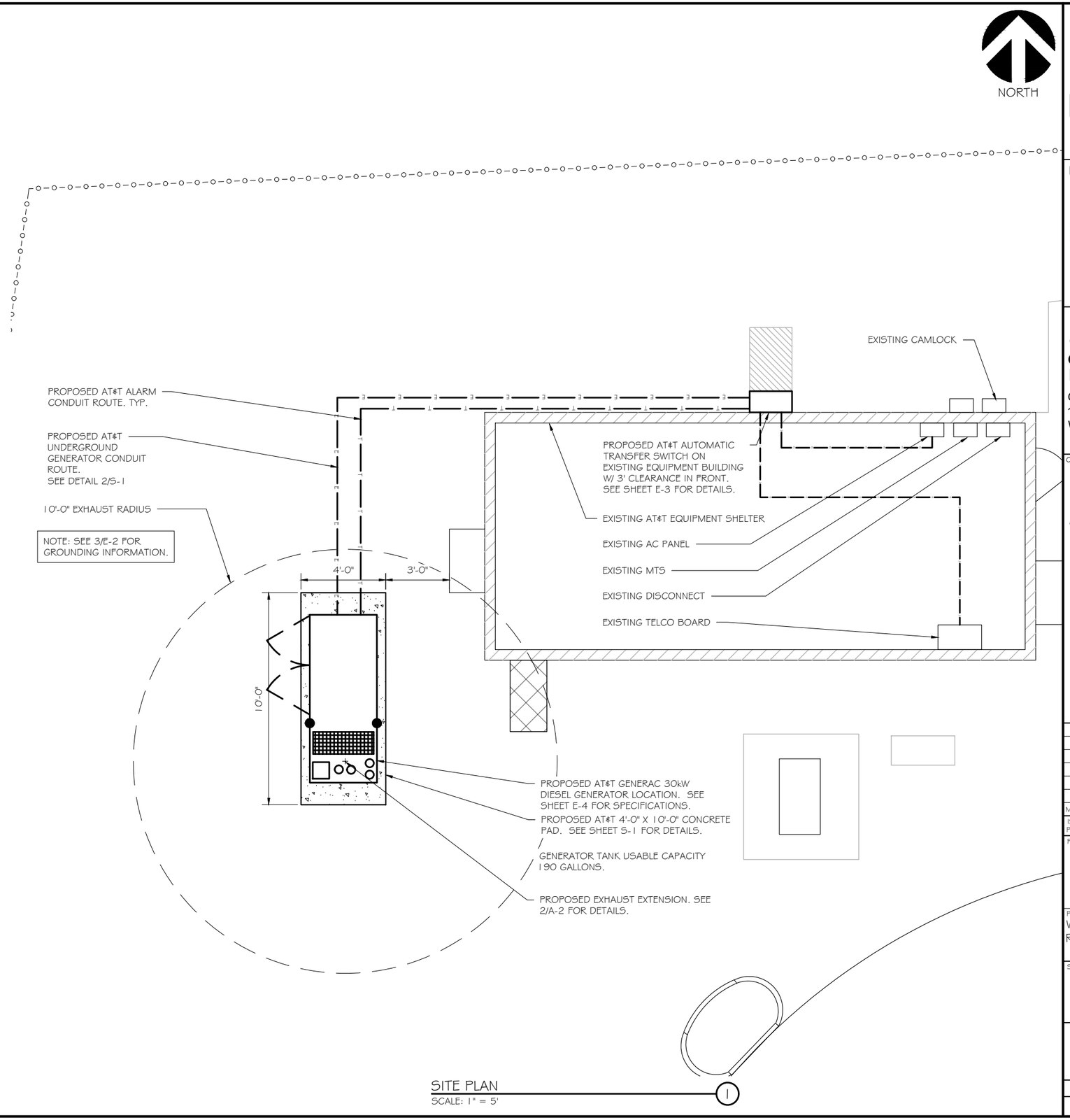
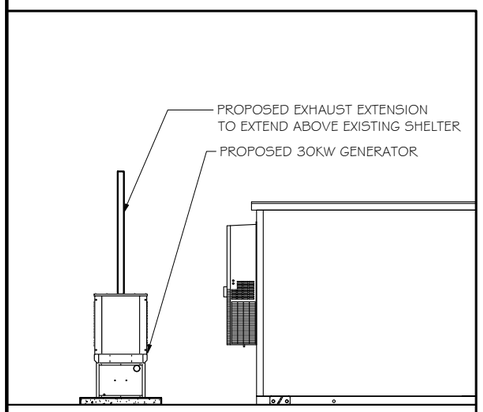


SITE PLAN
SCALE: 1" = 5'
1



EXHAUST EXTENSION DETAILS
SCALE: N/A
2

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CONSULTANT:
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Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" - 1" = 5'
22" x 34" - 1" = 2.5'

PROJECT NUMBER: 54144
SHEET NUMBER: A-2

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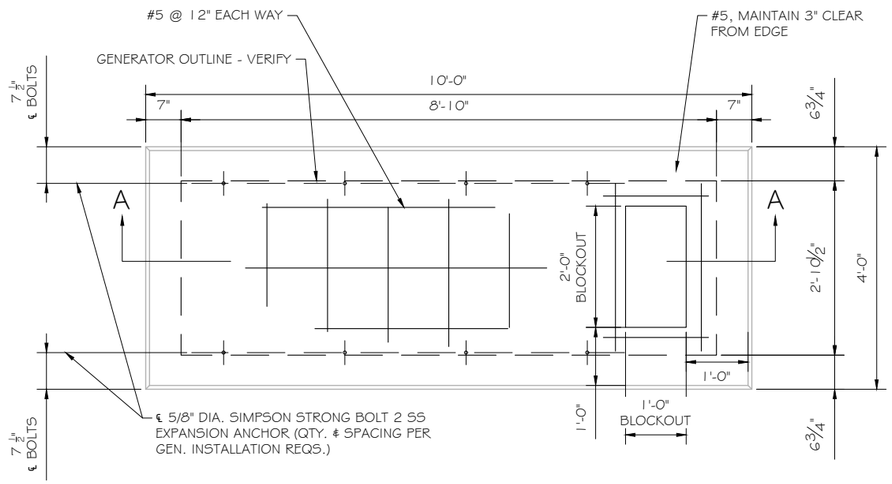
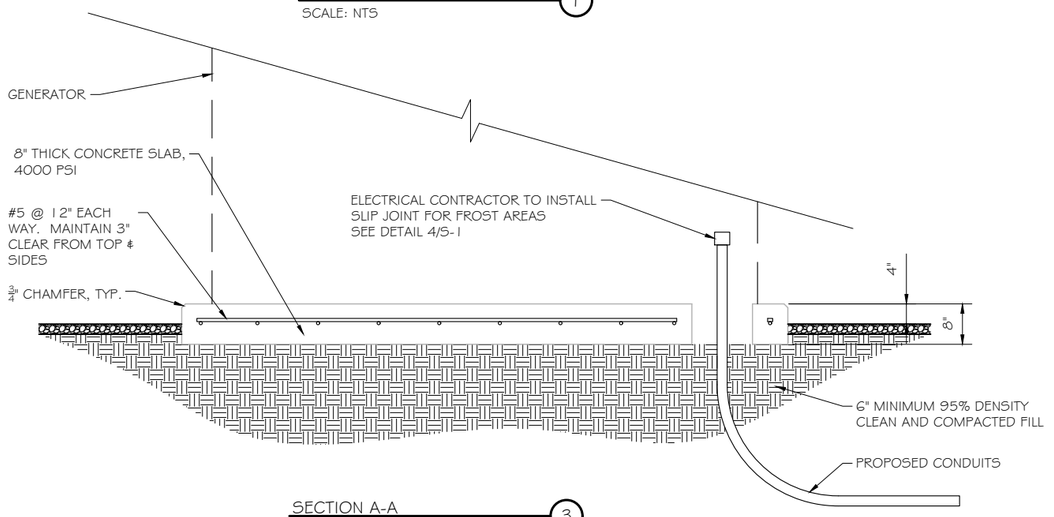


FOUNDATION PLAN (1)
SCALE: NTS



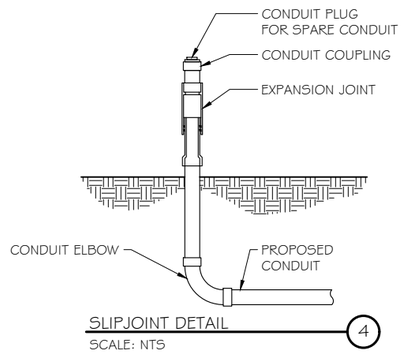
SECTION A-A (3)
SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT 30KW GENERATOR PACKAGE
UL REGISTRATION NUMBER: MH18459
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 ℄ COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION ℄ USE OF STATIONARY COMBUSTIBLE ENGINE ℄ GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY ℄ STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK ℄ 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

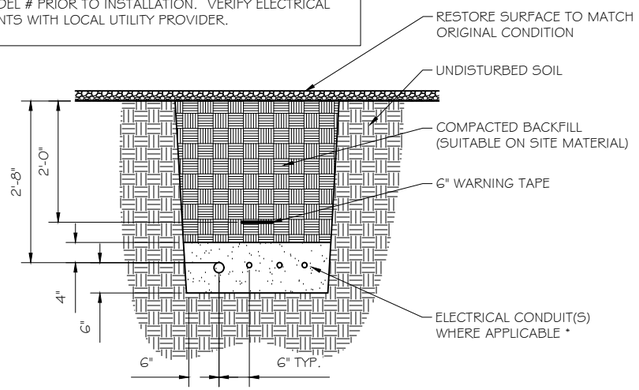
FACTORY PRE-SET AT 95% FULL FOR ALARM
FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL (4)
SCALE: NTS

NOTE:

VERIFY WIRE AND CONDUIT QUANTITY ℄ SIZES WITH GENERATOR MAKE ℄ MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

NOTES:
1. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH (2)
SCALE: NTS

STRUCTURAL GENERAL NOTES

1.0 GENERAL CONDITIONS
1.1 DESIGN ℄ CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
1.2 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, ℄ THEIR AGENTS FROM ANY LIABILITY WHATSOEVER ℄ 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 CONNECTIONS WITH THE WORK.
1.3 DO NOT SCALE DRAWINGS
1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR	: 3974 LBS

2.0 FOR DESIGN ℄ ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
3.0 CONCRETE
3.1 MEET OR EXCEED THE FOLLOWING CODES ℄ STANDARDS:

DESIGN	: ACI318-11
CONSTRUCTION	: ACI301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
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)

3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
3.5 MAXIMUM AGGREGATE SIZE: 3/4"
3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
4.0 FOUNDATION ℄ EXCAVATION NOTES
4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION ℄ SLAB SUBGRADE ℄ BACKFILL AREAS, ℄ THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE ℄ AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN ℄ NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: S-1

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DIAGRAM CIRCUIT SCHEDULE

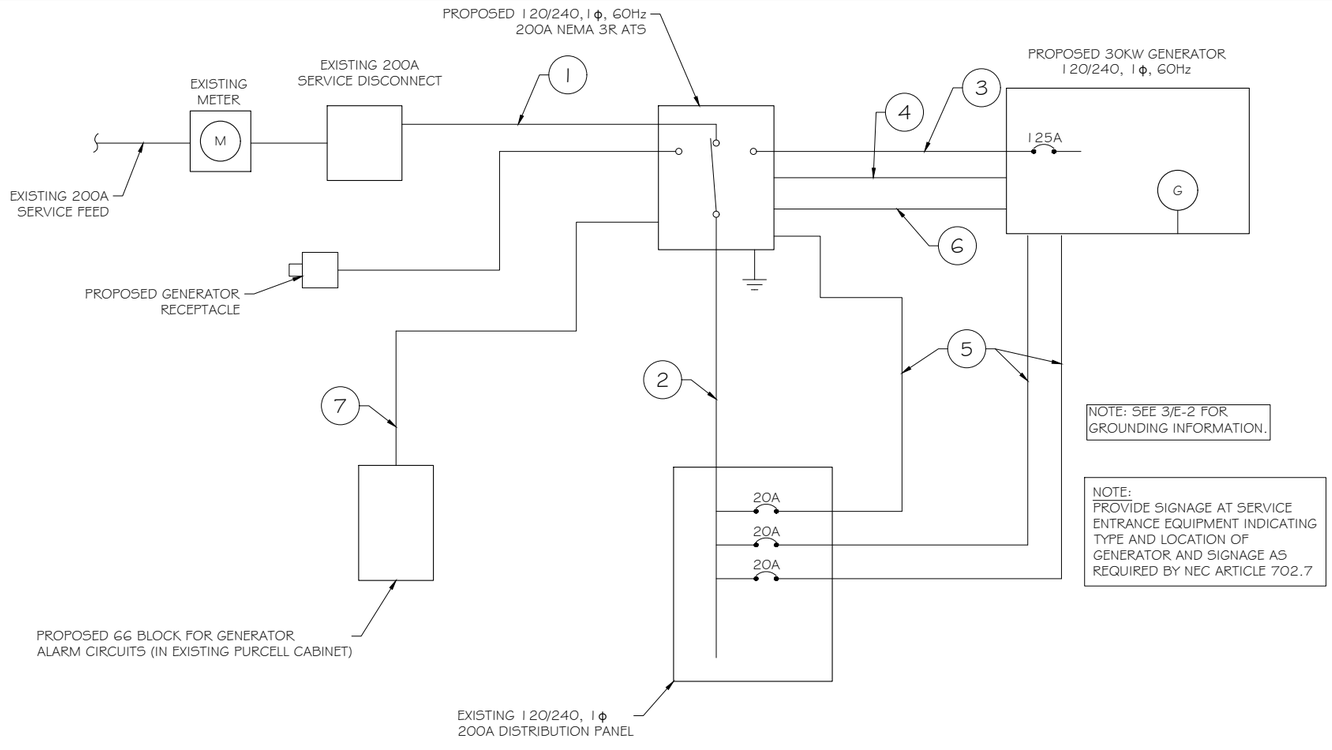
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #1	(1) #6	1-1/2"	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	(1) #12 (1) #12 (1) #12	1" 1" 1"	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 6-PAIR CAT5	N/A	1"	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	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 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

CIRCUIT DETAIL (1)
SCALE: NTS

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
*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE	

ALARM WIRING IDENTIFICATION CHART (2)
SCALE: NTS



PROPOSED WIRING DIAGRAM (3)
SCALE: NTS

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ROCKVILLE, MD 20852

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-1

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AC Distribution Panel - Layout Diagram

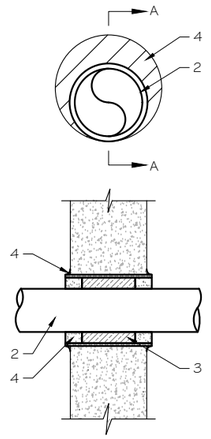
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	RECT 5	1	2P	OFF	50	RECT 9
3					4				
5	2P	ON	30	RECT 6	6	1P	ON	20	
7					8	1P	ON	20	
9	1P	ON	20		10	1P	ON	20	
11	1P	ON	20		12	2P	ON	80	
13	1P	ON	20		14				
15	2P	ON	60		16	1P	ON	20	
17					18	1P	ON	20	
19	2P	ON	30	RECT 7	20	1P	ON	20	
21					22	2P	OFF	30	RECT 10
23	2P	ON	30	RECT 8	24				
25					26	1P	ON	20	
27	2P	ON	30	BTS 1 RECT 1	28				
29					30				
31	2P	ON	30	BTS 1 RECT 2	32				
33					34	1P	ON	20	ATS
35	2P	ON	30	BTS 1 RECT 3	36	1P	ON	20	BLOCK HEATER
37					38	1P	ON	20	BATTERY CHARGER
39	2P	ON	30	BTS 1 RECT 4	40	2P	ON		
41					42				

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

EXISTING PANEL SCHEDULE (1)
SCALE: NTS

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



NOTE:
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

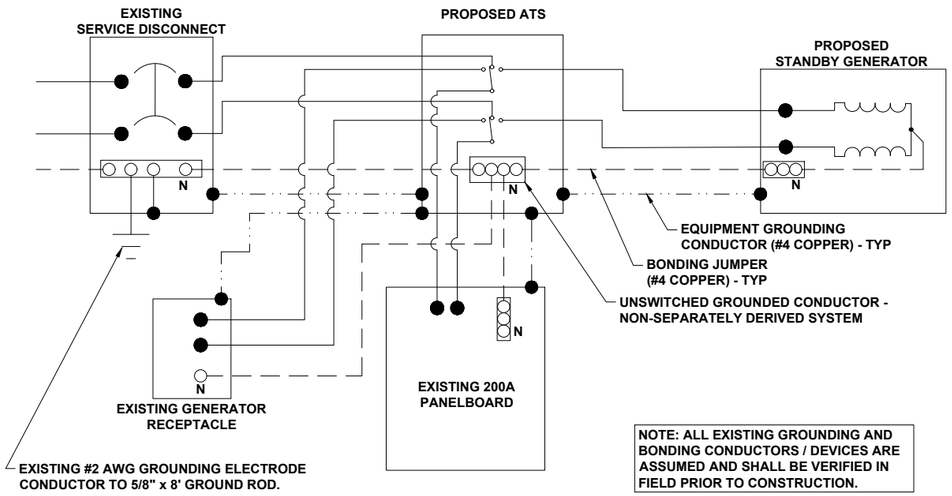
U.L. SYSTEM NO. C-AJ-1150
CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902
F RATING = 3 HR
T RATING = 0 HR

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 (CAT2) 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 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" DIAMETER (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.
3. 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.
4. 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.

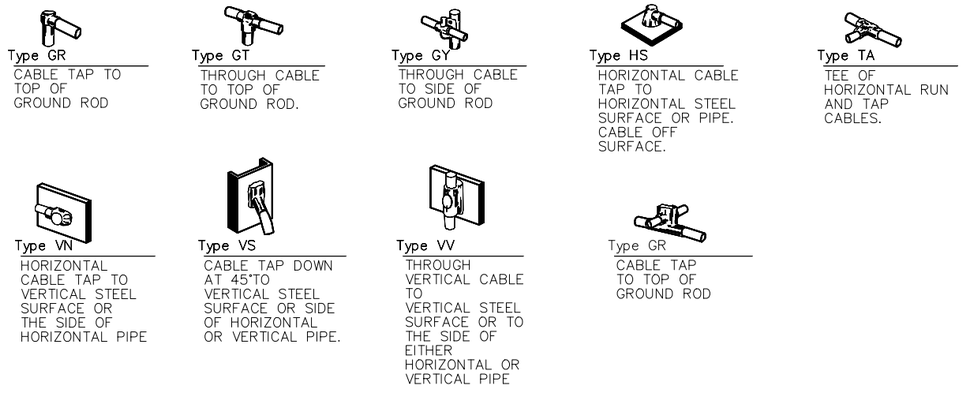
* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) (2)
SCALE: NTS



NOTE: ALL EXISTING GROUNDING AND BONDING CONDUCTORS / DEVICES ARE ASSUMED AND SHALL BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION.

GROUNDING DETAIL (3)
SCALE: NTS



CADWELD DETAILS (4)
SCALE: NTS

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CONSULTANT:
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Information Technology, Inc.
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License No: 37842, Expiration Date: 9/8/2023
Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
1	03/16/23	REVISED CDs
0	02/07/23	FINAL CDs
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-2

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UTILITY AC POWER LOAD ESTIMATE

ESTIMATED SITE AC LOAD

TOTAL ESTIMATED SITE AC LOAD : **28.13** KVA **117.21** AMPS

ESTIMATE 200A SERVICE SUFFICIENT
(NO ON-SITE GENERATOR)

17.63 KVA 73.4583 AMPS

DC PLANT DETAILS: **TOTAL PLANT LOAD:** **24.50 KVA** **102.08 AMPS**

RECTTIFIER SIZE (A):	125	N+1 RECTIFIER QUANTITY:	7
LOAD PER RECT. (KVA):	3.50	N RECTIFIER QUANTITY:	6
MAXIMUM "N" CAPACITY (A)	750	**EXPECTED PEAK DC LOAD (A):**	600.0
MAXIMUM "N+1" CAPACITY (A)	875		

(DC PLANT LOAD CALCULATED WITH N+1 (7) RECTIFIERS AT MAXIMUM OUTPUT)

14

HVAC DETAILS: **TOTAL HVAC LOAD:** 0.00 **KVA** **0.00 AMPS**

		Size	QTY.:	EST. LOAD:
Unit 1	HVAC	4	0	0.00 KVA
Unit 2	N/A	0	0	0.00 KVA
Unit 3	N/A	0	0	0.00 KVA
Unit 4	N/A	0	0	0.00 KVA
Unit 5	N/A	0	0	0.00 KVA
Unit 6	N/A	0	0	0.00 KVA

8.40 **Generator Load:** 0.00 **KVA** **0.00 AMPS**

0.00
0.00
0.00
0.00
0.00
8.40

HEATER QUANTITY: 0 HTR > HVAC? N EST. LOAD: 0.00 KVA N 0.00 AMPS

(THIS CALCULATION USES HIGHEST LOAD - EITHER ALL HEATERS RUNNING OR ALL AIR CONDITIONERS RUNNING)

NOTE: HVAC UNITS USED FOR LOAD CALCULATIONS

(HVAC LOAD CALCULATED WITH ALL SPECIFIED UNITS RUNNING AT MAXIMUM LOAD FOR SITE LOAD, SINGLE HVAC/HEATER USED TO CALCULATE GENSET LOAD)

LIGHTING & RECEPTICLE LOADS: **TOTAL LIGHT/RECPT LOAD:** **3.63 KVA** **15.13 AMPS**

SITE AREA FT^2:	330	INDOOR LIGHTS - (3VA FT^4):	0.99 KVA	4.13 AMPS
		OUTDOOR LIGHTS (EST.):	1.20 KVA	5.00 AMPS
OUTLET QTY:	8 (180VA EACH)	TOTAL OUTLET LOAD:	1.44 KVA	6.00 AMPS

OTHER SITE AC POWERED EQUIPMENT: **TOTAL OTHER SITE AC EQUIPMENT:** **0.00 KVA** **0.00 AMPS**

(THESE CUSTOM AC LOAD VALUES CAN BE ADDED ON THE POWER CONSUMPTION WORK SHEET)

0	KVA	USER SPECIFIED LOAD 1:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 2:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 3:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 4:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 5:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 6:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 7:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 8:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 9:	0.00 KVA	0.00 AMPS
0	KVA	USER SPECIFIED LOAD 10:	0.00 KVA	0.00 AMPS

11' 5" x 28' N 0 0

IT HAS BEEN ATTEMPTED TO USE MANUFACTURER SPECIFICATIONS FOR RECTIFIER LOADS EXCEPT "GENERIC". FOR "**GENERIC**" PLANT CONFIGURATIONS THE ACTUAL MANUFACTURER RECTIFIER LOAD VALUES ARE PREFERRED IF AVAILABLE AND CAN BE SPECIFIED BELOW.

HVAC LOAD VALUES CAN ALSO BE CHANGED FOR ANY CONFIGURATION TO MEET EXACT VENDOR MODEL HVAC SPECIFICATIONS IF AVAILABLE.

RECTIFIER TYPE: GENERIC 125A +24V Rectifier
MAX. 27V RECTIFIER DC OUTPUT: 125 AMPS
DEFAULT RECTIFIER AC LOAD: 3.5 KVA
MODIFY DEFAULT RECTIFIER AC LOAD? **N**

2.14

HVAC SIZE: #REF!
DEFAULT HVAC LOAD (per unit): #REF! KVA #REF! AMPS)
MODIFY DEFAULT HVAC LOAD? N

12

NOTES ON DEFAULT CALCULATIONS AND AC SERVICE EVALUATIONS:

1) LOAD FOR DC PLANT CALCULATED AT MAXIMUM 100% OUTPUT FOR ALL "N+1" RECTIFIERS
NOTE: FOR "GENERIC" PLANT CONFIGURATIONS, VERIFY and/or UPDATE ACTUAL MANUFACTURER MAXIMUM RECTIFIER KVA AC INPUT LOAD FOR BEST ACCURACY

2) LOAD FOR HVAC UNITS IS CALCULATED WITH EITHER ALL AIR CONDITIONING OR ALL HEATING UNITS RUNNING SIMULTANEOUSLY (DECIDED BY WHICH GROUPING PRODUCES THE HIGHEST LOAD.)
(THIS IS AN ABSOLUTE WORST CASE LOAD CALCULATION)
VERIFY and/or UPDATE ACTUAL MANUFACTURE MAXIMUM KVA HVAC LOAD FOR BEST ACCURACY

3) ALL LOADS CALCULATED AT 100% - NO DE-RATING OR 125% UP-RATING FACTORS APPLIED.

4) 120V (DUPLEX) RECEPTACLES ARE 180VA EACH

5) INDOOR LIGHTING: ESTIMATED AT 3VA PER SQUARE FOOT; OUTDOOR LIGHTING ESTIMATED AT 1.2 KVA

6) FOR "BORDERLINE" AC UPGRADE EVALUATIONS - THE CALCULATIONS ARE A NEAR WORST CASE ESTIMATE AND IT IS VERY UNLIKELY (THOUGH POSSIBLE) THE AC LOAD WILL EVER BE AT THE CALCULATED MAXIMUM LOAD VALUE - FOR BORDERLINE AC UPGRADE DECISIONS IT IS RECOMMENDED TO PERFORM ON-SITE LOAD VERIFICATION MEASUREMENTS PRIOR TO INITIATING UTILITY SERVICE UPGRADES

7) GENERATOR SIZING IS BASED ON:
LARGEST HVAC/HEATER SINGLE UNIT LOAD and
TYPICAL DC PLANT LOAD IS CALCULATED BASED ON 50% "N" RECTIFIERS

SITE POWER CALCULATION TOOL - VERSION 5.31 - April 12, 2022 R. BADGERO

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ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
LOAD SUMMARY

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-2.1

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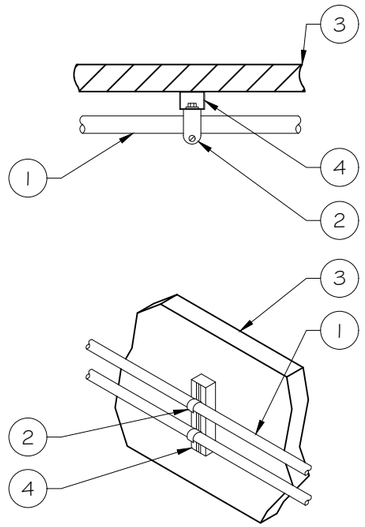
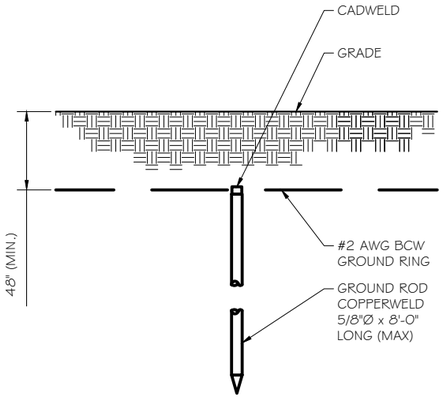
1. CONDUIT (TYP)
2. BUTTERFLY CLAMP AS REQUIRED
3. EXISTING WALL/CEILING
4. VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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'-0" O.C. LENGTH OF RUN	



CONDUIT WALL MOUNT 1
SCALE: NTS

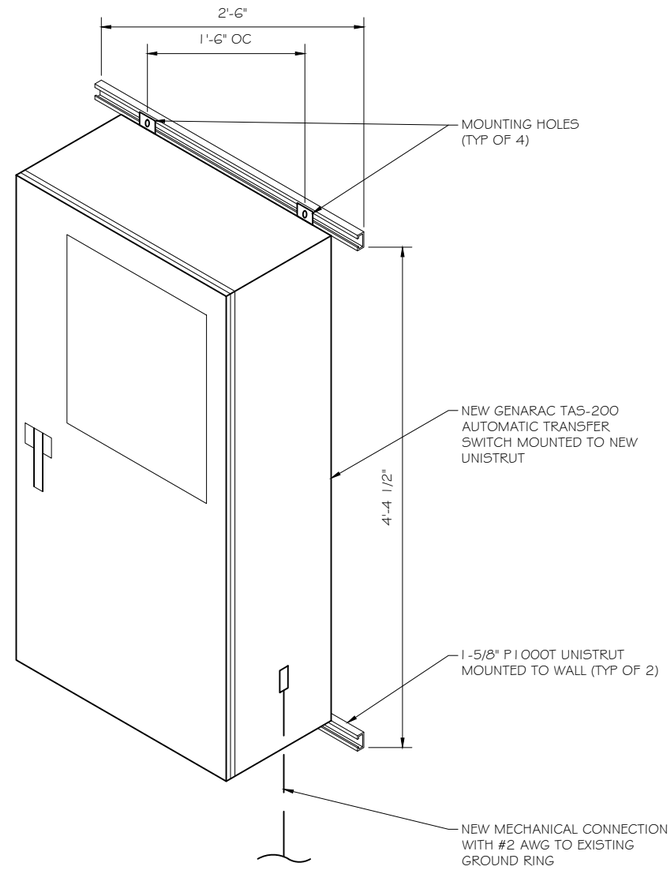


NOTE:
1. GROUND RODS MAY BE:
   - COPPER CLAD STEEL
   - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. 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)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

GROUND ROD DETAIL 2
SCALE: NTS

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"

NOTE:
1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



GENERAC ATS MOUNTING DETAIL 3
SCALE: NTS

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PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-3

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

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

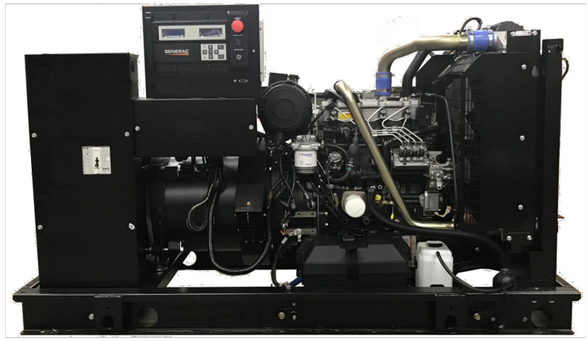

Image used for illustration purposes only

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.

SPEC SHEET 1 of 6

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
- 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)

SPEC SHEET 2 of 6

GENERAC 30KW GENERATOR SPECIFICATIONS
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:
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FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

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

FUEL SYSTEM

- NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

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

GENERATOR SET

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

CIRCUIT BREAKER OPTIONS

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

ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch
- Enclosure Heater
- Damper Alarm Contacts

WARRANTY (Standby Gensets Only)

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

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciation
- 120V GFCI and 240V Outlets
- Remote Communication - Modem
- 10A Engine Run Relay

FUEL TANKS (Size On Last Page)

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

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM

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

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing

FUEL TANKS

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

SPEC SHEET

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	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 Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (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	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50
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%

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)

SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:

GENERAL DYNAMICS
Information Technology, Inc.

GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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0	02/07/23	FINAL CDs
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144

SHEET NUMBER: E-4.1

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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 (m^3/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_2O (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

SPEC SHEET 5 of 6

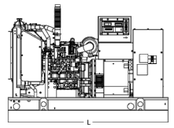
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

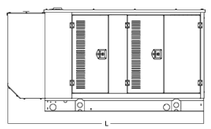
GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



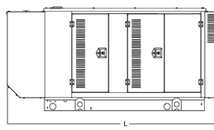
OPEN SET (Includes Exhaust Flex)

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 69.8 (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)



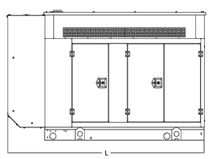
WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	372 (170)	241 (110)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
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	
			Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	505 (230)	338 (154)
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)		
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	
			Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	510 (232)	341 (155)
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		
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.

SPEC SHEET 6 of 6

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

NOTE:
190 GALLONAGE USEABLE BASETANK
STANDARD WITH GENERATOR

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

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OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4.2

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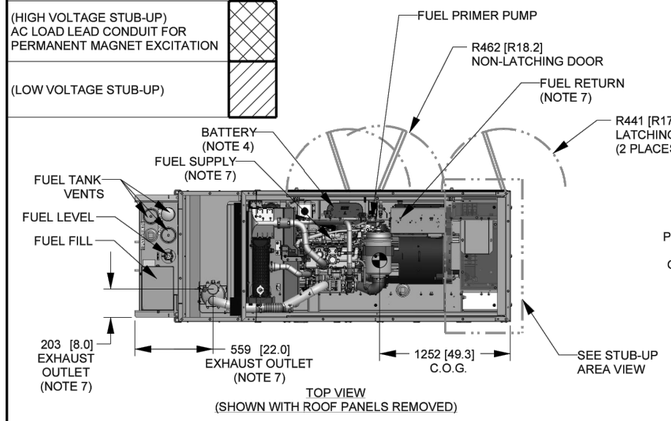
SH	REV	WINDCHILL VERSION	
1/1	A	A.4	

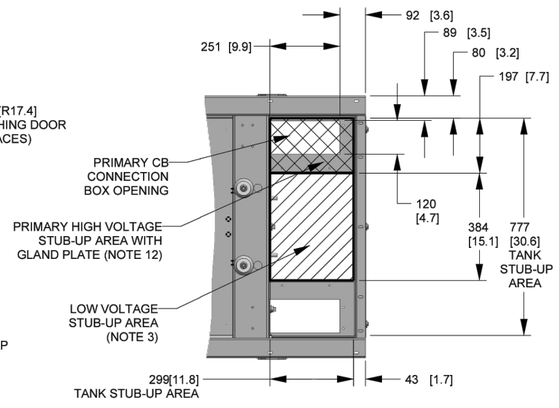
RECOMMENDED ELECTRICAL STUB-UPS

(HIGH VOLTAGE STUB-UP)
AC LOAD LEAD CONDUIT FOR PERMANENT MAGNET EXCITATION

(LOW VOLTAGE STUB-UP)

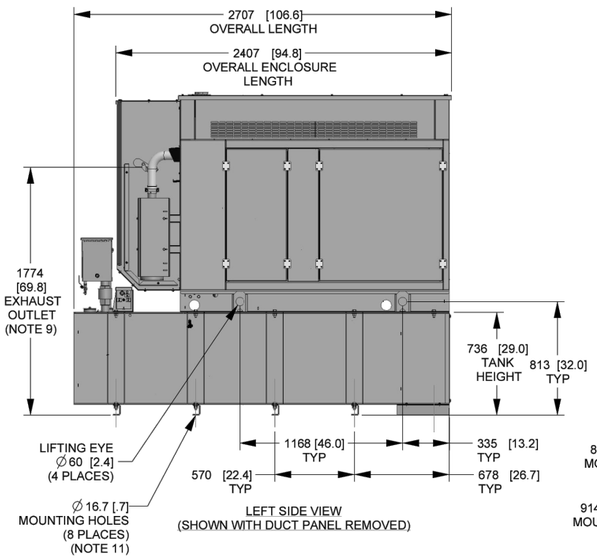


TOP VIEW
(SHOWN WITH ROOF PANELS REMOVED)

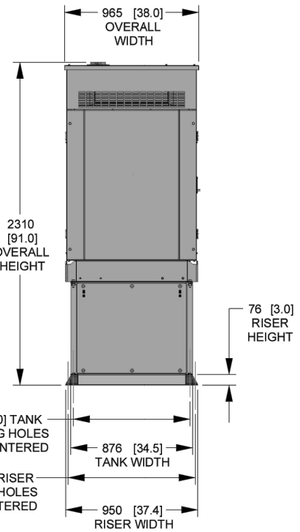


STUB-UP AREA VIEW
(2X SCALE)

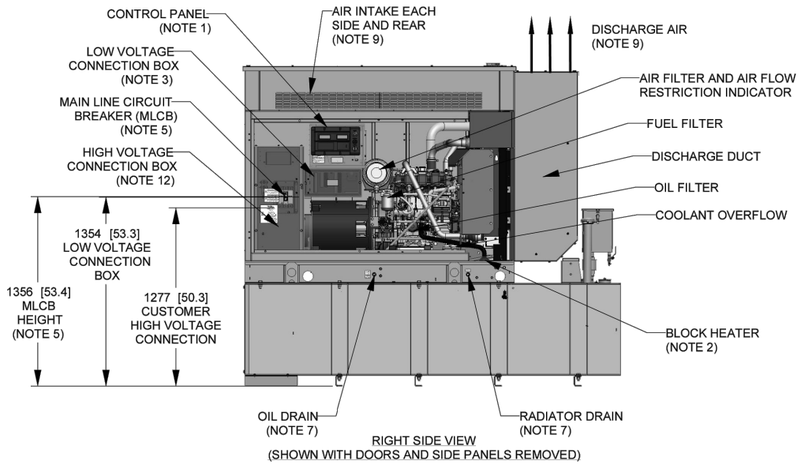
NOTES:
1. CONTROL PANEL (10A BATTERY CHARGER INSIDE)
2. 120V, 20A GFCI & 250V, 15A OUTLET
3. CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN THE LOW VOLTAGE CONNECTION BOX (USE LOW VOLTAGE STUB-UP AREA)
4. BATTERY (12 VOLT NEGATIVE GROUND SYSTEM).
5. MAIN LINE CIRCUIT BREAKER (MLCB) (MLCB HEIGHT MAY VARY WITH CB SELECTION). AC LOAD LEADS CONNECT DIRECTLY TO BOTTOM OF BREAKER.
6. CENTER OF GRAVITY AND WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS
7. ENGINE SERVICE CONNECTIONS:
   FUEL SUPPLY = 3/8" NPT
   FUEL RETURN = 3/8" NPT
   OIL DRAIN = 1/2" NPT
   RADIATOR DRAIN = 1/2" NPT
   EXHAUST OUTLET = 2.5" I.D.
8. STUB-UPS: BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
9. GENERATOR SET MUST BE INSTALLED SUCH THAT FRESH COOLING AIR IS AVAILABLE AND DISCHARGE AIR IS NOT RECIRCULATED. SEE SPEC SHEET FOR MINIMUM AIR FLOW AND MAXIMUM RESTRICTION REQUIREMENTS.
10. BOTTOM OF GENERATOR SET MUST BE CLOSED TO PREVENT PEST INTRUSION AND RECIRCULATION OF DISCHARGE AIR AND/OR IMPROPER COOLING AIR FLOW.
11. BOLTS OR STUDS USED TO MOUNT UNIT TO PAD SHALL BE 5/8-11 GRADE 5. USE STANDARD SAE TORQUE SPECS.
12. HIGH VOLTAGE STUB-UP AREA INCLUDES THE AC LOAD LEAD CONNECTIONS TO MLCB, NEUTRAL CONNECTION AND AUXILIARY 120/240V CONNECTION.
13. 190 GALLON USEABLE CAPACITY BASETANK STANDARD WITH GENERATOR
14. 1500W 120 VAC ENGINE BLOCK HEATER WITH THREE PRONG CORD.
15. FUEL LINES ARE PLUMBED DIRECTLY TO BASE TANK
16. DOORS MUST BE ABLE TO OPEN AT LEAST 90° TO BE REMOVED.
17. GENERATOR MUST BE GROUNDED



LEFT SIDE VIEW
(SHOWN WITH DUCT PANEL REMOVED)



REAR VIEW



RIGHT SIDE VIEW
(SHOWN WITH DOORS AND SIDE PANELS REMOVED)

WEIGHT DATA: INCLUDES FUEL TANK
GENERATOR: 1358 [2995]
GENERATOR WITH SHIPPING SKID: 1424 [3139]

WEIGHT: KG [LBS]
DIMENSIONS: MM [INCHES]

DRAWING CREATED FROM PRO/ENGINEER 3D FILE. ECO MODIFICATION TO BE APPLIED TO SOLID MODEL ONLY.

INSTALLATION DRAWING

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ELECTRONICALLY APPROVED
INSIDE WINDCHILL

GENERAC

TITLE
INSTALL D2.2L G22
30KW SSS L2A Y01 EXT

ISSUE DATE: 12/18/17

SIZE	CAGE NO	DWG NO	REV
B	N/A	10000019290	A

SCALE	0.030	WT-KG	SEE ABOVE	SHEET	1 of 1

GENERAC 30KW GENERATOR TANK SPECIFICATIONS (1)
SCALE: NTS

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PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC 30KW GENERATOR TANK SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4.3

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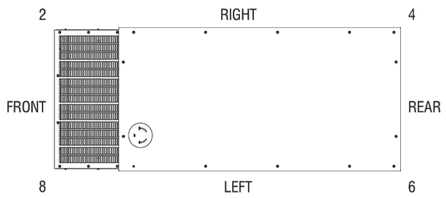
LEVEL 2 SOUND ATTENUATED ENCLOSURE
SD030 2.2L GENERAC

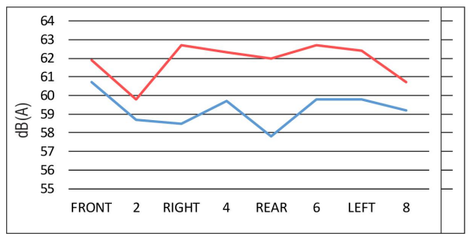
60Hz NO-LOAD, dB(A) — **DISTANCE: 7 METERS**

MICROPHONE LOCATION	OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	dB(A)
1, FRONT	21	42	50	59	53	52	49	46	36	**61**
2	20	37	48	56	53	54	49	45	37	**59**
3, RIGHT	19	41	52	55	52	52	49	48	38	**59**
4	18	53	48	56	54	51	49	44	34	**60**
5, REAR	16	54	49	52	51	50	47	41	31	**58**
6	17	55	47	55	52	54	49	45	38	**60**
7, LEFT	21	54	50	54	53	53	50	46	38	**60**
8	20	46	47	52	55	55	50	44	38	**59**
AVERAGE	**19**	**48**	**49**	**55**	**53**	**53**	**49**	**45**	**36**	**59**

60Hz FULL-LOAD, dB(A) — **DISTANCE: 7 METERS**

MICROPHONE LOCATION	OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1,000	2,000	4,000	8,000	dB(A)
1, FRONT	23	54	52	60	54	52	49	46	36	**62**
2	21	48	49	55	55	54	49	46	38	**60**
3, RIGHT	20	50	59	59	54	52	50	50	37	**63**
4	20	59	49	58	55	52	48	46	35	**62**
5, REAR	21	60	51	55	54	51	47	41	31	**62**
6	20	60	49	58	53	53	52	46	38	**63**
7, LEFT	20	59	55	55	52	54	51	47	39	**62**
8	21	54	51	54	55	55	50	45	37	**61**
AVERAGE	**21**	**56**	**52**	**57**	**54**	**53**	**49**	**46**	**36**	**62**





- All positions at 23 feet (7 meters) from side faces of generator set.
- Test conducted on a 100 foot diameter asphalt surface.
- Sound pressure levels are subject to instrumentation, installation and testing conditions.
- Sound levels are ±2 dB(A)

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Part No. 10000032019
Rev. D 9/03/19

1 SOUND DATA
1 OF 1

SOUND DATA SPECIFICATIONS
SCALE: NTS

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PREPARED FOR:
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CONSULTANT:
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OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC SOUND DATA SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4.4

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TTS Series Switches

200 Amps 600 VAC

GENERAC® | INDUSTRIAL POWER

TAS200

200A Automatic Transfer Switch

TAS200 TAS200

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:

c UL us LISTED — UL1008, UL508, UL50, CSA C22.2 No. 178

nec® — NEC 700, 701 and 702

NEMA — NEMA 250

Application and Engineering Data

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

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
	Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #6 AWG
Output to Site	350MCM - #6 AWG
Generator Annunciator Connector	Deutsch DTM04-12PA-L012
Alarm Terminal Board	Generator Run Alarm
	Generator Fail – Shutdown Alarm
	Generator Fail – Non Shutdown Alarm
	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	
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	

GENERAC ATS SPECIFICATIONS 1
SCALE: NTS

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023
Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
1	03/16/23	REVISED CDs
0	02/07/23	FINAL CDs
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-5

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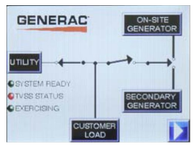
GENERAC | INDUSTRIAL POWER

TTS Control Systems

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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GENERAC ATS SPECIFICATIONS (1)
SCALE: NTS

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

PREPARED FOR:
at&t Mobility

CONSULTANT:
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101 STATION DR
WESTWOOD, MA 02090

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Michael L. Pinske: 3/16/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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SCALE: NONE

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SHEET NUMBER: E-5.1

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Revisions received 2.13.23 - JE
Revisions received 5.2.23 - JE

App No: 2023022106

Application General Information

Applicant Name	General Dynamics	Received	2/8/2023
Application Type	Minor Modification	Ann. Plan?	Yes
Carrier	AT&T Wireless	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Solution Type	Generator		
Existing	Existing	Gvt. Use Desc.	

Application Description

Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Site Information

Site Id	2	Zoning	CR-3.0 C-1.5 R-2.5 H-100
Structure Type	Watertank	Latitude	39.043617
Street Address	11400 Woodglen Dr & Executive Blvd	Longitude	-77.114128
County Site Name	Well Lane Water Tank	Ground Elevation	396
Carrier Site Name	Overlay - White Flint	City	Rockville
Site Owner	WSSC	Lease Status	In Process
Structure Owner	WSSC	Does the structure require an antenna structure registration under FCC Title 47 part 17?	No
Existing Structure Height	105'		
Provide the proposed height of the replacement structure without any antenna (New Apps Only)		Distance to Residential Property (New, Colocation Only)	
		Distance to Commercial Property (New, Colocation Only)	

Justification of why this site was selected:

Existing

Nearby Sites (New Apps Only):

Wednesday, February 8, 2023
1:43:51 PM

App No: 2023022106

Screening considerations (New, Colocation Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only): No

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

Will the proposed installation require more the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets?YN

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

Does the structure or current installation have concealment elements/measures?: No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

If yes, describe how the proposed installation does not defeat the existing concealment.: Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Small Wireless Facility Information

Is this a Small Wireless Facility?: No

Is the structure 10% taller than adjacent structures?

Please list adjacent structure heights

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet: ~~0~~

Cumulative volume of the proposed antenna(s) exclusive of equipment in cubic feet: ~~0~~

ROW Information

PROW?: No

ROW owner

ROW width

Pole Number

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

Antenna Information

Antenna Compliance	No
Compliance Desc	
Antenna Location	No
Antenna Loc. Desc.	
Env. Assessment	
Cat. Excluded?	checked
Routine Env. Evaluation	

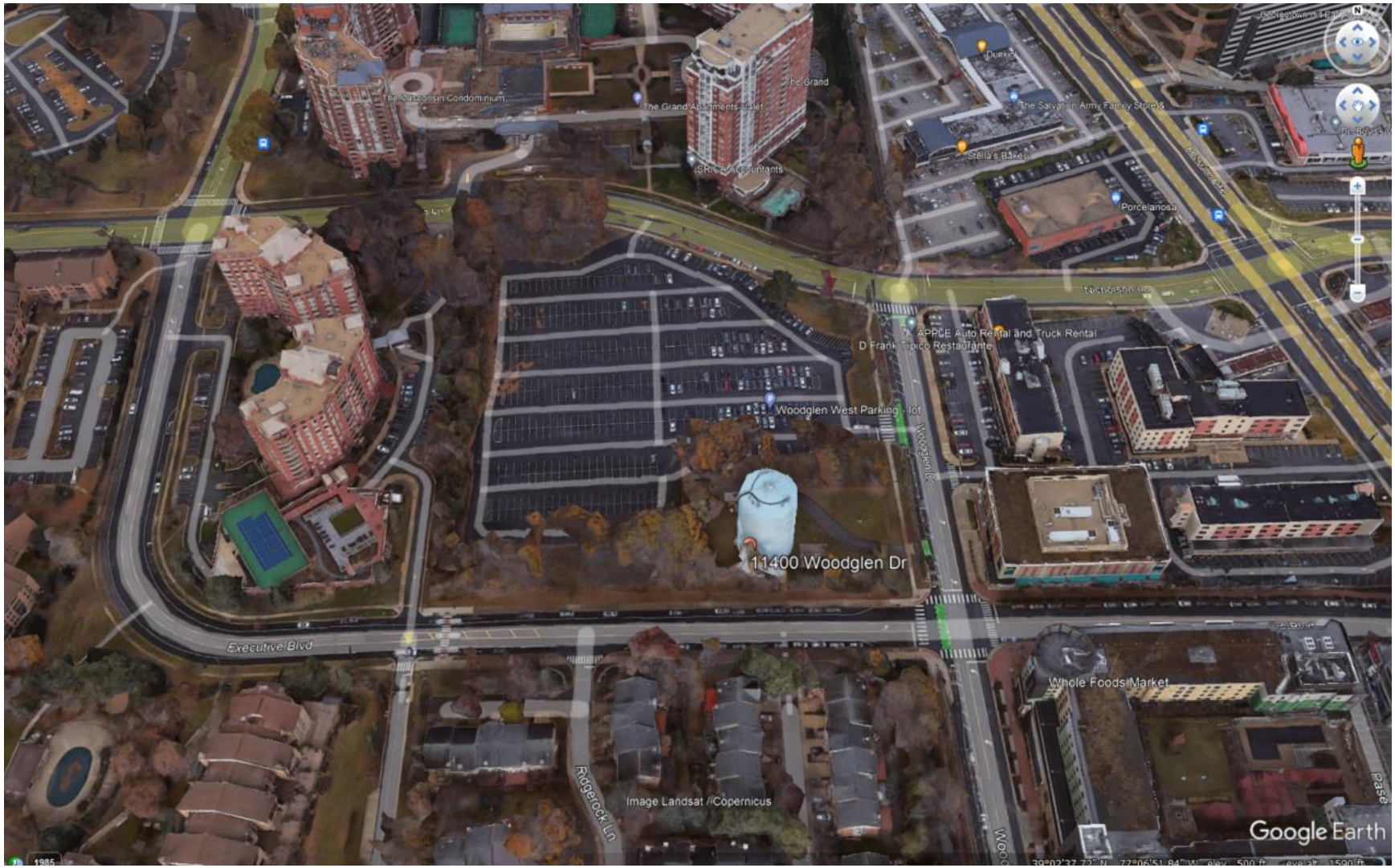
Antenna Model

Frequency

RAD Center | Max ERP | Antenna Dimension | Quantity

Wednesday, February 8, 2023

1:43:51 PM

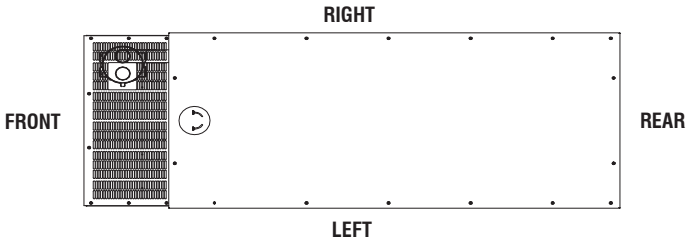

The Grand
The Grand Apartments Valet
Stella's Bakery
Porcelanosa
APPCE Auto Rental and Truck Rental
D Frank Tapico Restaurante
Woodglen West Parking - lot
Woodglen Dr
11400 Woodglen Dr
Executive Blvd
Whole Foods Market
Ridgerock Ln
Image Landsat / Copernicus
Google Earth

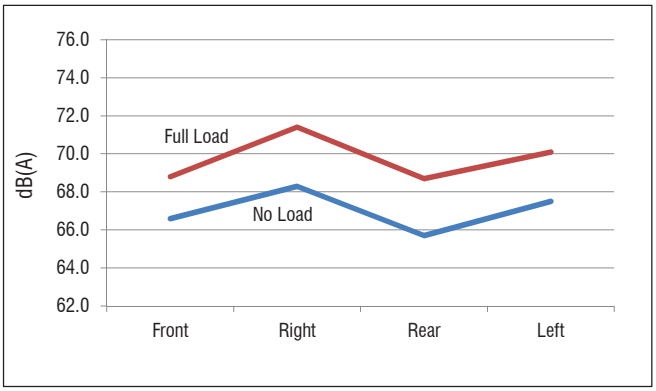
The generator is automatically set to be tested twice a month for approximately 30 minutes. This is a 20 minutes running time and 10 minute cool down. Usually every other Monday/Tuesday around 9:00am. The only other time it will run is during a power outage.

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

Decibel Scale (dBA)*

Civilization V opening theme

Chainsaw 110

Motorcycle 100

Lawn Mower 90

Vacuum Cleaner 80

Conversation 65

Floor Fan 50

Refrigerator Hum 40

Rustling Leaves 30

Pin Falling 15

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

Dark Souls 2 Grass 150

Jet Takeoff 140

Pneumatic Riveter 124

Hammer Drill 114

Rock Concert 105

Tractor/Hand Drill 97

City Traffic 78

Air Conditioning Unit 60

Electrical Transformer 45

*Source:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

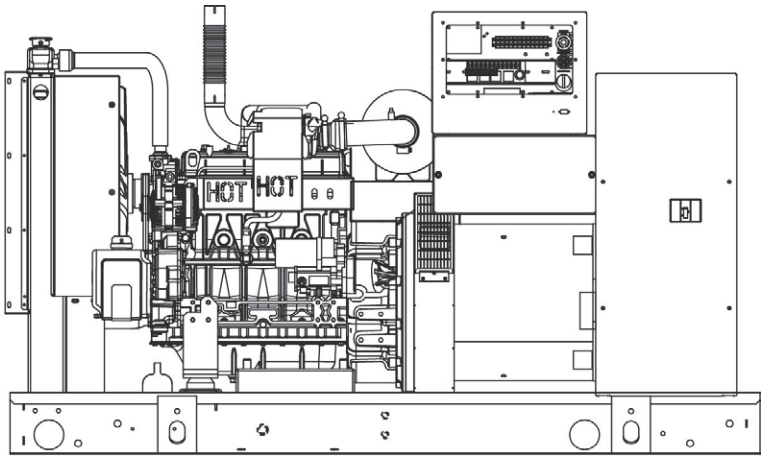
GENERAC | INDUSTRIAL POWER

STANDBY POWER RATING

30 kW, 38 kVA, 60 Hz

PRIME POWER RATING*

27 kW, 34 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

**Certain options or customization may not hold certification valid.

Image used for illustration purposes only

CODES AND STANDARDS

Generac products are designed to the following standards:

UL2200, UL508, UL142, UL498

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA ICS10, MG1, 250, ICS6, AB1

ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

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

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

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
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM

Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- 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
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- O Oil Heater
- O Industrial Exhaust Silencer

Fuel System

- O Flexible fuel lines
- O Primary fuel filter

Engine Electrical System

- O 10A UL battery charger
- O 2.5A UL battery charger
- O Battery Warmer

ALTERNATOR SYSTEM

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

CIRCUIT BREAKER OPTIONS

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

GENERATOR SET

- O Gen-Link Communications Software (English Only)
- O 8 Position Load Center
- O 2 Year Extended Warranty
- O 5 Year Warranty
- O 5 Year Extended Warranty

ENCLOSURE

- O Weather Protected
- O Level 1 Sound Attenuation
- O Level 2 Sound Attenuation
- O Steel Enclosure
- O Aluminum Enclosure
- O 150 MPH Wind Kit
- O 12 VDC Enclosure Lighting Kit
- O 120 VAC Enclosure Lighting Kit
- O AC/DC Enclosure Lighting Kit
- O Door Alarm Switch

TANKS (Size on last page)

- O Electrical Fuel Level
- O Mechanical Fuel Level
- O 54 Gal (204.4 L) Usable Capacity
- O 132 Gal (499.7 L) Usable Capacity
- O 211 Gal (798.7 L) Usable Capacity
- O 300 Gal (1135.6 L) Usable Capacity
- O 8” Fill Extension
- O 13” Fill Extension
- O 19” Fill Extension

CONTROL SYSTEM

- O 21-Light Remote Annunciator
- O Remote Relay Panel (8 or 16)
- O Oil Temperature Sender with Indication 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 Remote Communication - Modem
- O Remote Communication - Ethernet
- O 10A Run Relay
- O Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- O Coolant heater ball valves
- O Block Heaters
- O Fluid containment pans

ALTERNATOR SYSTEM

- O 3rd Breaker Systems

CONTROL SYSTEM

- O Spare inputs (x4) / outputs (x4) - H Panel Only
- O Battery Disconnect Switch

GENERATOR SET

- O Special Testing
- O IBC Seismic Certification

ENCLOSURE

- O Motorized Dampers
- O Door switched for intrusion alert
- O Enclosure ambient heaters

TANKS

- O Overfill Protection Valve
- O UL2085 Tank
- O ULC S-601 Tank
- O Stainless Steel Tank
- O Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- O Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu In)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminium

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Standard Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	7.94 (0.31)
Fuel Return Line mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, 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%

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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: 46
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
3 (1)

Total Fuel Pump Flow (Combustion + Return)
4.5 gph

	Diesel - gph (lph)
Percent Load	gph (lph)
25%	0.92 (3.5)
50%	1.45 (5.5)
75%	1.96 (7.4)
100%	2.74 (10.4)

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

COOLING

		Standby
Coolant Flow per Minute	gpm (lpm)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	111,000
Inlet Air	cfm (m3/hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H_2O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m3/min)	90 (2.55)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	153

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	230 (391)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	850 (454)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

** 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 consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

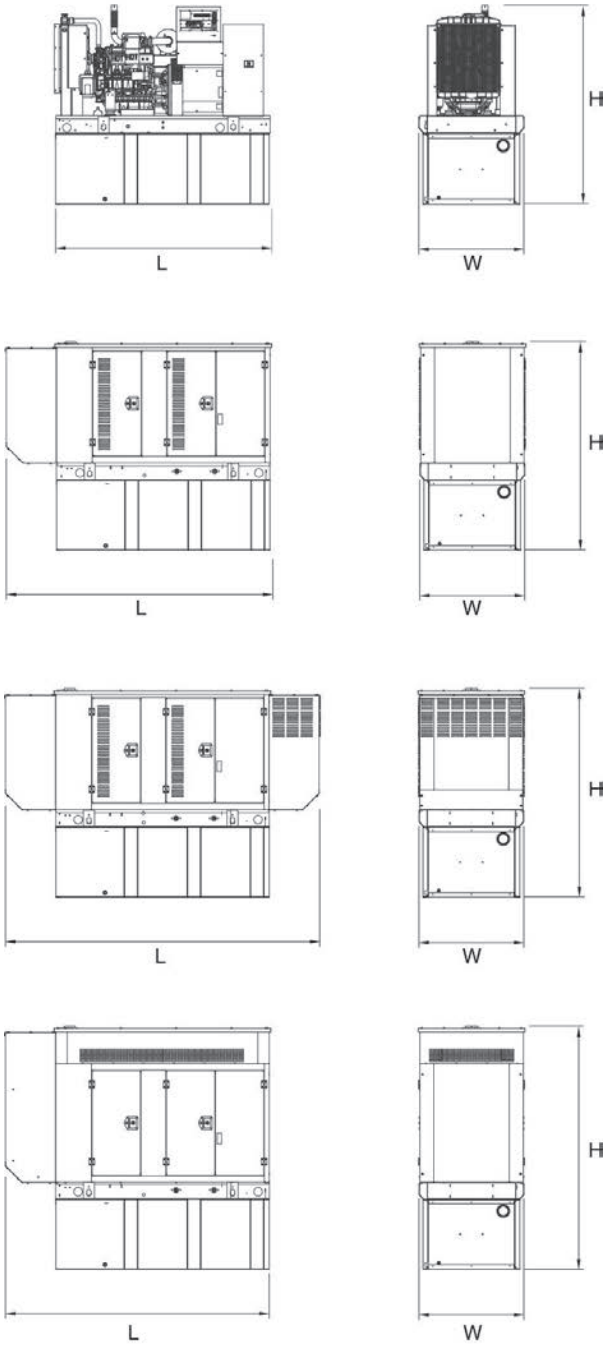
SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set
NO TANK	-	76 (1930.4) x 37.4 (949.9) x 42.2 (1072.1)	2060 (934)
19	54 (204.4)	76 (1930.4) x 37.4 (949.9) x 55.2 (1402.1)	2540 (1152)
48	132 (499.7)	76 (1930.4) x 37.4 (949.9) x 67.2 (1706.9)	2770 (1257)
77	211 (798.7)	76 (1930.4) x 37.4 (949.9) x 79.2 (2011.7)	2979 (1351)
109	300 (1135.6)	92.9 (2360) x 37.4 (949.9) x 82.7 (2100.6)	3042 (1380)

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 74.5 (1892.3)	302 (137)	191 (87)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 90 (2286)		

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112.5 (2857.1) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	112.5 (2857.1) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	112.5 (2857.1) x 38 (965.2) x 74.5 (1892.3)	455 (206)	288 (131)
77	211 (798.7)	112.5 (2857.1) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	112.5 (2857.1) x 38 (965.2) x 90 (2286)		

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 62 (1573.9)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 75 (1905)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 87 (2209.8)	460 (209)	291 (132)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 99 (2514.6)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 102.5 (2603.5)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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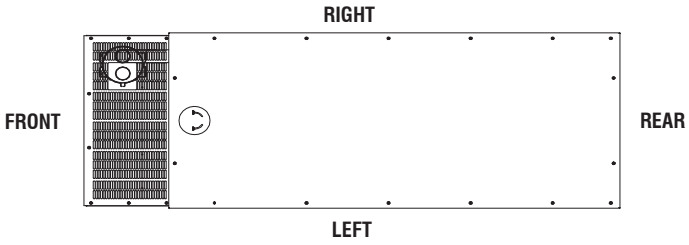
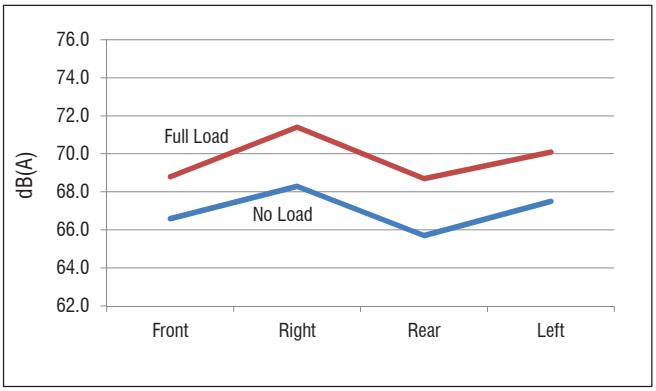
Part No 0K5085
Rev. D 08/19/15

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

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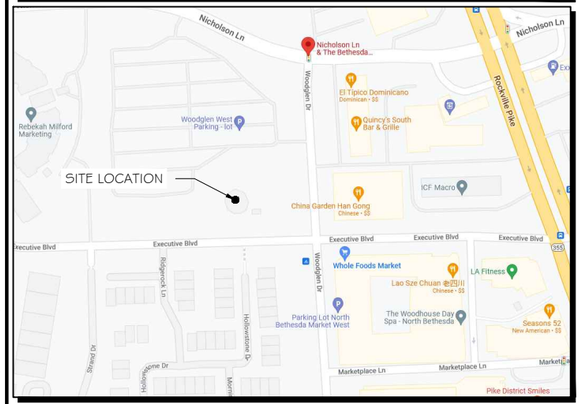
at&t Mobility

SITE NAME: OVERLAY - WHITE FLINT
FA LOCATION CODE: 10004923

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

VICINITY MAP



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.

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 2018

2. NATIONAL ELECTRIC CODE 2017

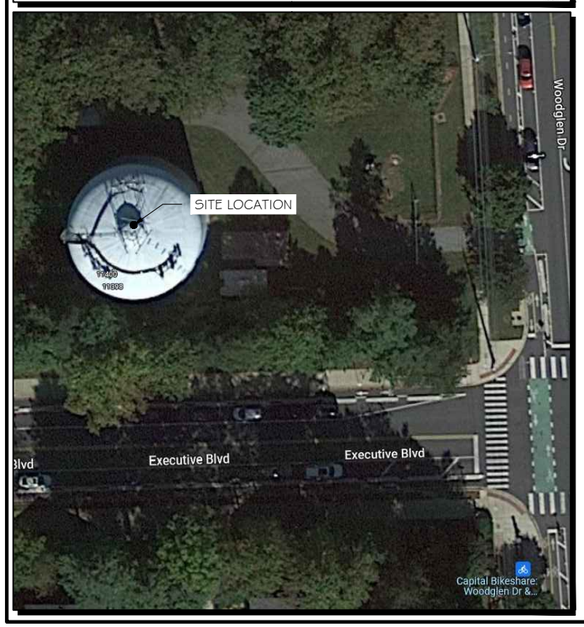
3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

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

AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER:

BRIAN K SILBERT
SR. REGIONAL MANAGER
GENERAL DYNAMICS WIRELESS SERVICES
101 STATION DRIVE
WESTWOOD, MA 02090
EMAIL: Brian.Silbert@GDIT.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: OVERLAY - WHITE FLINT
FA NUMBER: 10004923

PROPERTY OWNER:
WASHINGTON SUBURBAN SANITARY COMMISSION
14501 SWITZER LANE
LAUREL, MD 20707

ADDRESS:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

COUNTY: MONTGOMERY

LAT.: 39.043609°
LONG.: -77.114156°

GROUND ELEVATION: 396 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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S-1 FOUNDATION DETAILS

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E-4 GENERAC GENERATOR SPECIFICATIONS
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SIGNATURE BLOCK

AT&T MGR. DATE

GENERAL DYNAMICS CONSTRUCTION MGR. DATE

SITE ACQUISITION DATE

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: T-1

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NOTES TO SUBCONTRACTOR:

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE 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, 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.

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 TO BID SUBMITTAL..

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. 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.

12. 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 SUBCONTRACTOR.

13. 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 PERIOD.

15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

16. 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.

17. 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.

GENERAL NOTES:

1. 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 AND TOWER.

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 TIMES PER MONTH BY AT&T TECHNICIANS.

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

6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

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.

2. 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

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 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.

5. 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 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'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. 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. ASTIM (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. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
   g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
   h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
   i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
   j. UL (UNDERWRITER'S LABORATORY)

10. 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.

11. 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

1. 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 THHN/THWN 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

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'-0" VERTICAL AND 1'-0" 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

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

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 BONDING.

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.

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 PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.

7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC 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.

9. 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

1. 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 UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

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PREPARED FOR:

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CONSULTANT:

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Information Technology, Inc.

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101 STATION DR
WESTWOOD, MA 02090

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License No: 37842 Expiration Date: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs
ISSUE PHASE	FINAL	DATE ISSUED 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAL NOTES

SCALE: NONE

PROJECT NUMBER 54144

SHEET NUMBER N-1

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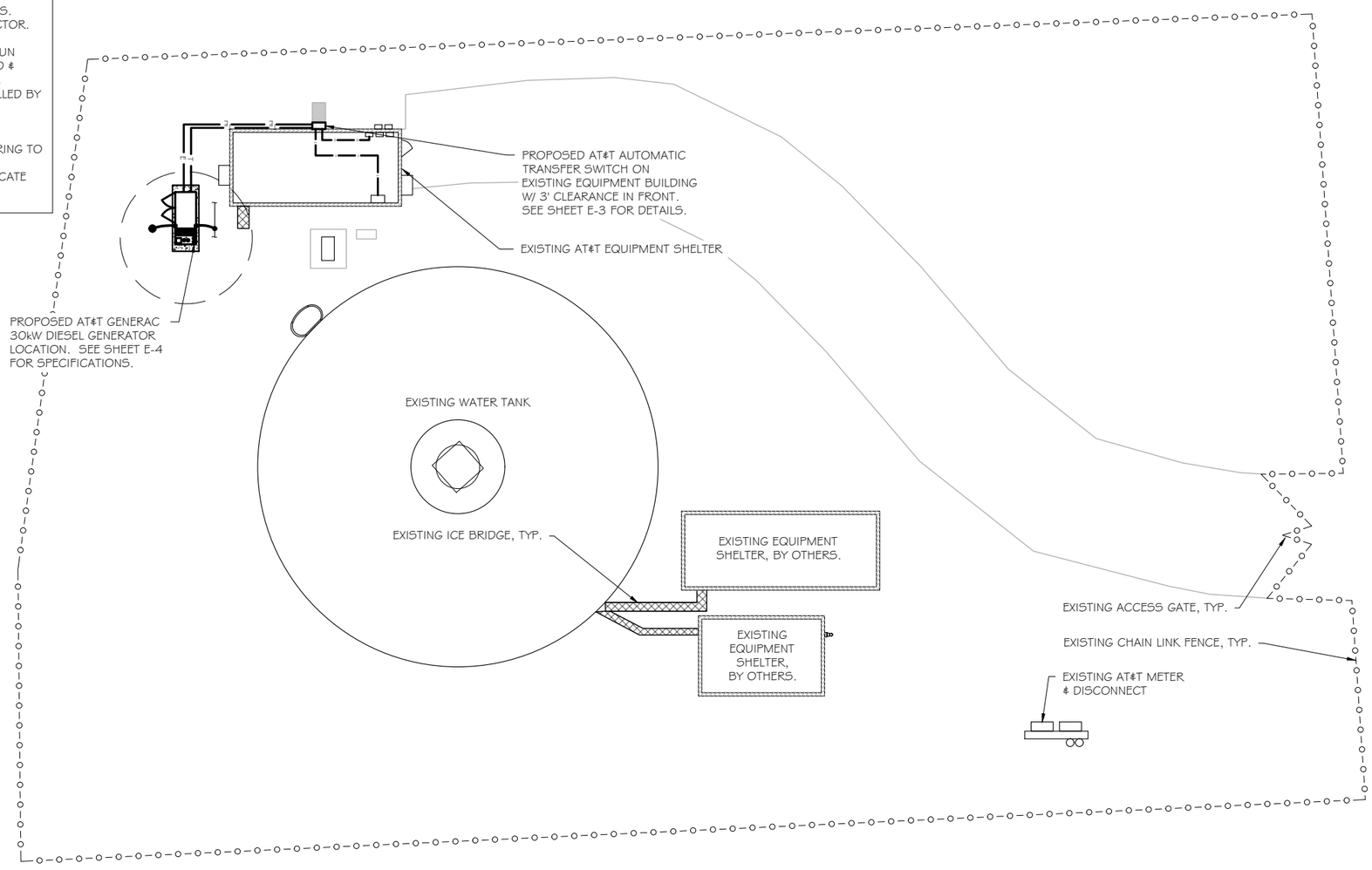
SCOPE OF WORK DETAILS

GENERAL:
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

CONDUITS:
- INSTALL PULL STRING IN EACH CONDUIT
- (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.



SITE PLAN
SCALE: 1" = 20'

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CONSULTANT:
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WESTWOOD, MA 02090

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License No: 37842 Expiration Date: 9/8/2023
Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 10' 20' 40'
11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

PROJECT NUMBER: 54144
SHEET NUMBER: A-1

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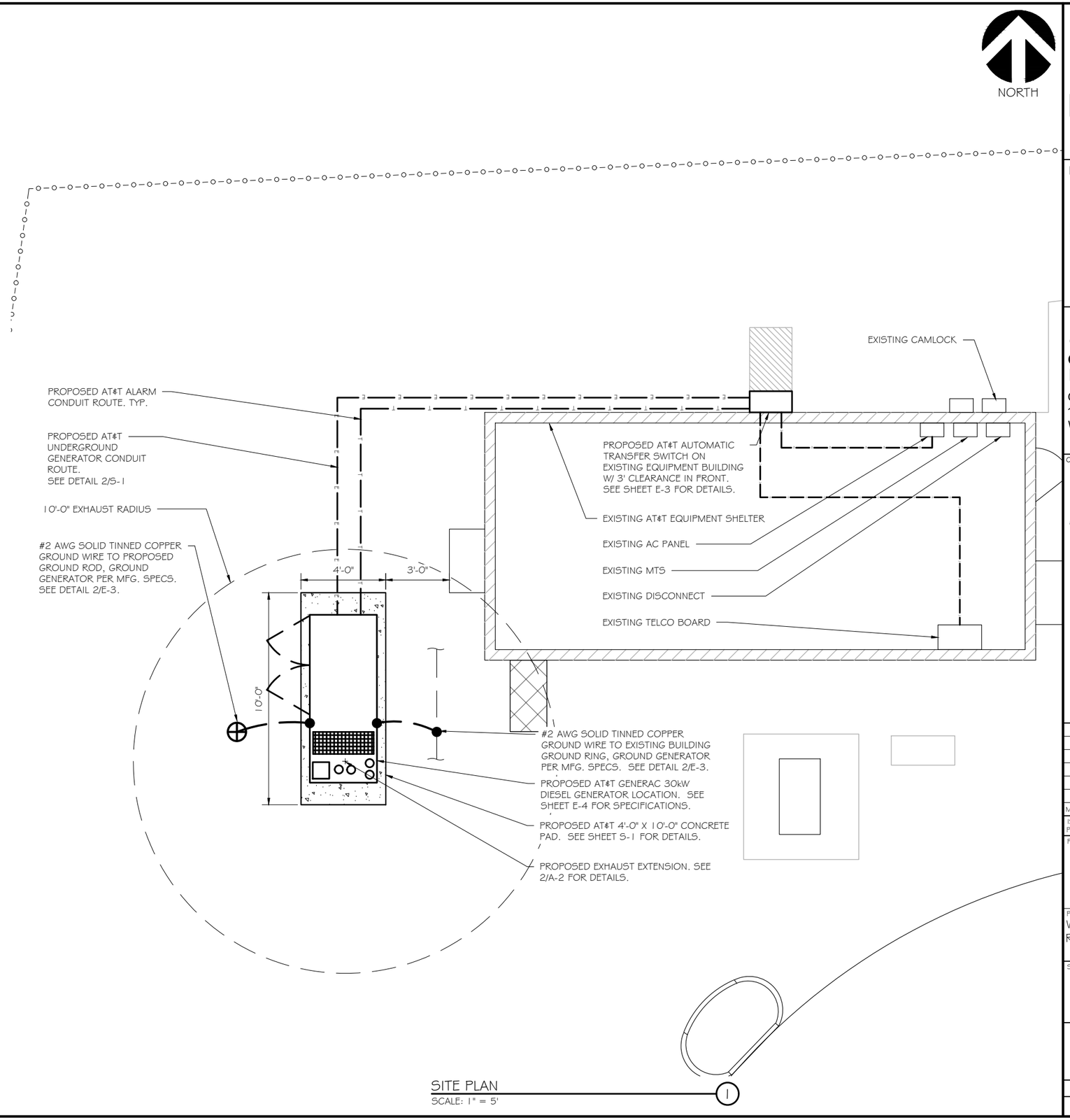
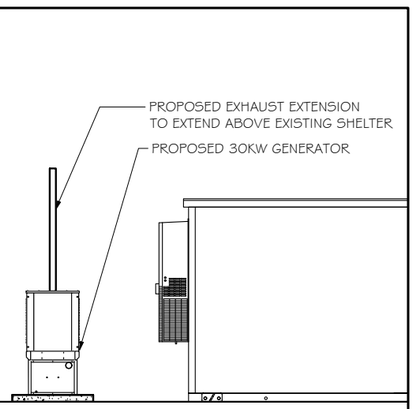


SITE PLAN
SCALE: 1" = 5'
1



EXHAUST EXTENSION DETAILS
SCALE: N/A
2

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STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
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ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" - 1" = 5'
22" x 34" - 1" = 2.5'

PROJECT NUMBER: 54144
SHEET NUMBER: A-2

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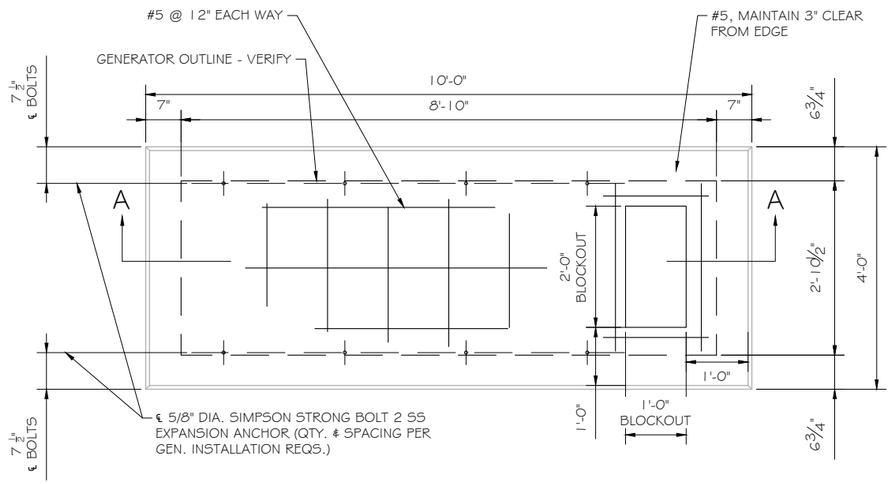
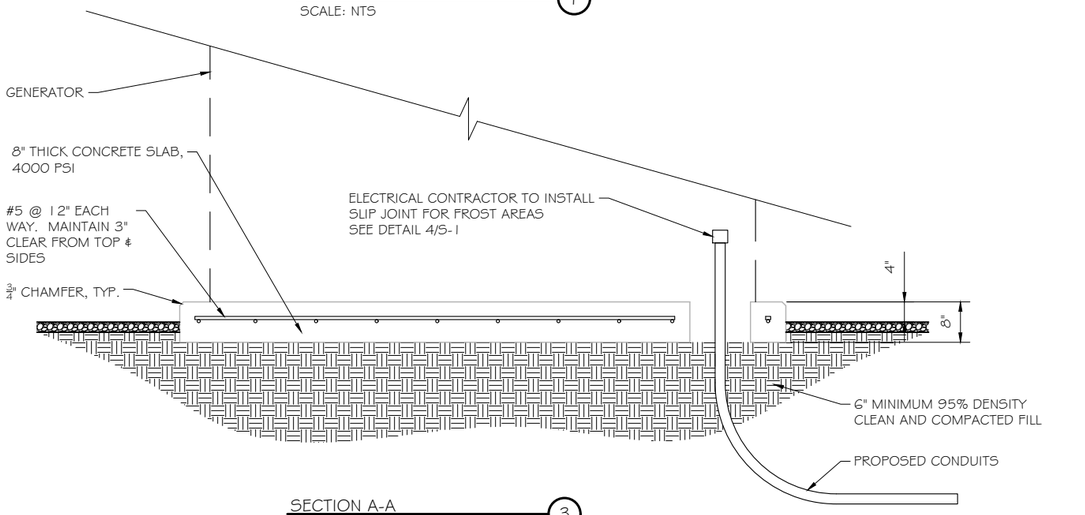


FOUNDATION PLAN 1
SCALE: NTS



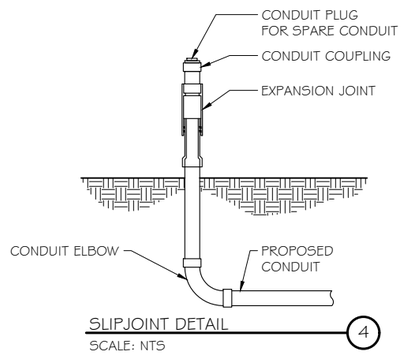
SECTION A-A 3
SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT 30KW GENERATOR PACKAGE
UL REGISTRATION NUMBER: MH18459
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 & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK & 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

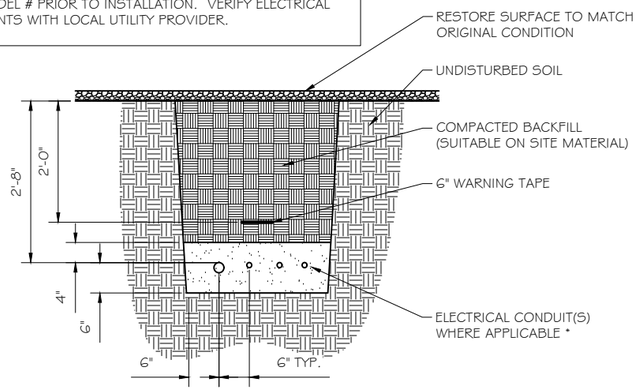
FACTORY PRE-SET AT 95% FULL FOR ALARM
FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL 4
SCALE: NTS

NOTE:

VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

NOTES:
1. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH 2
SCALE: NTS

STRUCTURAL GENERAL NOTES

1.0 GENERAL CONDITIONS
1.1 DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
1.2 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, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & 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 CONNECTIONS WITH THE WORK.
1.3 DO NOT SCALE DRAWINGS
1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR	: 3974 LBS

2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
3.0 CONCRETE
3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN	: ACI318-11
CONSTRUCTION	: ACI301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
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)

3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
3.5 MAXIMUM AGGREGATE SIZE: 3/4"
3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
4.0 FOUNDATION & EXCAVATION NOTES
4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: S-1

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DIAGRAM CIRCUIT SCHEDULE

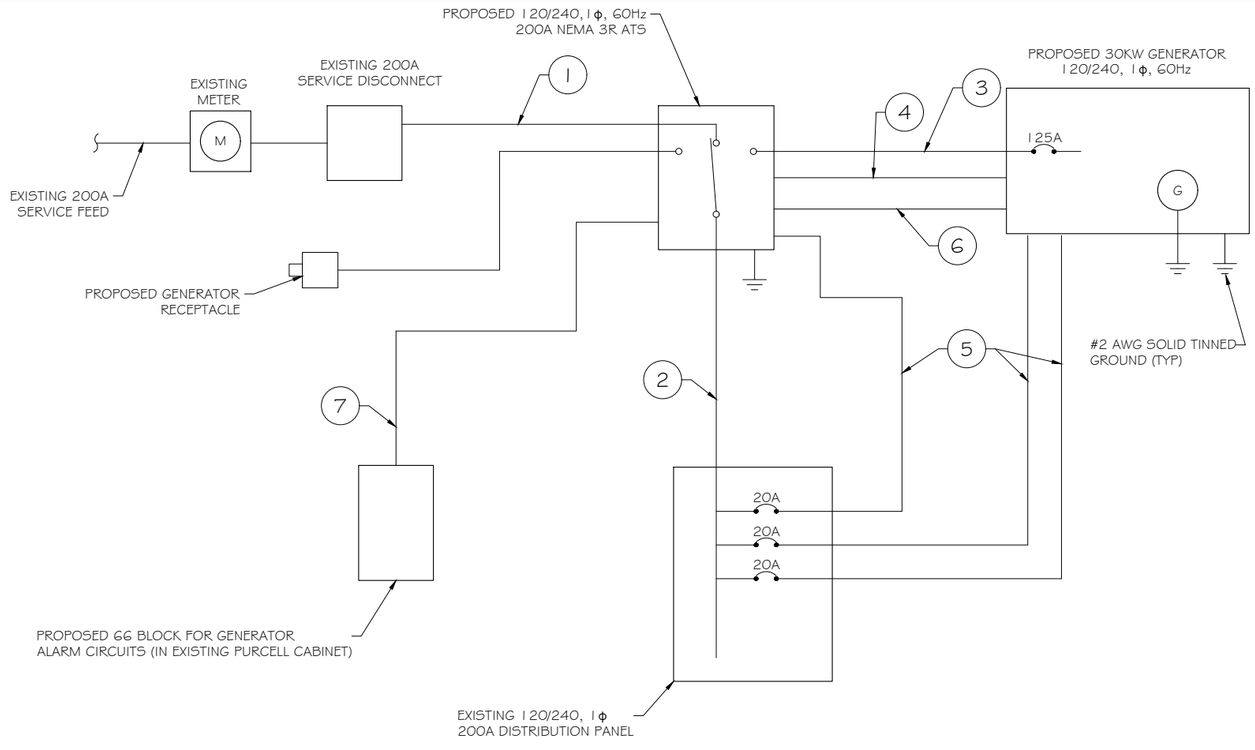
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #1	(1) #6	1-1/2"	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	(1) #12 (1) #12 (1) #12	1" 1" 1"	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 6-PAIR CAT5	N/A	1"	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	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 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

CIRCUIT DETAIL (1)
SCALE: NTS

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
*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE	

ALARM WIRING IDENTIFICATION CHART (2)
SCALE: NTS



PROPOSED WIRING DIAGRAM (3)
SCALE: NTS

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CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023
Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-1

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AC Distribution Panel - Layout Diagram

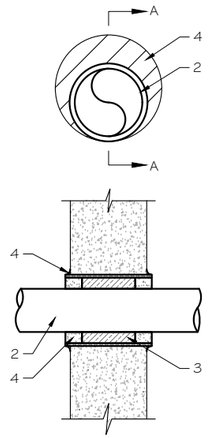
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	RECT 5	1	2P	OFF	50	RECT 9
3					2				
5	2P	ON	30	RECT 6	6	1P	ON	20	
7					8	1P	ON	20	
9	1P	ON	20		10	1P	ON	20	
11	1P	ON	20		12	2P	ON	80	
13	1P	ON	20		14				
15	2P	ON	60		16	1P	ON	20	
17					18	1P	ON	20	
19	2P	ON	30	RECT 7	20	1P	ON	20	
21					22	2P	OFF	30	RECT 10
23	2P	ON	30	RECT 8	24				
25					26	1P	ON	20	
27	2P	ON	30	BTS 1 RECT 1	28				
29					30				
31	2P	ON	30	BTS 1 RECT 2	32				
33					34	1P	ON	20	ATS
35	2P	ON	30	BTS 1 RECT 3	36	1P	ON	20	BLOCK HEATER
37					38	1P	ON	20	BATTERY CHARGER
39	2P	ON	30	BTS 1 RECT 4	40	2P	ON		
41					42				

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

EXISTING PANEL SCHEDULE (1)
SCALE: NTS

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



NOTE:
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
2. 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 = 0 HR

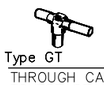
1. FLOOR OR WALL ASSEMBLY : MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
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 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" DIAMETER (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.
3. 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.
4. 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

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) (2)
SCALE: NTS


Type GR
CABLE TAP TO TOP OF GROUND ROD


Type GT
THROUGH CABLE TO TOP OF GROUND ROD.


Type GY
THROUGH CABLE TO SIDE OF GROUND ROD


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


Type TA
TEE OF HORIZONTAL RUN AND TAP CABLES.


Type VN
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.


Type VV
THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE


Type GR
CABLE TAP TO TOP OF GROUND ROD

CADWELD DETAILS (3)
SCALE: NTS

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at&t Mobility

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ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-2

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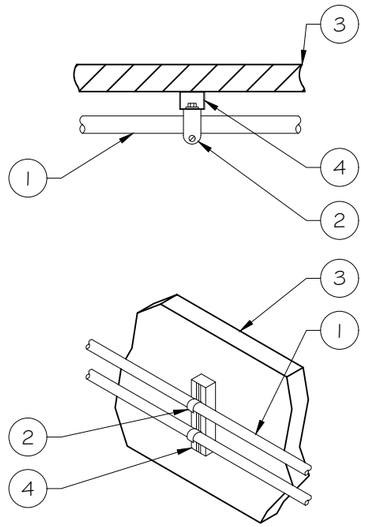
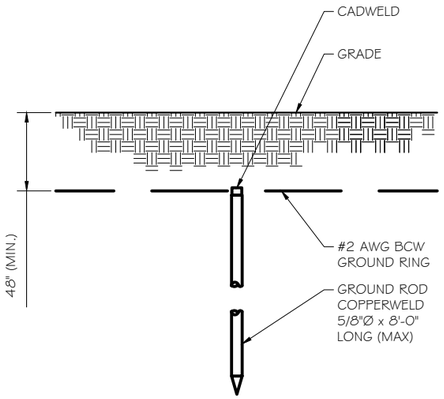
1. CONDUIT (TYP)
2. BUTTERFLY CLAMP AS REQUIRED
3. EXISTING WALL/CEILING
4. VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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'-0" O.C. LENGTH OF RUN	



CONDUIT WALL MOUNT 1
SCALE: NTS

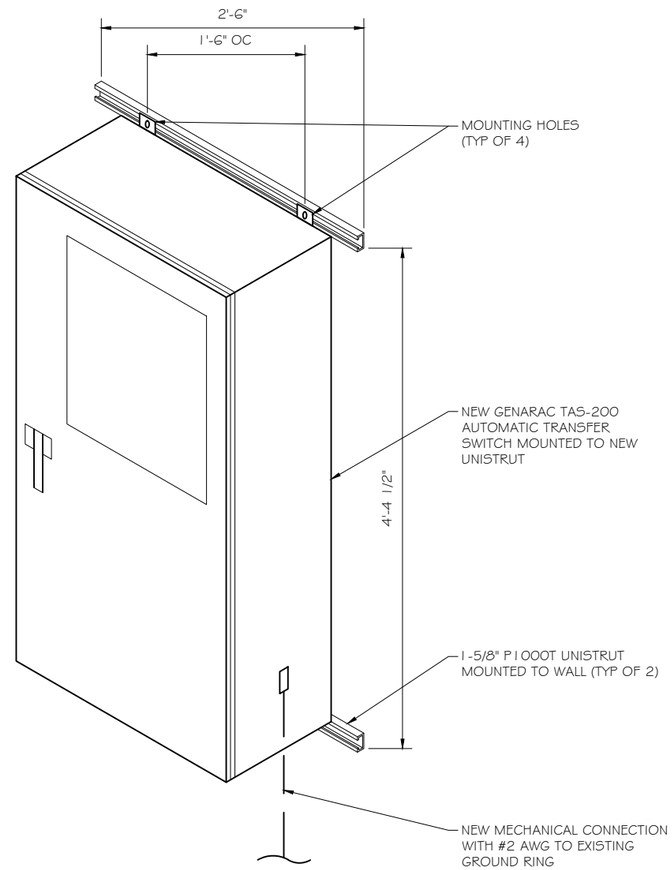


NOTE:
1. GROUND RODS MAY BE:
   - COPPER CLAD STEEL
   - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. 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)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

GROUND ROD DETAIL 2
SCALE: NTS

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"

NOTE:
1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



GENERAC ATS MOUNTING DETAIL 3
SCALE: NTS

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ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-3

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

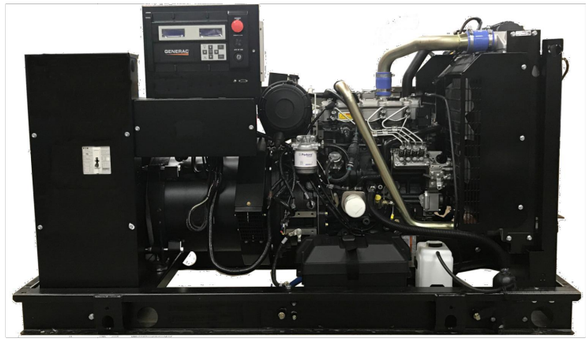
Standby Power Rating
30 kW, 38 kVA, 60 Hz

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

ISO 9001:2008

USA ENGINEERED & BUILT* *Assembled in the USA using domestic and foreign parts

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



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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.

SPEC SHEET 1 of 6

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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)

SPEC SHEET 2 of 6

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:
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SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

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

FUEL SYSTEM
- NPT Flexible Fuel Line

ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET
- Extended Factory Testing
- 8 Position Load Center
- Pad Vibration Isolation

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE
- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch
- Enclosure Heater
- Damper Alarm Contacts

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM
- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciation
- 120V GFCI and 240V Outlets
- Remote Communication - Modem
- 10A Engine Run Relay

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

ENGINEERED OPTIONS

ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM
- 3rd Breaker System

GENERATOR SET
- Special Testing

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

SPEC SHEET

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	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 Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (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	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50
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%

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)

SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:

GENERAL DYNAMICS
Information Technology, Inc.

GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144

SHEET NUMBER: E-4.1

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I:\54100\54144\CAD\54144_10004923_OVERLAY - WHITE FLINT_GENERATOR ATT CDs.dwg Printed by: tbeatty on Feb 07, 2023 - 5:13pm

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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 (m^3/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_2O (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

SPEC SHEET 5 of 6

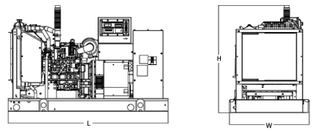
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

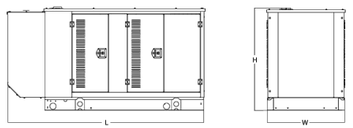
GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



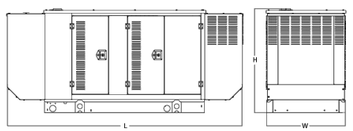
OPEN SET (Includes Exhaust Flex)

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 69.8 (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)



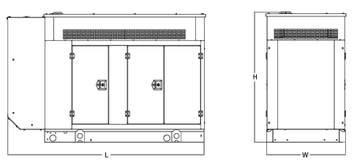
WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	372 (170)	241 (110)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
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	
			Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	505 (230)	338 (154)
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)		
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	
			Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	510 (232)	341 (155)
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		
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.

SPEC SHEET 6 of 6

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

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:

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ROCKVILLE, MD 20852

SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 54144

SHEET NUMBER E-4.2

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TTS Series Switches

200 Amps 600 VAC

GENERAC® | INDUSTRIAL POWER

TAS200

200A Automatic Transfer Switch

TAS200 TAS200

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:

c UL us LISTED — UL1008, UL508, UL50, CSA C22.2 No. 178

nec® — NEC 700, 701 and 702

NEMA — NEMA 250

Application and Engineering Data

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

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
	Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #6 AWG
Output to Site	350MCM - #6 AWG
Generator Annunciator Connector	Deutsch DTM04-12PA-L012
Alarm Terminal Board	Generator Run Alarm
	Generator Fail – Shutdown Alarm
	Generator Fail – Non Shutdown Alarm
	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	
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	

GENERAC ATS SPECIFICATIONS
SCALE: NTS
1

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PREPARED FOR:

at&t Mobility

CONSULTANT:
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ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-5

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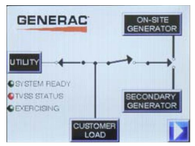
GENERAC | INDUSTRIAL POWER

TTS Control Systems

TAS200

3 of 3

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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GENERAC ATS SPECIFICATIONS 1
SCALE: NTS

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SHEET NUMBER: E-5.1

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Revisions received 2.13.23 - JE

App No: 2023022106

Application General Information

Applicant Name	General Dynamics	Received	2/8/2023
Application Type	Minor Modification	Ann. Plan?	Yes
Carrier	AT&T Wireless	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Solution Type	Generator		
Existing	Existing	Gvt. Use Desc.	

Application Description

Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Site Information

Site Id	2	Zoning	CR-3.0 C-1.5 R-2.5 H-100
Structure Type	Watertank	Latitude	39.043617
Street Address	11400 Woodglen Dr & Executive Blvd	Longitude	-77.114128
County Site Name	Well Lane Water Tank	Ground Elevation	396
Carrier Site Name	Overlay - White Flint	City	Rockville
Site Owner	WSSC	Lease Status	In Process
Structure Owner	WSSC	Does the structure require an antenna structure registration under FCC Title 47 part 17?	No
Existing Structure Height	105'		
Provide the proposed height of the replacement structure without any antenna (New Apps Only)		Distance to Residential Property (New, Colocation Only)	
		Distance to Commercial Property (New, Colocation Only)	

Justification of why this site was selected:

Existing

Nearby Sites (New Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

Screening considerations (New, Colocation Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only): No

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

Will the proposed installation require more the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets?YN

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

Does the structure or current installation have concealment elements/measures?: No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

If yes, describe how the proposed installation does not defeat the existing concealment.: Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Small Wireless Facility Information

Is this a Small Wireless Facility?: No

Is the structure 10% taller than adjacent structures?

Please list adjacent structure heights

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet: ~~0~~

Cumulative volume of the proposed antenna(s) exclusive of equipment in cubic feet: ~~0~~

ROW Information

PROW?: No

ROW owner

ROW width

Pole Number

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

Antenna Information

Antenna Compliance	No
Compliance Desc	
Antenna Location	No
Antenna Loc. Desc.	
Env. Assessment	
Cat. Excluded?	checked
Routine Env. Evaluation	

Antenna Model

Frequency

RAD Center | Max ERP | Antenna Dimension | Quantity

Wednesday, February 8, 2023

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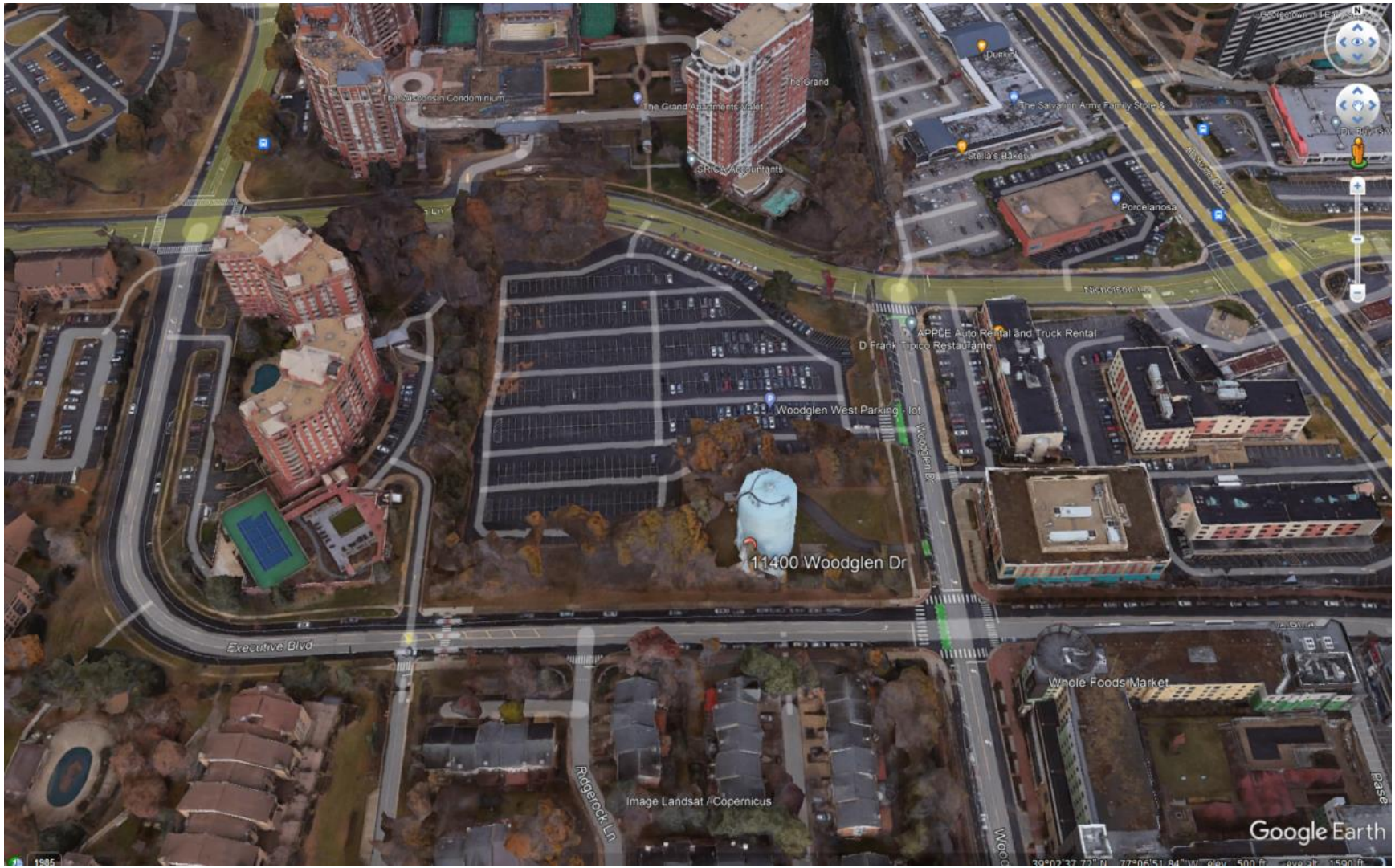
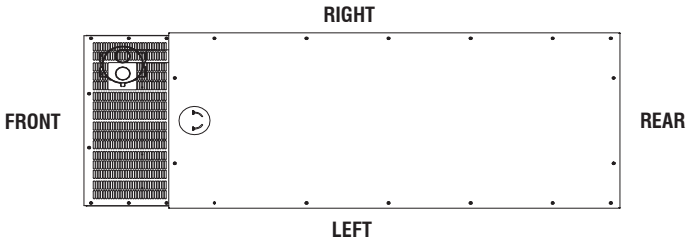

The Grand
The Grand Apartments Valet
Stella's Bakery
Porcelanosa
APPCE Auto Rental and Truck Rental
D Frank Tapico Restaurante
Woodglen West Parking - lot
Woodglen Dr
11400 Woodglen Dr
Executive Blvd
Whole Foods Market
Ridgerock Ln
Image Landsat / Copernicus
Google Earth

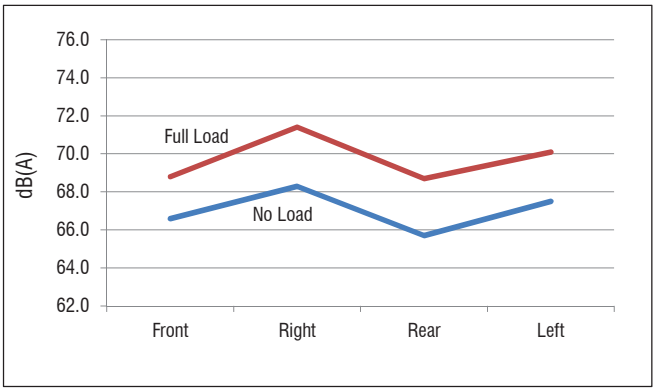
The generator is automatically set to be tested twice a month for approximately 30 minutes. This is a 20 minutes running time and 10 minute cool down. Usually every other Monday/Tuesday around 9:00am. The only other time it will run is during a power outage.

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

Decibel Scale (dBA)*

Civilization V opening theme

Chainsaw 110

Motorcycle 100

Lawn Mower 90

Vacuum Cleaner 80

Conversation 65

Floor Fan 50

Refrigerator Hum 40

Rustling Leaves 30

Pin Falling 15

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

Dark Souls 2 Grass 150

Jet Takeoff 140

Pneumatic Riveter 124

Hammer Drill 114

Rock Concert 105

Tractor/Hand Drill 97

City Traffic 78

Air Conditioning Unit 60

Electrical Transformer 45

*Source:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

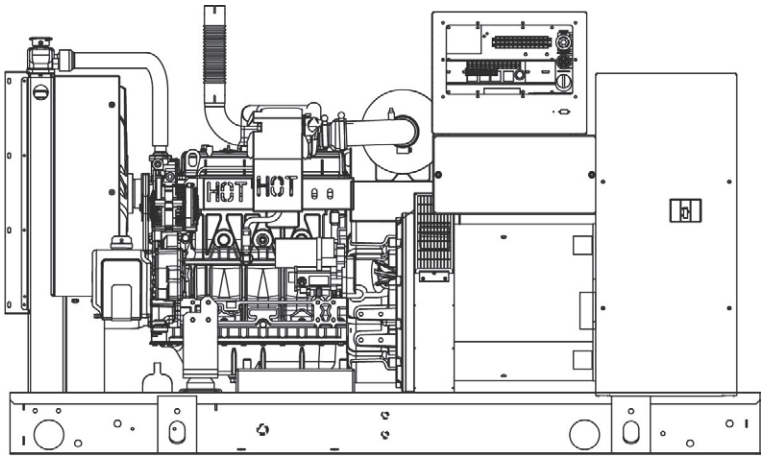
GENERAC | INDUSTRIAL POWER

STANDBY POWER RATING

30 kW, 38 kVA, 60 Hz

PRIME POWER RATING*

27 kW, 34 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

**Certain options or customization may not hold certification valid.

Image used for illustration purposes only

CODES AND STANDARDS

Generac products are designed to the following standards:

UL2200, UL508, UL142, UL498

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA ICS10, MG1, 250, ICS6, AB1

ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

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

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

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
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM

Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- 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
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- O Oil Heater
- O Industrial Exhaust Silencer

Fuel System

- O Flexible fuel lines
- O Primary fuel filter

Engine Electrical System

- O 10A UL battery charger
- O 2.5A UL battery charger
- O Battery Warmer

ALTERNATOR SYSTEM

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

CIRCUIT BREAKER OPTIONS

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

GENERATOR SET

- O Gen-Link Communications Software (English Only)
- O 8 Position Load Center
- O 2 Year Extended Warranty
- O 5 Year Warranty
- O 5 Year Extended Warranty

ENCLOSURE

- O Weather Protected
- O Level 1 Sound Attenuation
- O Level 2 Sound Attenuation
- O Steel Enclosure
- O Aluminum Enclosure
- O 150 MPH Wind Kit
- O 12 VDC Enclosure Lighting Kit
- O 120 VAC Enclosure Lighting Kit
- O AC/DC Enclosure Lighting Kit
- O Door Alarm Switch

TANKS (Size on last page)

- O Electrical Fuel Level
- O Mechanical Fuel Level
- O 54 Gal (204.4 L) Usable Capacity
- O 132 Gal (499.7 L) Usable Capacity
- O 211 Gal (798.7 L) Usable Capacity
- O 300 Gal (1135.6 L) Usable Capacity
- O 8” Fill Extension
- O 13” Fill Extension
- O 19” Fill Extension

CONTROL SYSTEM

- O 21-Light Remote Annunciator
- O Remote Relay Panel (8 or 16)
- O Oil Temperature Sender with Indication 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 Remote Communication - Modem
- O Remote Communication - Ethernet
- O 10A Run Relay
- O Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- O Coolant heater ball valves
- O Block Heaters
- O Fluid containment pans

ALTERNATOR SYSTEM

- O 3rd Breaker Systems

CONTROL SYSTEM

- O Spare inputs (x4) / outputs (x4) - H Panel Only
- O Battery Disconnect Switch

GENERATOR SET

- O Special Testing
- O IBC Seismic Certification

ENCLOSURE

- O Motorized Dampers
- O Door switched for intrusion alert
- O Enclosure ambient heaters

TANKS

- O Overfill Protection Valve
- O UL2085 Tank
- O ULC S-601 Tank
- O Stainless Steel Tank
- O Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- O Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu In)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminium

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Standard Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	7.94 (0.31)
Fuel Return Line mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, 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%

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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: 46
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
3 (1)

Total Fuel Pump Flow (Combustion + Return)
4.5 gph

	Diesel - gph (lph)
Percent Load	gph (lph)
25%	0.92 (3.5)
50%	1.45 (5.5)
75%	1.96 (7.4)
100%	2.74 (10.4)

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

COOLING

		Standby
Coolant Flow per Minute	gpm (lpm)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	111,000
Inlet Air	cfm (m3/hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H_2O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m3/min)	90 (2.55)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	153

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	230 (391)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	850 (454)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

** 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 consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

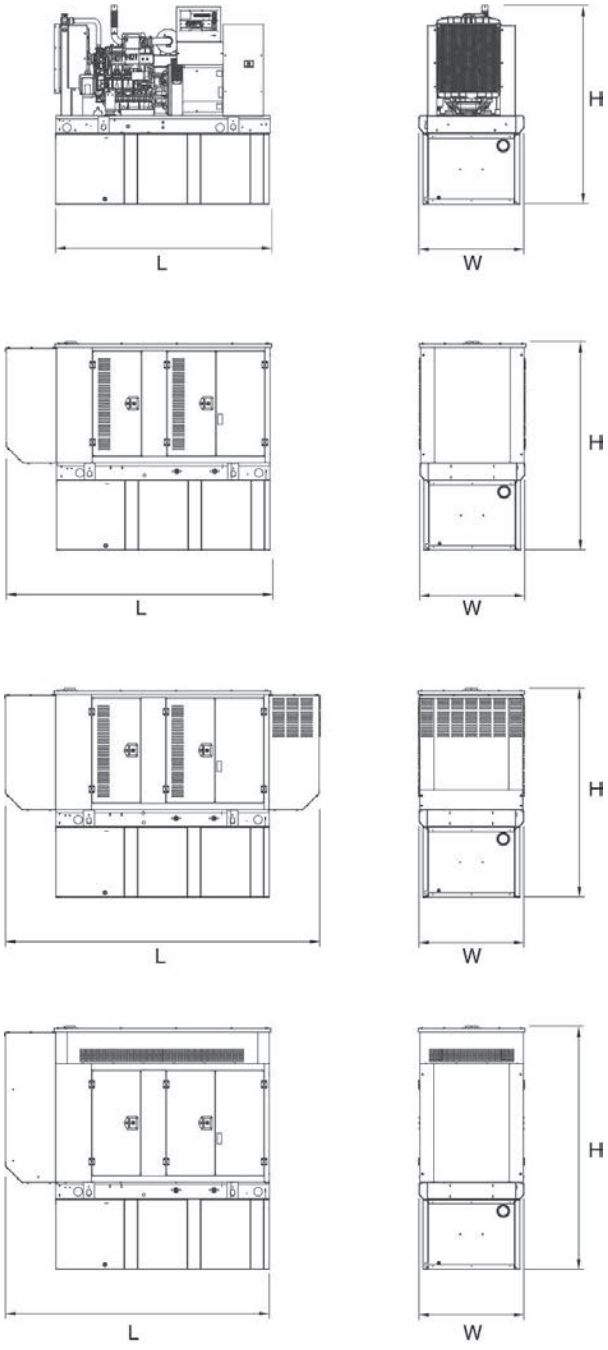
SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set
NO TANK	-	76 (1930.4) x 37.4 (949.9) x 42.2 (1072.1)	2060 (934)
19	54 (204.4)	76 (1930.4) x 37.4 (949.9) x 55.2 (1402.1)	2540 (1152)
48	132 (499.7)	76 (1930.4) x 37.4 (949.9) x 67.2 (1706.9)	2770 (1257)
77	211 (798.7)	76 (1930.4) x 37.4 (949.9) x 79.2 (2011.7)	2979 (1351)
109	300 (1135.6)	92.9 (2360) x 37.4 (949.9) x 82.7 (2100.6)	3042 (1380)

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 74.5 (1892.3)	302 (137)	191 (87)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 90 (2286)		

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112.5 (2857.1) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	112.5 (2857.1) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	112.5 (2857.1) x 38 (965.2) x 74.5 (1892.3)	455 (206)	288 (131)
77	211 (798.7)	112.5 (2857.1) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	112.5 (2857.1) x 38 (965.2) x 90 (2286)		

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 62 (1573.9)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 75 (1905)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 87 (2209.8)	460 (209)	291 (132)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 99 (2514.6)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 102.5 (2603.5)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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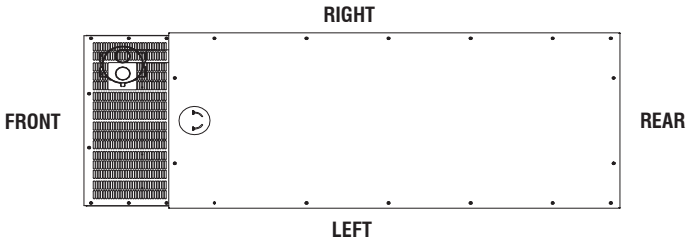
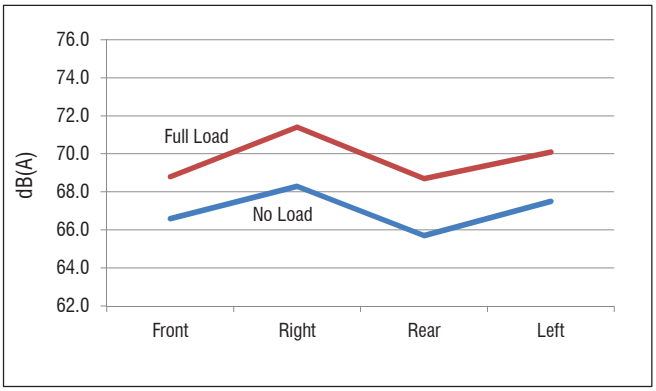
Part No 0K5085
Rev. D 08/19/15

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

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DRAWN BY: TRB CHECKED BY: MJR

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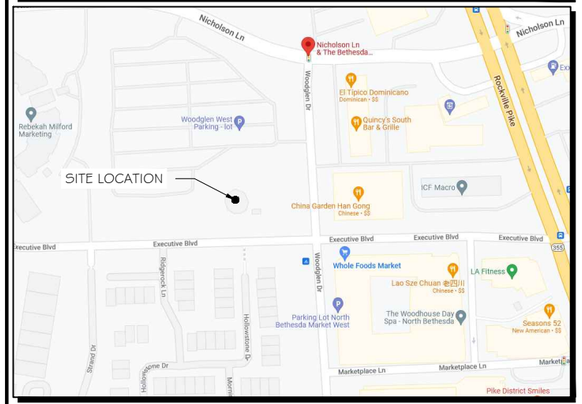
at&t Mobility

SITE NAME: OVERLAY - WHITE FLINT
FA LOCATION CODE: 10004923

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

VICINITY MAP



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.

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 2018

2. NATIONAL ELECTRIC CODE 2017

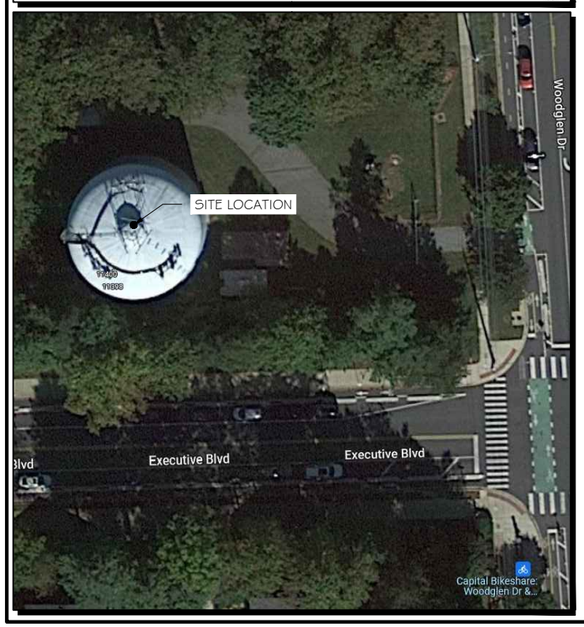
3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

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

AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER:

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ENGINEER:

RAMAKER & ASSOCIATES, INC.
855 COMMUNITY DRIVE
SAUK CITY, WI 53583
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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: OVERLAY - WHITE FLINT
FA NUMBER: 10004923

PROPERTY OWNER:
WASHINGTON SUBURBAN SANITARY COMMISSION
14501 SWITZER LANE
LAUREL, MD 20707

ADDRESS:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

COUNTY: MONTGOMERY

LAT.: 39.043609°
LONG.: -77.114156°

GROUND ELEVATION: 396 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 CONSTRUCTION MGR. DATE

SITE ACQUISITION DATE

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PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: T-1

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NOTES TO SUBCONTRACTOR:

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE 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, 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.

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 TO BID SUBMITTAL..

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. 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.

12. 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 SUBCONTRACTOR.

13. 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 PERIOD.

15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

16. 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.

17. 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.

GENERAL NOTES:

1. 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 AND TOWER.

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 TIMES PER MONTH BY AT&T TECHNICIANS.

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

6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

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.

2. 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

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 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.

5. 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 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'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. 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. ASTIM (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. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
   g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
   h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
   i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
   j. UL (UNDERWRITER'S LABORATORY)

10. 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.

11. 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

1. 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 THHN/THWN 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

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'-0" VERTICAL AND 1'-0" 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

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

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 BONDING.

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.

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 PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.

7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC 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.

9. 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

1. 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 UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

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PREPARED FOR:

at&t Mobility

CONSULTANT:

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Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs
ISSUE PHASE	FINAL	DATE ISSUED 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAL NOTES

SCALE: NONE

PROJECT NUMBER 54144

SHEET NUMBER N-1

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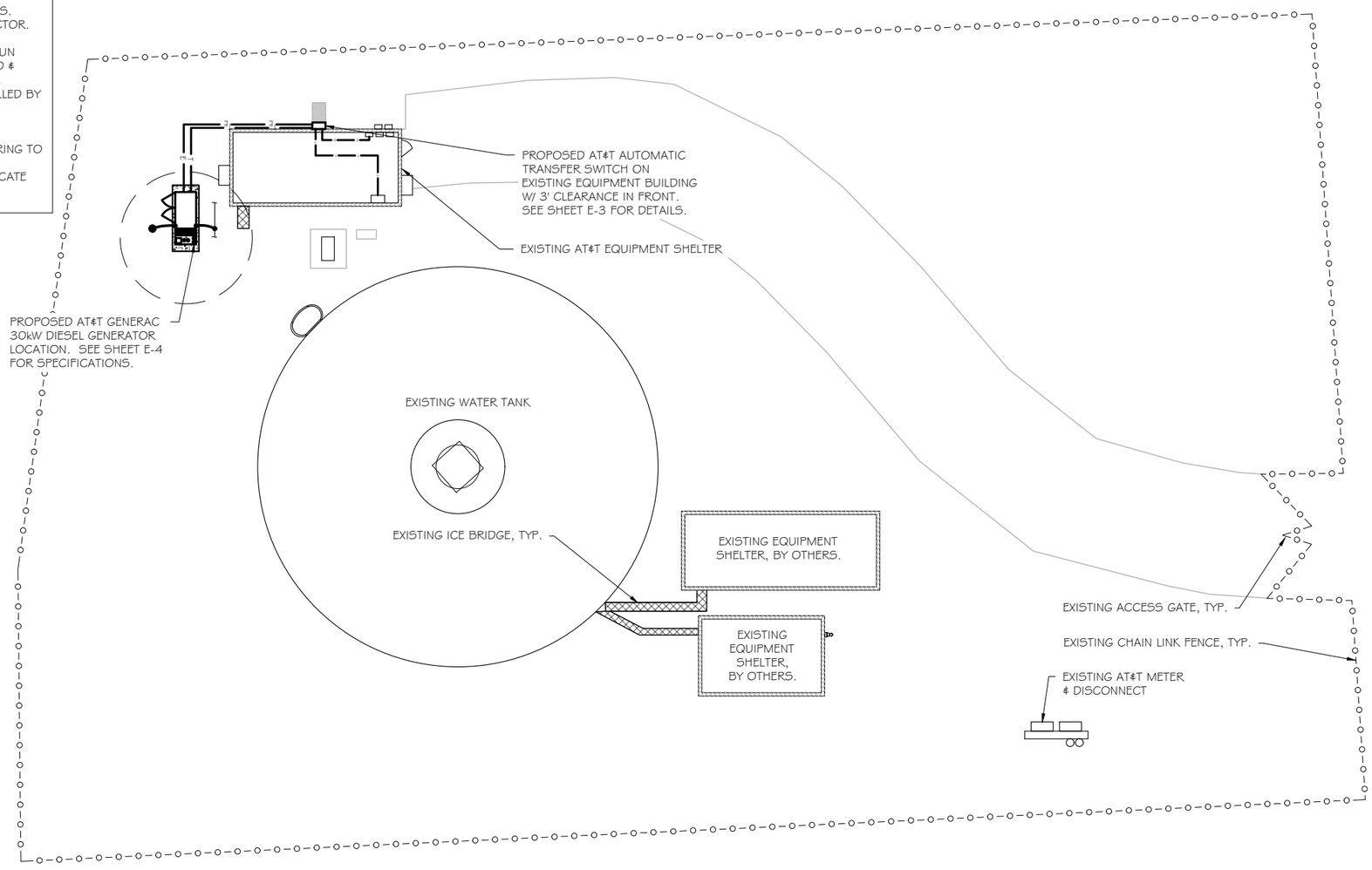
SCOPE OF WORK DETAILS

GENERAL:
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

CONDUITS:
- INSTALL PULL STRING IN EACH CONDUIT
- (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.



SITE PLAN
SCALE: 1" = 20'

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PREPARED FOR:
at&t Mobility

CONSULTANT:
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FA ID # 10004923

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WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 10' 20' 40'
11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

PROJECT NUMBER: 54144
SHEET NUMBER: A-1

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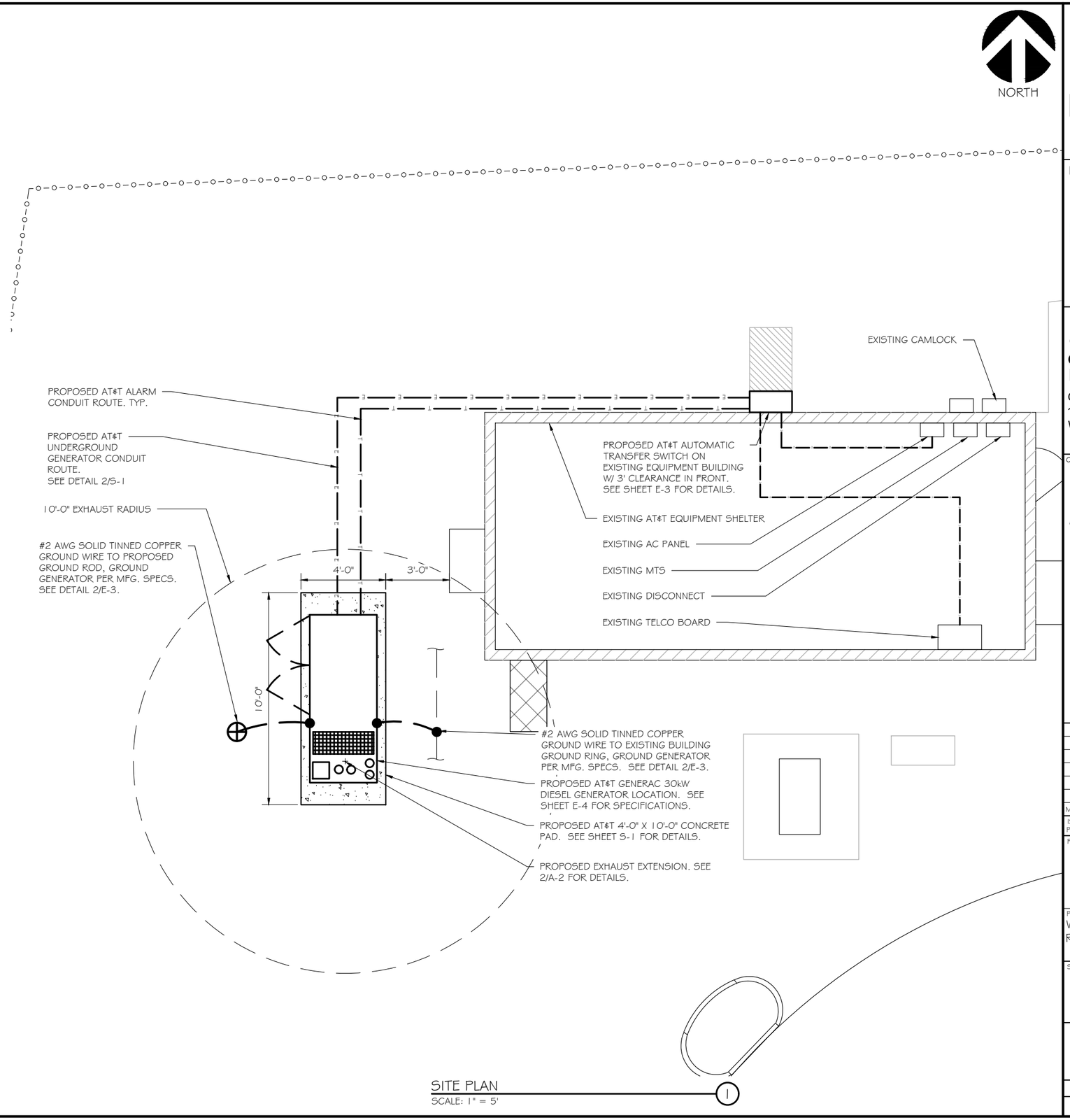
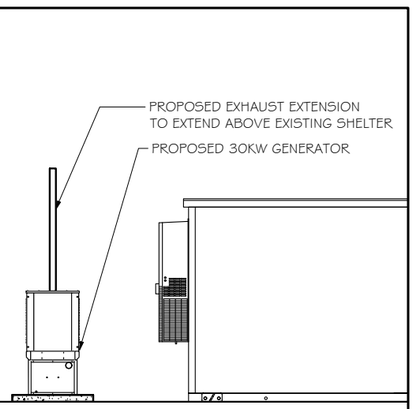


SITE PLAN
SCALE: 1" = 5'
1



EXHAUST EXTENSION DETAILS
SCALE: N/A
2

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License No: 37842, Expiration Date: 9/8/2023
Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" - 1" = 5'
22" x 34" - 1" = 2.5'

PROJECT NUMBER: 54144
SHEET NUMBER: A-2

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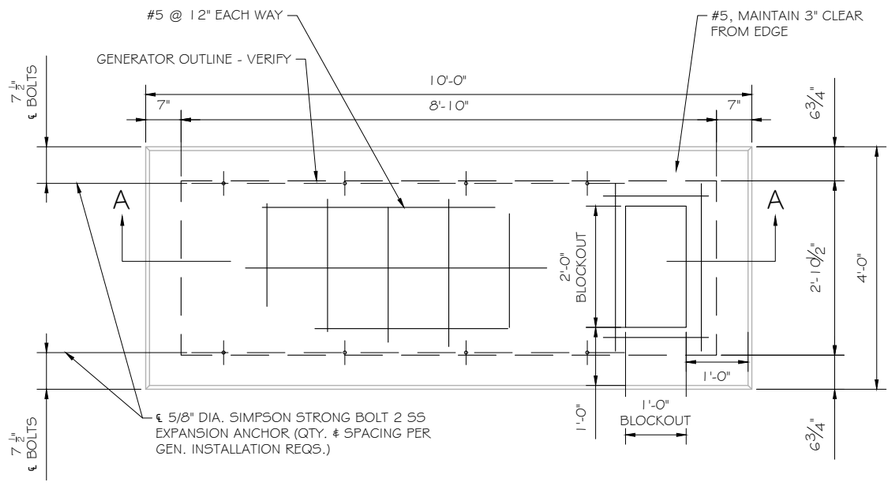
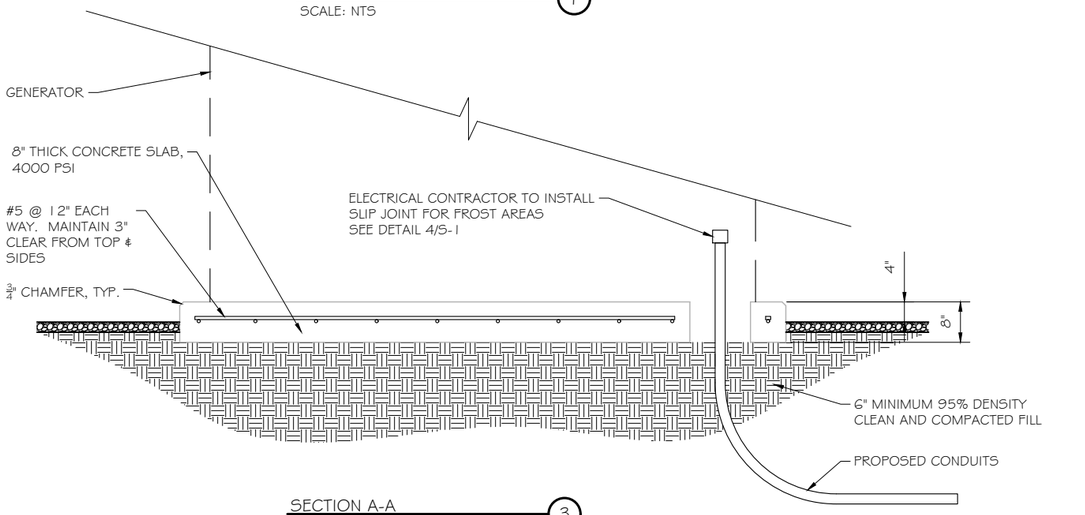


FOUNDATION PLAN 1
SCALE: NTS



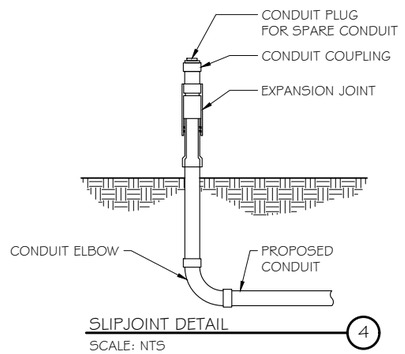
SECTION A-A 3
SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT 30KW GENERATOR PACKAGE
UL REGISTRATION NUMBER: MH18459
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 & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK & 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

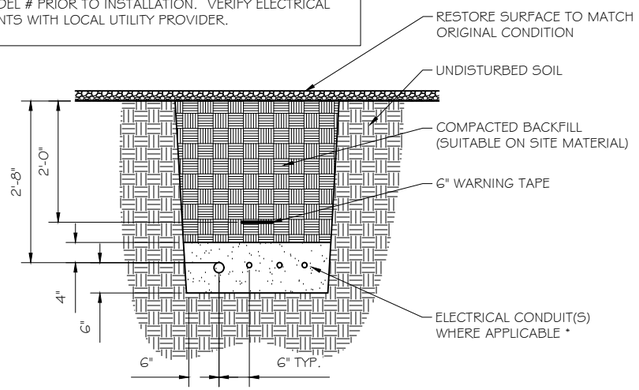
FACTORY PRE-SET AT 95% FULL FOR ALARM
FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL 4
SCALE: NTS

NOTE:

VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

NOTES:
1. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH 2
SCALE: NTS

STRUCTURAL GENERAL NOTES

1.0 GENERAL CONDITIONS
1.1 DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
1.2 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, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & 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 CONNECTIONS WITH THE WORK.
1.3 DO NOT SCALE DRAWINGS
1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR	: 3974 LBS

2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
3.0 CONCRETE
3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN	: ACI318-11
CONSTRUCTION	: ACI301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
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)

3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
3.5 MAXIMUM AGGREGATE SIZE: 3/4"
3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
4.0 FOUNDATION & EXCAVATION NOTES
4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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PREPARED FOR:
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CONSULTANT:
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WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: S-1

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DIAGRAM CIRCUIT SCHEDULE

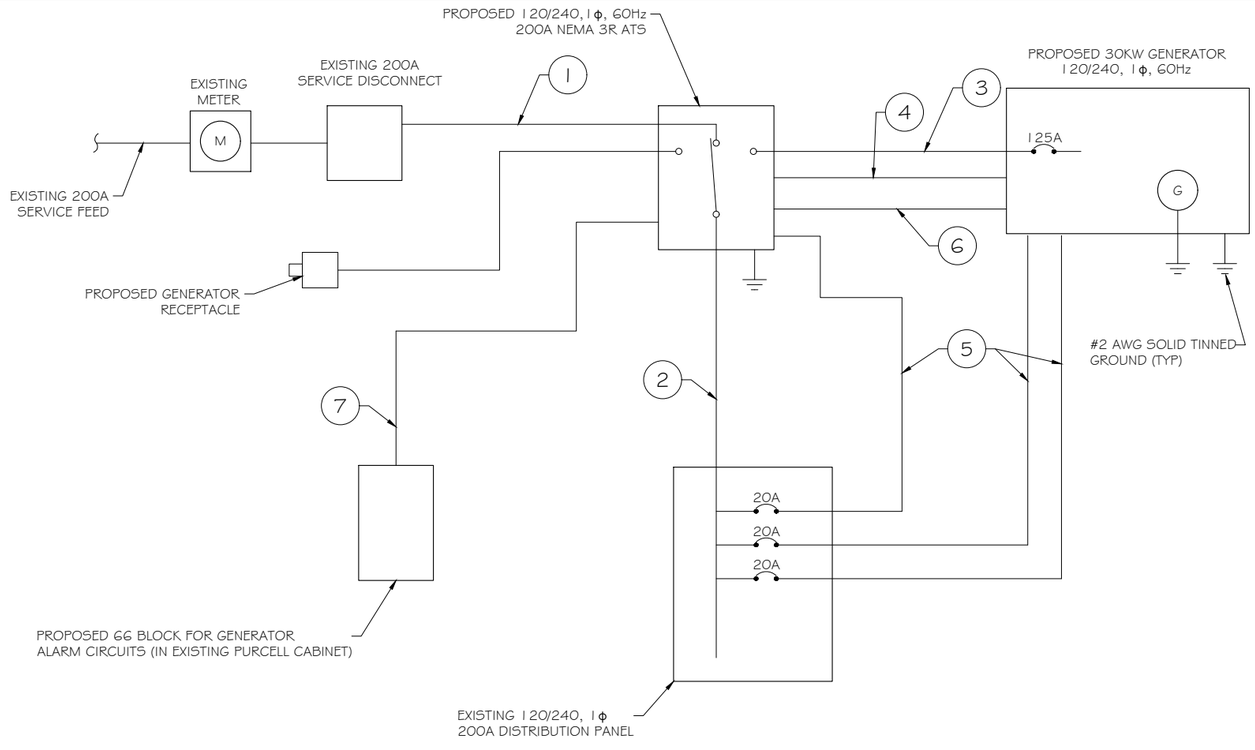
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #1	(1) #6	1-1/2"	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	(1) #12 (1) #12 (1) #12	1" 1" 1"	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 6-PAIR CAT5	N/A	1"	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	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 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

CIRCUIT DETAIL (1)
SCALE: NTS

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
*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE	

ALARM WIRING IDENTIFICATION CHART (2)
SCALE: NTS



PROPOSED WIRING DIAGRAM (3)
SCALE: NTS

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OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-1

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AC Distribution Panel - Layout Diagram

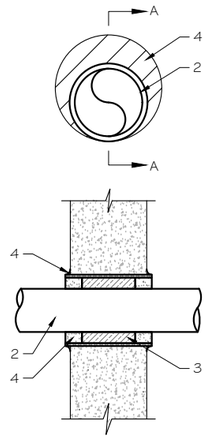
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	RECT 5	1	2P	OFF	50	RECT 9
3					2				
5	2P	ON	30	RECT 6	6	1P	ON	20	
7					8	1P	ON	20	
9	1P	ON	20		10	1P	ON	20	
11	1P	ON	20		12	2P	ON	80	
13	1P	ON	20		14				
15	2P	ON	60		16	1P	ON	20	
17					18	1P	ON	20	
19	2P	ON	30	RECT 7	20	1P	ON	20	
21					22	2P	OFF	30	RECT 10
23	2P	ON	30	RECT 8	24				
25					26	1P	ON	20	
27	2P	ON	30	BTS 1 RECT 1	28				
29					30				
31	2P	ON	30	BTS 1 RECT 2	32				
33					34	1P	ON	20	ATS
35	2P	ON	30	BTS 1 RECT 3	36	1P	ON	20	BLOCK HEATER
37					38	1P	ON	20	BATTERY CHARGER
39	2P	ON	30	BTS 1 RECT 4	40	2P	ON		
41					42				

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

EXISTING PANEL SCHEDULE (1)
SCALE: NTS

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



NOTE:
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
2. 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 = 0 HR

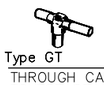
1. FLOOR OR WALL ASSEMBLY : MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
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 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" DIAMETER (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.
3. 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.
4. 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

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) (2)
SCALE: NTS


Type GR
CABLE TAP TO TOP OF GROUND ROD


Type GT
THROUGH CABLE TO TOP OF GROUND ROD.


Type GY
THROUGH CABLE TO SIDE OF GROUND ROD


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


Type TA
TEE OF HORIZONTAL RUN AND TAP CABLES.


Type VN
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.


Type VV
THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE


Type GR
CABLE TAP TO TOP OF GROUND ROD

CADWELD DETAILS (3)
SCALE: NTS

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SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-2

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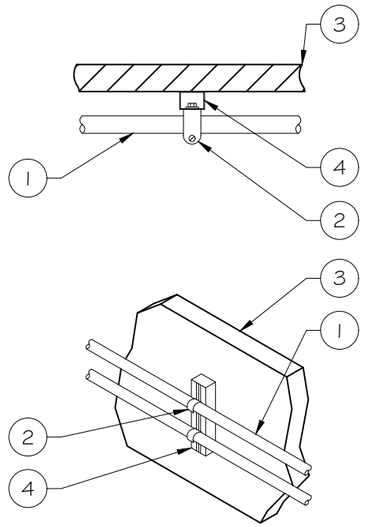
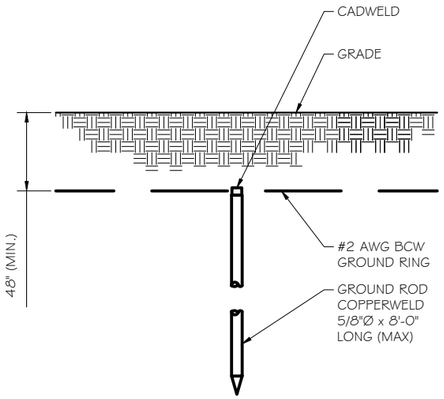
1. CONDUIT (TYP)
2. BUTTERFLY CLAMP AS REQUIRED
3. EXISTING WALL/CEILING
4. VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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'-0" O.C. LENGTH OF RUN	



CONDUIT WALL MOUNT 1
SCALE: NTS

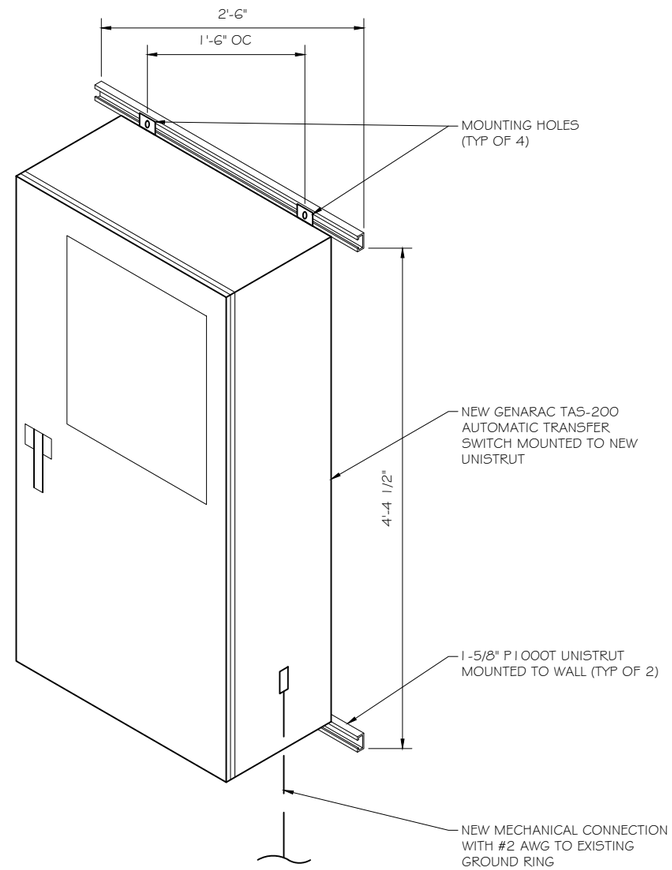


NOTE:
1. GROUND RODS MAY BE:
   - COPPER CLAD STEEL
   - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. 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)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

GROUND ROD DETAIL 2
SCALE: NTS

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"

NOTE:
1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



GENERAC ATS MOUNTING DETAIL 3
SCALE: NTS

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ROCKVILLE, MD 20852

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-3

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

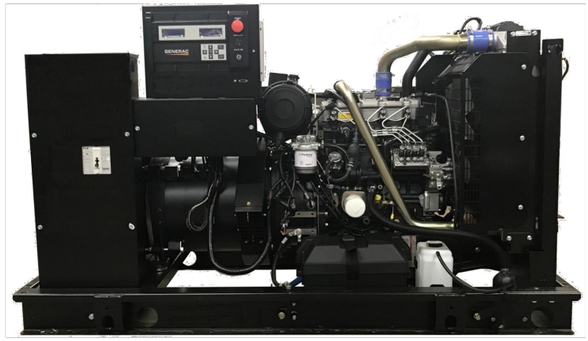
Standby Power Rating
30 kW, 38 kVA, 60 Hz

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

ISO 9001:2008

USA ENGINEERED & BUILT* *Assembled in the USA using domestic and foreign parts

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



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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.

SPEC SHEET 1 of 6

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

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GENERAC | INDUSTRIAL POWER

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)

SPEC SHEET 2 of 6

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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employee-owned
(608) 643-4100 www.ramaker.com

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
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101 STATION DR
WESTWOOD, MA 02090

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Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4

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INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

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

FUEL SYSTEM
- NPT Flexible Fuel Line

ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET
- Extended Factory Testing
- 8 Position Load Center
- Pad Vibration Isolation

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE
- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch
- Enclosure Heater
- Damper Alarm Contacts

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM
- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciation
- 120V GFCI and 240V Outlets
- Remote Communication - Modem
- 10A Engine Run Relay

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

ENGINEERED OPTIONS

ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM
- 3rd Breaker System

GENERATOR SET
- Special Testing

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

SPEC SHEET

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	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 Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (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	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50
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%

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)

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SCALE: NONE

PROJECT NUMBER: 54144

SHEET NUMBER: E-4.1

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GENERAC | INDUSTRIAL POWER

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 (m^3/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_2O (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

SPEC SHEET 5 of 6

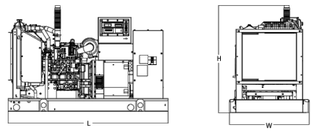
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

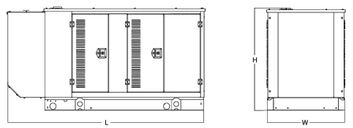
GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



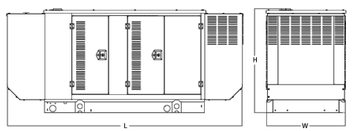
OPEN SET (Includes Exhaust Flex)

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 69.8 (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)



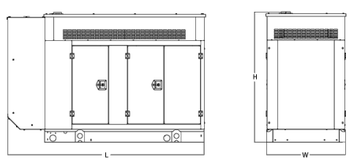
WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	372 (170)	241 (110)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
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	
			Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	505 (230)	338 (154)
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)		
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	
			Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	510 (232)	341 (155)
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		
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.

SPEC SHEET 6 of 6

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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TTS Series Switches

200 Amps 600 VAC

GENERAC® | INDUSTRIAL POWER

TAS200

200A Automatic Transfer Switch

TAS200 TAS200

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:

c UL us LISTED — UL1008, UL508, UL50, CSA C22.2 No. 178

nec® — NEC 700, 701 and 702

NEMA — NEMA 250

Application and Engineering Data

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

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
	Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #6 AWG
Output to Site	350MCM - #6 AWG
Generator Annunciator Connector	Deutsch DTM04-12PA-L012
Alarm Terminal Board	Generator Run Alarm
	Generator Fail – Shutdown Alarm
	Generator Fail – Non Shutdown Alarm
	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	
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	

GENERAC ATS SPECIFICATIONS
SCALE: NTS
1

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023
Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-5

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I:\54100\54144\CAD\54144_10004923_OVERLAY - WHITE FLINT_GENERATOR ATT CDs.dwg Printed by: tbeatty on Feb 07, 2023 - 5:13pm

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DRAWN BY: TRB CHECKED BY: MJR

I:\54100\54144\CAD\54144_10004923_OVERLAY - WHITE FLINT_GENERATOR ATT CDs.dwg Printed by: tbeatty on Feb 07, 2023 - 5:13pm

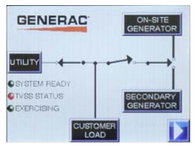
GENERAC | INDUSTRIAL POWER

TTS Control Systems

TAS200

3 of 3

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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GENERAC ATS SPECIFICATIONS 1
SCALE: NTS

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SCALE: NONE

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SHEET NUMBER: E-5.1

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App No: 2023022106

Application General Information

Applicant Name	General Dynamics	Received	2/8/2023
Application Type	Minor Modification	Ann. Plan?	No
Carrier	AT&T Wireless	Will site be used to support government telecommunications facilities or other equipment for government use?	No
Solution Type	Generator		
Existing	Existing	Gvt. Use Desc.	

Application Description

Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Site Information

Site Id	2	Zoning	CR-3.0 C-1.5 R-2.5 H-100
Structure Type	Watertank	Latitude	39.043617
Street Address	11400 Woodglen Dr & Executive Blvd	Longitude	-77.114128
County Site Name	Well Lane Water Tank	Ground Elevation	396
Carrier Site Name	Overlay - White Flint	City	Rockville
Site Owner	WSSC	Lease Status	In Process
Structure Owner	WSSC	Does the structure require an antenna structure registration under FCC Title 47 part 17?	No
Existing Structure Height	396		
Provide the proposed height of the replacement structure without any antenna (New Apps Only)		Distance to Residential Property (New, Colocation Only)	
		Distance to Commercial Property (New, Colocation Only)	

Justification of why this site was selected:

Existing

Nearby Sites (New Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

Screening considerations (New, Colocation Apps Only):

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

6409 Questions

Does this qualify as a 6409 application? (Minor Mod, Colocations Only): No

For towers outside the public ROW will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 20 feet, whichever is greater?

Will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 6 feet?

For towers outside the public ROW will the proposed installation increase the width by adding appurtenance to the body of the structure that would protrude from the edge of the structure by more than 20 feet?

Will the proposed installation require more the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets?YN

Will the proposed installation increase the height of the structure by: (1) more than 10% or (2) more than 10 feet, whichever is greater?

Does the structure or current installation have concealment elements/measures?: No

Will the proposed installation require excavation or expansion outside the current boundaries of the site?

If yes, describe how the proposed installation does not defeat the existing concealment.: Install back-up self-contained 30kw diesel generator and 4'x10' concrete pad

Small Wireless Facility Information

Is this a Small Wireless Facility?: Yes

Is the structure 10% taller than adjacent structures?

Please list adjacent structure heights

Cumulative volume of the proposed wireless equipment(s) exclusive of antennas in cubic feet: 0

Cumulative volume of the proposed antenna(s) exclusive of equipment in cubic feet: 0

ROW Information

PROW?: No

ROW owner

ROW width

Pole Number

Wednesday, February 8, 2023

1:43:51 PM

App No: 2023022106

Antenna Information

Antenna Compliance	No
Compliance Desc	
Antenna Location	No
Antenna Loc. Desc.	
Env. Assessment	
Cat. Excluded?	checked
Routine Env. Evaluation	

Antenna Model

Frequency

RAD Center | Max ERP | Antenna Dimension | Quantity

Wednesday, February 8, 2023

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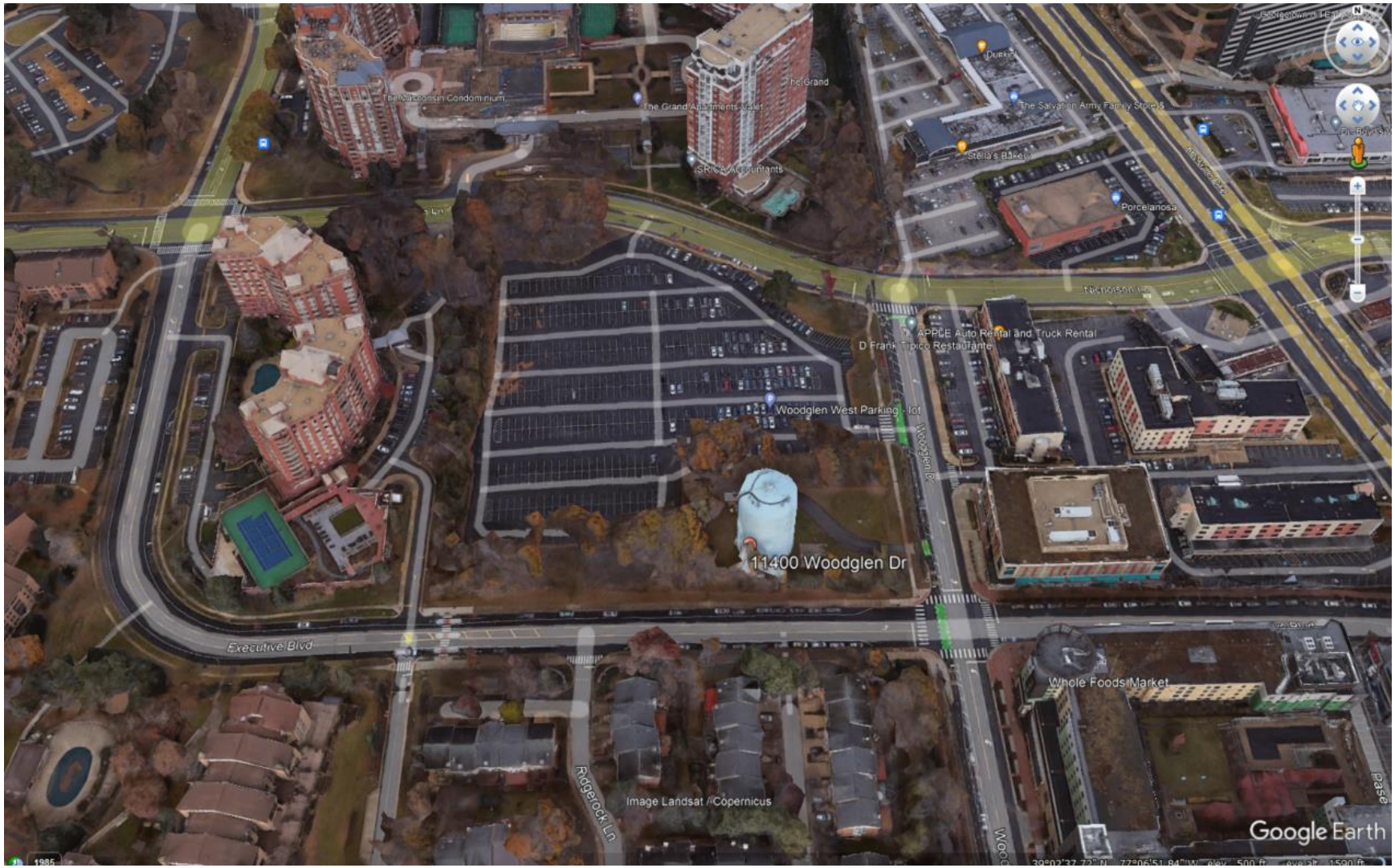
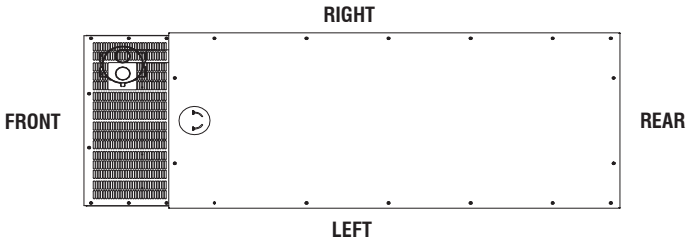

The Grand
The Grand Apartments Valet
Stella's Bakery
Porcelanosa
APPCE Auto Rental and Truck Rental
D Frank Tapico Restaurante
Woodglen West Parking - lot
Woodglen Dr
11400 Woodglen Dr
Executive Blvd
Whole Foods Market
Ridgerock Ln
Image Landsat / Copernicus
Google Earth

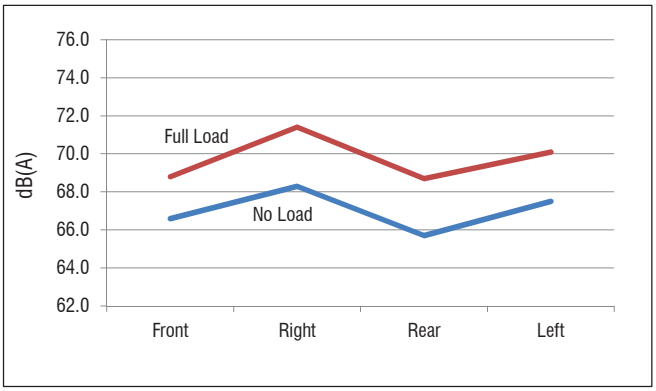
The generator is automatically set to be tested twice a month for approximately 30 minutes. This is a 20 minutes running time and 10 minute cool down. Usually every other Monday/Tuesday around 9:00am. The only other time it will run is during a power outage.

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)								DISTANCE: 7 METERS	
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

Decibel Scale (dBA)*

Civilization V opening theme

Chainsaw 110

Motorcycle 100

Lawn Mower 90

Vacuum Cleaner 80

Conversation 65

Floor Fan 50

Refrigerator Hum 40

Rustling Leaves 30

Pin Falling 15

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10

Dark Souls 2 Grass 150

Jet Takeoff 140

Pneumatic Riveter 124

Hammer Drill 114

Rock Concert 105

Tractor/Hand Drill 97

City Traffic 78

Air Conditioning Unit 60

Electrical Transformer 45

*Source:
www.cdc.gov/niosh/topics/noise/noisemeter.html
http://e-a-r.com/hearingconservation/faq_main.cfm

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

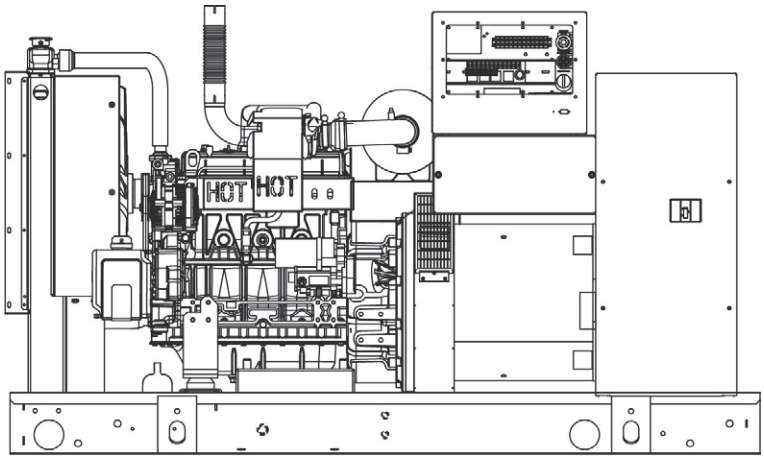
GENERAC | INDUSTRIAL POWER

STANDBY POWER RATING

30 kW, 38 kVA, 60 Hz

PRIME POWER RATING*

27 kW, 34 kVA, 60 Hz



*Built in the USA using domestic and foreign parts

*EPA Certified Prime ratings are not available in the U.S. or its Territories.

**Certain options or customization may not hold certification valid.

Image used for illustration purposes only

CODES AND STANDARDS

Generac products are designed to the following standards:

UL2200, UL508, UL142, UL498

NFPA70, 99, 110, 37

NEC700, 701, 702, 708

ISO9001, 8528, 3046, 7637, Pluses #2b, 4

NEMA ICS10, MG1, 250, ICS6, AB1

ANSI C62.41

POWERING AHEAD

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

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

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

STANDARD FEATURES

ENGINE SYSTEM

General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

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
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated Units)
- Silencer mounted in the discharge hood (enclosed only)

ENCLOSURE (IF SELECTED)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (IF SELECTED)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM

Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- 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
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

General

- O Oil Heater
- O Industrial Exhaust Silencer

Fuel System

- O Flexible fuel lines
- O Primary fuel filter

Engine Electrical System

- O 10A UL battery charger
- O 2.5A UL battery charger
- O Battery Warmer

ALTERNATOR SYSTEM

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

CIRCUIT BREAKER OPTIONS

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

GENERATOR SET

- O Gen-Link Communications Software (English Only)
- O 8 Position Load Center
- O 2 Year Extended Warranty
- O 5 Year Warranty
- O 5 Year Extended Warranty

ENCLOSURE

- O Weather Protected
- O Level 1 Sound Attenuation
- O Level 2 Sound Attenuation
- O Steel Enclosure
- O Aluminum Enclosure
- O 150 MPH Wind Kit
- O 12 VDC Enclosure Lighting Kit
- O 120 VAC Enclosure Lighting Kit
- O AC/DC Enclosure Lighting Kit
- O Door Alarm Switch

TANKS (Size on last page)

- O Electrical Fuel Level
- O Mechanical Fuel Level
- O 54 Gal (204.4 L) Usable Capacity
- O 132 Gal (499.7 L) Usable Capacity
- O 211 Gal (798.7 L) Usable Capacity
- O 300 Gal (1135.6 L) Usable Capacity
- O 8” Fill Extension
- O 13” Fill Extension
- O 19” Fill Extension

CONTROL SYSTEM

- O 21-Light Remote Annunciator
- O Remote Relay Panel (8 or 16)
- O Oil Temperature Sender with Indication 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 Remote Communication - Modem
- O Remote Communication - Ethernet
- O 10A Run Relay
- O Ground Fault Indication and Protection Functions

ENGINEERED OPTIONS

ENGINE SYSTEM

- O Coolant heater ball valves
- O Block Heaters
- O Fluid containment pans

ALTERNATOR SYSTEM

- O 3rd Breaker Systems

CONTROL SYSTEM

- O Spare inputs (x4) / outputs (x4) - H Panel Only
- O Battery Disconnect Switch

GENERATOR SET

- O Special Testing
- O IBC Seismic Certification

ENCLOSURE

- O Motorized Dampers
- O Door switched for intrusion alert
- O Enclosure ambient heaters

TANKS

- O Overfill Protection Valve
- O UL2085 Tank
- O ULC S-601 Tank
- O Stainless Steel Tank
- O Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- O Vent Extensions

RATING DEFINITIONS

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications. Power ratings in accordance with ISO 8528-1, Second Edition

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu In)	2.4 (146.46)
Bore - mm (in)	90 (3.54)
Stroke - mm (in)	94 (3.70)
Compression Ratio	21.3:1
Intake Air Method	Turbocharged
Cylinder Head Type	Cast Iron
Piston Type	Aluminium

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+/- 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	6.2 (6.52)

Cooling System

Cooling System Type	Closed Recovery
Water Pump	Pre-Lubed, Self Sealing
Fan Type	Pusher
Fan Speed (rpm)	2698
Fan Diameter mm (in)	560 (22)
Coolant Standard Wattage	1500
Coolant Heater Standard Voltage	120 VAC

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Injection	Distribution Injection Pump
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line mm (in)	7.94 (0.31)
Fuel Return Line mm (in)	7.94 (0.31)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	Std
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50

Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, 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%

SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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: 46
Three-Phase 346/600 VAC @0.8pf	30 kW	Amps: 36

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)
3 (1)

Total Fuel Pump Flow (Combustion + Return)
4.5 gph

	Diesel - gph (lph)
Percent Load	gph (lph)
25%	0.92 (3.5)
50%	1.45 (5.5)
75%	1.96 (7.4)
100%	2.74 (10.4)

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

COOLING

		Standby
Coolant Flow per Minute	gpm (lpm)	10 (38)
Coolant System Capacity	gal (L)	2.8 (10.95)
Heat Rejection to Coolant	BTU/hr	111,000
Inlet Air	cfm (m3/hr)	4,500 (7647)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H_2O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m3/min)	90 (2.55)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	49
Piston Speed	ft/min (m/min)	1110 (338)
BMEP	psi	153

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m^3/min)	230 (391)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	850 (454)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

** 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 consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

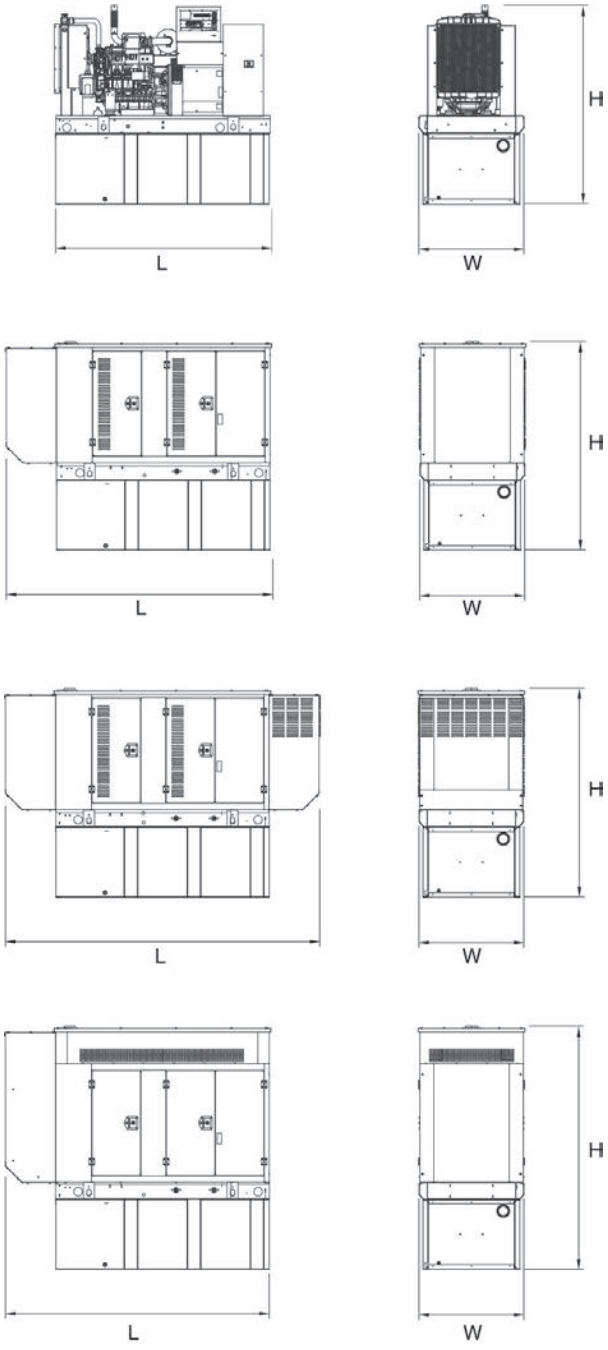
SD030 | 2.4L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set
NO TANK	-	76 (1930.4) x 37.4 (949.9) x 42.2 (1072.1)	2060 (934)
19	54 (204.4)	76 (1930.4) x 37.4 (949.9) x 55.2 (1402.1)	2540 (1152)
48	132 (499.7)	76 (1930.4) x 37.4 (949.9) x 67.2 (1706.9)	2770 (1257)
77	211 (798.7)	76 (1930.4) x 37.4 (949.9) x 79.2 (2011.7)	2979 (1351)
109	300 (1135.6)	92.9 (2360) x 37.4 (949.9) x 82.7 (2100.6)	3042 (1380)

STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 74.5 (1892.3)	302 (137)	191 (87)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 90 (2286)		

LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112.5 (2857.1) x 38 (965.2) x 49.5 (1258.1)		
19	54 (204.4)	112.5 (2857.1) x 38 (965.2) x 62.5 (1587.5)		
48	132 (499.7)	112.5 (2857.1) x 38 (965.2) x 74.5 (1892.3)	455 (206)	288 (131)
77	211 (798.7)	112.5 (2857.1) x 38 (965.2) x 86.5 (2197.1)		
109	300 (1135.6)	112.5 (2857.1) x 38 (965.2) x 90 (2286)		

LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	94.8 (2408.9) x 38 (965.2) x 62 (1573.9)		
19	54 (204.4)	94.8 (2408.9) x 38 (965.2) x 75 (1905)		
48	132 (499.7)	94.8 (2408.9) x 38 (965.2) x 87 (2209.8)	460 (209)	291 (132)
77	211 (798.7)	94.8 (2408.9) x 38 (965.2) x 99 (2514.6)		
109	300 (1135.6)	94.8 (2408.9) x 38 (965.2) x 102.5 (2603.5)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

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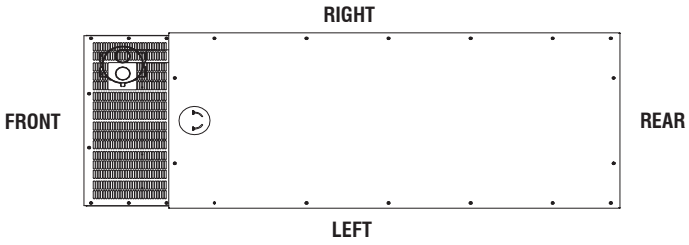
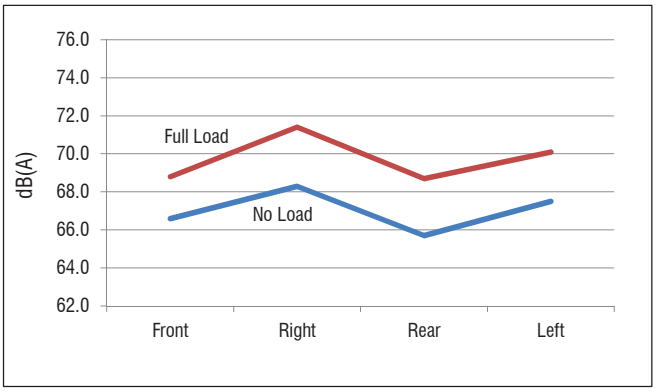
Part No 0K5085
Rev. D 08/19/15

LEVEL 2 ACOUSTIC ENCLOSURE
SD30 2.4L GENERAC

	60Hz NO-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.1	48.6	57.3	60.8	63.3	55.2	56.7	55.2	45.5	66.6
RIGHT	23.0	50.2	59.9	63.2	64.6	56.3	57.4	57.6	47.3	68.3
REAR	18.1	50.3	56.3	60.4	62.8	54.8	53.2	50.3	40.4	65.7
LEFT	19.5	53.3	56.7	62.6	63.5	56.7	57.5	56.7	46.0	67.5
AVERAGE	21.0	50.6	57.6	61.8	63.5	55.8	56.2	55.0	44.8	**67.0**

	60Hz FULL-LOAD DATA, dB(A)						DISTANCE: 7 METERS			
MICROPHONE LOCATION	1/1 OCTAVE BAND CENTER FREQUENCY (Hz)									
	31.5	63	125	250	500	1000	2000	4000	8000	dB(A)
FRONT	23.8	59.3	60.7	62.6	64.6	56.9	58.5	57.4	48.1	68.8
RIGHT	25.7	52.9	62.8	68.3	65.2	59.3	60.5	60.6	51.2	71.4
REAR	21.2	54.7	63.6	63.0	63.7	58.9	55.9	53.7	45.6	68.7
LEFT	24.6	60.6	63.2	65.3	63.4	59.3	59.5	59.0	50.7	70.1
AVERAGE	23.8	56.9	62.6	64.8	64.2	58.6	58.6	57.7	48.9	**69.8**





1. All positions at 23 feet (7 meters) from side faces of generator set.
2. Test conducted on a 100 foot diameter asphault surface.
3. Sound pressure levels are subject to instrumentation, installation and testing conditions.

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Part No. 0186600SSD
Rev. B 04/16/15

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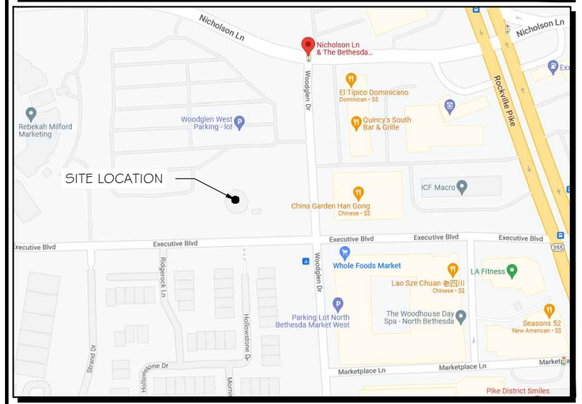
at&t Mobility

SITE NAME: OVERLAY - WHITE FLINT
FA LOCATION CODE: 10004923

GENERATOR PROJECT
30KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

VICINITY MAP



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.

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 2018

2. NATIONAL ELECTRIC CODE 2017

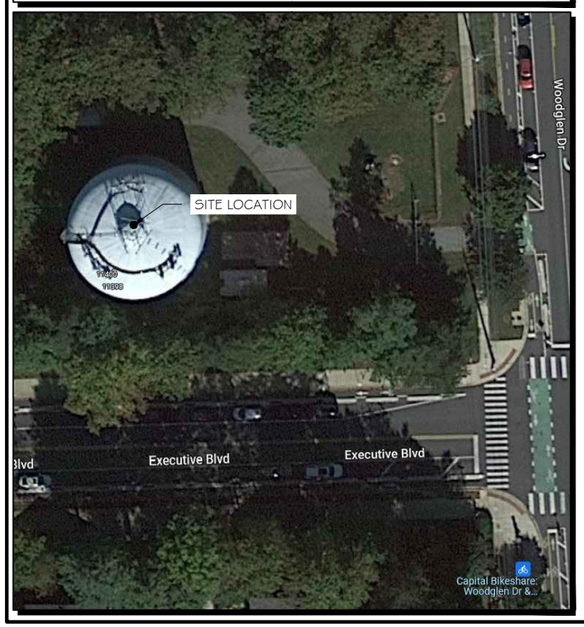
3. AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE

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

AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER:

BRIAN K SILBERT
SR. REGIONAL MANAGER
GENERAL DYNAMICS WIRELESS SERVICES
101 STATION DRIVE
WESTWOOD, MA 02090
EMAIL: Brian.Silbert@GDIT.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: OVERLAY - WHITE FLINT
FA NUMBER: 10004923

PROPERTY OWNER:
WASHINGTON SUBURBAN SANITARY COMMISSION
14501 SWITZER LANE
LAUREL, MD 20707

ADDRESS:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

COUNTY: MONTGOMERY

LAT.: 39.043609°
LONG.: -77.114156°

GROUND ELEVATION: 396 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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S-1 FOUNDATION DETAILS

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SIGNATURE BLOCK

AT&T MGR. DATE

GENERAL DYNAMICS CONSTRUCTION MGR. DATE

SITE ACQUISITION DATE

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

PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
101 STATION DR
WESTWOOD, MA 02090

Certification & 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: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
TITLE SHEET

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: T-1

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NOTES TO SUBCONTRACTOR:

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE 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, 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.

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 TO BID SUBMITTAL..

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. 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.

12. 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 SUBCONTRACTOR.

13. 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 PERIOD.

15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

16. 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.

17. 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.

GENERAL NOTES:

1. 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 AND TOWER.

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 TIMES PER MONTH BY AT&T TECHNICIANS.

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

6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

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.

2. 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

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 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.

5. 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 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'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. 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. ASTIM (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. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
   g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
   h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
   i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
   j. UL (UNDERWRITER'S LABORATORY)

10. 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.

11. 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

1. 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 THHN/THWN 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

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'-0" VERTICAL AND 1'-0" 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

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

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 BONDING.

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.

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 PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.

7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC 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.

9. 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

1. 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 UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

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PREPARED FOR:

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CONSULTANT:

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Information Technology, Inc.

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License No: 37842 Expiration Date: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs
ISSUE PHASE	FINAL	DATE ISSUED 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAL NOTES

SCALE: NONE

PROJECT NUMBER 54144

SHEET NUMBER N-1

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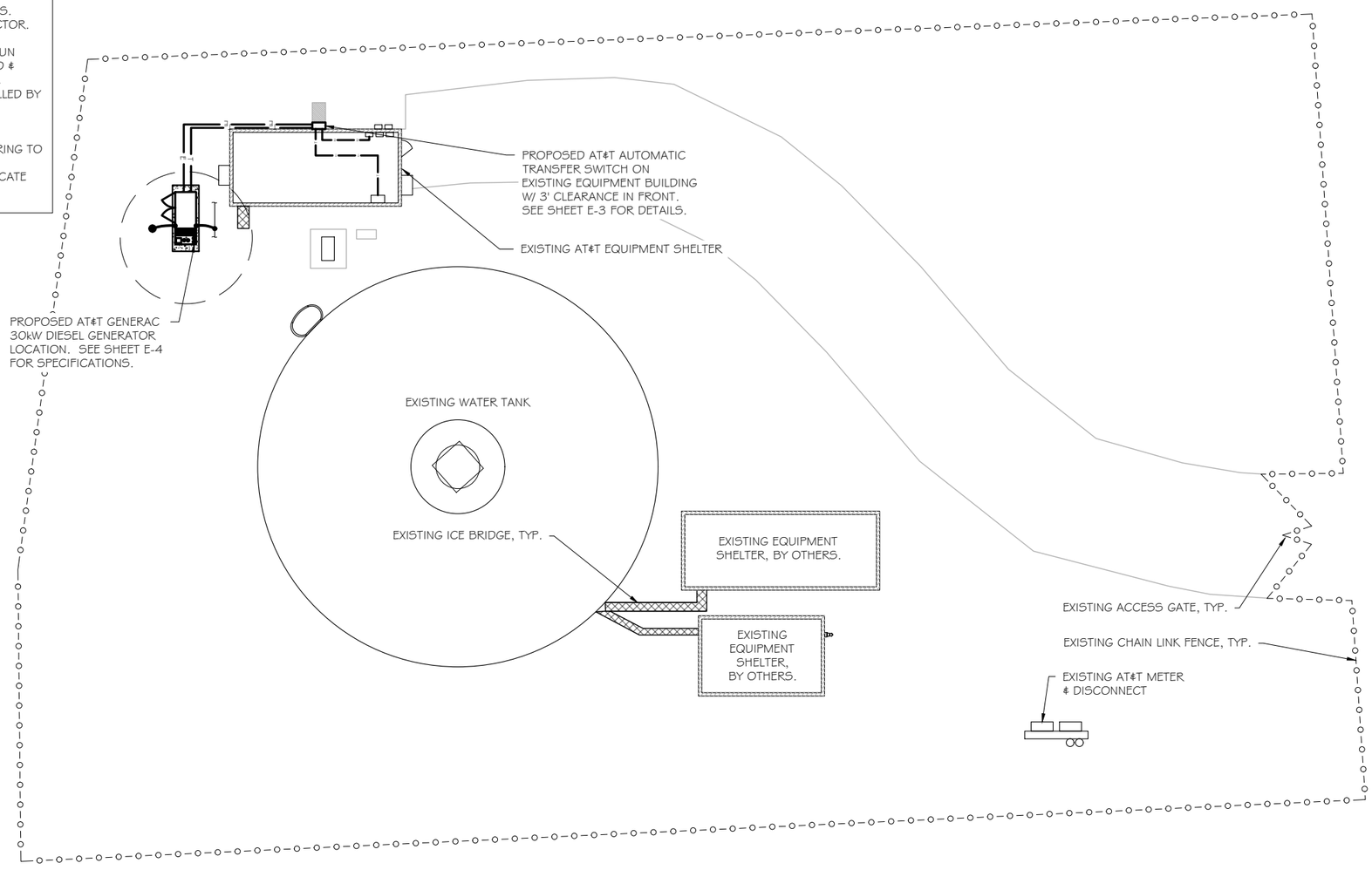
SCOPE OF WORK DETAILS

GENERAL:
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
- NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
- NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION

CONDUITS:
- INSTALL PULL STRING IN EACH CONDUIT
- (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.

GROUNDING:
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.



SITE PLAN
SCALE: 1" = 20'

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CONSULTANT:
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ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

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OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 10' 20' 40'
11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

PROJECT NUMBER: 54144
SHEET NUMBER: A-1

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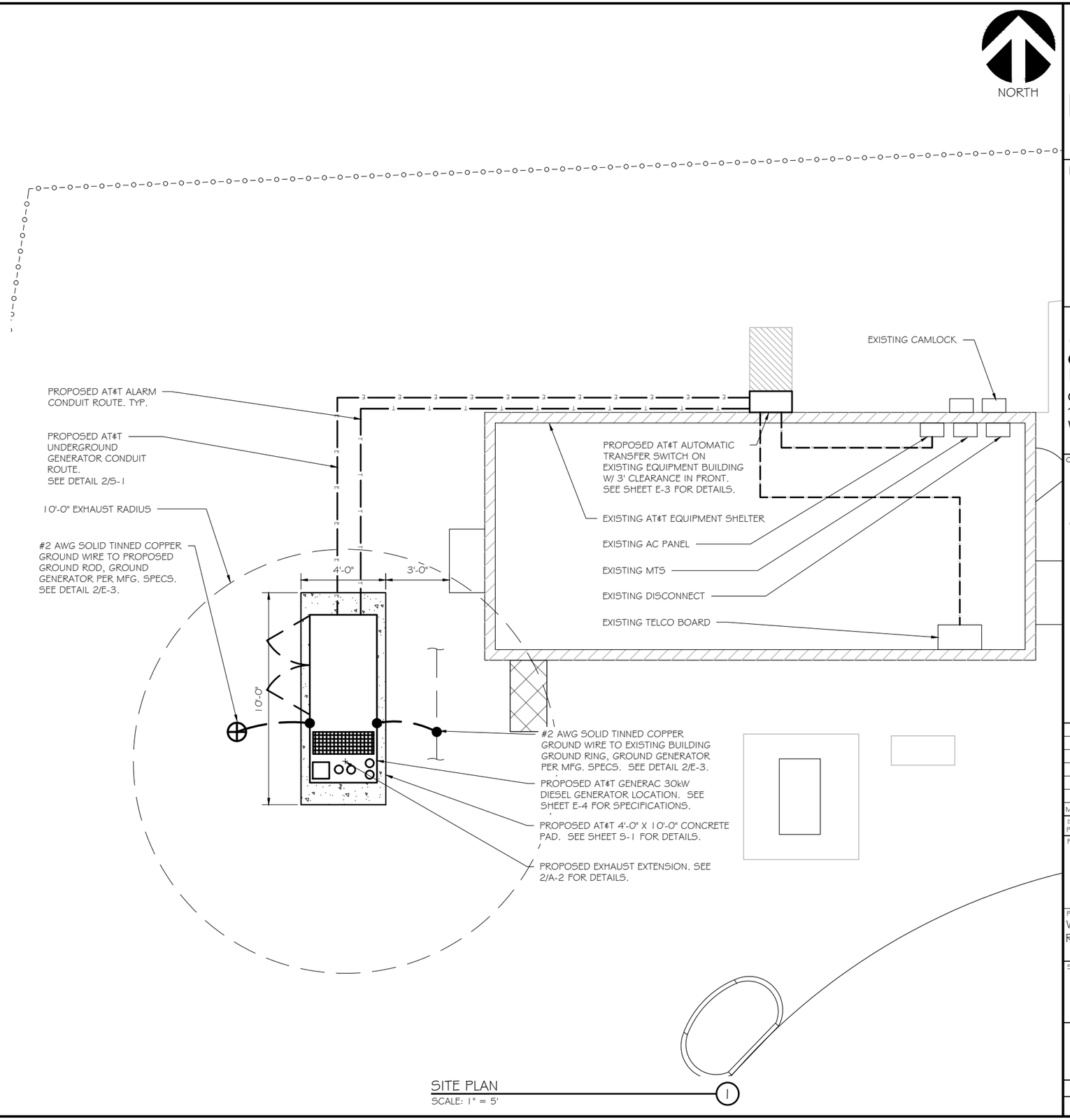
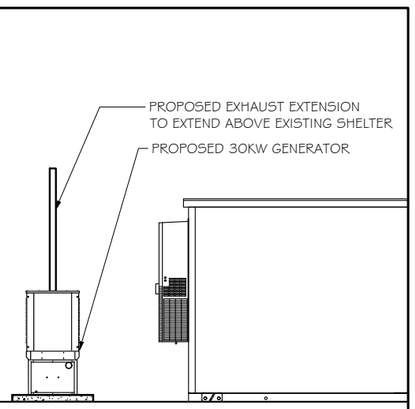


SITE PLAN
SCALE: 1" = 5'
1



EXHAUST EXTENSION DETAILS
SCALE: N/A
2

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ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" - 1" = 5'
22" x 34" - 1" = 2.5'

PROJECT NUMBER: 54144
SHEET NUMBER: A-2

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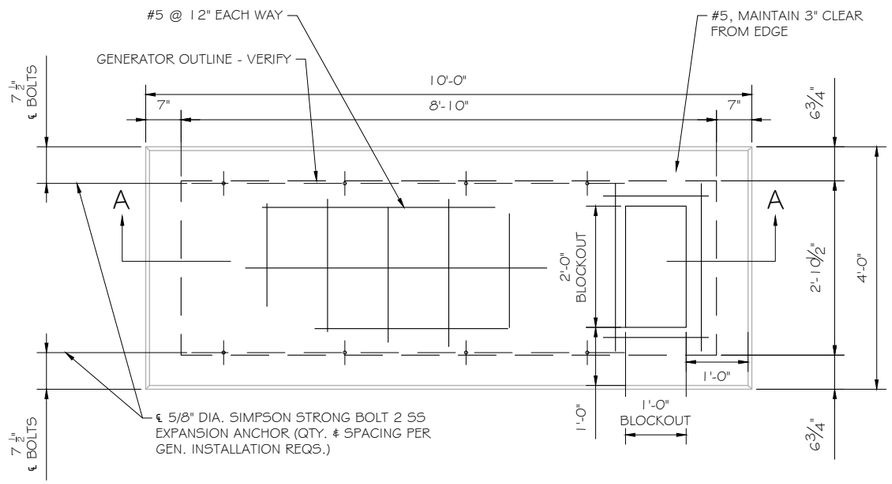
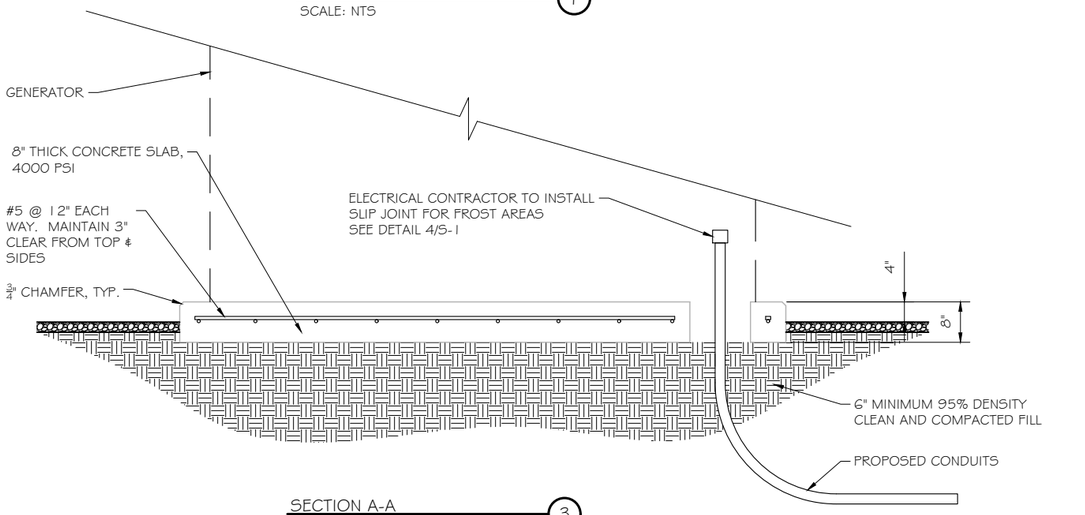


FOUNDATION PLAN 1
SCALE: NTS



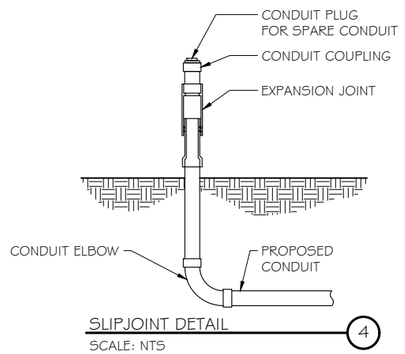
SECTION A-A 3
SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

REF: ATT 30KW GENERATOR PACKAGE
UL REGISTRATION NUMBER: MH18459
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 & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING

SUB BASE TANK TESTING: PRIMARY TANK & 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

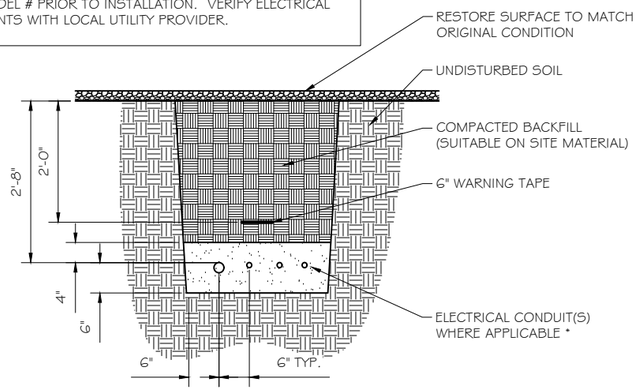
FACTORY PRE-SET AT 95% FULL FOR ALARM
FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL 4
SCALE: NTS

NOTE:

VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

NOTES:
1. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH 2
SCALE: NTS

STRUCTURAL GENERAL NOTES

1.0 GENERAL CONDITIONS
1.1 DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
1.2 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, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & 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 CONNECTIONS WITH THE WORK.
1.3 DO NOT SCALE DRAWINGS
1.4 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR	: 3974 LBS

2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
3.0 CONCRETE
3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN	: ACI318-11
CONSTRUCTION	: ACI301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
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)

3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
3.3 DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
3.4 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
3.5 MAXIMUM AGGREGATE SIZE: 3/4"
3.6 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
4.0 FOUNDATION & EXCAVATION NOTES
4.1 SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
4.2 ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FRO FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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MARK	DATE	DESCRIPTION
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ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: S-1

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DIAGRAM CIRCUIT SCHEDULE

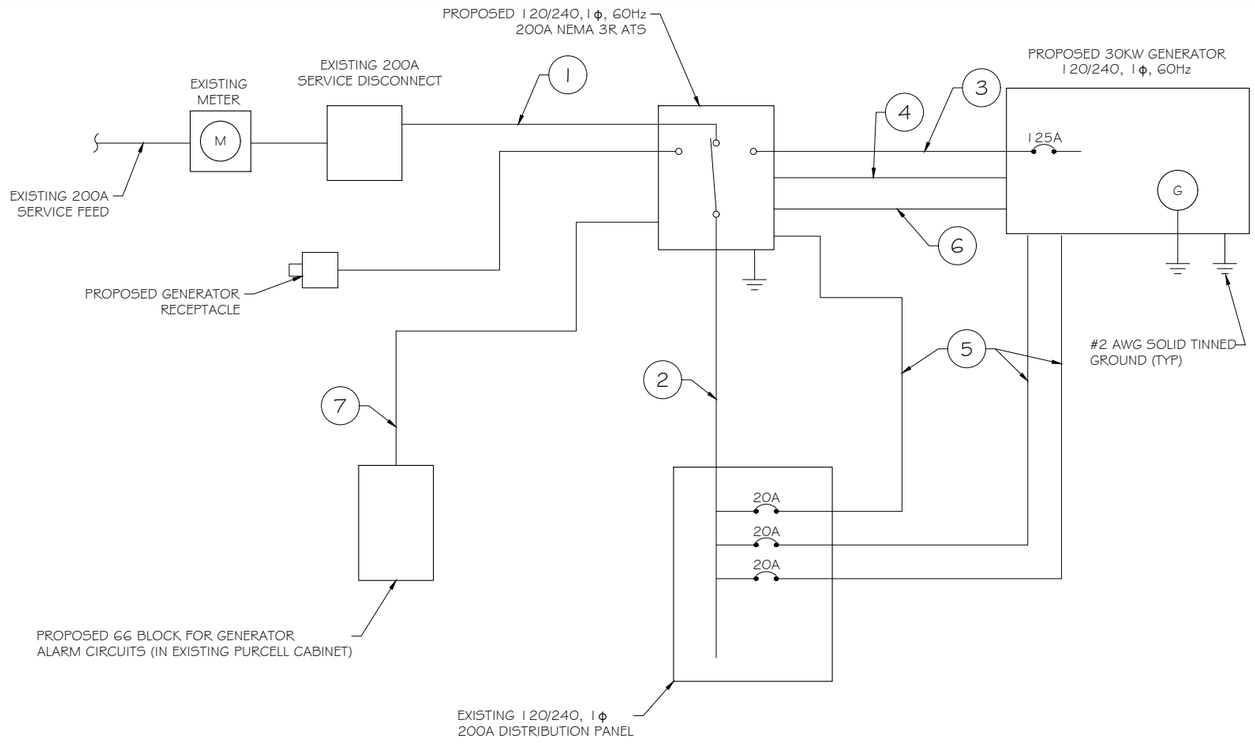
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #1	(1) #6	1-1/2"	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	(1) #12 (1) #12 (1) #12	1" 1" 1"	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 6-PAIR CAT5	N/A	1"	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	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 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

CIRCUIT DETAIL (1)
SCALE: NTS

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
*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE	

ALARM WIRING IDENTIFICATION CHART (2)
SCALE: NTS



PROPOSED WIRING DIAGRAM (3)
SCALE: NTS

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ROCKVILLE, MD 20852

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-1

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AC Distribution Panel - Layout Diagram

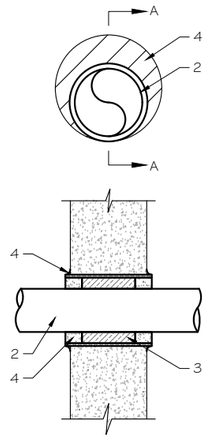
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	RECT 5	1	2P	OFF	50	RECT 9
3					2				
5	2P	ON	30	RECT 6	6	1P	ON	20	
7					8	1P	ON	20	
9	1P	ON	20		10	1P	ON	20	
11	1P	ON	20		12	2P	ON	80	
13	1P	ON	20		14				
15	2P	ON	60		16	1P	ON	20	
17					18	1P	ON	20	
19	2P	ON	30	RECT 7	20	1P	ON	20	
21					22	2P	OFF	30	RECT 10
23	2P	ON	30	RECT 8	24				
25					26	1P	ON	20	
27	2P	ON	30	BTS 1 RECT 1	28				
29					30				
31	2P	ON	30	BTS 1 RECT 2	32				
33					34	1P	ON	20	ATS
35	2P	ON	30	BTS 1 RECT 3	36	1P	ON	20	BLOCK HEATER
37					38	1P	ON	20	BATTERY CHARGER
39	2P	ON	30	BTS 1 RECT 4	40	2P	ON		
41					42				

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

EXISTING PANEL SCHEDULE (1)
SCALE: NTS

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



NOTE:
1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED
2. 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 = 0 HR

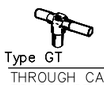
1. FLOOR OR WALL ASSEMBLY : MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
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 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" DIAMETER (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.
3. 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.
4. 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

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) (2)
SCALE: NTS


Type GR
CABLE TAP TO TOP OF GROUND ROD


Type GT
THROUGH CABLE TO TOP OF GROUND ROD.


Type GY
THROUGH CABLE TO SIDE OF GROUND ROD


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


Type TA
TEE OF HORIZONTAL RUN AND TAP CABLES.


Type VN
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.


Type VV
THROUGH VERTICAL CABLE TO VERTICAL STEEL SURFACE OR TO THE SIDE OF EITHER HORIZONTAL OR VERTICAL PIPE


Type GR
CABLE TAP TO TOP OF GROUND ROD

CADWELD DETAILS (3)
SCALE: NTS

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at&t Mobility

CONSULTANT:
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Information Technology, Inc.
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WESTWOOD, MA 02090

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License No: 37842, Expiration Date: 9/8/2023
Michael L. Pinske: 2/07/2023
Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-2

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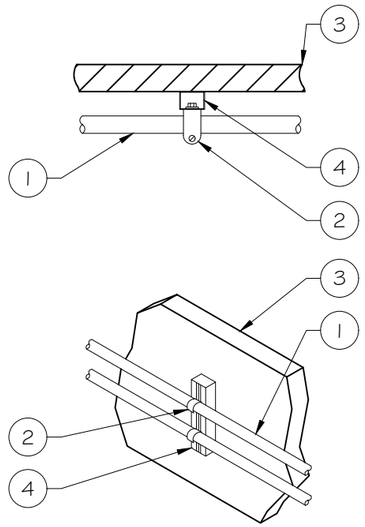
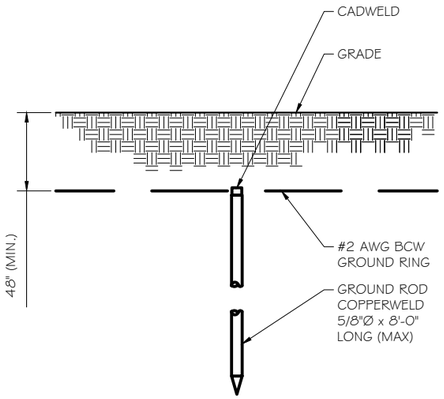
1. CONDUIT (TYP)
2. BUTTERFLY CLAMP AS REQUIRED
3. EXISTING WALL/CEILING
4. VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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'-0" O.C. LENGTH OF RUN	



CONDUIT WALL MOUNT 1
SCALE: NTS

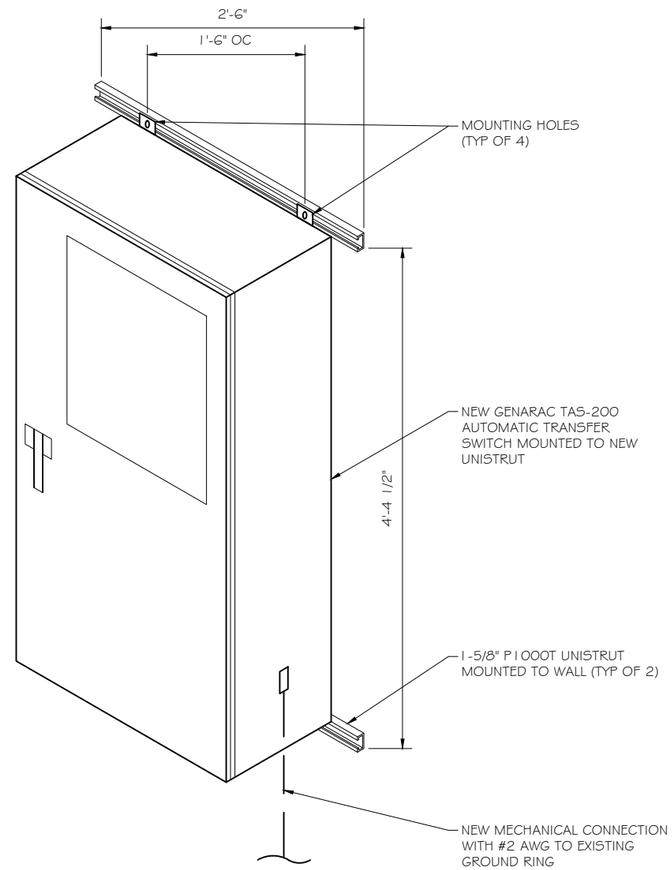


NOTE:
1. GROUND RODS MAY BE:
   - COPPER CLAD STEEL
   - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. 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)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

GROUND ROD DETAIL 2
SCALE: NTS

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"

NOTE:
1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



GENERAC ATS MOUNTING DETAIL 3
SCALE: NTS

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CONSULTANT:
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Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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ISSUE PHASE: FINAL
DATE ISSUED: 02/07/2023

PROJECT TITLE:
OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-3

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

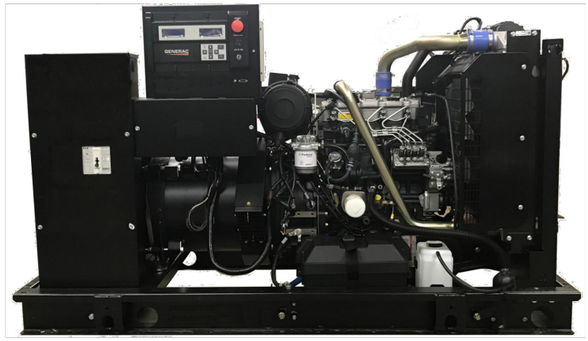
Standby Power Rating
30 kW, 38 kVA, 60 Hz

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

ISO 9001:2008

USA ENGINEERED & BUILT* *Assembled in the USA using domestic and foreign parts

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



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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.

SPEC SHEET 1 of 6

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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)

SPEC SHEET 2 of 6

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
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WESTWOOD, MA 02090

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Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

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ISSUE PHASE: FINAL — DATE ISSUED: 02/07/2023

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OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:
GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-4

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

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

FUEL SYSTEM
- NPT Flexible Fuel Line

ELECTRICAL SYSTEM
- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM
- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET
- Extended Factory Testing
- 8 Position Load Center
- Pad Vibration Isolation

CIRCUIT BREAKER OPTIONS
- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENCLOSURE
- Weather Protected Enclosure
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Level 2 Sound Attenuation with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch
- Enclosure Heater
- Damper Alarm Contacts

WARRANTY (Standby Gensets Only)
- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

CONTROL SYSTEM
- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Oil Temperature Indication and Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 100 dB Alarm Horn
- Ground Fault Annunciation
- 120V GFCI and 240V Outlets
- Remote Communication - Modem
- 10A Engine Run Relay

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

ENGINEERED OPTIONS

ENGINE SYSTEM
- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM
- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

ALTERNATOR SYSTEM
- 3rd Breaker System

GENERATOR SET
- Special Testing

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

SPEC SHEET

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Type	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 Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow
Crankcase Capacity - qt (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	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	< 50
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%

SPEC SHEET

GENERAC 30KW GENERATOR SPECIFICATIONS (1)

SCALE: NTS

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SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 54144

SHEET NUMBER: E-4.1

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SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

GENERAC | INDUSTRIAL POWER

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 (m^3/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_2O (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

SPEC SHEET 5 of 6

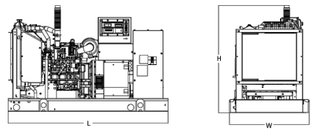
SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

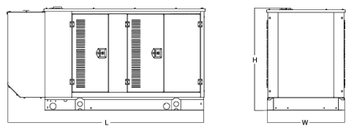
GENERAC | INDUSTRIAL POWER

DIMENSIONS AND WEIGHTS*



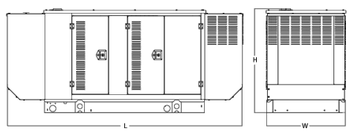
OPEN SET (Includes Exhaust Flex)

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 69.8 (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)



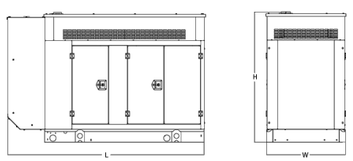
WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg) Enclosure Only	
			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	372 (170)	241 (110)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
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	
			Steel	Aluminum
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	505 (230)	338 (154)
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)		
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	
			Steel	Aluminum
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	510 (232)	341 (155)
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)		
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.

SPEC SHEET 6 of 6

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

GENERAC 30KW GENERATOR SPECIFICATIONS (1)
SCALE: NTS

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PREPARED FOR:

at&t Mobility

CONSULTANT:

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WESTWOOD, MA 02090

Certification & Seal:

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License No: 37842 Expiration Date: 9/8/2023

Michael L. Pinske: 2/07/2023 Date:

STATE OF MARYLAND · MICHAEL L. PINSKE · 37842 · PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
A	01/16/23	REVISED PCDs

ISSUE PHASE: FINAL DATE ISSUED: 02/07/2023

PROJECT TITLE:

OVERLAY - WHITE FLINT
FA ID # 10004923

PROJECT INFORMATION:
WOODGLEN & NICHOLSON DRIVE
ROCKVILLE, MD 20852

SHEET TITLE:

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 54144

SHEET NUMBER E-4.2

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TTS Series Switches

200 Amps 600 VAC

GENERAC® | INDUSTRIAL POWER

TAS200

200A Automatic Transfer Switch

TAS200 TAS200

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:

c UL us LISTED — UL1008, UL508, UL50, CSA C22.2 No. 178

nec® — NEC 700, 701 and 702

NEMA — NEMA 250

Application and Engineering Data

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

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
	Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #6 AWG
Output to Site	350MCM - #6 AWG
Generator Annunciator Connector	Deutsch DTM04-12PA-L012
Alarm Terminal Board	Generator Run Alarm
	Generator Fail – Shutdown Alarm
	Generator Fail – Non Shutdown Alarm
	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	
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	

GENERAC ATS SPECIFICATIONS
SCALE: NTS
1

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PREPARED FOR:

at&t Mobility

CONSULTANT:
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License No: 37842, Expiration Date: 9/8/2023
Michael L. Pinske: 2/07/2023 Date:

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SHEET TITLE:
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SCALE: NONE

PROJECT NUMBER: 54144
SHEET NUMBER: E-5

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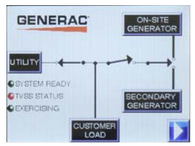
GENERAC | INDUSTRIAL POWER

TTS Control Systems

TAS200

3 of 3

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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GENERAC ATS SPECIFICATIONS 1
SCALE: NTS

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