

# COUNTY OF MENDOCINO DEPARTMENT OF PLANNING AND BUILDING SERVICES

860 NORTH BUSH STREET · UKIAH · CALIFORNIA · 95482 120 WEST FIR STREET · FT. BRAGG · CALIFORNIA · 95437 BRENT SCHULTZ, DIRECTOR TELEPHONE: 707-234-6650 FAX: 707-463-5709 FB PHONE: 707-964-5379 FB FAX: 707-961-2427 pbs@mendocinocounty.org www.mendocinocounty.org/pbs

August 20, 2020

Environmental Health - Ukiah Building Inspection - Ukiah Assessor Air Quality Management CalFire – Prevention Ukiah Valley Fire Protection District Cloverdale Rancheria Redwood Valley Rancheria Sherwood Valley Band of Pomo Indians

**CASE#:** AP\_2020-0028 **DATE FILED:** 7/15/2020

**OWNER: CHRISTOPHER C. NELSON** 

APPLICANT/AGENT: ALICIA MILLER C/O SMARTLINK FOR AT&T

**REQUEST:** Administrative Permit to install one 30 kilowatt back up diesel generator and a 190 gallon sub-base diesel fuel tank. Ancillary developments include placement of a 4 ft. by 10 ft. concrete pad, connection into existing electrical services and installation of an automatic transfer switch and noise reduction acoustic enclosure. **LOCATION:** 6.3± miles south of the City of Ukiah, on the east side of US Highway 101 (US 101), 1± mile north of its intersection with McNab Ranch Road (private), located at 7381 South Highway 101, Ukiah (APN: 186-240-01).

**SUPERVISORIAL DISTRICT: 5** 

**STAFF PLANNER:** CHEVON HOLMES **RESPONSE DUE DATE:** September 3, 2020

#### PROJECT INFORMATION CAN BE FOUND AT:

https://www.mendocinocounty.org/government/planning-building-services/public-agency-referrals

Mendocino County Planning & Building Services is soliciting your input, which will be used in staff analysis and forwarded to the appropriate public hearing. You are invited to comment on any aspect of the proposed project(s). Please convey any requirements or conditions your agency requires for project compliance to the project coordinator at the above address, or submit your comments by email to <a href="mailto:pbs@mendocinocounty.org">pbs@mendocinocounty.org</a>. Please note the case number and name of the project coordinator with all correspondence to this department.

We have reviewed the above application a	nd recommend the following (please che	ck one):
☐ No comment at this time.		
☐ Recommend conditional approval (attack	ched).	
Applicant to submit additional information Planning and Building Services in any control of the Planning and Building Services in the Planning and Building and Buildin	on (attach items needed, or contact the apsorrespondence you may have with the ap	
☐ Recommend denial (Attach reasons for	recommending denial).	
☐ Recommend preparation of an Environ	mental Impact Report (attach reasons wh	y an EIR should be required).
Other comments (attach as necessary)		
REVIEWED BY:		
Signature	Department	Date

CASE: AP 2020-0028

**OWNER: CHRISTOPHER NELSON TTEE** 

**APPLICANT:** Alicia Miller c/o Smartlink for AT&T

AGENT: Alicia Miller c/o Smartlink for AT&T

**REQUEST:** Administrative Permit to install one 30 kilowatt back up diesel generator and a 190 gallon sub-base diesel fuel

tank. Ancillary developments include placement of a 4 ft. by 10 ft. concrete pad, connection into existing electrical

services and installation of an automatic transfer switch and noise reduction acoustic enclosure.

LOCATION: 6.3± miles south of the City of Ukiah, on the east side of US Highway 101 (US 101), 1± mile north of its intersection

with McNab Ranch Road (private), located at 7381 South Highway 101, Ukiah (APN: 186-240-01).

APN/S: 186-240-01

**PARCEL SIZE:** Leased area of 1,600 Square Feet on a 53.66± Acre Parcel

GENERAL PLAN: Rangeland, 160 Acre Minimum Parcel Size (RL160)

**ZONING:** Rangeland, 160 Acre Minimum Parcel Size (RL:160)

**EXISTING USES:** Telecommunications Facility & Agriculture

**SUPERVISORIAL DISTRICT:** 5<sup>th</sup> (Williams)

### **RELATED CASES:**

•Use Permit U# 1-2001 was approved by the Planning Commission on October 4, 2001 permitting Edge Wireless, now AT&T Mobility, to install a 70 foot tall wooden pole to support 3 panel antennas and a 2x2 square foot antenna, to be "flush mounted" to the pole. Although approved for 70 feet, the pole was built to a height of 67 feet.

- •Use Permit Modification #UM 1-2001/2009 was approved by the Planning Commission at the November 19, 2009 public hearing allowing the 67 foot wooden pole to be replaced with a new 72 foot faux wood pole as well as permitting T-Mobile to "flush-mount" 3 panel antennas and 1 microwave dish to the pole. AT&T's antennas were transferred to the new pole.
- •Use Permit Modification #UM 1-2001/2011 was approved by The Planning Commission on September 15, 2011 permitting AT&T Wireless to mount six (6) panel antennas to an existing 72 foot tall wooden pole using T-Arms.
- •Administrative Permit AP\_2016-0022 was approved by the Planning Commission on Nobember 16, 2016 to allow T-Mobile to install a 7.5 Kw generator and a 99.1 gallon propane tank.
- •Administrative Permit AP\_2019-0069 was approved by the Zoning Administrator October 16, 2019 to allow three (3) antennas and three (3) TMAs to be relocated to the 60 ft. height of the tower and, three (3) new antennas and three (3) RRHs to be added, one per tower sector to the pole. On the ground, one (1) DUS41 was removed and replaced with two (2) BB6630s inside the existing equipment cabinet.

	ADJACENT GENERAL PLAN	ADJACENT ZONING	ADJACENT LOT SIZES	ADJACENT USES
NORTH:	RL160	RL:160	67.53± Acres	Agriculture
EAST:	RL160	RL:160	2.01± Acres	Agriculture
SOUTH:	RL160	RL:160	55.54± Acres	Agriculture
WEST:	RL160	RL:160	25.62± Acres	Agriculture

# **REFERRAL AGENCIES**

LOCAL **STATE TRIBAL** ☑ CALFIRE (Land Use) ☑ Air Quality Management District

☑ Assessor's Office

☑ Building Division (Ukiah)

⊠ Environmental Health (Ukiah)

☑ Ukiah Valley Fire Protection District

☑ Cloverdale Rancheria ☑ Redwood Valley Rancheria

☑ Sherwood Valley Band of Pomo Indians

ADDITIONAL INFORMATION: The purpose of the Administrative Permit is to install a backup generator for AT&T at an existing Crown Castle (CCATT LLC) wireless facility. There will be no antenna or equipment changes, no frequency changes, no tower work and no expansion of the existing footprint.

STAFF PLANNER: CHEVON HOLMES **DATE:** 8/12/2020

# **ENVIRONMENTAL DATA**

1. MAC:

NO

2. FIRE HAZARD SEVERITY ZONE:

CALFIRE FRAP maps/GIS

Moderate

3. FIRE RESPONSIBILITY AREA:

CALFIRE FRAP maps/GIS

Ukiah Valley Fire Protection District & SRA

4. FARMLAND CLASSIFICATION:

Grazing Land (G) and Unique Farmland (U)

5. FLOOD ZONE CLASSIFICATION:

FEMA Flood Insurance Rate Maps (FIRM)

NO

**6. COASTAL GROUNDWATER RESOURCE AREA:** 

Coastal Groundwater Study/GIS

N/A

7. SOIL CLASSIFICATION:

Mendocino County Soils Study Eastern/Western Part

Eastern Types

Bearwallow-Hellman-Witherell

8. PYGMY VEGETATION OR PYGMY CAPABLE SOIL:

LCP maps. Pygmy Soils Maps: GIS

NO

9. WILLIAMSON ACT CONTRACT:

GIS/Mendocino County Assessor's Office

NO

10. TIMBER PRODUCTION ZONE:

NO

11. WETLANDS CLASSIFICATION:

GIS **NO** 

12. EARTHQUAKE FAULT ZONE:

Earthquake Fault Zone Maps; GIS**NO** 

13. AIRPORT LAND USE PLANNING AREA:

Airport Land Use Plan; G

NO

14. SUPERFUND/BROWNFIELD/HAZMAT SITE:

GIS; General Plan 3-1

NO

15. NATURAL DIVERSITY DATABASE:

CA Dept. of Fish & Wildlife Rarefind Database/GIS

NO

16. STATE FOREST/PARK/RECREATION AREA ADJACENT:

IS; General Plar

NO

**17. LANDSLIDE HAZARD:** 

Hazards and Landslides Map: GIS: Policy RM-61: General Plan 4-44

NC

18. WATER EFFICIENT LANDSCAPE REQUIRED:

Policy RM-7; General Plan 4-34

NC

19. WILD AND SCENIC RIVER:

www.rivers.gov (Eel Only): GIS

NO

20. SPECIFIC PLAN/SPECIAL PLAN AREA:

Various Adopted Specific Plan Areas; GIS

NO

21. STATE CLEARINGHOUSE REQUIRED:

NO

22. OAK WOODLAND AREA:

USDA

NO

23. HARBOR DISTRICT:

Sec. 20.512

NO



# PLANNING & BUILDING SERVICES

CASE NO:	
DATE FILED:	
FEE:	
RECEIPT NO:	
RECEIVED BY:	
	Office Use Only

# **APPLICATION FORM**

APPLICANT:			
Name: Alicia Miller, Smartlink, Agent for	AT&T Mobility Black	201_473_3756	
Name: Alicia Miller, Smartilitik, Agent for	ATOCI MODILLY Phon	ie: 201-473-3730	
Mailing Address: 360 Civic Drive, Suite C			
City: Pleasant Hill State/Zip: CA	. / 94523Emai	ii: alicia.miller@sma	rtlinkgroup.com
PROPERTY OWNER:			
Name: Gregory T. Nelson (Power of Att	orney is CCATT <sub>Ph</sub>	<u>ட</u> ு) (602) 845-17	01
Mailing Address: 2055 S. Stearman Drive			
City: Chandler State/Zip: AZ	/ 85286Emai	il: vendor.helpdesk(	@crowncastle.com
AGENT:			
Name: Same as applicant	Phor	ne:	
Mailing Address:			
City:State/Zip:	Ema	il:	
ASSESSOR'S PARCEL NUMBER/S: 186-24	40-01		
TYPE OF APPLICATION:			
X Administrative Permit	☐ Flood Hazard Developn	nont Pormit	☐ Reversion to Acreage
☐ Agricultural Preserve: New Contract	☐ General Plan Amendme		☐ Rezoning
☐ Agricultural Preserve: Cancellation	☐ Land Division – Minor		☐ Use Permit – Cottage
☐ Agricultural Preserve: Rescind & ReEnter	☐ Land Division — Major		☐ Use Permit – Minor
☐ Airport Land Use	☐ Land Division — Parcel		☐ Use Permit – Major
☐ Development Review	☐ Land Division — Re-Sub		☐ Variance
☐ Exception	☐ Modification of Conditi		☐ Other
l certify that the information submitted with this applice	ation is true and accurate.		
Alicia Willon 5/27/2020	) (See	e attached Letter of	Authorization)

Signature of Owner

Date

Form Ver. 07 01.2019

Signature of Applicant/Agent

Date

# **SITE AND PROJECT DESCRIPTION QUESTIONNAIRE**

The purpose of this questionnaire is to relate information concerning your application to the Department of Planning and Building Services and other agencies who will be reviewing your project proposal. Please remember that the clearer picture that you give us of your project and the site, the easier it will be to promptly process your application. Please answer all questions. Those questions which do not pertain to your project please indicate "Not applicable" or "N/A".

### THE PROJECT

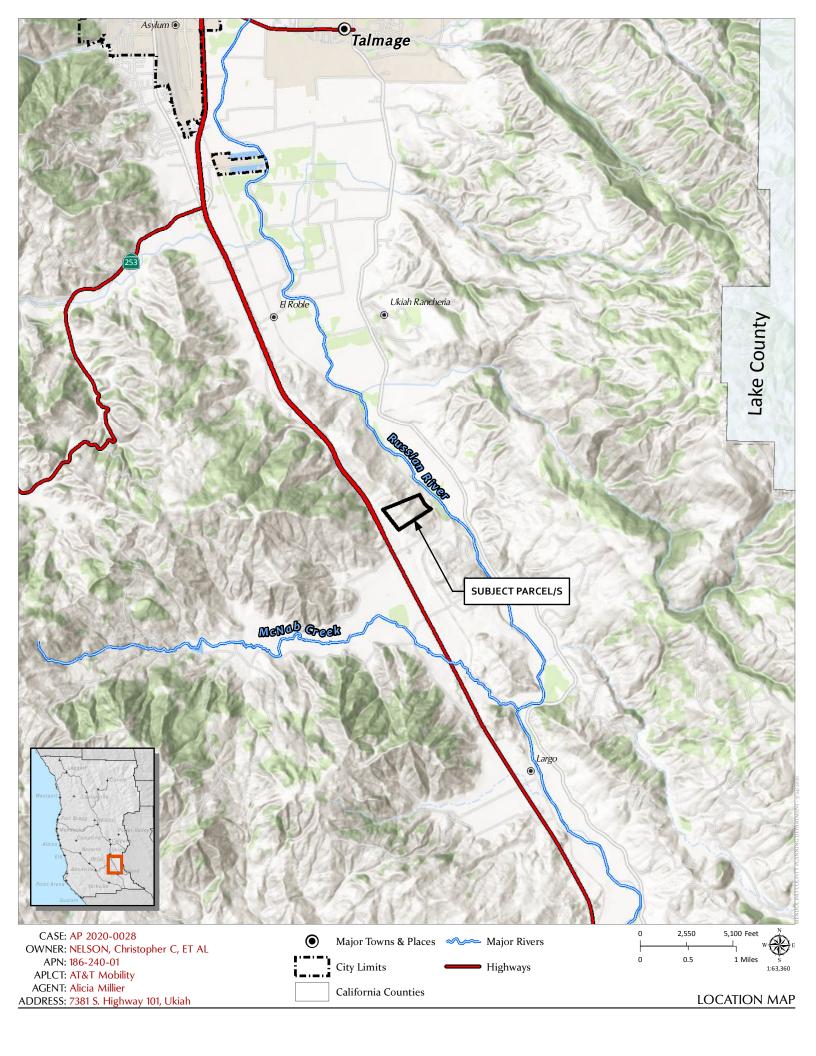
<ol> <li>Describe your project. Include se Installing a backup genera</li> </ol>					
There will be no antenna/of the footprint. All work fo	equipment chang or the generator i	ges, no frequency nstallation will be	changes, no completed w	tower work, no	expansion g fenced
compound. Proposed Ger tank. The project includes					
installation of an automati	•		•	•	•
The generator will only be					
2. Structures/Lot Coverage	NO. OF UNITS		SQUARE FOOTAGE		
2. Structures, Lot coverage	EXISTING	PROPOSED	EXISTING	PROPOSED	TOTAL
☐ Single Family					
☐ Mobile Home			1,444	No about	1 444
☐ Duplex ☐ Multifamily	1	No change	1,444	No change	1,444
Ճ Other: unmanned telecon	nmunications				
□ Other: facility					
GRAND TOTAL (Equal to gross area	of Parcel):				
3. If the project is commercial, indus	trial or institutional,	complete the following	:		
3. If the project is commercial, indus Estimated No. of Employees per shift		complete the following	:		
3. If the project is commercial, induse Estimated No. of Employees per shift Estimated No. of shifts per day: No. of shifts per day.	ft: <b>N/A</b>	complete the following	:		

. Will the project	be phas	ed?		
☐ YES	<b>⋈</b> NO	If yes, explain your pla	ans for phasing:	
		2000120-000-000		
_				
-			nan the building sites and road	ds?
☐ YES	X NO	If no, explain:		
Will the project	involve	the use or disposal of	f potentially hazardous materi	ials such as toxic substances, flammables, or explosives
		If yes, explain:	. ,	, , ,
The generate	or sub	tank will store 19	00 gallons of diesel fuel	l on site.
			NI/A	
		arking will be provided vered spaces:	d? IN/A Number	Size
		covered spaces:		
		andard spaces:		
		cessible spaces:	<del></del>	**************************************
		no. of spaces: d additional spaces:		
	Total:	radardonar spaces.		
			If yes, grading and drainage p	plans may be required. .g., steep, moderate slope, flat, etc.)
L 123	M NO	Also, please describe	the terrain to be traversed. Je	.g., steep, moderate slope, hat, etc.,
			5004 - 76	
For grading or r	oad con	struction, complete tl	he following: N/A	
			_	
		· · · · · · · · · · · · · · · · · · ·		
Amount of fill:			cubic yards	
Max. height of	fill slope:	:	feet	
Max. height of	cut slope	2:	feet	
Amount of imp	ort/expc	rt:	cubic yards	
Location of bor	rrow or d	isposal site:		

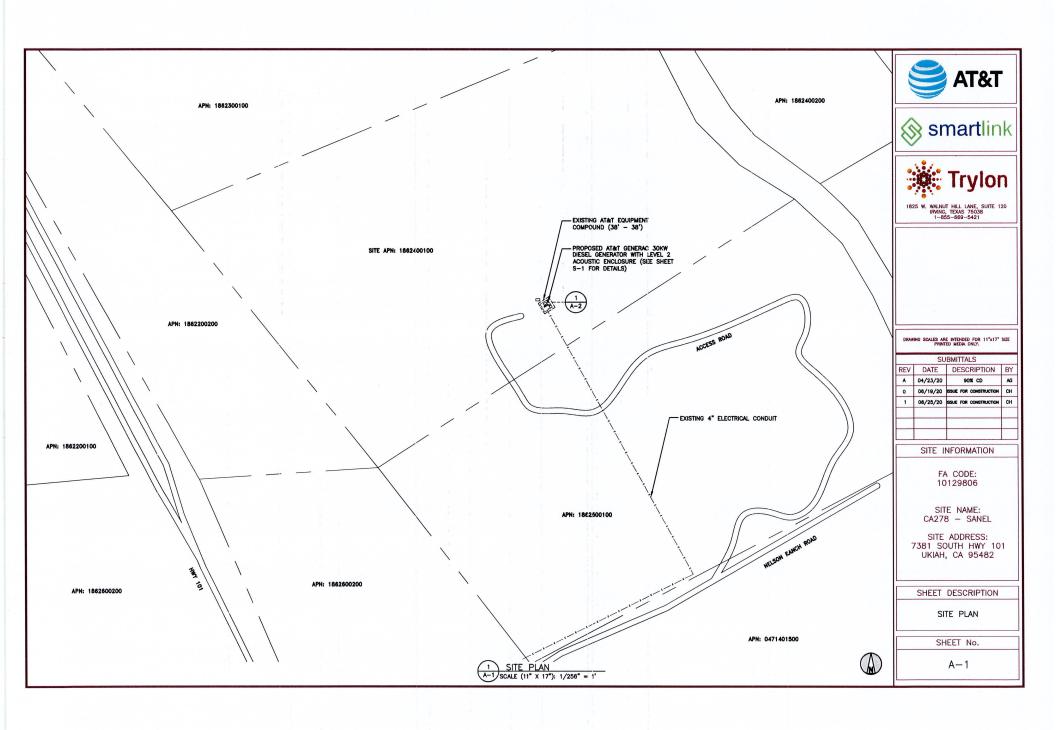
	y be required	
	☐ YES	⊠ NO
11.	Will the prop	posed development convert land currently or previously used for agriculture to another use?  INO
12.	Will the dev ☐ YES	elopment provide public or private recreation opportunities?  NO If yes, explain how:
13.	Is the propo	sed development visible from State Highway 1 or other scenic route?
14.	Is the propo	sed development visible from a park, beach or other recreational area?  ☑ NO
15.	Does the de	velopment involve diking, filling, dredging or placing structures in open coastal water, wetlands, estuaries or lakes?
	Diking: Filling: Dredging: Structures:	<ul> <li>□ YES</li></ul>
	If so what is	
		the amount of material to be dredged/filled?: cubic yards redged material disposal site?:
		my Corps of Engineers permit been applied for?   YES  NO
16.	. Will there bo	e any exterior lighting?  NO If yes, describe below and identify the location of all exterior lighting on the plot and building plans.
_		
17.	. <b>Utilities will</b> Electricity:	be supplied to the site as follows:  ☑ Utility Company (service exists to parcel) existing to telecommunications facility ☐ Utility Company (requires extension of service to site): feet miles ☐ On Site Generation – Specify:
	Gas:	<ul> <li>☐ Utility Company/Tank</li> <li>☐ On Site Generation – Specify:</li> <li>☒ None</li> </ul>
	Telephone:	☑ YES □ NO existing

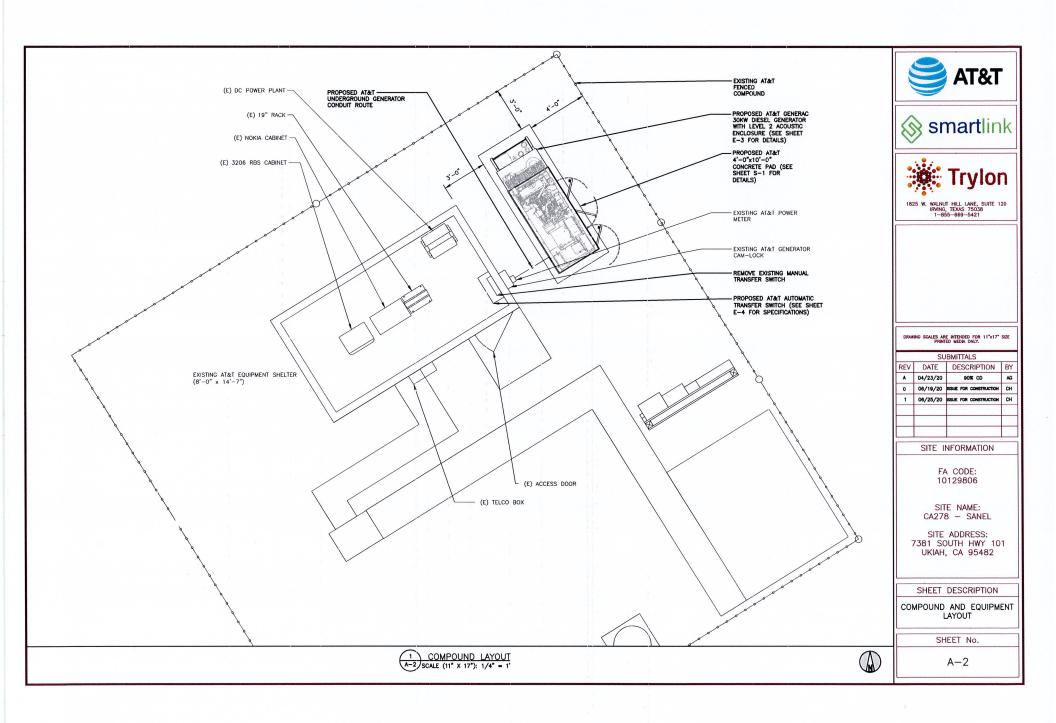
18. What will be the method of sewage disposal? N/A  Community Sewage System (specify supplier):	
☐ Septic Tank	
☐ Other (specify):	
19. What will be the domestic water source: N/A  Community Water System (specify supplier):  Well Spring Other (specify):	
20. Are there any associated projects and/or adjacent properties under your ownership?  YES NO If yes, explain: (e.g., Assessor's Parcel Number, address, etc.)	
21. List and describe any other related permits and other public approval required for this project, including those required county departments, city, regional, State and Federal agencies:  _Building permit	ed by other
22. Describe the location of the site in terms of readily identifiable landmarks: (e.g., mailboxes, mile posts, street intersed Nelson Ranch Road and So Hwy 101	ctions, etc.)
23. Are there existing structures on the property? If yes, describe below and identify the use of each structure on the plotentative map if the proposal is for a subdivision.  ☑ YES □ NO	ot plan or
Existing unmanned telecommunications facility	
24. Will any existing structure be demolished or removed? If yes, describe the type of development to be demolished or including the relocation site, if applicable.  ☐ YES ☑ NO	r removed,

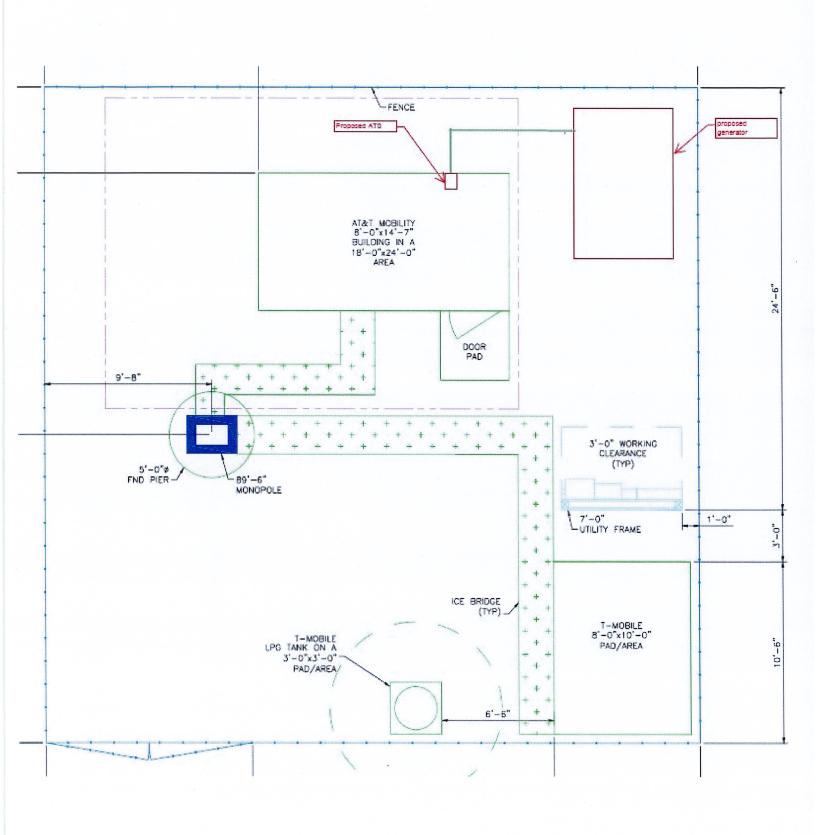
25. What is the max	imum neight of a	all structures	?						
Existing: <u>73'</u>	feet								
Proposed: 73'	feet								
26. What is the gros			including cov	vered parki	ing and accesso	ory buildings	?		
Existing: <u>1.44</u> 4	square fee	et				_			
Proposed: 1,44	4 square fee	et							
27. What is the tota	l lot area within	property line	es?						
Total Lot Area:		☐ acres ☐ sq	uare feet						
28. Briefly describe to soil stability, plants be helpful:  Existing telecommunications.	and animals, and	d any cultural	l, historical oi	r scenic asp	ects. Attach a	ny photogra	phs of th		l would
								nstalled within	
existing fence	d compound								
	<u> </u>								
29. Briefly describe to lindicate the type of be helpful.  Nearby land is	land use (use ch	art below) ar	nd its general						
	<del>.</del>								
						- 40,			
30. Indicate the surr									
	cant Residential	Agriculture	Commercial	Industrial	Public Facility	Timberland	Other		
		×							
West:		X							

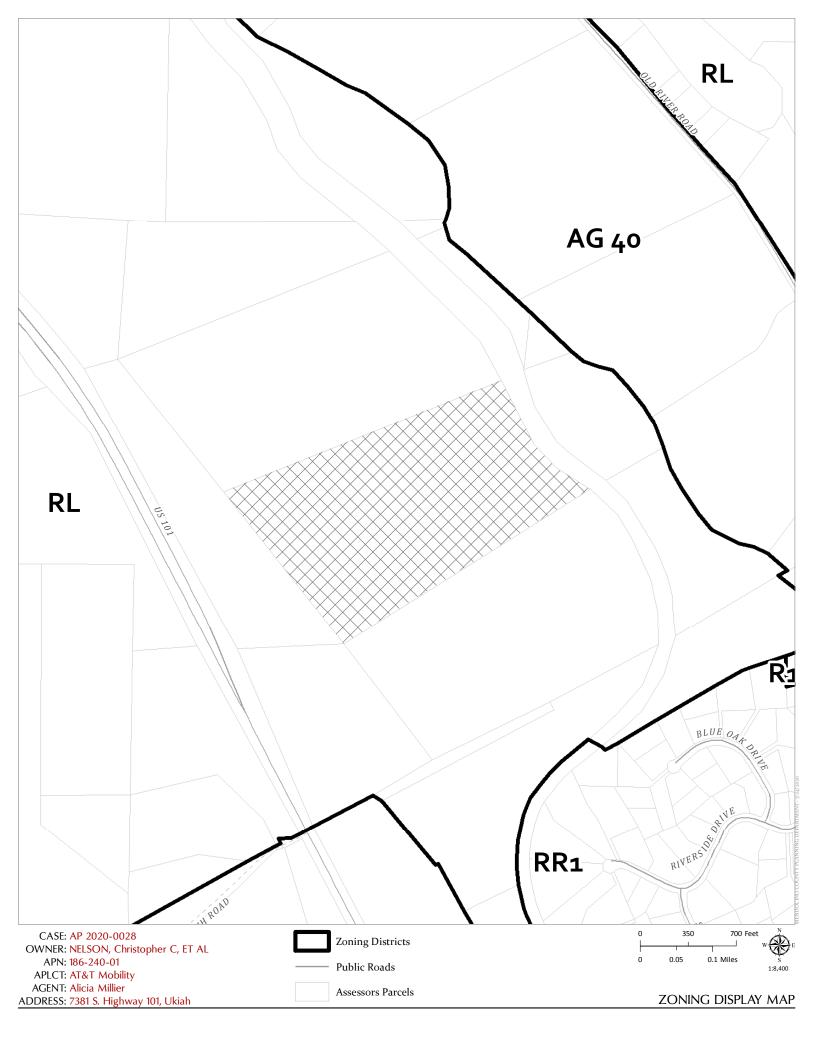




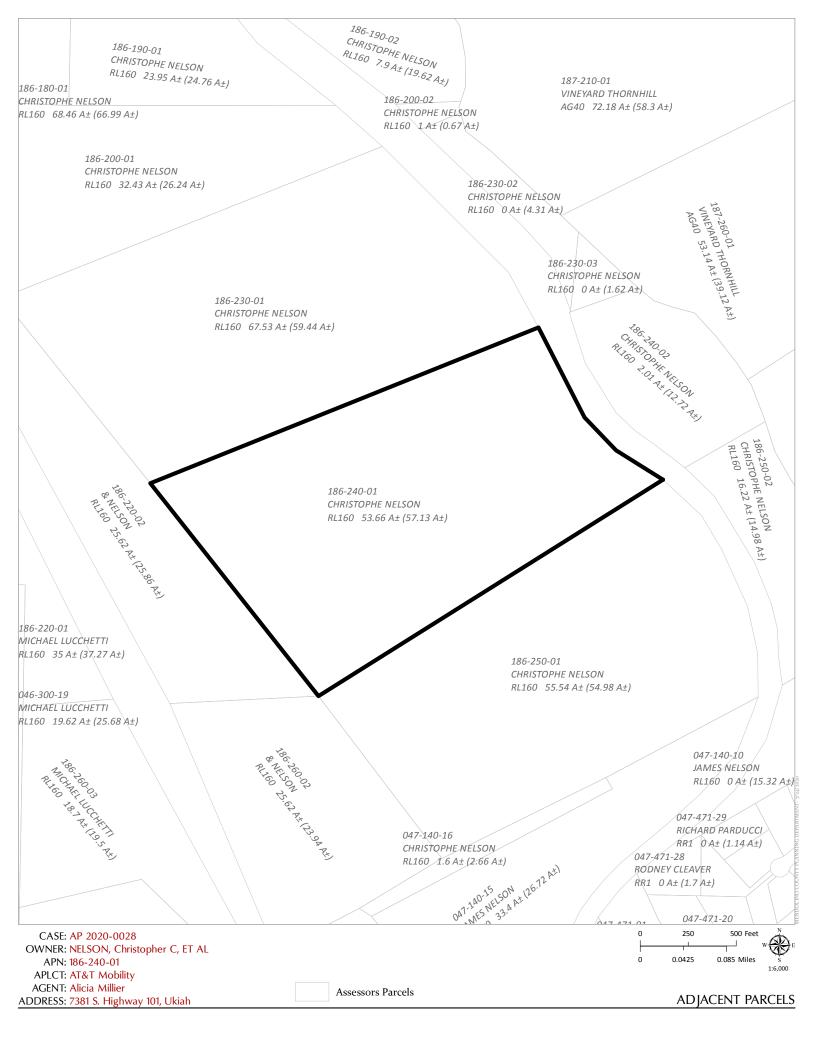


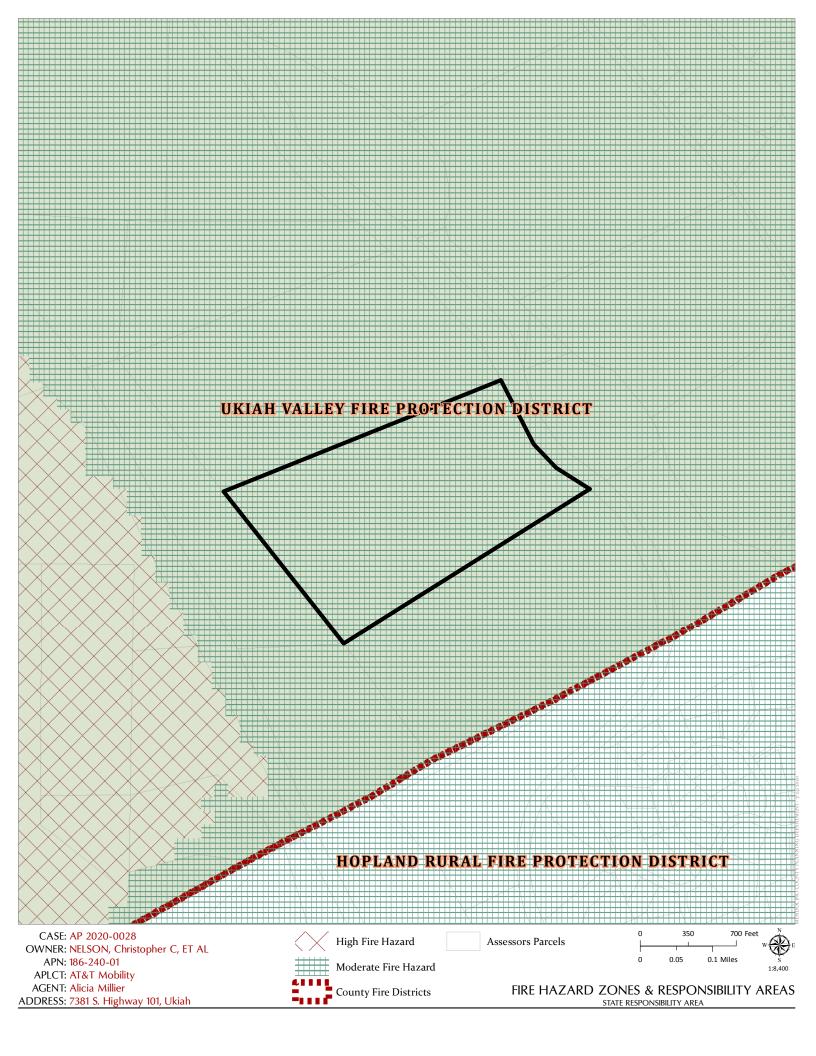


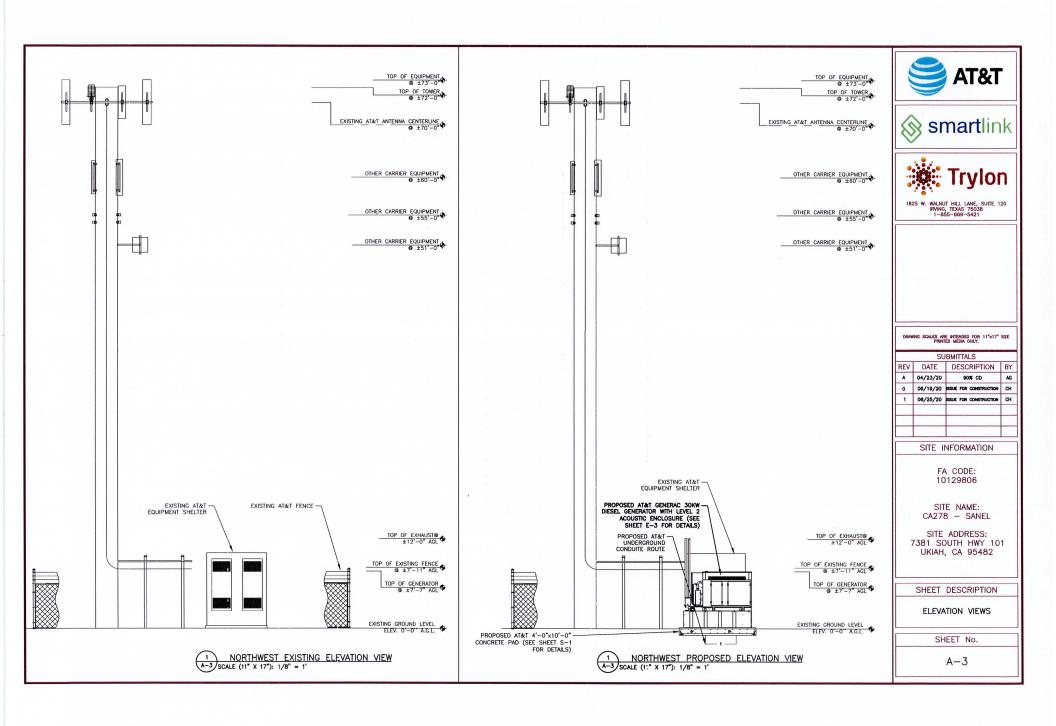


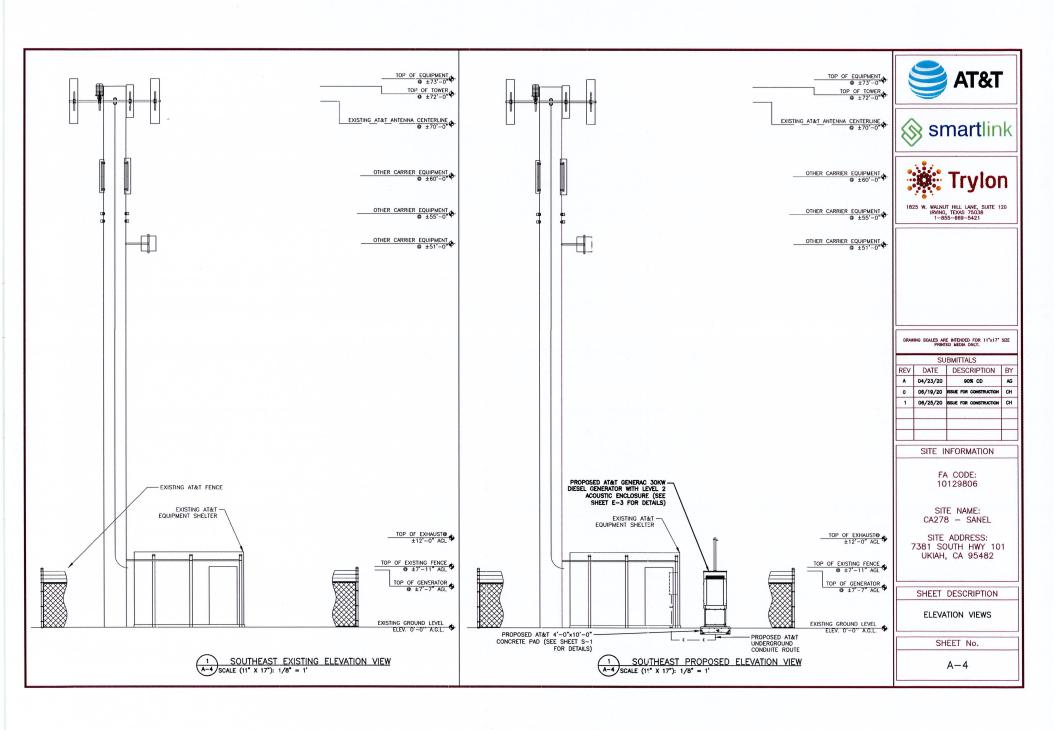


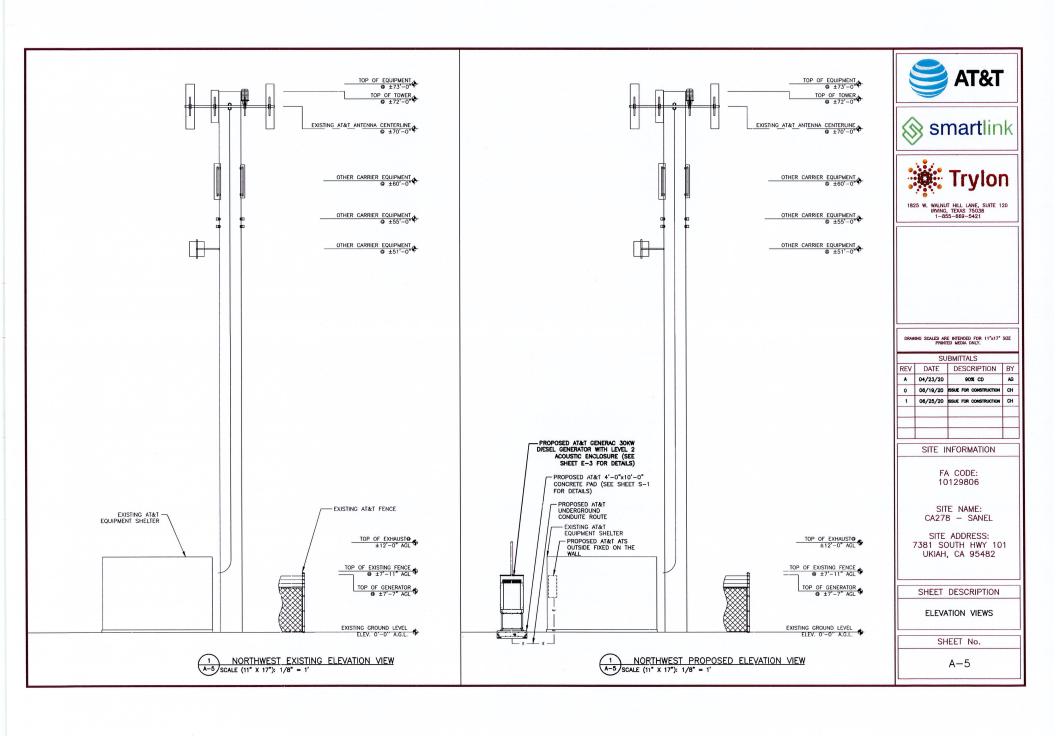


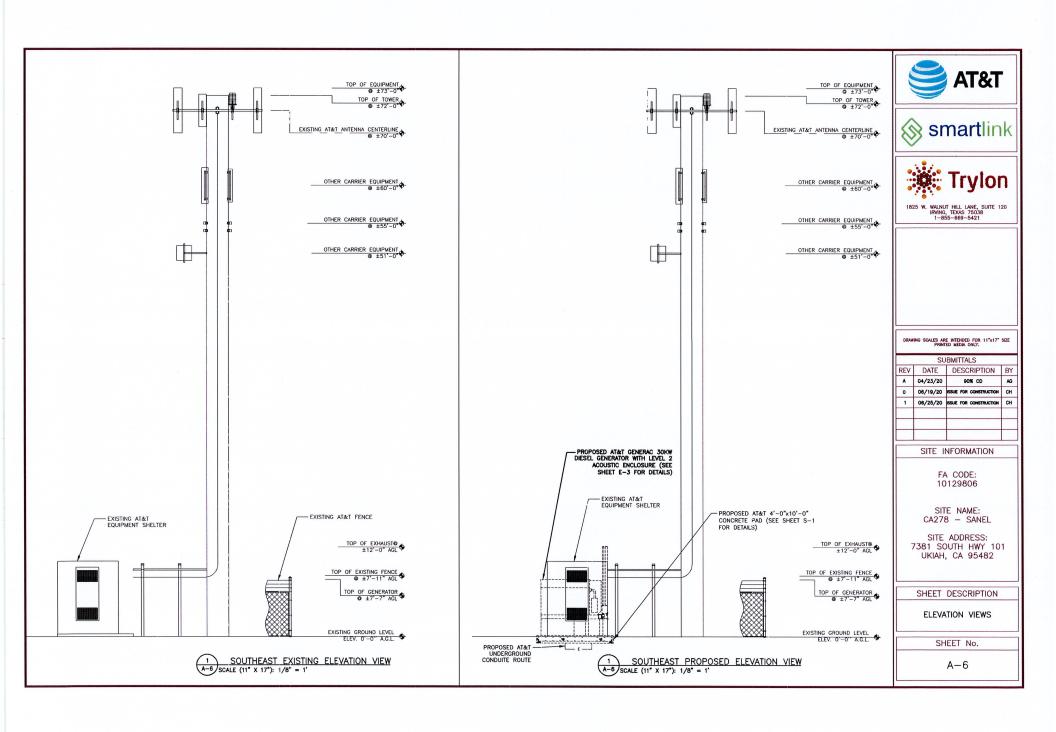












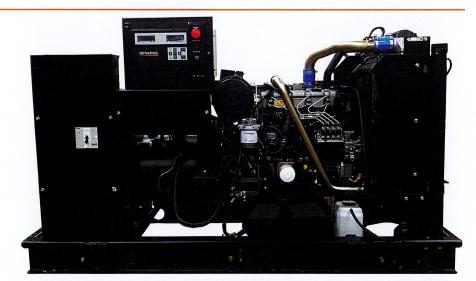
**Standby Power Rating** 30 kW, 38 kVA, 60 Hz

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





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



**GENERAC** 

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.

EPA Certified Stationary Emergency

# GENERAC INDUSTRIAL

#### STANDARD FEATURES

#### **ENGINE SYSTEM**

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

#### **Fuel System**

- Fuel Lockoff Solenoid
- · Primary Fuel Filter

#### **Cooling System**

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

#### **Electrical System**

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

#### **ALTERNATOR SYSTEM**

- UL2200 GENprotect<sup>™</sup>
- · 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<sup>®</sup> Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

#### Full System Status Display

- Power 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 VoltageFrequency

## **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)

# SD030 | 2.2L | 30 kW

# INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

# **CONFIGURABLE OPTIONS**

#### **ENGINE SYSTEM**

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

#### **FUEL SYSTEM**

O NPT Flexible Fuel Line

#### **ELECTRICAL SYSTEM**

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

#### **ALTERNATOR SYSTEM**

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

#### **GENERATOR SET**

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

#### **CIRCUIT BREAKER OPTIONS**

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

#### **ENCLOSURE**

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

# **WARRANTY (Standby Gensets Only)**

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

#### **CONTROL SYSTEM**

GENERAC\*

O NFPA 110 Compliant 21-Light Remote Annunciator

INDUSTRIAL

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

#### FUEL TANKS (Size On Last Page)

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

# **ENGINEERED OPTIONS**

### **ENGINE SYSTEM**

- Coolant Heater Isolation Ball Valves
- O Fluid Containment Pan

#### **CONTROL SYSTEM**

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

#### **ALTERNATOR SYSTEM**

O 3rd Breaker System

# **GENERATOR SET**

O Special Testing

#### **FUEL TANKS**

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

# SD030 | 2.2L | 30 kW

# INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



# APPLICATION AND ENGINEERING DATA

# **ENGINE SPECIFICATIONS**

General

0.0170101	
Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet
Cylinder #	4
Туре	In-Line
Displacement - in <sup>3</sup> (L)	135 (2.22)
Bore - in (mm)	3.3 (84)
Stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged
Cylinder Head	Cast Iron
Piston Type	Aluminum
Crankshaft Type	Forged Steel

# Engine Governing

Crankcase Capacity - qt (L)

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

11.2 (10.6)

# Cooling System

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

# Fuel System

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

# Engine Electrical System

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

# **ALTERNATOR SPECIFICATIONS**

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

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

# SD030 | 2.2L | 30 kW

# INDUSTRIAL DIESEL GENERATOR SET

# **OPERATING DATA**

### **POWER RATINGS**

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

# **MOTOR STARTING CAPABILITIES (skVA)**

#### skVA vs. Voltage Dip

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

### **FUEL CONSUMPTION RATES\***

	Diesel -	gph (Lph)
Fuel Pump Lift- ft (m)	Percent Load	Standl
3 (1)	25%	1.0 (3

Total Fuel Pump Flow (Combustion + Return) - gph (Lph) 16.6 (63)

50%	1.4 (5.2)
75%	2.0 (7.5)
100%	2.8 (10.5)

Standby

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#### **COOLING**

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

### **COMBUSTION AIR REQUIREMENTS**

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

ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	RPM	1,800	Exhaust Flow (Rated Output)	scfm (m³/min)	296.6 (8.4)
Horsepower at Rated kW**	hp	49	Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Piston Speed	ft/min (m/min)	1,181 (360)	Exhaust Temp (Rated Output)	°F (°C)	892 (478)
BMEP	psi (kPa)	159 (1,096)			

<sup>\*\*</sup> Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

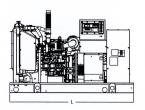
Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

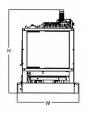
Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB

Prime - See Bulletin 0187510SSB

<sup>\*</sup> Fuel supply installation must accommodate fuel consumption rates at 100% load.

# **DIMENSIONS AND WEIGHTS\***

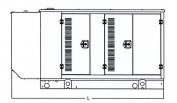




# **OPEN SET (Includes Exhaust Flex)**

Run Time - Hours	Usable Capacity - Gal (L)	$L \times W \times H$ - 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)

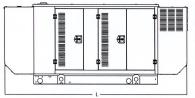
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### **WEATHER PROTECTED ENCLOSURE**

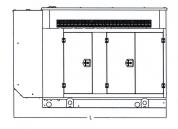
Run Time	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - Ibs (kg) Enclosure Only	
- Hours			Steel	Aluminum
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	- - 372 - (170)	241 (110)
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)		
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)		
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)		

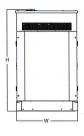




### **LEVEL 1 ACOUSTIC ENCLOSURE**

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - Ibs (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	( anacity	L x W x H - in (mm)	Enclosure Only	
- HOUR	- Hours			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)		

<sup>\*</sup> 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.