STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
APPLICATION OF THE FIRST TAXING DISTRICT WATER DEPARTMENT OF NORWALK FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A WIRELESS TELECOMMUNICATIONS FACILITY AT 173½ WEST ROCKS ROAD IN NORWALK, CONNECTICUT	:	DOCKET NO. 489
	:	APRIL 23, 2020

RESPONSES OF THE FIRST TAXING DISTRICT WATER DEPARTMENT OF NORWALK TO CONNECTICUT SITING COUNCIL PRE-HEARING QUESTIONS, SET ONE

On April 2, 2020, the Connecticut Siting Council ("Council") issued Pre-Hearing Questions, Set One to The First Taxing District Water Department of Norwalk ("Applicant" or "FTD"), relating to Docket No. 489. The FTD, together with AT&T, Verizon, T-Mobile and Sprint (the "Wireless Carriers") offer the following responses.

Please Note: Due to the recent merger of Sprint and T-Mobile, certain details about Sprint's existing cell site at the Property, its future use of the proposed FTD Facility and its cell sites in and around Norwalk remain uncertain or unavailable. It is not clear, at this point, if Sprint will continue to occupy this site location once the merger of network infrastructure is completed. FTD will do its best to supplement these responses during the course of this proceeding.

Question No. 1

Of the letters sent to abutting property owners, how many certified mail receipts were received? If any receipts were not returned, which owners did not receive their notice? Were any additional attempts made to contact those property owners?

Response

Of the thirteen (13) abutter notice letters sent out prior to the filing on the Application, FTD received nine (9) return receipts (green cards). None of the remaining notices were returned by the post office. Notice letters to John M. Packes, Jr., Antonio Luna, Jon L. and Gail I. Myers, and Tommy R. Soto and Maria Montoya-Soto were resent on April 23, 2020.

Question No. 2

Please provide proof of notice to the Western Connecticut Council of Governments.

Response

The Western Connecticut Council of Governments was inadvertently not included on the original Certificate of Service behind Tab 2 of the Application. A copy of the filing was sent to the Western Connecticut Council of Governments on April 6, 2020. An updated Certificate of Service is attached hereto as Exhibit 1.

Question No. 3

Referencing page 3 of the Application from the First Taxing District Water Department of Norwalk (Applicant), it states "Notice of FTD's intent to submit this Application was published on March 12 and March 13, 2020, by FTD in The Hour. A copy of an Affidavit of Publication will be forwarded to the Council as soon as it is available." Please provide such affidavit.

Response

An electronic copy of the above-referenced Affidavit of Publication was received on April 7, 2020 is included in Exhibit 2.

Question No. 4

Pursuant to CGS §16-50o, please submit a copy of the deed for the proposed site. Does the deed include any restrictive covenants that limit uses of the property? For example, is use of the property limited to "water supply purposes or purposes incidental or accessory thereto"?

Response

A copy of the deed for the 173 ½ West Rocks Road parcel (the "Property") is included in Exhibit 3. The deed does not contain any language restricting the use of the Property.

Site/Tower

Question No. 5

How many residences are located within a 1,000-foot radius of the proposed tower?

Response

There are 100 residences located within 1,000 feet of the proposed tower site.

Question No. 6

Referencing Tab 6 of the Application, Site Search Summary Map, this map does not match Tab 11, Optional Site Locations Summary Map. Specifically, on the Site Search Summary Map, Alternative Location D is located where Option E is located on the Optional Site Locations Summary Map. Please provide a revised Site Search Summary Map if necessary.

Response

A revised Site Search Summary Map is included in Exhibit 4.

Question No. 7

Could the tower be designed with a yield point to ensure that the tower setback radius remains within the boundaries of the subject property?

Response

Yes.

Question No. 8

Referencing Tab 1 of the Application, Facilities and Equipment Specification and Sheet C-3, please respond to the following:

a) AT&T has 12 remote radio heads (RRHs) depicted on Sheet C-3, but only the model numbers of nine are included on the Facilities and Equipment Specifications page. Please provide the model number(s) for the remaining three RRHs.

b) T-Mobile has nine RRHs depicted on Sheet C-3, but only six are identified on the Facilities and Equipment Specification page. Please correct the page and/or drawing as necessary.

c) Sprint has nine RRHs depicted on Sheet C-3, but only six are identified on the Facilities and Equipment Specification page. Please correct the page and/or drawing as necessary.

Response

a) The model numbers for AT&T's (12) proposed RRHs include:

(3) RRHs model 4478-B14

(3) RRHs model 4415-B30

(3) RRHs model 4449-B5/B12

(3) RRHs model 8843-B2/B66A

b) The model numbers for T-Mobile's (9) proposed RRHs include:

(3) RRHs model 4449BIZ, B71

(3) RRHs model 4415-B25

(3) RRHs model 4415 B66A

c) The model numbers for Sprint's (9) proposed RRHs include:

(3) RRHs model RRH19004x45

(3) RRHs model RRH8002x50

(3) RRHs model AAHF-H65V9

Question No. 9

What is the structural design standard applicable to the proposed T-arm mounts for the four carriers?

Response

The structural design standard applicable to the proposed T-arm mounts are as follows:

- ANSI/TIA-222-H;
- TIA-222-G-2;
- Verizon NTSD 449;
- AT&T Mount Technical Directive ATT-0020291-373.

Question No. 10

Would the tower have a galvanized gray finish?

Response

No. The galvanized steel tower and all of the Wireless Carriers' antennas and equipment on the tower will need to be "painted to match the adjacent materials" to comply with the

conditions imposed by the State Historic Preservation Office's January 17, 2020 no adverse effect approval letter. A copy of the SHPO's letter is included in Tab 11 of the Application.

Question No. 11

Pursuant to CGS §16-50p(a)(3)(G), please identify the safety standards and/or codes applicable to equipment, machinery or technology that would be used or operated at the proposed facility.

Response

- 2015 International Building Code with the 2018 Connecticut Building Code Supplement.
- 2017 National Electric Code (NFPA 70).
- 2015 International Mechanical Code.
- 2018 Connecticut State Fire Prevention Code.
- 2018 Connecticut State Fire Safety Code (NPFA 101).
- NFPA 58 Liquified Petroleum Gas Code, 2014 Edition.
- ANSI/TIA-222-G-2 "Structural Standard for Antenna Supporting Structures and Antennas".
- ANSI/TIA-222-H Addendum #1 "Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures".
- Occupational Safety and Health Administration (OSHA).

Question No. 12

Would the tower be designed for EIA/TIA-222 structural standards version G, H, or both? Would construction conform to the 2018 State Building Code?

Response

Yes, the tower would be designed for both TIA-222 Structural G and H and would conform to the 2018 Connecticut Building Code Supplement.

Question No. 13

Would the tower and foundation be designed to accommodate an increase in tower height?

Response

Yes.

Question No. 14

Referencing Tab 1 of the Application, Sheet C-2, each of the four carriers would have a 10-foot by 20-foot equipment area within the fenced compound. Would the carriers utilize walk-in equipment shelters, concrete equipment pads or steel platforms (with or without canopies)?

Response

Each of the carriers intends to utilize equipment cabinets located on separate concrete pads near the base of the tower. Also, due to the introduction of individual site generators and propane tanks for AT&T and Verizon, compound layout plans are in the process of being revised. The revised layout plan will be submitted to the Council as soon as it is available.

Question No. 15

What measures are proposed for the site to ensure security and deter vandalism such as alarms, gates, and locks?

Response

The wireless facility compound will be surrounded by a six (6) foot tall black vinyl-coated chain link security fence and gate with privacy slats. The gate will be locked with access

limited to the Wireless Carriers and the FTD. Wireless Carrier equipment will maintain separate intrusion alarm systems which will be monitored remotely.

Question No. 16

Identify the safety standards and/or codes by which equipment, machinery or technology that would be used or operated at the proposed facility.

Response

See the Applicant's response to Q11.

Question No. 17

What acreage of prime farmland soils would the facility and associated equipment be located on? What is the total acreage of prime farmland soils on the subject property?

Response

The entire 3,518 square foot facility compound would be in the area designated as Prime Farmland Soils on the Farmland Soils maps included behind Tab 12 of the Application. The total area on the Property identified as Prime Farmland Soils is approximately 0.5 acres.

Coverage/Capacity

Question No. 18

For each of the four wireless carriers, identify distances and directions to the adjacent sites with which the proposed facility would hand off signals. Include addresses, tower types, and existing antenna centerline heights for such carriers at these adjacent sites.

Response

AT&T Adjacent Sites

Site	Street Address	Town	Structure Type	Antenna Centerline (Feet AGL)	Distance (Miles)
CT2094	2 Sunny Lane	Westport	Monopole	100	2.7
CT2132	Willard Road	Norwalk	Self-Support	347	1.8
CT2138	Shirley Street	Norwalk	Guyed	81	2.1
CT2200	284 New Canaan Avenue	Norwalk	Stealth Pole Internal Array	126/136	2
CT5015	24 Belden Avenue	Norwalk	Rooftop	121/130/141	1.8
CT5046	1 Will Russ Court	Norwalk	Utility	105	1.4
CT5055	101 Merritt 7	Norwalk	Rooftop	128	0.7
CT5080	33 Riverside Avenue	Westport	Rooftop	59/69	2.9

Verizon Adjacent Sites

Site	Street Address	Town	Structure Type	Antenna Centerline (Feet AGL)	Distance (Miles)
Norwalk West 2	301 Merritt 7	Norwalk	Building Side-Mounted	106	0.6
Wilton 2	50 Danbury Road	Wilton	Building Side-Mounted	72	1.7
Cranbury	2 Sunny Lane, Westport	Westport	Monopole	128	2.7
Westport West	33 Riverside Avenue	Westport	Building Side-Mounted	69	2.9
Westport SW 2	274 Riverside Avenue	Westport	Rooftop	82	2.7

Site	Street Address	Town	Structure Type	Antenna Centerline (Feet AGL)	Distance (Miles)
East Norwalk	1 Filbert Street	Norwalk	Tank	111	2.1
East Norwalk 2	24 Belden Avenue	Norwalk	Building Side-Mounted	85	1.7
Norwalk 9	6 Shirley Street	Norwalk	Self-Support	101	4.2
Darien East	4 Tower Drive	Darien	Tank	108	4.1
New Canaan South	677 South Avenue	New Canaan	Tank	122	3.8
New Canaan	39 Locust Avenue	New Canaan	Building Side-Mounted	45	3.8
Silver Hill	208 Valley Road	New Canaan	Monopole	106	3.1

T-Mobile Adjacent Sites

Site	Street Address	Town	Structure Type	Antenna Centerline (Feet AGL)	Distance (Miles)
CTFF772A	383 Main Avenue	Norwalk	Rooftop	105	0.45
CT11322D	101 Main Avenue, Merritt 7 Corp. Park	Norwalk	Rooftop	114	0.61
CT11075C	2 Sunny Lane	Westport	Self-Support	110	2.69
CT11011D	10 Willard Road (SNET LL)	Norwalk (Westport)	Self-Support	262	1.8
CT11356C	2 Willruss Street Pole #1102 Line #1880	Norwalk	Utility Lattice	114	1.34
CTFF757A	40 Danbury Road	Wilton	Rooftop	86	1.48
CT11286C	24 Belden Avenue	Norwalk	Rooftop	110	1.8

Adjacent Site information for Sprint was not available at the time of the filing of these responses.

Question No. 19

For each carrier, are all frequencies used to transmit voice and data? For each carrier, which frequencies would be used for providing capacity?

Response

AT&T – All frequencies are used to transmit voice and data. The 700 MHz frequency establishes the coverage footprint of the system. The other frequencies (850 MHz, PCS and AWS) have a smaller coverage footprint and serve primarily to provide additional capacity.

Verizon - Yes, all frequencies being deployed are used to transmit voice and data services. In addition to the existing frequencies at the current site, 850 MHz would be deployed on the new tower to provide additional capacity in the area.

T Mobile – All LTE, UMTS and GSM frequencies are used to transmit both voice and data. 5G NR frequencies are used for Data only currently but will change as 5G capabilities evolve. The mid-band L1900 and L2100 frequencies provide the majority of the capacity in this area.

Sprint – Information regarding Sprint's plans for frequency deployment were not available at that time of the filing of these responses.

Question No. 20

Provide the existing centerline antenna heights for each carrier on the existing water tank facility.

Response

AT&T – 111 - foot centerline.

Verizon – 82 - foot centerline.

T-Mobile – 108 - foot centerline.

Sprint – 106 -foot centerline.

Question No. 21

What are the lowest heights at which each carrier's antennas could achieve their wireless service objectives from the proposed site?

Response

The antenna heights described in the Application represent the minimum heights needed by each of the carriers to satisfy their wireless service objectives and accommodate the shared use of the proposed tower. The tower also represents the tallest structure the SHPO would approve at the Property, given the sites proximity to the Merritt Parkway.

Question No. 22

Could the required coverage and capacity upgrade needs be met for all four carriers by a series of small cell facilities or a distributed antenna system rather than the proposed macro tower facility?

Response

No. Theoretically, it may be possible to install a large number of small cell facilities in the area that could match or closely match the coverage footprint of the proposed FTD Facility (macro cell). Such an approach, however, is not economically feasible and is not consistent with good RF Engineering practice. Typically, small cell facilities utilize existing infrastructure (i.e. electric distribution poles) along public rights of way in areas where coverage and/or capacity problems exist. In areas where this existing infrastructure is not available, for example, along private roads or on private and municipal property, property rights would need to be acquired and new poles would need to be installed. The actual number of small cell facilities that would be

needed to provide a service comparable to that from the proposed FTD Facility is not known but would be significant given the overall size of the area the Wireless Carriers are attempting to serve.

Question No. 23

What is the signal strength that each carrier designs its system for? For in-vehicle coverage? For in-building coverage?

Response

AT&T – For 700 MHz and 850 MHz, the coverage thresholds are -83 dBm and -93 dBm. These are the coverage thresholds defined by AT&T for "high quality" and "adequate" coverage, respectively. For PCS and AWS, the corresponding coverage thresholds are -86 dBm and -96 dBm.

Verizon – In-building -85 RSRP; and In-Vehicle -95 RSRP

T-Mobile – T-Mobile designs the network for In-Vehicle Coverage, In-building Residential and In-building Commercial. As this particular area comprises dense commercial buildings, maintaining in-building coverage is essential along with maintaining vehicular coverage along the main highways.

Sprint – Information regarding Sprint's coverage threshold design criteria were not available at the time of the filing of these responses.

Question No. 24

What is the existing signal strength for each carrier within the area it is seeking to cover from this site assuming that the existing site is deactivated, and the proposed facility is not constructed?

Response

AT&T – Within the area of coverage that AT&T seeks to cover once the existing site is decommissioned, it runs as high as the "high quality" coverage threshold (-83 dBm) and ranges downward to unreliable coverage (less than -93 dBm).

Verizon – Greater than or equal to -105 RSRP, a level of service that is unreliable.

T-Mobile – If the existing site is deactivated and proposed site is not constructed, the area would be reduced to unreliable in-vehicle coverage along with coverage gaps on the Route 15. In-building residential and In-building commercial coverage without the existing site would be unreliable.

Sprint – Information regarding Sprint's existing signal strength in the area around the proposed FTD Facility was not available at the time of the filing of these responses.

Question No. 25

Provide the existing and proposed coverage footprint areas from the proposed site (in square miles), for each carrier and each frequency that would be installed for that carrier.

Response

AT&T – The 700 MHz footprints are as follows:

Current Water Tank Site:

-83 dBm:	0.91 square miles
-93 dBm:	0.64 square miles

New Site:

-83 dBm:	0.98 square miles
-93 dBm:	0.71 square miles

Verizon

Existing 700 LTE coverage in square miles:
RSRP -85 0.986
RSRP -95 6.683

Proposed 700 LTE coverage in square miles:
RSRP -85 1.709
RSRP -95 16.734

Existing 850 LTE coverage in square miles:
RSRP -85 1.454
RSRP -95 6.784

Proposed 850 LTE coverage in square miles:
RSRP -85 1.454
RSRP -95 6.784

Existing AWS/2100 LTE coverage in square miles:
RSRP -85 0.072
RSRP -95 0.4236

Proposed AWS/2100 LTE coverage in square miles:
RSRP -85 0.661
RSRP -95 2.591

Existing PCS/1900 LTE coverage in square miles:
RSRP -85 0.204
RSRP -95 0.988

Proposed PCS/1900 LTE coverage in square miles:
RSRP -85 0.795
RSRP -95 3.407

T Mobile

Existing Coverage footprint:
L2100 = 4.8 Square miles

Proposed Site:
L2100 = 6.0 Square miles

Sprint – Information regarding Sprint existing and proposed coverage footprint areas from the proposed FTD Facility were not available at the time of the filing of these responses.

Question No. 26

Are the carriers experiencing any gaps in existing coverage along state roads? If so, would the proposed tower resolve such gaps?

Response

AT&T – AT&T currently has a small gap on the Merritt Parkway in a valley just west of State Route 7. The new site eliminates this gap almost completely.

Verizon – Because Verizon maintains an existing cell site at the Property, there are no existing gaps in service along State roads in the area.

T-Mobile – T-Mobile is not experiencing In-vehicle coverage gaps on and near RT-15. The proposed tower will provide comparable coverage to that of the existing site.

Sprint – Information regarding Sprint's coverage gaps in the area around the FTD Facility was not available at the time of the filing of these responses.

Question No. 27

Would the deployment of the proposed facility be sufficient to address any capacity concerns, now or in the future, or would additional facilities be required in the near term to off-load traffic?

Response

AT&T and Verizon – The proposed facility will be sufficient to replace the service each of the Wireless Carriers currently provide from the existing water tank facility on the Property and may provide some capacity benefits in the near term. Beyond the "near term" time frame (2-3 years) it is difficult to predict the additional benefits of the replacement facility.

T-Mobile – The proposed facility will be sufficient to maintain coverage and capacity levels that T-Mobile currently provides from the existing water tank facility on the Property and

may provide some capacity benefits in the near term. At this time, additional facilities are not planned for capacity in the near term, however T-Mobile constantly evaluates capacity needs and will update plans as customer usage and requirements may change in the future.

Sprint – Information regarding the sufficiency of the proposed FTD Facility to address Sprint's coverage and capacity needs in the area was not available at the time of the filing of these responses.

Question No. 28

Has the City of Norwalk or other emergency response entity expressed an interest in co-locating emergency services antennas? Would the Applicant provide space for emergency services antennas on the tower, if requested?

Response

No. The FTD, a municipal corporation, would certainly make the tower available to other municipal emergency service entities, if a need exists.

Question No. 29

What types of antenna configurations could provide the required coverage? For example, would flush-mounted antennas result in reduced coverage or would full platform antennas result in increased coverage? Please explain.

Response

To be consistent with the SHPO's authorization, the antenna arrays cannot extend more than three (3) feet off the face of the tower restricting the type of platform or T-Arm mounting structure that can be used. The use of flush-mounted antennas would result in a reduction of service and may require each of the Wireless Carriers to install antennas at a second antenna centerline height, thereby requiring a tall tower.

Backup Power

Question No. 30

Page ii of the Application states, "A propane-fueled generator and fuel tank may also be located on the Property if needed by the wireless carriers." Has the Applicant determined if the backup generator is needed by the carriers? If so, would the carriers share the backup generator?

Response

- AT&T will install its own 20kW propane generator for emergency back-up power and a 500-gallon propane fuel tank.
- Verizon will install its own 30 kW Propane fueled generator for emergency back-up power and a 500-gallon propane fuel tank.
- T-Mobile will install a battery cabinet only. No generator is planned at this time.
- Information regarding Sprint's interest in installing a generator at the site was not available at the time of the filing of these responses.

Both AT&T and Verizon require the installation separate generators and fuel tanks that will remain under their exclusive control. AT&T and Verizon feel strongly that control of their cell site equipment, including a backup power supply, is critical to the reliability of their wireless networks. Neither is willing to risk establishing a "single point of failure" that comes with a shared generator. Specifications for AT&T's and Verizon's generators are included in Exhibit 5.

Question No. 31

Is natural gas available at the site as a backup generator fuel? If yes, was natural gas considered? Explain.

Response

No. Natural gas is not available at the Property or in the area around the Property.

Question No. 32

Approximately what size in kilowatts would the backup generator be?

Response

See AT&T and Verizon responses to Interrogatory No. 30 above.

Question No. 33

Would the backup generator have containment measures to protect against fluid leakage?

Response

Yes. Each generator it would maintain appropriate containment measures to protect against fluid leakage of the generator unit.

Question No. 34

What would be the estimated run time for the Applicant's propane generator before it would need to be refueled, assuming it is running at full load under normal conditions for all carriers?

Response

AT&T – The estimated run time for AT&T's emergency back-up generator is 3.5 to 4 days assuming full load.

Verizon – The estimated run time for Verizon's emergency back-up generator is 3 to 4 days assuming full load.

Question No. 35

Would battery backup be used to provide uninterrupted power and prevent a reboot condition for any of the four wireless carriers? For each carrier, if applicable, indicate how long the battery backup alone could supply power for that carrier in the event that the generator fails to start or if a backup generator is not installed.

Response

Each of the Wireless Carriers will provide some form of battery back-up power for its equipment. The back-up batteries provide the Wireless Carriers with between 4 to 8 hours of back-up power following the interruption of commercial electric service and would prevent a reboot condition for the Wireless Carriers' equipment. If combine with an individual carrier's back-up generators, the batteries would provide continuous back-up power to the cell site without interruption.

Question No. 36

Would the backup generator run periodically for maintenance purposes? If so, at what frequency and duration? Would this be scheduled for daytime hours?

Response

Yes. If a back-up generator is installed, the unit would be exercised regularly, on a weekly basis, for approximately 15-30 minutes and occur only on weekdays.

Public Safety

Question No. 37

Will the proposed carriers' equipment support text-to-911 service? Is additional equipment required for this purpose?

Response

Yes. No additional equipment is required to provide this service.

Question No. 38

Would the carriers' operation comply with federal E911 requirements?

Response

Yes.

Question No. 39

Would the carriers' installations comply with the intent of the Warning, Alert and Response Network Act of 2006?

Response

Yes.

Environment

Question No. 40

What, if any, stealth tower design options would be feasible to employ at this site? Please provide costs related to each stealth tower design, if applicable.

Response

As discussed in the FTD application, the SHPO played a key role in consideration of "stealth" design aspects of this facility. Throughout the project design and SHPO review process, stealth design options and alternative tower locations on the Property were reviewed and considered including: keeping the existing water tank and wireless facilities intact; employing a unipole with internally-mounted antennas; and, use of a "monopine" tree tower. All of the alternate designs had substantial limitations or increased visual effects. Ultimately, the SHPO determined that restricting the projection of antenna mounting structures to three (3) feet and painting the tower, antennas and equipment would be the most appropriate way to minimize the visual impact for the tower.

Question No. 41

Would the proposed facility comply with Department of Energy and Environmental Protection noise control standards at the property boundaries?

Response

Yes. Operation of the proposed facility will comply with State and local noise standards.

Question No. 42

Is the proposed facility within a Department of Energy and Environmental Protection-designated Aquifer Protection Area?

Response

Yes, the proposed facility is within the Kellogg-Deering Aquifer Protection Area.

Question No. 43

Referencing Tab 11 of the Application, Letter from State Historic Preservation Office (SHPO), would the proposed antennas, remote radio units, wires, mounts, and associated tower equipment be painted to match the tower?

Response

Yes.

Question No. 44

Referencing Tab 11 of the Application, Historic Resources Determination, page 2, under "Option E," it states, "However, this alternative would not minimize the effectiveness of the site for the carriers due to shadowing and/or blocking of their signal southwestward along the Parkway." Please explain.

Response

The sentence referenced on page no. 2 in the Historic Resources Determination should read "However, this alternative would minimize the effectiveness of the site…". The proposed water tank would block radio signals for each of the Wireless Carriers to the southwest along the Merritt Parkway.

Question No. 45

Did SHPO provide any comments on the new water tank either through the Federal Communications Commission process or the City of Norwalk Planning and Zoning process? If so, please provide or describe such comments.

Response

Yes. The FTD received a no adverse effect letter from the SHPO as a part of its regulatory process for the new water tank. A copy of the SHPO's determination for the new FTD water tank is included in Exhibit 6.

Question No. 46

Please provide a comparison of overall visibility among the tower location Options A through E identified behind Tab 11 of the Application from abutting and nearby residences.

Response

Projected overall visibility of the proposed Facility from each of the five options (A through E) from abutting and nearby residences is detailed below.

Option A: This location could potentially lessen the views from a few residences on Skyview Lane to the southwest as the tower would be screened to some extent by the new FTD water tank. The views from additional abutting properties and nearby residences would remain similar to the existing water tank visibility.

Option B: Like Option A, upon completion of the project, this location could potentially soften the views from a few residences on Skyview Lane to the southwest due to the screening from the new FTD water tank. The views from additional abutting properties and nearby residences would also remain similar to the existing water tank visibility. However, this option requires at least one, if not multiple, temporary structures be built while the existing water tank is

demolished. The additional space that would be needed to accommodate the temporary tower(s) and associated equipment would result in additional tree clearing and the removal of existing vegetative screening, ultimately increasing views from additional off-site locations.

Option C: Visibility from Option C would be similar to that of Options A and B with respect to residences along Skyview Lane. However, its proximity to West Rocks Road and Caddy Road would likely increase visibility to those nearby residences to the east.

Option D: Option D would be visible along Skyview Lane and to some residences farther to the south/southwest on Linden Street, Linden Heights and Winnipauk Drive. The new water tank structure would limit visibility from nearby residences along West Rocks Road and Caddy Road to the highest point of the tower. Option D was selected based on extensive consultations with the SHPO and has received a "no adverse effect" determination by the agency.

Option E: Option E would likely create the most visibility to the largest number of abutting and nearby residences. Its location south of the existing water tank and east of the new water tank would create a large contiguous clearing, eliminating nearly all the existing screening in the northeast portion of the property. This location would have similar visibility characteristics as Option D with respect to residences along Skyview Lane. Unlike Option D, the new water tank would not obstruct the visibility of the Option E tower to nearby residences along West Rocks Road and Caddy Road, although views may be slightly softened due to the water tank being in the immediate background.

EXHIBIT 1

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
APPLICATION OF THE FIRST TAXING DISTRICT WATER DEPARTMENT OF NORWALK FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A WIRELESS TELECOMMUNICATIONS FACILITY AT 173½ WEST ROCKS ROAD IN NORWALK, CONNECTICUT	:	DOCKET NO. 489
	:	APRIL 23, 2020

SUPPLEMENTAL CERTIFICATION OF SERVICE

I hereby certify that on the 6th day of April 2020, a copy of the Docket No. 489 Application and attachments was sent first class mail, postage prepaid, to the following:

Charles Vidich
Senior Project Manager
Western Connecticut Council of Governments
1 Riverside Road
Sandy Hook, CT 06482

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280 Trumbull Street
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Attorneys for First Taxing District Water Department

EXHIBIT 2

ROBINSON & COLE, LLP
280 TRUMBULL STREET
KENNETH BALDWIN
HARTFORD CT 061033597

AFFIDAVIT OF PUBLICATION

STATE OF CONNECTICUT
COUNTY OF FAIRFIELD

I, Erica Murren

Being duly sworn, depose and say that, I am a Representative in the employ of HEARST CONNECTICUT MEDIA GROUP, Publisher of the Norwalk Hour, that a LEGAL NOTICE as stated below was published in the Norwalk Hour.

Subscribed and sworn to before me on this 7th Day of April, A.D. 2020.

Shelley D. Neville
Notary Public

My commission expires

SHELLEY D. NEVILLE
NOTARY PUBLIC OF CONNECTICUT
My Commission Expires 3/31/2023

LEGAL NOTICE

Notice is hereby given, pursuant to Section 16-50l(b) of the Connecticut General Statutes and Regulations pertaining thereto, of an Application to be submitted to the Connecticut Siting Council ("Council") on or about March 20, 2020, by the First Taxing District Water Department ("FTD" or the "Applicant"). The Application proposes the installation of a wireless telecommunications tower and related facility on a 1.69 acre parcel at 173½ West Rocks Road in Norwalk, Connecticut ("Property"). FTD proposes to construct a 130-foot monopole tower and install radio equipment within a fenced facility compound. A propane-fueled generator and fuel tank may also be installed on the Property. The tower will support antennas operated by AT&T, Verizon Wireless, T-Mobile and Sprint. Antennas on the existing water tank will be relocated to the new tower and the existing water tank will be removed. Access to the facility will extend from West Rocks Road. The location and other features of the proposed facility, including tower height are subject to change under provisions of Connecticut General Statutes § 16-50g et. seq. and 47 U.S.C. § 1455e.

On the day of the Siting Council public hearing on this proposal, FTD will fly a balloon at the height of the proposed tower described above. Interested parties and residents of the City of Norwalk are invited to review the Application during normal business hours after March 20, 2020, at any of the following offices:

Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

First Taxing District Water Department
12 New Canaan Avenue
Norwalk, CT 06851

City Clerk
City of Norwalk
125 East Avenue
Norwalk, CT 06856

Harry W. Rilling, Mayor
City of Norwalk
125 East Avenue
Norwalk, CT 06856

or the offices of the undersigned. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

FIRST TAXING DISTRICT OF NORWALK
WATER DEPARTMENT

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597
(860) 275-8200
Its Attorneys

PO Number

Ad Caption
LEGAL NOTICE Notice is heret

Publication
Norwalk Hour

Ad Number
0002546070-01

Publication Schedule
3/12/2020, 3/13/2020

EXHIBIT 3

sell the same in manner and form as is above written; and that the same is free from all incumbrances whatsoever, except the outstanding and recorded mortgage as hereinbefore described. AND, FURTHERMORE, I, the said grantor, do by these presents bind myself and my heirs forever to WARRANT AND DEFEND the above granted and bargained premises to her, the said grantee, and her heirs and assigns, against all claims and demands whatsoever, except as hereinbefore specifically mentioned. IN WITNESS WHEREOF, I have hereunto set my hand and seal this 13 day of December, in the year of our Lord nineteen hundred and fifty.

Signed, sealed and delivered in the presence of:
Samuel D. Phillips Jr.
W. L. Cain
As to signature of Grantor.

WILLIAM O. PARK, JR (L.S.)

STATE OF FLORIDA)
) SS.
COUNTY OF PALM BEACH)

Personally appeared WILLIAM O. PARK, JR., Signer and Sealer of the foregoing instrument, and acknowledged the same to be his free act and deed, before me.

(Not'l Seal)

Catharine Monaghan Notary Public in and for the State of Florida at Large.
My Commission expires Sept 21, 1951

Received for Record Aug. 6, A.D. 1951, at 12:20 P. M., and recorded by
Mabel [signature] Town Clerk.

* J.C. TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING: KNOW YE, That the STATE OF CONNECTICUT, acting herein by G. Albert Hill, its Highway Commissioner, hereunto duly authorized under authority granted by Section 2226, Chapter 107 of the General Statutes of the State of Connecticut, Revision of 1949, and with the advice and consent of Frank M. Lynch, Commissioner of Finance and Control of the State of Connecticut, for the consideration of One Dollar and other valuable considerations received to its full satisfaction of The First Taxing District, of the City of Norwalk, a municipal corporation existing under the laws of the State of Connecticut and having its territorial limits within the County of Fairfield, in said State, does remise, release and forever QUIT-CLAIM unto the said The First Taxing District, its successors and assigns forever, all the right, title, interest, claim and demand whatsoever as it, the said Releasor, has or ought to have in or to that certain triangular parcel of land situated in the City of Norwalk, County of Fairfield and State of Connecticut, southerly of the Merritt Parkway at the former location of West Rocks Road and containing one and eight hundred ninety-five one-thousandths (1.895) acres, more or less, bounded and described as follows: Beginning at the point of intersection of the westerly highway line of the former location of West Rocks Road and the division line between lands now or formerly of John Lane and of the Releasor herein, land herein conveyed; THENCE - along land of said John Lane, the following courses and distances: Westerly forming an interior angle of 90°-14'-25" with the said westerly highway line of the former location of West Rocks Road, sixteen and twenty-one one-hundredths (16.21) feet to a Connecticut Highway Department monument; westerly again, forming an interior angle of 176°-11'-40" with the last described course, seventy-four and eighty-eight one-hundredths (74.88) feet to a C.H.D. monument; westerly again, forming an interior angle of 179°-37'-55" with the last described course, forty-four and forty one-hundredths (44.40) feet to a C.H.D. monument; westerly again, forming an interior angle of 182°-03'-30" with the last described course, one hundred forty-eight and thirty-six one-hundredths (148.36) feet to a C.H.D. monument; northerly forming an interior angle of 98°-56'-55" with the last described course, three and seven one-hundredths (3.07) feet to a C.H.D. monument; westerly forming an interior angle of 263°-40' with the last described course, forty-eight and ten one-hundredths

(48.10) feet to a C.H.D. monument; westerly again, forming an interior angle of 182°-29'-50" with the last described course, twenty-four and thirty-six one-hundredths (24.36) feet to a C.H.D. monument; westerly again, forming an interior angle of 173°-00'-15" with the last described course, thirty-two and ninety-eight one-hundredths (32.98) feet to a C.H.D. monument; westerly again, forming an interior angle of 161°-06'-10" with the last described course, one hundred twenty-one and twenty-nine one-hundredths (121.29) feet to a C.H.D. monument and other land of the Releasor herein which is subject to an easement in favor of the Connecticut Light and Power Company; THENCE - along other land of the Releasor herein northeasterly following the arc of a circle having a radius of two thousand one hundred forty and ten one-hundredths (2140.10) feet and deflecting to the left, for a distance of two hundred sixteen and eighty-nine one-hundredths (216.89) feet to a C.H.D. monument; the chord of said arc forming an interior angle of 30°-53'-40" with the last described course; and northeasterly again, forming an exterior angle of 177°-05'-50" with the chord of the aforesaid arc, four hundred fourteen and eighty-nine one-hundredths (414.89) feet to a point in the westerly highway line of the former location of West Rocks Road; THENCE - along the said westerly highway line of the former location of West Rocks Road, the following courses and distances: Southerly forming an interior angle of 41°-02' with the last described course, fourteen and twenty-eight one-hundredths (14.28) feet to a point; southerly again, forming an interior angle of 165°-41'-50" with the last described course, sixty-four and twenty-two one-hundredths (64.22) feet to a point; southerly again, forming an interior angle of 184°-24'-10" with the last described course, thirty-six and two one-hundredths (36.02) feet to a point; southerly again, forming an interior angle of 177°-25'-20" with the last described course, forty-seven and twenty-four one-hundredths (47.24) feet to a point; southerly again, forming an interior angle of 169°-50'-20" with the last described course, nineteen and sixty-seven one-hundredths (19.67) feet to a point; southerly again, forming an interior angle of 170°-09'-10" with the last described course, thirty-one and thirty-three one-hundredths (31.33) feet to a point; southerly again, forming an interior angle of 166°-12'-30" with the last described course, twenty-five and fourteen one-hundredths (25.14) feet to a point; southerly again, forming an interior angle of 173°-21'-10" with the last described course, sixty-nine (69.00) feet to a point; and southerly again, forming an interior angle of 187°-45' with the last described course, thirty-four and twenty-seven one-hundredths (34.27) feet to the point of beginning. Being a portion of the land acquired by the Releasor herein from Alvin D. Wadsworth, by a Warranty Deed, dated June 5, 1935 and recorded in the Norwalk Land Records in Volume 262 at Page 630. The above described premises are conveyed subject to such rights and easements as may appear of record and to any state of facts which an inspection of the premises may show. For a more particular description of the above described premises, reference is made to a map to be filed in the Norwalk Town Clerk's office, entitled: "Town of Norwalk, plan showing land to be released to The First Taxing District-City of Norwalk by The State of Connecticut, West Rocks Road & Merritt Parkway, Scale 1"-40' May 1951, G. Albert Hill, Highway Commissioner." TO HAVE AND TO HOLD the premises, with all their appurtenances, unto the said Releasee, its successors and assigns forever, so that neither it, the said Releasor, nor its successors, nor any other person or persons under it or them shall hereafter have any claim, right or title in or to the premises, or any part thereof, but therefrom it is, and they are by these presents forever barred and excluded. IN WITNESS WHEREOF, the State of Connecticut, acting herein by G. Albert Hill, its Highway Commissioner, has caused its seal to be hereunto affixed, and this instrument to be executed in its behalf,

this 31st day of July A.D. 1951.

Signed, Sealed and Delivered in the presence of
Julia D. Conway
Irene W. Pelzar

STATE OF CONNECTICUT (Corp. Seal)
By: O. Albert Hill (L.S.)
State Highway Commissioner

STATE OF CONNECTICUT } ss. Hartford, July 31 A.D. 1951.
COUNTY OF HARTFORD }

Personally appeared for the State of Connecticut, O. Albert Hill, its Highway Commissioner, signer and sealer of the foregoing instrument, and acknowledged the same to be the free act and deed of the State of Connecticut, and his free act and deed, in the aforesaid capacity, before me,

(Not'l Seal) Julia D Conway Notary Public

This conveyance is made with the advice and consent of the undersigned, in conformity with Section 2226, Chapter 107 of the General Statutes of the State of Connecticut, Revision of 1949.

Frank M Lynch (L.S.)
Commissioner of Finance & Control
of the State of Connecticut

Approved as to Form
Aug 2 1951
William L. Beers.
Dep.Attorney General

Received for Record Aug. 6, A.D. 1951, at 12:53 P.M., and recorded by
Mabel P. Leland, Town Clerk.

Release

NO. 83634
NORTHEASTERN GAS TRANSMISSION COMPANY } SUPERIOR COURT

VS. } FAIRFIELD COUNTY

DORIS S. KOLLIKER ET ALS } JULY 30, 1951

RELEASE OF LIS PENDENS

This certifies that the Lis Pendens in the above-entitled condemnation proceedings upon the real estate of Doris S. Kolliker, said Lis Pendens being dated February 23, 1951, and recorded on February 24, 1951, in the Land Records of the Town of Norwalk, State of Connecticut, in Volume 358 at Page 359, is released and dissolved and the lien of said Lis Pendens is hereby removed, said action having been withdrawn. Dated at Bridgeport, Connecticut this 31st day of July, 1951.

NORTHEASTERN GAS TRANSMISSION COMPANY

By Marsh, Day & Calhoun
Its Attorneys

Received for Record Aug. 6, A.D. 1951, at 1:30 P.M., and recorded by
Mabel P. Leland, Town Clerk.

Deed.

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING: KNOW YE, That We, HENRY VAN PATTEN LOCKWOOD and ALICE MARION LOCKWOOD, of the Town of Norwalk, County of Fairfield and State of Connecticut, for the consideration of one dollar and other valuable considerations, received to our full satisfaction of FRANK E. RAYMOND, of said Town of Norwalk, do give, grant, bargain, sell and confirm unto the said FRANK E. RAYMOND: All that certain piece, parcel or tract of land, situated in Rowayton, so called, in the Town of Norwalk, County of Fairfield and State of Connecticut, and being designated as Lot No. 8 on a "Map of property prepared for Ambler Estates, Inc. Norwalk, Conn. Scale 1"=30', June, 1943" certified substantially correct by Fred B. Deilus, C.E., which map is on file in the office of the Town Clerk of said Town of Norwalk, and bounded and described as follows: northerly 72.54 feet by Lot No. 1 as designated on said map; easterly 149 feet, more or less, by Lot No. 7 as designated on said map; southerly 72 feet by the highway known as Pond Street; and westerly 151.32 feet by land now or formerly of William Moore. Being the same premises conveyed to Henry Van Patten Lockwood and Alice Marion Lockwood by Nellie Kellogg Lockwood by warranty deed dated December 6,

EXHIBIT 4

C:\Users\mkopel\Dropbox (APT GIS)\APT GIS Team Folder\Projects\First Tax District Norwalk CT544\mxd\First Tax Norwalk Site Search Summary Map.mxd

Legend

- (A) Site Investigated
- Proposed Equipment
- Potential Equipment
- Proposed Lease Area
- Proposed Electrical and Telco Service
- Proposed Gravel Access Drive/Turn-Around Area
- Proposed Hydropillar Water Reservoir (By Others)
- Proposed Fence (By Others)
- Municipal Boundary
- Approximate Parcel Boundary
- Subject Property

Site Search Summary Map

Proposed Wireless Telecommunications Facility
First Taxing District of
The City of Norwalk
173 1/2 West Rocks Road
Norwalk, Connecticut

Map Notes:
Base Map Source: 2019 Aerial Photograph (CT ECO)
Map Scale: 1 inch = 100 feet
Map Date: April 2020

100 50 0 100 Feet

ALL-POINTS TECHNOLOGY CORPORATION

EXHIBIT 5

POLAR POWER INC.

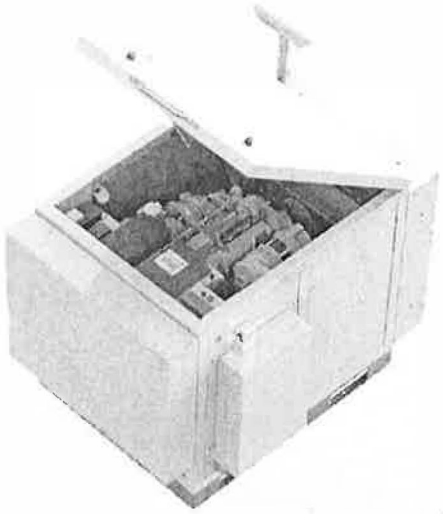
20 KW GASEOUS DC GENERATOR
PART NUMBER 8220-100-NG/LPG-20-03

All APUs include:

- Ethernet module with SNMP
- Powder coated aluminum enclosure
- V-belt driven radiator fan
- 5 Year Warranty

Options available:

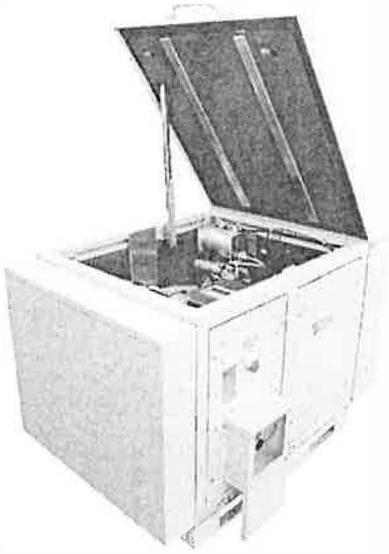
- Electric radiator fans
- Level 2 sound enclosure
- 8-alarm relay board
- Oil refining kit



Standards:

- *UL STD 2200*
- *EPA Compliant*

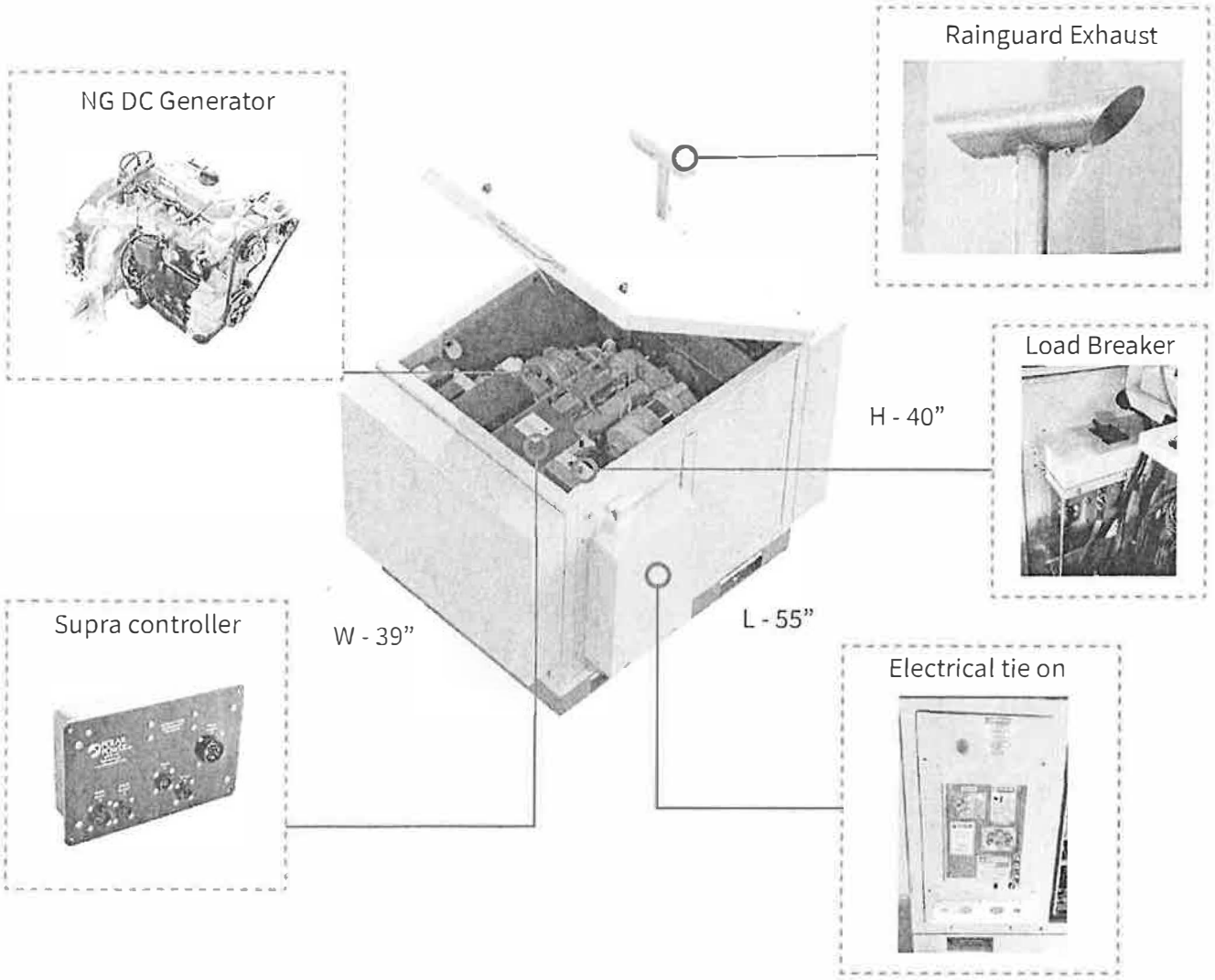
Made in USA



Founded in 1979 Polar Power specialized in solar photovoltaic systems, solar air conditioning and refrigeration. We developed and provided photovoltaic charging controls for telecommunications in the 1980s along with DC generators for the military. In 1994 we were first to provide DC generators with remote control and monitoring to the telecommunications industry.

Polar's success is based on engineering generators to meet the very specific needs of each application. Telecom site optimization is best met with the DC generator technology as the loads and batteries are DC. It makes no sense to install an AC generator and convert the output to DC. The AC generators are designed for a wide range of applications and they are not specifically produced for telecom applications so there are issues with reliability, space, and fuel efficiency.

Polar can save you considerable time and cost in permitting, installing, purchasing, and maintaining a backup generator. We reduce CAPEX and OPEX costs while improving backup reliability.



SMALL FOOTPRINT.
Polar's DC generator is considerably smaller in size than an AC generator. You can now backup sites that could not accommodate an AC generator. Smaller also means less cost for space leasing.

LOW MAINTENANCE.

LOW ACOUSTIC NOISE. <67 dBA @ 7 meters, and low vibration so as not to disturb the local residents or building landlords.

CORROSION RESISTANT. All-aluminum enclosure with stainless hardware for low maintenance, and long service life.

FUEL EFFICIENT. Up to 85% fuel savings due to smaller engine displacement, high efficiency alternator, and variable speed operation.

ADVANCED MONITORING. Remote diagnostics, control, and monitoring. Ethernet and RS232 standard, with SNMP.

RODENT RESISTANT. Small animals can quickly destroy a generator set by gnawing on wires, fuel lines, radiator hoses, etc. Cooling air inlets and outlets have perforated aluminum screens to keep small rodents and large insects out. Stainless steel wire braid is placed over fuel and radiator lines to prevent damage.

LONG LIFE. Controls and wire harnesses are designed to exceed a 20 year life. Higher grade, longer life electrical wire (UL 3173), weather tight connectors, gold plated connector pins on signal circuits. No transfer switches are required.

SPECIFICATIONS PN 8220-100-G-20-03

Engine

Engine Model	Ford TSG 415
Cylinders	4 In-line
Displacement (L)	1.5
Bore (in./mm)	3.11/79
Stroke (in./mm)	3.01/76.4
Intake Air System	Naturally Aspirated
Engine HP	47
Emissions	U.S. EPA Tier 4
Emissions Compliance	EPA Certified
Variable RPM	2300 to 2800

Engine lubrication system

Oil Filter Type	Full flow spin-on canister
Oil Capacity (L)	3.78
Oil Pressure Switch	Yes
Oil Pressure Transducer	Optional

Fuel consumption NG

[*Note: Calculated Values]

Output (kW)	Flow Rate in BTU/hr
10	211,000
15	340,000
20	470,000

Fuel Consumption LPG

[*Note: Calculated Values]

Output (kW)	gal/hr	L/hr
4	0.97	3.67
5	1.1	4.16
6	1.26	4.77
8	1.69	6.4
9	1.945	7.36
10	2.2	8.33
12	2.52	9.54
15	3.55	13.44
20	5.1	19.3

Engine cooling system

Type	Pressurized Aluminum Radiator
Water Pump	Belt-driven, Pre-lubed, self-sealing
Fan Type	Electric Fans
Airflow CFM	1300
Fan Mode	Pusher
Temperature Sensor	Yes

Environmental

Operating Temperature (°C/°F)	-40 to 72 / -40 to 162
Operating Humidity %	100
Cold Start Aids	Spark Plugs

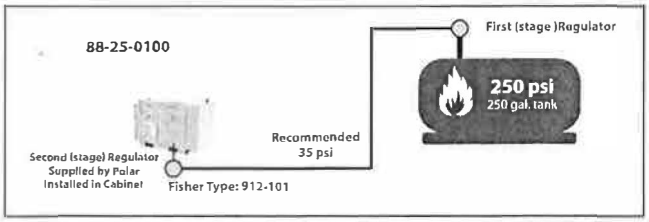
Optional: manifold heater available for temperatures < -40 °F

Power adjustment for conditions

Temperature Deration	2% derate for every 5.6 °C (10 °F) above 25 °C (77 °F)
Altitude Deration	4% derate for every 300 m (1000 ft) above 91 m (300 ft)

Fuel system

Type	LPG or Natural Gas
Fuel Pump Type	Fuel Solenoid Replacement
Fuel Tank/Line	Supplied by customer
Max fuel flow rate (BTU/hr)	470,000



Minimum	Recommended	Maximum
0.14 psi	0.39 psi	0.5 psi
4 in H2O	11 in H2O	13.9 in H2O
10 mbar	27.4 mbar	34.5 mbar

Engine cooling

System coolant capacity (gal/L)	2.2/8.3
Maximum operation air temperature on radiator (°C/°F)	54/129
Maximum ambient temperature (°C/°F)	49/120

Exhaust

Exhaust flow at rated output (cfm/cmm)	90/2.55
Exhaust temperature at rated output (°C/°F)	480/900

Alternator

Alternator Model	8220
Type	Permanent Magnets, NdFeB
Weight (lb/kg)	46.5/21
Regulation Type	Variable engine speed
Stator	3 phase/32 poles
Overcurrent Protection (A)	20 kW - 500
Disconnect Means	Pull fuse block or Circuit breaker
Voltage Range (VDC)	44 to 60
Alternator Exhaust Flow (cfm/cmm)	130 to 180 / 3.68 to 5.1
MTBF (hr)	100,000+

Enclosure

Model	88-25-0100
Type	Weather Protective
Materials	Powder coated aluminum
Door Hardware	Three Point with Padlock Hasp, and Removable Side Panels
Mounting	Secure Mounting Tabs
Dims.	L 55" x W 39" x H 40" *(Height 54" including Exhaust)*

Optional: L2 option

Weight

Dry Weight (lb/kg)	698.9/317

Starter Supercapacitor

Model	20-16-0001
Storage Rating (Ah)	500
Voltage (VDC)	13-14.4
Weight (lb/kg)	12.1/5.5
Operating Temperature (°C/°F)	-40 to 65 / -40 to 149
Service Life (year)	10 to 15

Charger

Model	00-10-0015
Input Voltage (VDC)	37 to 62
Output Voltage (VDC)	14 to 14.4
Recharge time from 0 VDC (min)	10
Recharge time from 8 VDC (min)	2
Weight (lb/kg)	2.2/1

Standards

Certification	Intertek 400376
UL Listing	UL STD 2200
Standards	CSA STD C22.2 No. 100

Controller features

Controller Type	Supra Model 250
4-Line Plain Text OLED Display	Simple user interface for ease of operation
Engine Run Hours Indication	Standard
Programmable Start Delay	Standard
Run/Alarm/Maintenance Logs	Standard
Engine Start Sequence	Cyclic cranking: 5 sec on, 45 sec rest (3 attempts maximum)
Starter Supercapacitor Charger	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed	Standard
Automatic High Engine Temperature Shutdown	Standard
Field Upgradeable Firmware	Standard
Glow Plug Delay	Automatic With Temperature
Engine Start Delay	Adjustable, Set at 60 sec
Return to Utility Delay	Adjustable, Set at 60 sec
Engine Cool-down	Adjustable, Set at 60 sec
Exerciser	Programmable

Monitoring

Alarm monitoring and remote control through Ethernet.

Contact closure alarm board

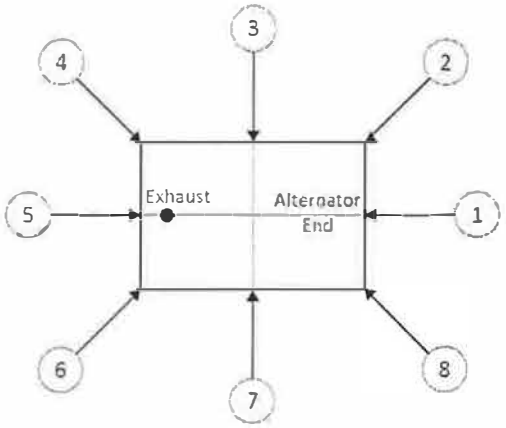
Shutdown Alarm	Standard
Warning Alarm	Standard
Engine Run	Standard
E-Stop Depressed	Standard

SOUND DATA

Type of Test	Sound Test	Serial No.	--
Test No.	01	Controller serial No.	--
Generator model	8220-100-NG-20-03	Observer	CHRIS ASHKAR
Enclosure model	Horizontal – 100	Date	1/25/2019 – 5:30 am
Alternator	8220-1-65-1	Nominal Speed / V / 1	2800 RPM / 370A / 55V
Engine	Ford TSG415	Firmware	3.0.0.19

Sound Pressure Levels in dB(A)
*Disclaimer: Testing conducted in outdoor and uncontrolled environment
*Baseline taken for Ambient noise levels

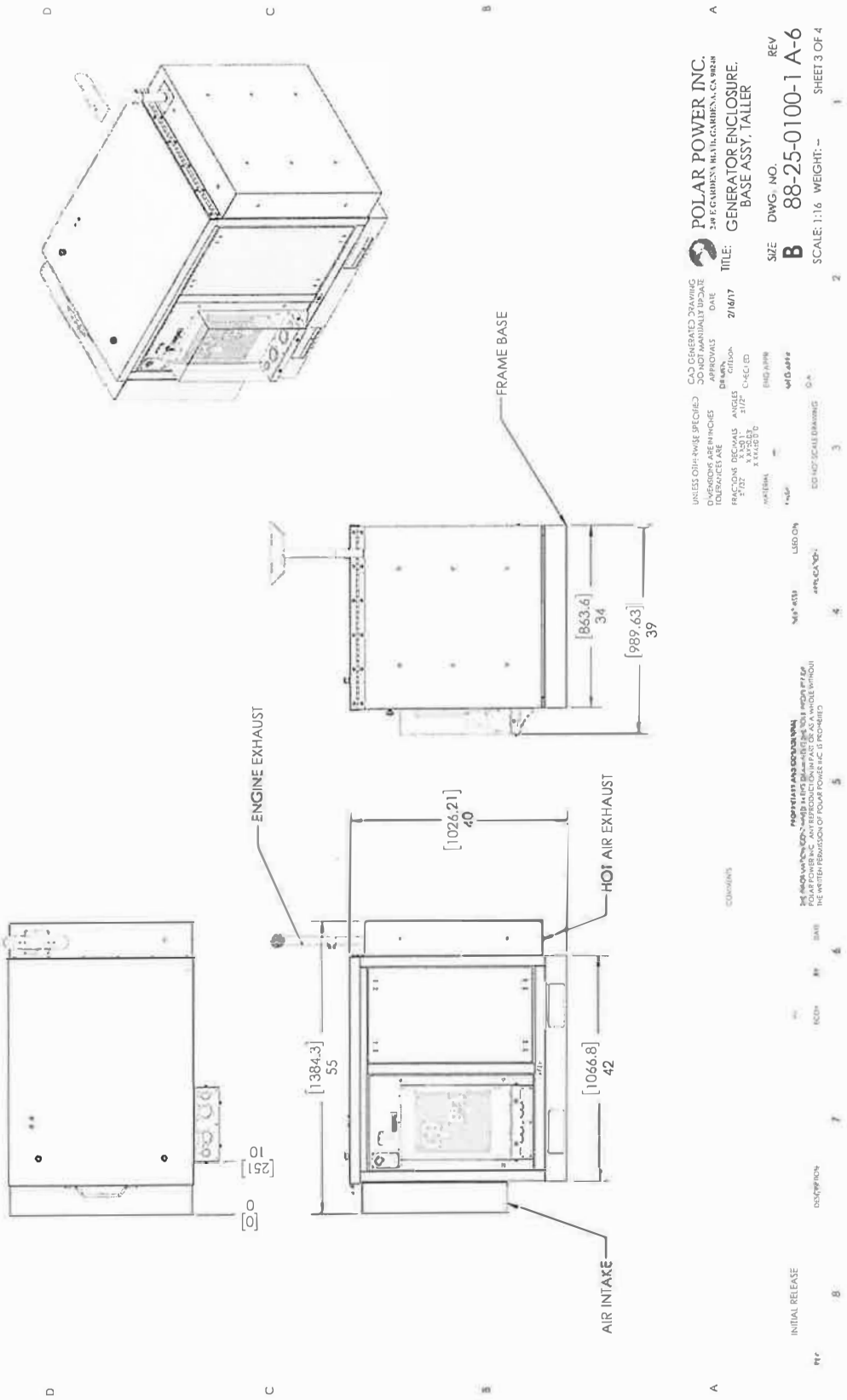
Position	Overall Level	Frequency Spectrum Levels								
		Center Frequency (Hz)								
		31.5	63	125	250	500	1000	2000	4000	8000
1	70.1	32.0	35	50.2	53.0	55.0	53.0	49.0	66.0	40.0
2	68.0	30.8	35.6	44.5	45.6	51.3	49.5	46.3	67.6	41.0
3	63.9	30.1	33.5	42.5	52.5	52.8	49.9	45.9	48.0	41.9
4	62.9	31.6	30.0	42.8	51.2	46.6	45.9	40.5	48.8	37.0
5	62.8	30.6	33.2	48.5	52.3	48.5	50.1	43.7	51.6	39.6
6	63.3	31.0	31.2	46.5	48.3	49.7	49.3	44.2	48.3	39.8
7	68.1	30.2	34.6	44.8	51.2	54.6	50.1	44.4	47.2	39.5
8	69.2	31.0	36.4	49.8	52.1	52.9	49.7	43.1	63.6	37.2
Average	66.0	30.9	33.7	46.2	50.8	51.4	49.7	44.6	55.1	39.5
Baseline	49.1	--	--	41.0	33.2	36.5	35.4	--	--	--



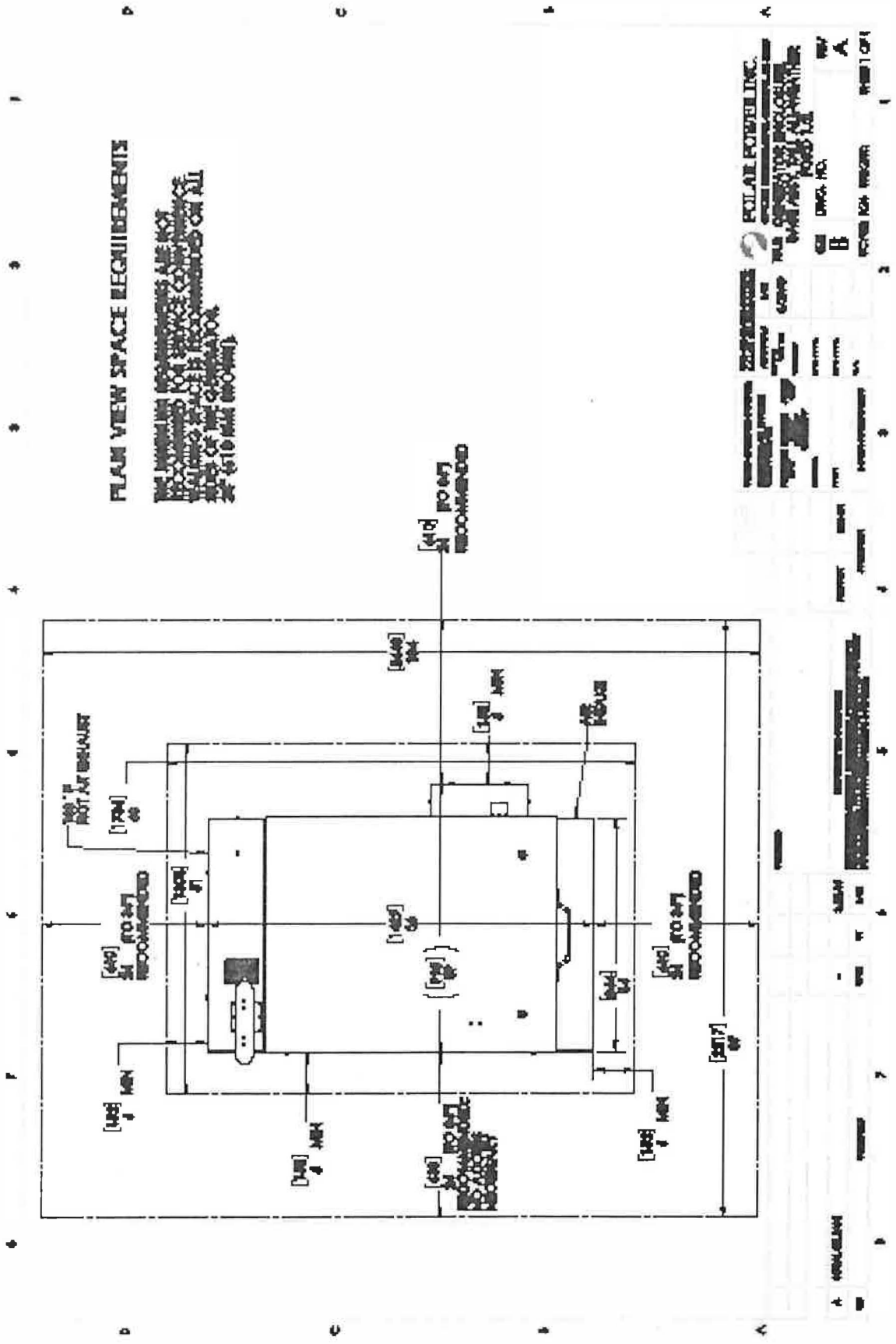
Notes:

1. Generator operating at full rated load
2. Generator configuration includes quiet exhaust system
3. All measurement positions are 7 m (23 ft.) from center of generator set and 1 m (3.3 ft.) height
4. Test conducted outside on an asphalt surface, **temperature *45°F*, humidity *52%*, wind *1 mph*, barometer *30 inHg*.**
5. Meter used - Phonic PAA2, Serial No. OGA0H80208

DRAWING FOR PN 8220-100-G-20-03



PLANNING FOR PN 8220-100-G-20-03



249 E. Gardena Blvd., Gardena, CA 90248
Tel.: +1(310)8309153 • Fax: +1(310)7192385
info@polarpowerinc.com • www.polarpower.com

KOHLER.

Model: 30CCL

208-600 V **Gas**

ISO 9001 KOHLER. NATIONALLY REGISTERED

EPA-Certified for Stationary Emergency Applications

Ratings Range

		60 Hz
Standby:	**kW**	30
	kVA	30-38

The Kohler® Advantage

- **High Quality Power**
  Kohler generators provide advanced voltage and frequency regulation along with ultra-low levels of harmonic distortion for excellent generator power quality to protect your valuable electronics.
- **Extraordinary Reliability**
  Kohler is known for extraordinary reliability and performance and backs that up with a premium five-year or 2000 hour limited warranty.
- **All-Aluminum Sound Enclosure**
  Durable aluminum sound-attenuating enclosure.

Generator Set Ratings

				Natural Gas 130°C Rise Standby Rating		LP Gas 130°C Rise Standby Rating	
Alternator	**Voltage**	**Ph**	**Hz**	**kW/kVA**	**Amps**	**kW/kVA**	**Amps**
4D8.3	120/208	3	60	30/38	106	30/38	106
	127/220	3	60	30/38	100	30/38	100
	120/240	3	60	30/38	92	30/38	92
	120/240	1	60	30/30	125	30/30	125
	139/240	3	60	30/38	92	30/38	92
	220/380	3	60	30/38	58	30/38	58
	277/480	3	60	30/38	46	30/38	46
	347/600	3	60	30/38	37	30/38	37
4P7BX	120/208	3	60	30/38	106	30/38	106
	127/220	3	60	30/38	100	30/38	100
	120/240	3	60	30/38	92	30/38	92
	120/240	1	60	30/30	125	30/30	125
	139/240	3	60	30/38	92	30/38	92
	220/380	3	60	30/38	58	30/38	58
	277/480	3	60	30/38	46	30/38	46
4E8.3	120/240	1	60	30/30	125	30/30	125
4Q7BX	120/240	1	60	30/30	125	30/30	125

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. *Standby Ratings*: The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The generator set accepts rated load in one step.
- A five-year/2000 hour limited warranty covers all generator set systems and components. A five-year extended comprehensive limited warranty is also available.
- Engine Features
  - Powerful and reliable 2.2 L turbocharged liquid-cooled engine
  - Electronic engine management system.
  - Simple field conversion between natural gas and LPG fuels while maintaining emission certification.
- Innovative Cooling System
  - Electronically controlled fan speeds minimize generator set sound signature.
- Alternator features:
  - Kohler's wound field excitation system with its unique PowerBoost™ design delivers great voltage response and short-circuit capability.
  - The unique Fast-Response® X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Kohler designed controller for one-source system integration and remote communication. See Controller on page 3.
- Certifications
  - The generator set engine is certified by the Environmental Protection Agency (EPA) to conform to the New Source Performance Standard (NSPS) for stationary spark-ignited emissions.
  - UL 2200/cUL listing is available.
  - The generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
  - CSA certification is available.
  - Accepted by the Massachusetts Board of Registration of Plumbers and Gas Fitters.
- Approved for stationary standby applications in locations served by a reliable utility source.

Alternator Specifications

Specifications		Alternator
Manufacturer		Kohler
Exciter type		Brushless, Wound-Field
Leads: quantity, type		
4D		12, Reconnectable
4E		4, 110-120/220-240 V
4PX		12, Reconnectable
4QX		4, 110-120/220-240 V
Voltage regulator		Solid State, Volts/Hz
Insulation:		NEMA MG1
Material		Class H
Temperature rise		130°C, Standby
Bearing: quantity, type		1, Sealed
Coupling		Flexible Disc
Amortisseur windings		Full
Voltage regulation, no-load to full-load		Controller Dependent
One-step load acceptance		100% of Rating
Unbalanced load capability		100% of Rated Standby Current
Peak motor starting kVA:		(35% dip for voltages below)
480 V	4D8.3 (12 lead)	120
240 V	4E8.3 (4 lead)	74
480 V	4P7BX (12 lead)	180
240 V	4Q7BX (4 lead)	113

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Windings are vacuum-impregnated with epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

Application Data

Engine

Engine Specifications	
Manufacturer	Kohler
Engine: model, type	KG2204T, 2.2 L, 4-Cycle Turbocharged
Cylinder arrangement	In-line 4
Displacement, L (cu. in.)	2.2 (134.25)
Bore and stroke, mm (in.)	91 x 86 (3.5 x 3.4)
Compression ratio	10.5:1
Piston speed, m/min. (ft./min.)	340 (1016)
Main bearings: quantity, type	5, plain alloy steel
Rated rpm	1800
Max power at rated RPM, kW (HP)	
LPG	47.8 (64.1)
Natural Gas	47.6 (63.9)
Cylinder head material	Cast Iron
Piston type and material	High Silicon Aluminum
Crankshaft material	Nodular Iron
Valve (exhaust) material	Forged Steel
Governor type	Electronic
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±1.0%
Frequency	Fixed
Air cleaner type, all models	Dry

Engine Electrical

Engine Electrical System	
Ignition system	Electronic
Battery charging alternator:	
Ground (negative/positive)	Negative
Volts (DC)	14
Ampere rating	90
Starter motor rated voltage (DC)	12
Battery, recommended cold cranking amps (CCA):	
Qty., rating for -18°C (0°F)	One, 630
Battery voltage (DC)	12
Battery group size	24

Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust temperature at rated kW, dry exhaust, °C (°F)	610 (1130)
Maximum allowable back pressure, kPa (in. Hg)	7.5 (2.2)

Fuel

Fuel System	
Fuel type	Natural Gas or LPG
Fuel supply line inlet	1 NPTF
Natural gas fuel supply pressure, kPa (in. H_2O)	1.24-2.74 (5-11)
LPG vapor withdrawal fuel supply pressure, kPa (in. H_2O)	1.24-2.74 (5-11)

Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	—
Ethane, % by volume	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propene, % by volume	0.1 max.	5.0 max.
C_4 and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass	25 max.	
Lower heating value, MJ/m^3 (Btu/ft^3), min.	33.2 (890)	84.2 (2260)

* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

Application Data

Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.) §	4.2 (4.4)
Oil added during oil change (on average), L (qt.) §	3.3 (3.5)
Oil pan capacity with filter, L (qt.) §	8.5 (9.0)
Oil filter: quantity, type §	1, Cartridge

§ Kohler recommends the use of Kohler Genuine oil and filters.

Cooling

Radiator System	
Ambient temperature, °C (°F)	50 (122)
Engine jacket water capacity, L (gal.)	2.65 (0.7)
Radiator system capacity, including engine, L (gal.)	13.2 (3.5)
Engine jacket water flow, Lpm (gpm)	62 (16.4)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	22.5 (1280)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	qty. 3 @ 406 (16)
Fan power requirements (powered by engine battery charging alternator)	12 VDC, 18 amps each

Operation Requirements

Air Requirements	
Radiator-cooled cooling air, m^3/min. (scfm)‡	51 (1800)
Combustion air, m^3/min. (cfm)	1.6 (57)
Air over engine m^3/min. (cfm)	25 (883)

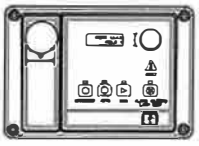
† Air density = 1.20 kg/m^3 (0.075 lbm/ft^3)

Fuel Consumption ‡	
Natural Gas, m^3/hr. (cfh) at % load	**Standby Ratings**
100%	11.9 (421)
75%	10.0 (355)
50%	8.2 (289)
25%	6.3 (223)
0%	4.5 (158)
LP Gas, m^3/hr. (cfh) at % load	**Standby Ratings**
100%	4.6 (164)
75%	3.7 (131)
50%	2.8 (99)
25%	1.9 (66)
0%	1.0 (34)

‡ Nominal fuel rating: Natural gas, 37 MJ/m^3 (1000 Btu/$ft.^3$)
LP vapor, 93 MJ/m^3 (2500 Btu/$ft.^3$)

LP vapor conversion factors:
8.58 $ft.^3$ = 1 lb.
0.535 m^3 = 1 kg.
36.39 $ft.^3$ = 1 gal.

Controller



APM402 Controller
Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-161 for additional controller features and accessories.

Modbus® is a registered trademark of Schneider Electric.

Sound Enclosure

- Durable aluminum, sound-attenuating enclosure with quiet operation of 57 dB(A) log average @ 7 m (23 ft.) at no load.
- Internally mounted silencer.
- Fade-, scratch, and corrosion-resistant Kohler® Power Armor™ automotive-grade textured finish.
- Acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.

KOHLER.

KOHLER CO., Kohler, Wisconsin 53044 USA
Phone 920-457-4441, Fax 920-459-1646
For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444
KOHLERPower.com

Standard Features

- Alternator Protection
- Aluminum Sound Enclosure with Enclosed Silencer
- Battery Rack and Cables
- Flexible Fuel Line
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Low Fuel Pressure Switch (with NFPA fuel module)
- Oil Drain Extension
- Operation and Installation Literature
- Standard 5-Year Limited Warranty

Available Options

Approvals and Listings

- ❑ CSA Certified
- ❑ UL 2200 Listing

Controller

- ❑ 15-Relay Dry Contact Board
- ❑ Communication Products
- ❑ Input/Output Module (2 inputs, 5 outputs)
- ❑ Lockable Emergency Stop (lockout/tagout)
- ❑ Low Fuel Pressure Warning Switch
- ❑ Manual Key Switch
- ❑ Manual Speed Adjust
- ❑ Remote Annunciator Panel
- ❑ Remote Emergency Stop
- ❑ Run Relay

Enclosure Accessories

- ❑ Enclosure Doors for 291 kph (181 mph) Wind load

Starting Aids*

- ❑ Block Heater, 110-120 V
- ❑ Block Heater, 220-240 V

Oil Pan Heater*

- ❑ Oil Pan Heater, 110-120 V
- ❑ Oil Pan Heater, 190-240 V

* One block heater or oil pan heater is required for ambient temperatures below 0°C (32°F). At temperatures below -18°C (0°F) installation of both heaters is required.

Electrical System

- ❑ Alternator Strip Heater
- ❑ Battery
- ❑ Battery Charger, 6 Amp
- ❑ Battery Charger, 10 Amp w/Alarms
- ❑ Battery Heater
- ❑ Temperature Compensation for 10 Amp Battery Charger

Miscellaneous

- ❑ Certified Test Report
- ❑ Engine Fluids Added
- ❑ Maintenance Kit (filters, spark plugs, oil)
- ❑ Rated Power Factor Testing

Literature

- ❑ General Maintenance
- ❑ NFPA 110
- ❑ Overhaul
- ❑ Production

Warranty

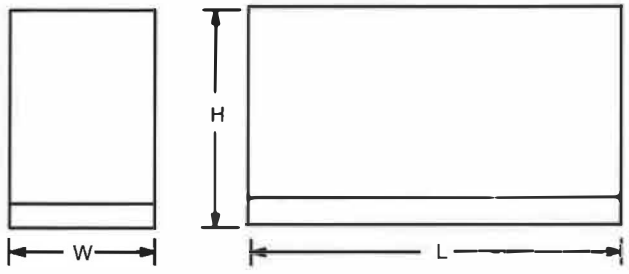
- ❑ Optional Extended 5-Year/2000 Hour Comprehensive Limited Warranty

Other Options

- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.):	2280 x 830 x 1182 (89.8 x 32.7 x 46.5)
Weight, with engine fluids, kg (lb.):	635 (1432)



NOTE: This drawing is provided for reference only and should not be used for planning. Contact your local distributor for more detailed information.

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EXHIBIT 6

Connecticut
still revolutionary

Department of Economic and Community Development

State Historic Preservation Office

April 23, 2018

Ms. Kimberly Threlfall
Fitzgerald & Halliday, Inc.
416 Asylum Street
Hartford, CT 06103

Subject: Replacement water tank, West Rocks Road
Norwalk, CT

Dear Ms. Threlfall:

The State Historic Preservation Office has reviewed the information submitted for the above-named property pursuant to the provisions of Section 106 of the National Historic Preservation Act of 1966 and Connecticut Environmental Policy Act.

While the subject property is not historic, the site is adjacent to the National Register of Historic Places Merritt Parkway. Your scope of work is the installation of a 116' water tower and the removal of the current 110' water tower. The SHPO has determined that the undertaking as proposed conforms to the Secretary of the Interior's *Standards for the Treatment of Historic Properties* and will constitute no adverse effects to historic resources.

The State Historic Preservation Office appreciates the opportunity to review and comment upon this project. These comments are provided in accordance with the Connecticut Environmental Policy Act and Section 106 of the National Historic Preservation Act. For further information please contact Todd Levine, Environmental Reviewer, at (860) 256-2759 or todd.levine@ct.gov.

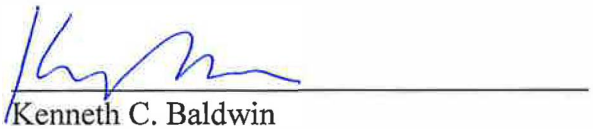
Sincerely,

Catherine Labadia
Deputy State Historic Preservation Officer

CERTIFICATE OF SERVICE

I hereby certify that on the 23rd day of April, 2020, a copy of the foregoing was sent, via electronic mail, to:

Lucia Chiocchio, Esq.
Cuddy & Feder LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
LChiocchio@cuddyfeder.com



Kenneth C. Baldwin