

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

A PETITION FOR A DECLARATORY RULING ON THE NEED TO OBTAIN A SITING  
COUNCIL CERTIFICATE FOR THE PROPOSED MODIFICATION OF AN EXISTING  
WIRELESS TELECOMMUNICATIONS FACILITY AT:  
259 COMMERCE STREET, EAST HAVEN, CT 06512

PETITION NO. \_\_\_\_\_  
AUGUST 16, 2022

PETITION FOR A DECLARATORY RULING:  
INSTALLATION HAVING NO:  
SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

**I. Introduction**

Pursuant to Sections 16-50j-38 and 16-50j-39 of the Regulations of Connecticut State Agencies (“R.C.S.A”), T-Mobile Northeast, LLC (“T-Mobile”) hereby petitions the Connecticut Siting Council (the “Council”) for a declaratory ruling (“Petition”) that no Certificate of Environmental Compatibility and Public Need (“Certificate”) is required under Section 16-50k(a) of the Connecticut General Statutes (“C.G.S”) for the modification of an existing wireless telecommunications facility at 259 Commerce Road, East Haven, Connecticut (the “Existing Facility”).

**II. Existing Facility**

The Existing Facility is located on an approximately 0.49-acre parcel owned by Stephen Viglione. The Facility consists of a 58-foot monopole tower and associated compound, which is owned by Crown Castle. **Attachment 1** contains the owner’s authorization permitting T-Mobile to file this Petition. The Facility was originally built in approximately 2003 and T-Mobile’s shared use of the facility was approved by the Council on March 2, 2007, as documented in **Attachment 2**.

**III. T-Mobile Facility**

T-Mobile’s proposed modification to its facility is illustrated on the plans submitted as **Attachment 3**. T-Mobile proposes to install a new 48kW diesel generator for emergency backup power.

T-Mobile’s existing ground equipment is located on a concrete pad immediately adjacent to the existing guyed tower on the South side. T-Mobile will install the new generator on a proposed 9’

x 4' concrete pad immediately adjacent to the monopole's North side. The generator requires 3' clearances in all directions, meaning T-Mobile will need a 15' x 10' area. The proposed generator will be fueled via an integrated 240-gallon tank. The generator requires one (1) 12-minute run cycle per week. Specifications for the proposed generator are in **Attachment 4**.

#### **IV. The Proposed Modification Will Not Have A Substantial Adverse Environmental Effect**

##### **A. Physical Environmental Effects**

The installation of T-Mobile's emergency backup generator will not involve a significant alteration to the physical and environmental characteristics of the Property. The installation will alter an existing disturbed area immediately adjacent to the existing compound. No native trees will need to be removed and no on-site or off-site wetlands or watercourses will be impacted by the proposed facility expansion.

##### **B. Visual Effects**

Given the height of the existing tower, 58' AGL, and the presence of an existing developed compound area, T-Mobile's proposed generator installation would have a minimal visual impact. The proposed generator will be screened from view from the public right-of-way by the existing buildings and will have a minimal visual impact.

##### **C. Noise Effects**

The installation of T-Mobile's backup generator will not result in a significant increase in noise from the Existing Facility. Use of the generator to provide emergency back-up power would be exempt from CT DEEP noise control standards under CT General Statutes Section 22a-69-1.8(f), because any noise created would be the result of an emergency. The weekly 12-minute run cycles would not add a significant level of noise from the cell site/property, which already includes at least one other backup generator.

##### **D. FCC Compliance**

T-Mobile's proposed modification will not result in a change to radio frequency ("RF") emissions from the existing facility. A new power density calculation table has not, therefore, been provided as part of this filing.

#### **V. Notice to the Municipality, Property Owner and Abutting Landowners**

On July 6, 2022, a copy of this Petition was sent to the Town of East Haven's Mayor Joseph Carfora, and Joseph Budrow, Zoning Enforcement Officer. A notice of T-Mobile's intent to file this Petition was also sent to the owners of land that may be considered to abut the Property or are within 200-feet. Included in **Attachment 5** is a sample abutter's letter and the list of those abutting landowners who were sent notice.

#### **VI. Conclusion**

Based on the information provided above, the Petitioners respectfully requests that the Council issue a determination in the form of a declaratory ruling that the installation of a temporary tower at the Property will not have a substantial adverse environmental effect and does not require the issuance of a Certificate of Environmental Compatibility and Public Need pursuant to § 16-50k of the General Statutes.

Respectfully submitted,

Eric Breun  
Transcend Wireless  
Agent for T-Mobile Northeast LLC  
201-658-7728  
[ebreun@transcendwireless.com](mailto:ebreun@transcendwireless.com)

Attachments:

Joseph Carfora  
Town of East Haven  
250 Main Street  
East Haven, CT 06512

Joseph Budrow  
Town of East Haven  
250 Main Street  
East Haven, CT 06512

Crown Castle - Tower Owner

Stephen Viglione - Property Owner



# Town of East Haven, CT

## Property Listing Report

Map Block Lot

090 1013 005

Building # 1

Unique Identifier

V0098600

### Property Information

Property Location	259 COMMERCE ST
Mailing Address	259 COMMERCE ST EAST HAVEN CT 06512
Land Use	Light Industrial
Zoning Code	LI-2
Neighborhood	IS1

Owner	VIGLIONE STEPHEN J
Co-Owner	
Book / Page	0322/0838
Land Class	Industrial
Census Tract	1801000
Acreage	0.49

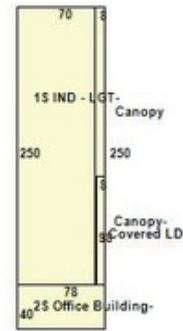
### Valuation Summary

(Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed
Buildings	806700	564690
Outbuildings	14200	9940
Land	114000	79800
Total	934900	654430

### Utility Information

Electric	No
Gas	No
Sewer	Yes
Public Water	Yes
Well	No



### Primary Construction Details

Year Built	1956
Building Desc.	Commercial
Building Style	
Stories	1
Exterior Walls	Concrete Block
Exterior Walls 2	B. V. Solid
Interior Walls	
Interior Walls 2	
Interior Floors 1	Tile
Interior Floors 2	

Heating Fuel	Gas
Heating Type	FHA
AC Type	Central
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	5
Total Rooms	0
Bath Style	NA
Kitchen Style	
Occupancy	0

Livable Area (ft)	23740
Building Use	Light Manu
Building Condition	Average
Frame Type	Average
Building Grade	0
Fireplaces	0
Wood Stoves	0
Attic Access	
Roof Style	
Roof Cover	

Bsmt Area	0
Fin Bsmt Area	0
Fin Bsmt Quality	
Bsmt Access	
Bsmt Gar	0
Bsmt Sump Pump	No

Report Created On

6/30/2022





# Town of East Haven, CT

Property Listing Report

Map Block Lot

090 1013 005

Building # 1

Unique Identifier

V0098600

## Detached Outbuildings

Type	Description	Area (sq ft)	Condition	Year Built
Paving	Paving	12000	Average	1956
Fencing	Fencing	400	Average	1956

## Attached Extra Features

Type	Description	Area (sq ft)	Condition	Year Built
Canopy	Canopy	2078	Average	1984
Loading Dock	Covered Loading Dock	783	Average	1984

## Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
VIGLIONE STEPHEN J	322_ 838	3/19/1981	0

## LETTER OF AUTHORIZATION

BUN: 842862 / East Haven South  
Property Address: 259 Commerce Street, East Haven, Connecticut 06512

I, Stephen T. Vigliore, owner/authorized representative of the above described property, located at 259 Commerce Street, East Haven, New Haven County, Connecticut 06512 (the "Property"), as evidenced by the Land Lease Agreement, dated April 30, 2003, as it may have been amended and assigned, hereby authorize T-Mobile Northeast LLC, through its designated agent, Northeast Site Solutions, to act as an agent on my behalf for the sole purpose of consummating any building or land-use applications necessary to ensure the ability of T-Mobile Northeast LLC to use the property for the purpose of constructing, modifying and operating a communications facility. I understand that this application may be denied, modified, or approved with conditions, and that such conditions or modifications must be complied with prior to issuance of building permits.

Signature of Property Owner /  
Authorized Representative:

Stephen T. Vigliore

Print Name:

Stephen T. Vigliore

Title:

owner

Company:

\_\_\_\_\_

Address:

259 Commerce Street, East Haven, CT 06512

Telephone:

(203) 467-8388

Date:

8-9-22

Petition No. 634  
AT&T Wireless  
East Haven, Connecticut  
Staff Report  
July 8, 2003

On June 10, 2003, Connecticut Siting Council (Council) member Philip T. Ashton and S. Derek Phelps of staff met with AT&T Wireless representatives at 259 Commerce Street in East Haven. Other persons in attendance were Lucia Chiocchio, Esq., of Cuddy & Feder LLP; Doug Frost, Engineering Technician, of NATCOMM, LLC; Kumar Rughoobur, RF Engineer, of WFI; Ray Vergati, Project Director, of Optasite, Inc.; and George Mingione, Planning and Zoning Administrator of the Town of East Haven. AT&T Wireless proposes to replace and expand an existing lattice tower and is petitioning the Council for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the modification.

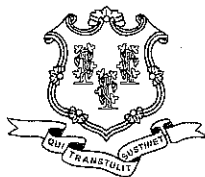
Specifically, AT&T Wireless proposes to replace and expand an existing 48' lattice tower (with a whip antenna extending to 61') with a 57' monopole to be relocated approximately 8' to 10' from the location of the existing tower. AT&T would attach six panel antennas on T-arms to the replacement tower. The property owner's whip antenna would not be reinstalled.

The existing lattice tower is located adjacent to the west side of the existing tower. The replacement monopole is 9' taller than the existing tower, but the overall height of the proposed facility will be approximately 1' lower in total height.

The proposed tower needs to be relocated approximately 8' to 10' from the location of the existing lattice tower for construction purposes. Associated equipment cabinets will be installed on a 7' x 13' concrete pad located at the base of the pole surrounded by an 8' vinyl stockade fence, which will be screened with 6' evergreen trees. The utilities will be installed underground.

At the request of the Council, AT&T Wireless wrote to six nearby residents on June 12, 2003, whose homes are within sight of the proposed tower location to advise them of the petition application. Those homeowners are: Antonio Rossano; Robert A. Esposito; Rita Compano; Phyllis Naqstri and Linda Lawson; Sebastiano and Maria DiBona; and Anne M. Fitzgerald. These persons were asked to forward comments to the Council by June 3, 2003. One resident, Rita Compano, sent a letter stating that she is not in favor of the petition primarily on the basis of concerns that it will adversely affect the property value of her home.

George Mingione, Planning and Zoning Administrator of the Town of East Haven, wrote to the Council in a letter dated June 11, 2003, stating that the town's preference is for vinyl fencing around the tower compound, not less than six feet tall, with evergreen plantings.



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@ct.gov](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

Daniel F. Caruso

Chairman

March 2, 2007

H. Karina Fournier  
Zoning Department  
T-Mobile  
35 Griffin Road South  
Bloomfield, CT 06002

RE: **EM-T-MOBILE-044-070208** - Omnipoint Communications, Inc. (T-Mobile) notice of intent to modify an existing telecommunications facility located at 259 Commerce Street, East Haven, Connecticut.

Dear Ms. Fournier:

At a public meeting held on February 27, 2007, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated February 8, 2007, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Daniel F. Caruso

Chairman

DFC/MP/laf

- c: The Honorable Joseph Maturo, Jr., Mayor, Town of East Haven  
George Mingione, Zoning Enforcement Officer, Town of East Haven  
Michele G. Briggs, New Cingular Wireless PCS, LLC  
Christopher B. Fisher, Esq., Cuddy & Feder LLP



■ ■ **T** ■ ■ Mobile ■  
EAST HAVEN SOUTH - GENERATOR ADD  
SITE ID: CT11623B  
259 COMMERCE ST  
EAST HAVEN, CT 06512

## GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES." 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
2. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
3. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
4. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
5. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL, AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
6. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
7. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
9. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
10. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
11. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
12. ANY AND ALL ERRORS, DISCREPANCIES, AND 'MISSED' ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE T-MOBILE CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO 'EXTRA' WILL BE ALLOWED FOR MISSED ITEMS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
14. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
16. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUITS AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
17. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
18. THE CONTRACTOR SHALL CONTACT 'CALL BEFORE YOU DIG' AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
19. CONTRACTOR SHALL COMPLY WITH THE OWNER'S ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.

## SITE DIRECTIONS

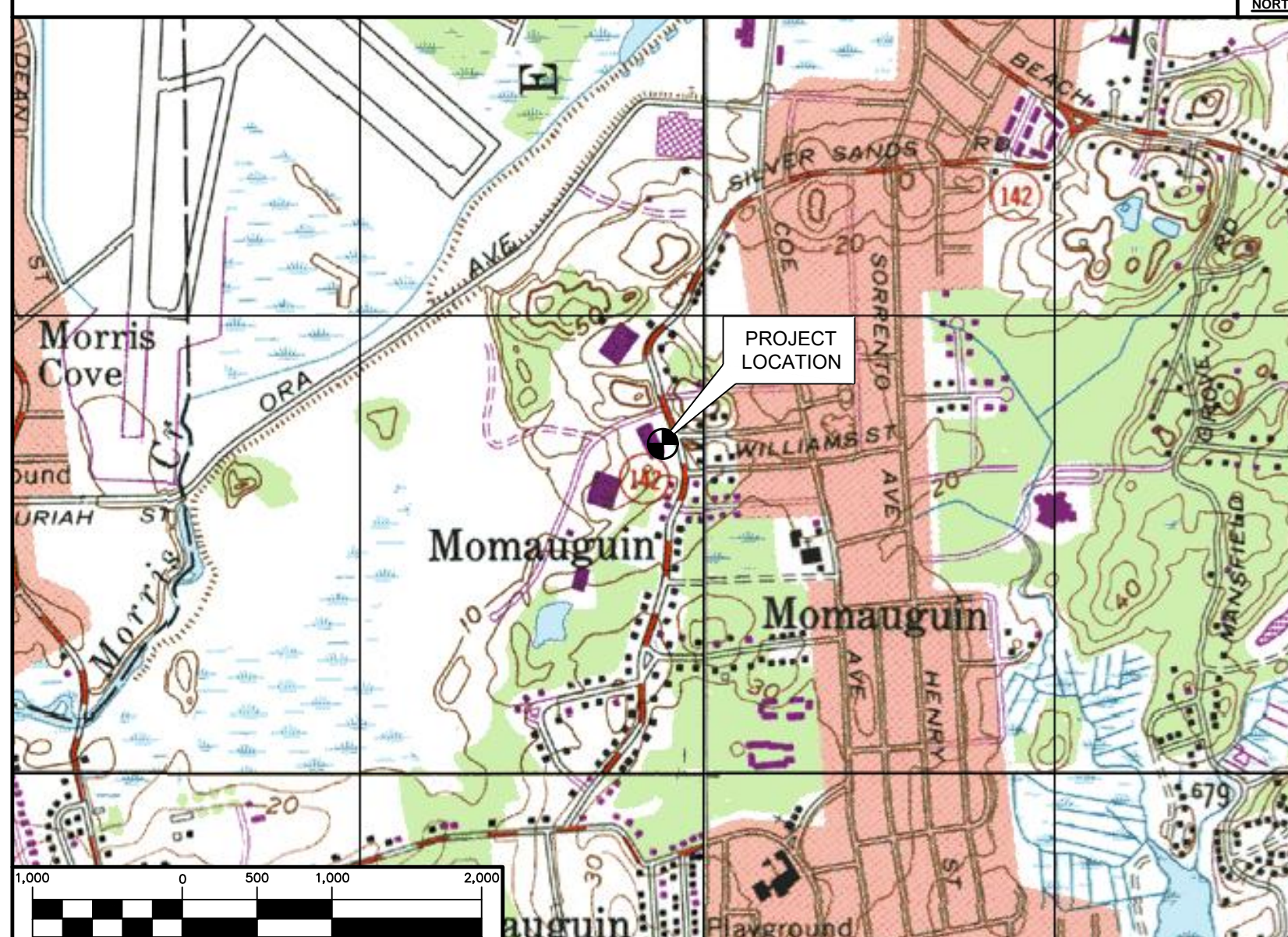
**FROM:** 35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

**TO:** 259 COMMERCE ST  
EAST HAVEN, CT 06512

- |   |          |
|---|----------|
| 1. START OUT GOING NORTH ON GRIFIN RD TOWARD HARTMAN RD.                            | 0.41 MI  |
| 2. TAKE THE 3RD RIGHT ONTO BLUE HILLS AVENUE EXT/CT-187. CONTINUE TO FOLLOW CT-187. | 0.79 MI  |
| 3. STAY STRAIGHT TO GO ONTO BLUE HILLS AVE/CT-187.                                  | 1.24 MI  |
| 4. TURN LEFT ONTO OLD WINDSOR RD/CT-305. CONTINUE TO FOLLOW CT-305.                 | 2.33 MI  |
| 5. MERGE ONTO I-91 S TOWARD HARTFORD.   | 24.76 MI |
| 6. MERGE ONTO CT-15 S VIA EXIT 17 TOWARD E MAIN ST.                                 | 11.40 MI |
| 7. TAKE EXIT 63 TOWARD CT-22/NORTH HAVEN.   | 0.14 MI  |
| 8. TURN LEFT ONTO HARTFORD TURNPIKE.  | 0.08 MI  |
| 9. TURN LEFT ONTO BISHOP ST/CT-22. CONTINUE TO FOLLOW CT-22.                        | 0.52 MI  |
| 10. TURN LEFT ONTO VALLEY SERVICE RD.   | 0.16 MI  |
| 11. MERGE ONTO I-91 S TOWARD NEW HAVEN.   | 7.62 MI  |
| 12. MERGE ONTO I-95 N VIA THE EXIT ON THE LEFT TOWARD NEW LONDON.                   | 1.85 MI  |
| 13. MERGE ONTO US-1 N VIA EXIT 51 TOWARD EAST HAVEN.                                | 1.35 MI  |
| 14. TURN RIGHT ONTO HEMINGWAY AVE/CT-142.   | 0.98 MI  |
| 15. STAY STRAIGHT TO GO ONTO COE AVE/CT-337.  | 0.41 MI  |
| 16. TAKE THE 2ND RIGHT ONTO SILVER SANDS RD/CT-337.                                 | 0.31 MI  |
| 17. TAKE THE 1ST RIGHT ONTO COMMERCE ST.  | 0.02 MI  |
| 259 COMMERCE ST, EAST HAVEN, CT 06512-4147, 259 COMMERCE ST IS ON THE LEFT.         |          |

### VICINITY MAP

**SCALE: 1" = 1000'**



## PROJECT SUMMARY

1. THE PROPOSED SCOPE OF WORK CONSISTS OF A MODIFICATION TO THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING THE FOLLOWING:
  - A. INSTALL (1) AUTOMATIC TRANSFER SWITCH ON A NEW 3' EQUIPMENT FRAME
  - B. INSTALL (1) 48KW DIESEL FUELED BACK-UP AC GENERATOR ON A NEW CONCRETE PAD. (9'-0" x 4'-0")
  - C. REMOVE EXISTING T-MOBILE CONCRETE PAD

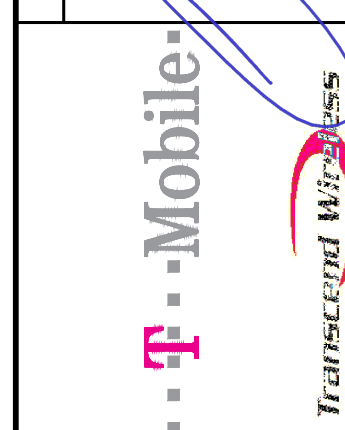
## PROJECT INFORMATION

SITE NAME: EAST HAVEN SOUTH  
SITE ID: CT116238  
SITE ADDRESS: 259 COMMERCE ST  
EAST HAVEN, CT 06512  
APPLICANT: T-MOBILE NORTHEAST, LLC  
35 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002  
CONTACT PERSON: DAN REID (PROJECT MANAGER)  
TRANSCEND WIRELESS, LLC  
(203) 592-8291  
ENGINEER: CENTEK ENGINEERING, INC.  
63-2 NORTH BRANFORD RD.  
BRANFORD, CT 06405  
PROJECT COORDINATES: LATITUDE: 41°-15'-22.54" N  
LONGITUDE: 72°-52'-32.51" W  
GROUND ELEVATION: 33'± AMSL  
SITE COORDINATES AND GROUND ELEVATION  
REFERENCED FROM GOOGLE EARTH.

## SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
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E-1	ELECTRICAL RISER DIAGRAM AND CONDUIT ROUTING	4
E-2	ELECTRICAL SPECIFICATIONS	4

PROFESSIONAL ENGINEER SEAL



**CENTEK** engineering  
Centered on Solutions<sup>SM</sup>

203] 488-0580

(203) 488-8587 Fax  
53-2 North Branford Road

Branford, CT 06405

www.CentekEng.com

T-MOBILE NORTHEAST LLC

**SITE NAME: EAST HAVEN SOUTH**

SITE ID: CT11623B

259 COMMERCE ST  
EAST HAVEN, CT 06512

DATE: 08/08/18

SCALE: AS NOTED

JOB NO. 18079.34

TITLE  
SHEET

**T-1**

Sheet No. 1 of 7



### **DESIGN BASIS:**

1. DESIGN CRITERIA:

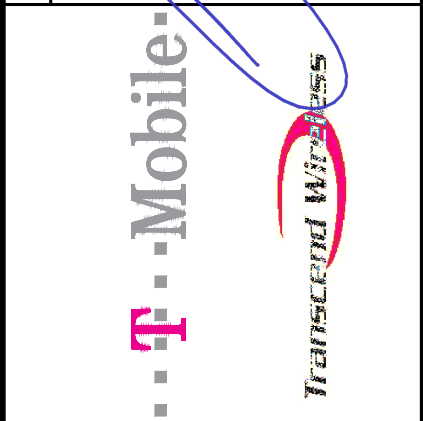
- RISK CATEGORY III (BASED ON IBC TABLE 1604.5)
- NOMINAL DESIGN SPEED (OTHER STRUCTURE): 133 MPH ( $V_{asd}$ )  
(EXPOSURE C/ IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10)

1. THE CONTRACTOR SHALL CALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.
2. ACTIVE EXISTING UTILITIES, WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED ALL TIMES. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY, PRIOR TO PROCEEDING, SHOULD ANY UNCOVERED EXISTING UTILITY PRECLUDE COMPLETION OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE AREAS OF THE COMPOUND DISTURBED BY THE WORK SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
4. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
5. IF ANY FIELD CONDITIONS EXIST WHICH PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL PROCEED WITH AFFECTED WORK AFTER CONFLICT IS SATISFACTORILY RESOLVED.

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES." 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE AND LOCAL CODES.
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5. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, PLUMBING, ELECTRICAL AND HVAC. PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
6. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
7. LOCATION OF EQUIPMENT AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
8. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY.
9. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
10. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
11. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
12. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS, ARE TO BE BROUGHT TO THE ATTENTION OF THE SITE OWNER'S CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
14. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
16. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
17. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
18. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
19. CONTRACTOR SHALL COMPLY WITH OWNER'S ENVIRONMENTAL ENGINEER ON ALL METHODS AND PROVISIONS FOR ALL EXCAVATION ACTIVITIES INCLUDING SOIL DISPOSAL. ALL BACKFILL MATERIALS TO BE PROVIDED BY THE CONTRACTOR.
20. THE COUNTY/CITY/TOWN WILL MAKE PERIODIC FIELD OBSERVATION AND INSPECTIONS TO MONITOR THE INSTALLATION, MATERIALS, WORKMANSHIP AND QUALITY OF EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE DESIGN PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS AND APPROVED SHOP DRAWINGS.
21. THE COUNTY/CITY/TOWN MUST BE NOTIFIED (2) WORKING DAYS PRIOR TO CONCEALMENT/BURIAL OF ANY SYSTEM OR MATERIAL THAT WILL PREVENT THE DIRECT INSPECTION OF MATERIALS, METHODS OR WORKMANSHIP. EXCAVATION OF EQUIPMENT SHALL BE REQUIRED TO EXPOSE A GROUND RING OR TOWER FOUNDATION, POURING TOWER FOUNDATIONS, BURYING GROUND RODS, PLATES OR GRIDS, ETC. THE CONTRACTOR MAY PROCEED WITH THE SCHEDULED PROCESS (2) WORKING DAYS AFTER PROVIDING NOTICE UNLESS NOTIFIED OTHERWISE BY THE COUNTY/CITY/TOWN.

REV.	DATE	BY	DESCRIPTION
0	06/14/18	LAA	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
1	02/08/21	TJR	CONSTRUCTION DRAWINGS – REVISED PER NEW GENERATOR MODEL
2	05/18/21	TJR	CONSTRUCTION DRAWINGS – REVISED PER NEW GENERATOR MODEL
3	02/01/22	JD	CONSTRUCTION DRAWINGS – REVISED PER NEW GENERATOR MODEL
4	06/21/22	RTS	CONSTRUCTION DRAWINGS – REVISED PER NEW ABUTTERS MAP

PROFESSIONAL ENGINEER SEAL



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**T-MOBILE NORTHEAST LLC**

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**SITE NAME: EAST HAVEN S**

**SITE ID: CT11623B**

**259 COMMERCE ST**

**EAST HAVEN, CT 06512**

DATE:	08/08/18
SCALE:	AS NOTED
JOB NO.	18079.34

### GENERAL NOTES AND SPECIFICATIONS

N-1

Sheet No. 2 of 7

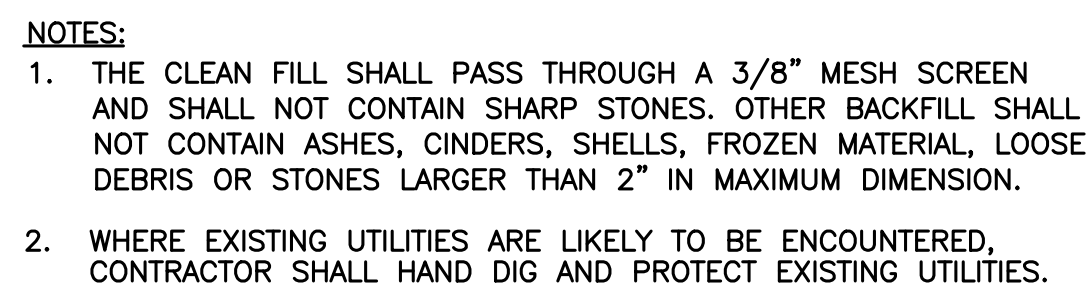
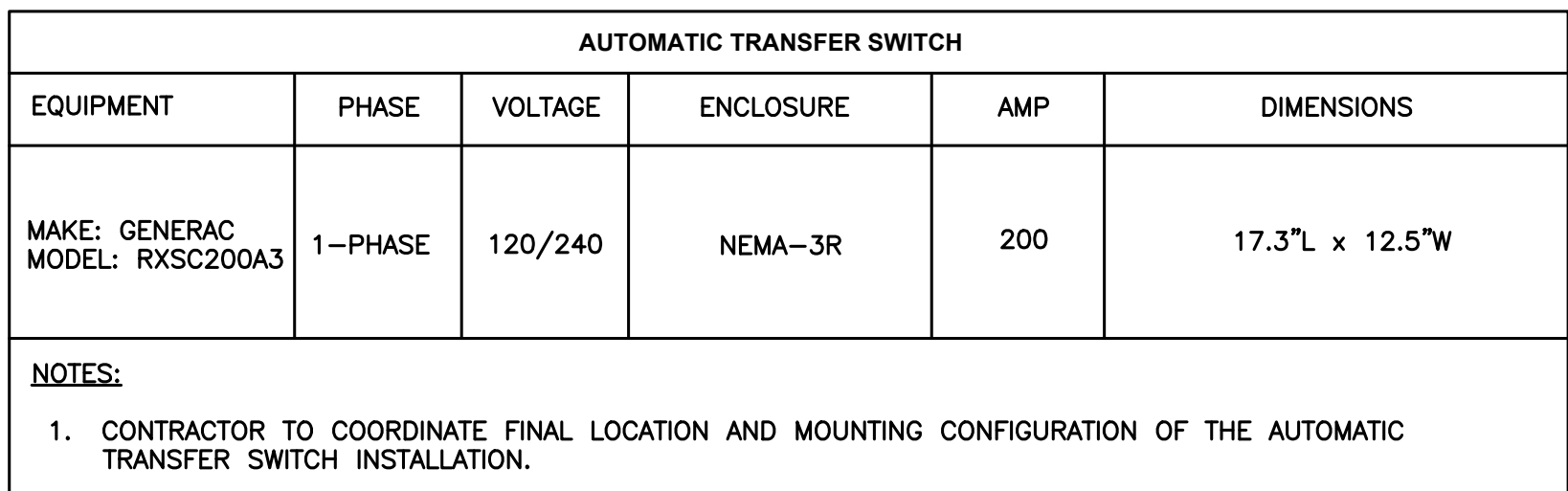
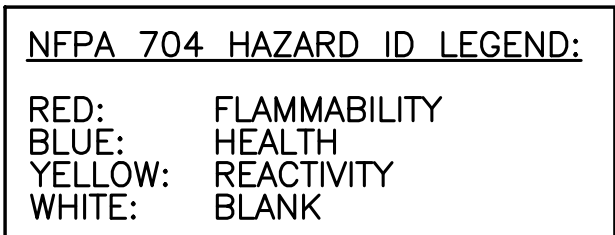
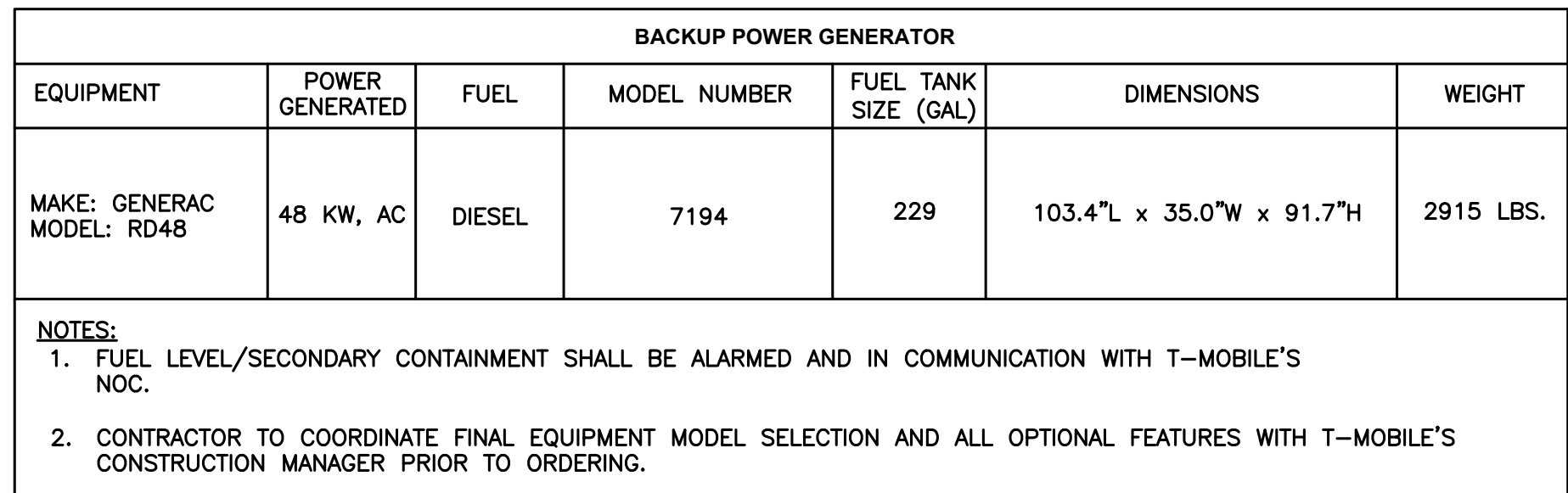










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**SECTION 16010**

- A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.
- B. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNERS REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES THAT MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR THE SCHEDULING OF ALL INSPECTIONS THAT MAY BE REQUIRED BY THE LOCAL AUTHORITY.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.
- E. NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. ALL MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.
- F. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.
- G. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.
- H. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.
- I. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- J. ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.
- K. BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.
- L. PROVIDE TEMPORARY POWER AND LIGHTING IN WORK AREAS AS REQUIRED.
- M. SHOP DRAWINGS:
  - 1. CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF SHOP DRAWINGS ON ALL EQUIPMENT AND MATERIALS PROPOSED FOR USE ON THIS PROJECT, GIVING ALL DETAILS, WHICH INCLUDE DIMENSIONS, CAPACITIES, ETC.
  - 2. CONTRACTOR SHALL SUBMIT SIX (6) COPIES OF ALL TEST REPORTS CALLED FOR IN THE SPECIFICATIONS AND DRAWINGS
- N. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH OWNER'S SPECIFICATIONS, AND REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPROPRIATE INDIVIDUALS TO OBTAIN ALL SUCH SPECIFICATIONS AND REQUIREMENTS. NOTHING CONTAINED IN, OR OMITTED FROM, THESE DOCUMENTS SHALL RELIEVE CONTRACTOR FROM THIS OBLIGATION.

A. MINIMUM CONDUIT SIZE FOR BRANCH CIRCUITS, LOW VOLTAGE CONTROL AND ALARM CIRCUITS SHALL BE 3/4". CONDUITS SHALL BE PROPERLY FASTENED AS REQUIRED BY THE N.E.C.

B. THE INTERIOR OF RACEWAYS/ENCLOSURES INSTALLED UNDERGROUND SHALL BE CONSIDERED TO BE WET LOCATION, INSULATED CONDUCTORS SHALL BE LISTED FOR USE IN WET LOCATIONS. PROVIDE WEATHERPROOF CONSTRUCTION IN WET LOCATIONS.

C. CONDUIT INSTALLED UNDERGROUND SHALL BE INSTALLED TO MEET MINIMUM COVER REQUIREMENTS OF TABLE 300.5.

D. PROVIDE RIGID GALVANIZED STEEL CONDUIT (RMC) FOR THE FIRST 10 FOOT SECTION WHEN LEAVING A BUILDING OR SECTIONS PASSING THROUGH FLOOR SLABS

E. ONLY LISTED PVC CONDUIT AND FITTINGS ARE PERMITTED FOR THE INSTALLATION OF ELECTRICAL CONDUCTORS, SUITABLE FOR UNDERGROUND APPLICATIONS.

CONDUIT SCHEDULE SECTION 16111			
CONDUIT TYPE	NEC REFERENCE	APPLICATION	MIN. BURIAL DEPTH (PER NEC TABLE 300.5) <sup>1,2</sup>
EMT	ARTICLE 358	INTERIOR CIRCUITING, EQUIPMENT ROOMS, SHELTERS	N/A
RMC, RIGID GALV. STEEL	ARTICLE 344, 300.5, 300.50	ALL INTERIOR/ EXTERIOR CIRCUITING, ALL UNDERGROUND INSTALLATIONS.	6 INCHES
PVC, SCHEDULE 40	ARTICLE 352, 300.5, 300.50	INTERIOR/ EXTERIOR CIRCUITING AND GROUNDING SYSTEMS, UNDERGROUND INSTALLATIONS, WHERE NOT SUBJECT TO PHYSICAL DAMAGE. <sup>1</sup>	18 INCHES
PVC, SCHEDULE 80	ARTICLE 352, 300.5, 300.50	INTERIOR/ EXTERIOR CIRCUITING AND GROUNDING SYSTEMS, UNDERGROUND INSTALLATIONS, WHERE SUBJECT TO PHYSICAL DAMAGE. <sup>1</sup>	18 INCHES
LIQUID TIGHT FLEX. METAL	ARTICLE 350	SHORT LENGTHS (MAX. 3FT.) WIRING TO VIBRATING EQUIPMENT IN WET LOCATIONS.	N/A
FLEX. METAL	ARTICLE 348	SHORT LENGTHS (MAX. 3FT.) WIRING TO VIBRATING EQUIPMENT IN WET LOCATIONS.	N/A

<sup>1</sup> PHYSICAL DAMAGE IS SUBJECT TO THE AUTHORITY HAVING JURISDICTION.

<sup>2</sup> UNDERGROUND CONDUIT INSTALLED UNDER ROADS, HIGHWAYS, DRIVEWAYS, PARKING LOTS SHALL HAVE MINIMUM DEPTH OF 24".

<sup>3</sup> WHERE SOLID RIGID PREVENTS COMPLIANCE WITH MINIMUM COVER DEPTHS, WIRING SHALL BE INSTALLED IN PERMITTED RACEWAY FOR DIRECT BURIAL. THE RACEWAY SHALL BE COVERED BY A MINIMUM OF 2" OF CONCRETE EXTENDING DOWN TO ROCK.

A. ALL CONDUCTORS SHALL BE TYPE THWN (INT. APPLICATION) AND XHHW (EXT. APPLICATION), 75 DEGREE C, 600 VOLT INSULATION, SOFT ANNEALED STRANDED COPPER. #10 AWG AND SMALLER SHALL BE SPLICED USING ACCEPTABLE SOLDERLESS PRESSURE CONNECTORS. #8 AWG AND LARGER SHALL BE SPLICED USING COMPRESSION SPLIT-BOLT TYPE CONNECTORS. #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR FOR LINE VOLTAGE BRANCH CIRCUITS. REFER TO PANEL SCHEDULE FOR BRANCH CIRCUIT CONDUCTOR SIZE(S). CONDUCTORS SHALL BE COLOR CODED FOR CONSISTENT PHASE IDENTIFICATION:

<u>LINE</u>	<u>COLOR</u>	<u>COLOR</u>
A	BLACK	BROWN
B	RED	ORANGE
C	BLUE	YELLOW
N	CONTINUOUS WHITE	GREY
G	CONTINUOUS GREEN	GREEN WITH YELLOW STRIPE

B. MINIMUM BENDING RADIUS FOR CONDUCTORS SHALL BE 12 TIMES THE LARGEST DIAMETER OF BRANCH CIRCUIT CONDUCTOR.

A. FURNISH AND INSTALL OUTLET BOXES FOR ALL DEVICES, SWITCHES, RECEPTACLES, ETC.. BOXES TO BE ZINC COATED STEEL.

B. FURNISH AND INSTALL PULL BOXES IN MAIN FEEDERS RUNS WHERE REQUIRED. PULL BOXES SHALL BE GALVANIZED STEEL WITH SCREW REMOVABLE COVERS, SIZE AND QUANTITY AS REQUIRED. PROVIDE WEATHERPROOF CONSTRUCTION IN WET LOCATIONS.

A. THE FOLLOWING LIST IS PROVIDED TO CONVEY THE QUALITY AND RATING OF WIRING DEVICES WHICH ARE TO BE INSTALLED. A COMPLETE LIST OF ALL DEVICES MUST BE SUBMITTED BEFORE INSTALLATION FOR APPROVAL.

1. 15 MINUTE TIMER SWITCH - INTERMATIC #FF15M (INTERIOR LIGHTS)
2. DUPLEX RECEPTACLE - P&S #2095 (GFCI) SPECIFICATION GRADE
3. SINGLE POLE SWITCH - P&S #CSB20AC2 (20A-120V HARD USE) SPECIFICATION GRADE
4. DUPLEX RECEPTACLE - P&S #5362 (20A-120V HARD USE) SPECIFICATION GRADE

B. PLATES - ALL PLATES USED SHALL BE CORROSION RESISTANT TYPE 304 STAINLESS STEEL. PLATES SHALL BE FROM SAME MANUFACTURER AS SWITCHES AND RECEPTACLES. PROVIDE WEATHERPROOF HOUSING FOR DEVICES LOCATED IN WET LOCATIONS.

C. OTHER MANUFACTURERS OF THE SWITCHES, RECEPTACLES AND PLATES MAY BE SUBMITTED FOR APPROVAL BY THE ENGINEER.

A. FUSIBLE AND NON-FUSIBLE, 600V, HEAVY DUTY DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY SQUARE "D". PROVIDE FUSES AS CALLED FOR ON THE CONTRACT DRAWINGS. AMPERE RATING SHALL BE CONSISTENT WITH LOAD BEING SERVED. DISCONNECT SWITCH COVER SHALL BE MECHANICALLY INTERLOCKED TO PREVENT COVER FROM OPENING WHEN THE SWITCH IS IN THE "ON" POSITION. EXTERIOR APPLICATIONS SHALL BE NEMA 3R CONSTRUCTION WITH PADLOCK FEATURE.

A. ALL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ZONE 2 SEISMIC REQUIREMENTS.

A. CONTRACTOR SHALL FURNISH AND INSTALL NON-METALLIC ENGRAVED BACK-LIT NAMEPLATES ON ALL PANELS AND MAJOR ITEMS OF ELECTRICAL EQUIPMENT.

B. LETTERS TO BE WHITE ON BLACK BACKGROUND WITH LETTERS 1-1/2 INCH HIGH WITH 1/4 INCH MARGIN.

C. IDENTIFICATION NOMENCLATURE SHALL BE IN ACCORDANCE WITH OWNER'S STANDARDS.

- A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.
- B. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.
- C. GROUNDING OF PANELBOARDS:
  - 1. PANELBOARD SHALL BE GROUNDED BY TERMINATING THE PANELBOARD FEEDER'S EQUIPMENT GROUND CONDUCTOR TO THE EQUIPMENT GROUND BAR KIT(S) LUGGED TO THE CABINET. ENSURE THAT THE SURFACE BETWEEN THE KIT AND CABINET ARE BARE METAL TO BARE METAL. PRIME AND PAINT OVER TO PREVENT CORROSION.
  - 2. CONDUIT(S) TERMINATING INTO THE PANELBOARD SHALL HAVE GROUNDING TYPE BUSHINGS. THE BUSHINGS SHALL BE BONDED TOGETHER WITH BARE #10 AWG COPPER CONDUCTOR WHICH IN TURN IS TERMINATED INTO THE PANELBOARD'S EQUIPMENT GROUND BAR KIT(S).
- D. EQUIPMENT GROUNDING CONDUCTOR:
  - 1. EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.
  - 2. THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE #12 AWG COPPER.
  - 3. EACH FEEDER OR BRANCH CIRCUIT SHALL HAVE EQUIPMENT GROUND CONDUCTOR(S) INSTALLED IN THE SAME RACEWAY(S).
- E. CELLULAR GROUNDING SYSTEM:

CONTRACTOR SHALL PROVIDE A CELLULAR GROUNDING SYSTEM WITH THE MAXIMUM AC RESISTANCE TO GROUND OF 10 OHM BETWEEN ANY POINT ON THE GROUNDING SYSTEM AS MEASURED BY 3-POINT GROUNDING TEST. (REFER TO SECTION 16960).

PROVIDE THE CELLULAR GROUNDING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:

  - 1. GROUND BARS
  - 2. EXTERIOR GROUNDING (WHERE REQUIRED DUE TO MEASURED AC RESISTANCE GREATER THAN SPECIFIED).
  - 3. ANTENNA GROUND CONNECTIONS AND PLATES.
- F. CONTRACTOR, AFTER COMPLETION OF THE COMPLETE GROUNDING SYSTEM BUT PRIOR TO CONCEALMENT/BURIAL OF SAME, SHALL NOTIFY OWNER'S PROJECT ENGINEER WHO WILL HAVE A DESIGN ENGINEER VISIT SITE AND MAKE A VISUAL INSPECTION OF THE GROUNDING GRID AND CONNECTIONS OF THE SYSTEM.
- G. ALL EQUIPMENT SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.C., MFG. SPECIFICATIONS, AND OWNER'S SPECIFICATIONS.

A. REFER TO CONTRACT DRAWINGS FOR DETAILS AND SCHEDULES.

A. FUSES SHALL BE NONRENEWABLE TYPE AS MANUFACTURED BY "BUSSMAN" OR APPROVED EQUAL. FUSES RATED TO 1/10 AMPERE UP TO 600 AMPERES SHALL BE EQUIVALENT TO BUSSMAN TYPE LPN-RK (250V) UL CLASS RK1, LOW PEAK, DUAL ELEMENT, TIME-DELAY FUSES. FUSES SHALL HAVE SEPARATE SHORT CIRCUIT AND OVERLOAD ELEMENTS AND HAVE AN INTERRUPTING RATING OF 200 KAIC. UPON COMPLETION OF WORK, PROVIDE ONE SPARE SET OF FUSES FOR EACH TYPE INSTALLED.

A. CONTRACTOR SHALL RETAIN THE SERVICES OF A LOCAL INDEPENDENT ELECTRICAL TESTING FIRM (WITH MINIMUM 5 YEARS COMMERCIAL EXPERIENCE IN THE ELECTRICAL TESTING INDUSTRY) AS SPECIFIED BY OWNER TO PERFORM:

TEST 1: THERMAL OVERLOAD AND MAGNETIC TRIP TEST, AND CABLE INSULATION TEST FOR ALL CIRCUIT BREAKERS RATED 100 AMPS OR GREATER.

TEST 2: RESISTANCE TO GROUND TEST ON THE CELLULAR GROUNDING SYSTEM.

THE TESTING FIRM SHALL INCLUDE THE FOLLOWING INFORMATION WITH THE REPORT:

1. TESTING PROCEDURE INCLUDING THE MAKE AND MODEL OF TEST EQUIPMENT.
2. CERTIFICATION OF TESTING EQUIPMENT CALIBRATION WITHIN SIX (6) MONTHS OF DATE OF TESTING. INCLUDE CERTIFICATION LAB ADDRESS AND TELEPHONE NUMBER.
3. GRAPHICAL DESCRIPTION OF TESTING METHOD ACTUALLY IMPLEMENTED.

B. THESE TESTS SHALL BE PERFORMED IN THE PRESENCE AND TO THE SATISFACTION OF OWNER'S CONSTRUCTION REPRESENTATIVE. TESTING DATA SHALL BE INITIALED AND DATED BY THE CONSTRUCTION REPRESENTATIVE AND INCLUDED WITH THE WRITTEN REPORT/ANALYSIS.

C. THE CONTRACTOR SHALL FORWARD SIX (6) COPIES OF THE INDEPENDENT ELECTRICAL TESTING FIRM'S REPORT/ANALYSIS TO ENGINEER A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO THE JOB TURNOVER.

D. CONTRACTOR TO PROVIDE A MINIMUM OF ONE (1) WEEK NOTICE TO OWNER AND ENGINEER FOR ALL TESTS REQUIRING WITNESSING.

A. ALL TESTS AS REQUIRED UPON COMPLETION OF WORK, SHALL BE MADE BY THIS CONTRACTOR. THESE SHALL BE CONTINUITY AND INSULATION TESTS; TEST TO DETERMINE THE QUALITY OF MATERIALS, ETC. AND SHALL BE MADE IN ACCORDANCE WITH E.C. RECOMMENDATIONS. ALL FEEDERS AND BRANCH CIRCUIT WIRING (EXCEPT CLASS 2 SIGNAL CIRCUITS) MUST BE TESTED FREE FROM SHORT CIRCUIT AND GROUND FAULT CONDITIONS AT 500V IN A REASONABLY DRY AMBIENT OF APPROXIMATELY 70 DEGREES F.

B. CONTRACTOR SHALL PERFORM LOAD PHASE BALANCING TESTS. CIRCUITS SHALL BE CONNECTED TO THE PANELBOARDS SO THAT THE NEW LOAD IS DISTRIBUTED AS EQUALLY AS POSSIBLE BETWEEN EACH LOAD AND NEUTRAL. 10% SHALL BE OVERSEEN BY THE CONTRACTOR. ALL ADDITIONAL FEEDER AND BRANCH CIRCUITS SHALL BE BALANCED ON THEIR OWN PANELBOARDS. FEEDER LOADS SHALL, IN TURN, BE BALANCED ON THE SERVICE EQUIPMENT. REASONABLE LOAD TEST SHALL BE ARRANGED TO VERIFY LOAD BALANCE IF REQUESTED BY THE ENGINEER.

C. ALL TESTS, UPON REQUEST, SHALL BE REPEATED IN THE PRESENCE OF OWNER'S REPRESENTATIVE. ALL TESTS SHALL BE DOCUMENTED AND TURNED OVER TO OWNER. OWNER SHALL HAVE THE AUTHORITY TO STOP ANY OF THE WORK NOT BEING PROPERLY INSTALLED. ALL SUCH DETECTED WORK SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER AND THE TESTS SHALL BE REPEATED.

[illegible]



## Protector™ Series

# GENERAC®

## Diesel Generator Set

### INCLUDES:

- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese) with external viewing window for easy indication of generator status and breaker position.
- Isochronous Electronic Governor
- Sound Attenuated Aluminum Enclosure
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- $\pm 1\%$  Voltage Regulation
- Integrated Base Tank Provides Up to 40 Hours of Run Time
- 5 Year Limited Warranty\*
- UL 2200 / UL142 / ULC S601 Listed
- Meets code requirements for External Vent and Fill

### Standby Power Rating

Model RD015 - 15 kW 60 Hz  
Model RD020 - 20 kW 60 Hz  
Model RD030 - 30 kW 60 Hz  
Model RD048 - 48 kW 60 Hz (single phase only)  
Model RD050 - 50 kW 60 Hz (three phase only)



**QUIET-TEST**



\*Built in the USA using domestic and foreign parts

Meets EPA Emission Regulations  
CA/MA Emissions Compliant

\* 5 year warranty applicable to U.S. and Territories/Canada. International warranty is 3 year limited.

## FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **TEST CRITERIA:**
  - ✓ PROTOTYPE TESTED
  - ✓ SYSTEM TORSIONAL TESTED
  - ✓ NEMA MG1-22 EVALUATION
  - ✓ MOTOR STARTING ABILITY
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at  $\pm 1\%$ .
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

# GENERAC®



**GENERATOR SPECIFICATIONS**

Type	Synchronous
Rotor Insulation Class	H (15 & 20 kW) or F (30, 48 & 50 kW)
Stator Insulation Class	H
Telephone Interference Factor (TIF)	<50
Alternator Output Leads 1-Phase	3 wire
Alternator Output Leads 3-Phase	6 wire
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Excitation System	Direct

**VOLTAGE REGULATION**

Type	Electronic
Sensing	Single Phase
Regulation	± 1%
Features	Adjustable Voltage & Gain

**GOVERNOR SPECIFICATIONS**

Type	Electronic Isochronous
Steady State Regulation	± 0.25%

**ELECTRICAL SYSTEM**

Battery Charge Alternator	50 Amp (15 & 20 kW) or 70 Amp (30, 48 & 50 kW)
Smart Battery Charger	2 Amp
Recommended Battery (battery not included)	Group 27F, 700 CCA
System Voltage	12 Volts

**GENERATOR FEATURES**

<p>Revolving field heavy duty generator          Directly connected to the engine          Operating temperature rise 120°C above a 40°C ambient          Class H insulation is NEMA rated          Class F insulation is NEMA rated          All models fully prototype tested</p>
---

**ENCLOSURE FEATURES**

Aluminum weather protective enclosure	Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added durability.
Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries and maximize sound dampening.
Small, compact, attractive	Makes for an easy, eye appealing installation.
SAE	Sound attenuated enclosure ensures quiet operation.

(All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271)

# 15 • 20 • 30 • 48 • 50 kW

## application & engineering data

### ENGINE SPECIFICATIONS: 15 & 20 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.28
Bore (in./mm)	3.46/88
Stroke (in./mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Naturally Aspirated
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

### ENGINE SPECIFICATIONS: 30 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.4
Bore (in/mm)	3.54/90
Stroke (in/mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Turbocharged
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

### ENGINE SPECIFICATIONS: 48/50 kW

Make	Generac
Model	In-Line
Cylinders	4
Displacement (Liters)	3.4
Bore in/mm	3.86/98
Stroke in/mm	4.45/113
Compression Ratio	18.5:1
Intake Air System	Turbocharged/Aftercooled
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

### WEIGHTS AND DIMENSIONS

	15 kW	20 kW	30 kW	48 kW	50 kW
Weight (lb/kg)	1380/626		1927/874	2197/997	
Dimensions (LxWxH) (in/cm)	81 x 31 x 50/205 x 78 x 128		95 x 35 x 57/242 x 89 x 145		

### ENGINE LUBRICATION SYSTEM

Oil Pump Type	Gear
Oil Filter Type	Full flow spin-on canister
Crankcase Capacity (quarts/liters)	6.87/6.5 - 15 & 20 kW 6.8/6.4 - 30 kW 7.4/7 - 48 & 50 kW

### ENGINE COOLING SYSTEM

Type	Pressurized radiator - 15 & 20 kW Closed recovery - 30, 48 & 50 kW
Water Pump	Pre-lubed, self-sealing
Fan Speed (rpm)	1800 - 15 & 20 kW 2061 - 30 kW 2029 - 48 & 50 kW
Fan Diameter (in/mm)	18.11/460 (15 & 20 kW) 22/559 (30, 48 & 50 kW)
Fan Mode	Pusher

### FUEL SYSTEM

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	7.94/0.31(ID)
Fuel Specification	ASTM
Fuel Filtering (microns)	5 - 15, 20 & 30 kW 10 - 48 & 50 kW

### TANK SPECIFICATIONS

Total Size (gallons/liters)	34/128.7 - 15 & 20 kW 62/234.7 - 30, 48 & 50 kW
Usable Size (gallons/liters)	32/121.1 - 15 & 20 kW 57/215.8 - 30, 48 & 50 kW
Run Time @ 1/2 Load (hrs)	41 - 15 kW 31 - 20 kW 38 - 30 kW 25 - 48 & 50 kW
Listings	UL142 ULC-S601

15 • 20 • 30 • 48 • 50 kW

operating data

## GENERATOR OUTPUT VOLTAGE/kW - 60 Hz

		kW (Standby)	Amp (Standby)	CB Size
RD015	120/240 V, 1Ø, 1.0 pf	15	62	70
	120/208 V, 3Ø, 0.8 pf	15	52	60
	120/240 V, 3Ø, 0.8 pf	15	45	50
RD020	120/240 V, 1Ø, 1.0 pf	20	83	100
	120/208 V, 3Ø, 0.8 pf	20	69	80
	120/240 V, 3Ø, 0.8 pf	20	60	70
RD030	120/240 V, 1Ø, 1.0 pf	30	125	150
	120/208 V, 3Ø, 0.8 pf	30	104	125
	120/240 V, 3Ø, 0.8 pf	30	90	100
	277/480 V, 3Ø, 0.8 pf	30	45	50
RD048/ RD050	120/240 V, 1Ø, 1.0 pf	48	200	200
	120/208 V, 3Ø, 0.8 pf	50	173	200
	120/240 V, 3Ø, 0.8 pf	50	150	175
	277/480 V, 3Ø, 0.8 pf	50	75	90

## SURGE CAPACITY IN AMPS

		Voltage Dip @ < .4 pf	
		15%	30%
RD015	120/240 V, 1Ø	53	129
	120/208 V, 3Ø	37	90
	120/240 V, 3Ø	32	78
	120/240 V, 1Ø	87	211
RD020	120/208 V, 3Ø	59	143
	120/240 V, 3Ø	51	124
	120/240 V, 1Ø	66	168
RD030	120/208 V, 3Ø	59	144
	120/240 V, 3Ø	51	125
	277/480 V, 3Ø	26	64
	120/240 V, 1Ø	69	189
RD048/ RD050	120/208 V, 3Ø	90	218
	120/240 V, 3Ø	78	189
	277/480 V, 3Ø	36	87
	120/240 V, 1Ø	69	189

## ENGINE FUEL CONSUMPTION

		gal/hr	L/hr
RD015	25% of rated load	0.51	1.93
	50% of rated load	0.79	2.99
	75% of rated load	1.14	4.31
	100% of rated load	1.48	5.58
RD020	25% of rated load	0.67	2.6
	50% of rated load	1.05	3.97
	75% of rated load	1.52	5.32
	100% of rated load	1.98	7.48
RD030	25% of rated load	0.92	3.5
	50% of rated load	1.45	5.5
	75% of rated load	1.96	7.4
	100% of rated load	2.74	10.4
RD048/ RD050	25% of rated load	1.35	5.11
	50% of rated load	2.15	8.14
	75% of rated load	3.06	11.58
	100% of rated load	3.98	15.07

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. 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-3046-1. Design and specifications are subject to change without notice.

15 • 20 • 30 • 48 • 50 kW

operating data

## ENGINE COOLING

	15 kW	20 kW	30 kW	48/50 kW
Air flow (inlet air including alternator and combustion air in cfm/cmm)	2824/80	2824/80	3038/86	2824/80
System coolant capacity (gal/liters)	2.8/10.6	2.8/10.6	2.8/10.6	2.8/10.6
Heat rejection to coolant (BTU per hr/MJ per hr)	63,535/67	63,535/67	111,000/117.1	135,900/143.4
Maximum operation air temperature on radiator (°C/°F)	50/122			
Maximum ambient temperature (°C/°F)	50/122			

## COMBUSTION REQUIREMENTS

Flow at rated power (cfm/cmm)	84.76/2.4	84.76/2.4	90/2.55	190/5.38
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## SOUND EMISSIONS

Sound output in dB(A) at 23 ft (7 m) with generator in exercise mode*	65
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load*	70

\*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

## EXHAUST

Exhaust flow at rated output (cfm/cmm)	98.88/2.8	98.88/2.8	230/6.51	448/12.7
Exhaust temperature at rated output (°C/°F)	604.4/1120	604.4/1120	454.4/850	604.4/1120

## ENGINE PARAMETERS

Rated Synchronous RPM	1800			
HP at rated kW	26.4	33.5	49	85

## POWER ADJUSTMENT FOR AMBIENT CONDITIONS

Temperature Deration .....	3% for every 5 °C above 25 °C or 1.7% for every 5 °F above 77 °F
Altitude Deration (15, 30, 48 & 50 kW) .....	1% for every 100 m above 915 m or 3% for every 1000 ft above 3000 ft
Altitude Deration (20 kW) .....	1% for every 100 m above 305 m or 3% for every 1000 ft above 1000 ft

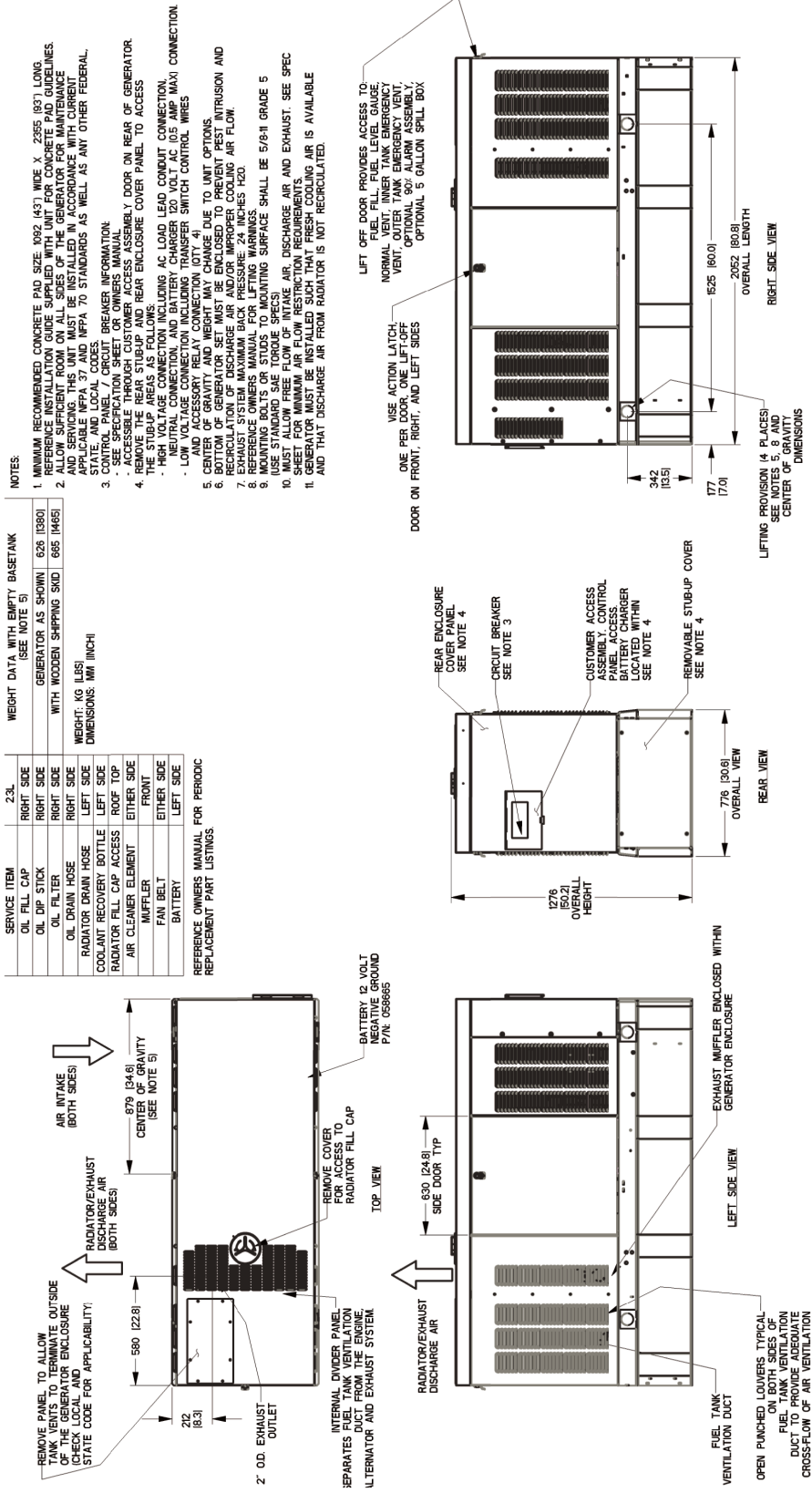
## CONTROLLER FEATURES

2-Line Plain Text Multilingual LCD Display .....	Simple user interface for ease of operation.
Mode Buttons: Auto .....	Automatic Start on Utility failure. Programmable 7 day exerciser.
Manual .....	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Off .....	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance Messages .....	Standard
Engine Run Hours Indication .....	Standard
Programmable start delay between 2-1500 seconds .....	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility Adjustable .....	From 140-171 V/190-216 V
Future Set Capable Exerciser/Exercise Set Error Warning .....	Standard
Run/Alarm/Maintenance Logs .....	50 Events Each
Engine Start Sequence .....	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter Lock-out .....	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger .....	Standard
Charger Fault/Missing AC Warning .....	Standard
Low Battery/Battery Problem Protection and Battery Condition Indication .....	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection .....	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection .....	Standard
Safety Fused/Fuse Problem Protection .....	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown .....	Standard
Overcrank/Overspeed (@ 72 Hz)/RPM Sense Loss Shutdown .....	Standard
High Engine Temperature Shutdown .....	Standard
Internal Fault/Incorrect Wiring Protection .....	Standard
Common External Fault Capability .....	Standard
Field Upgradable Firmware .....	Standard



15 & 20 kW

Drawing #0K7025-C (1 of 2)



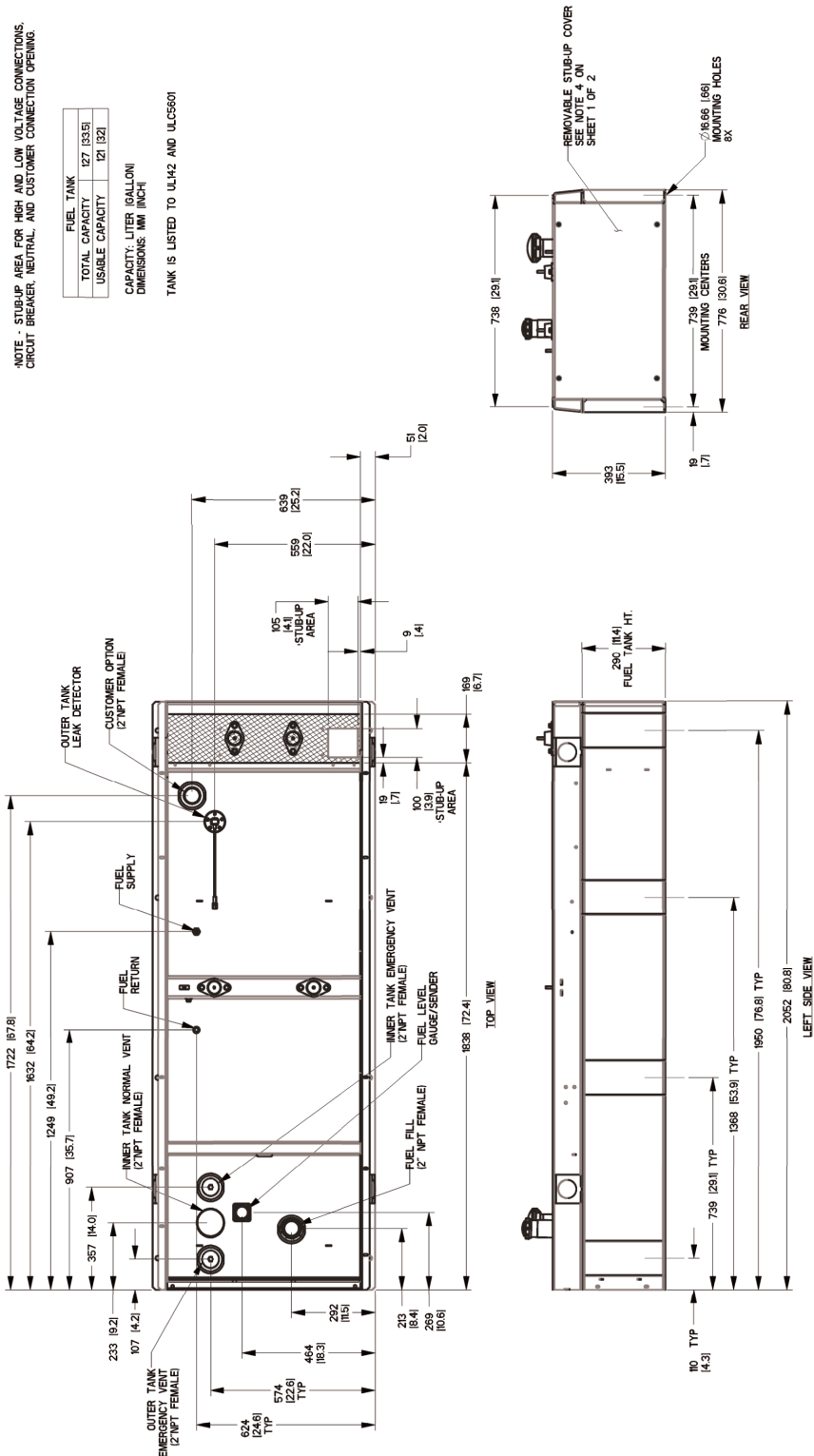
15 & 20 kW

NOTE: STUB-UP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL, AND CUSTOMER CONNECTION OPENING.

FUEL TANK	
TOTAL CAPACITY	127 [33.5]
USABLE CAPACITY	121 [32]

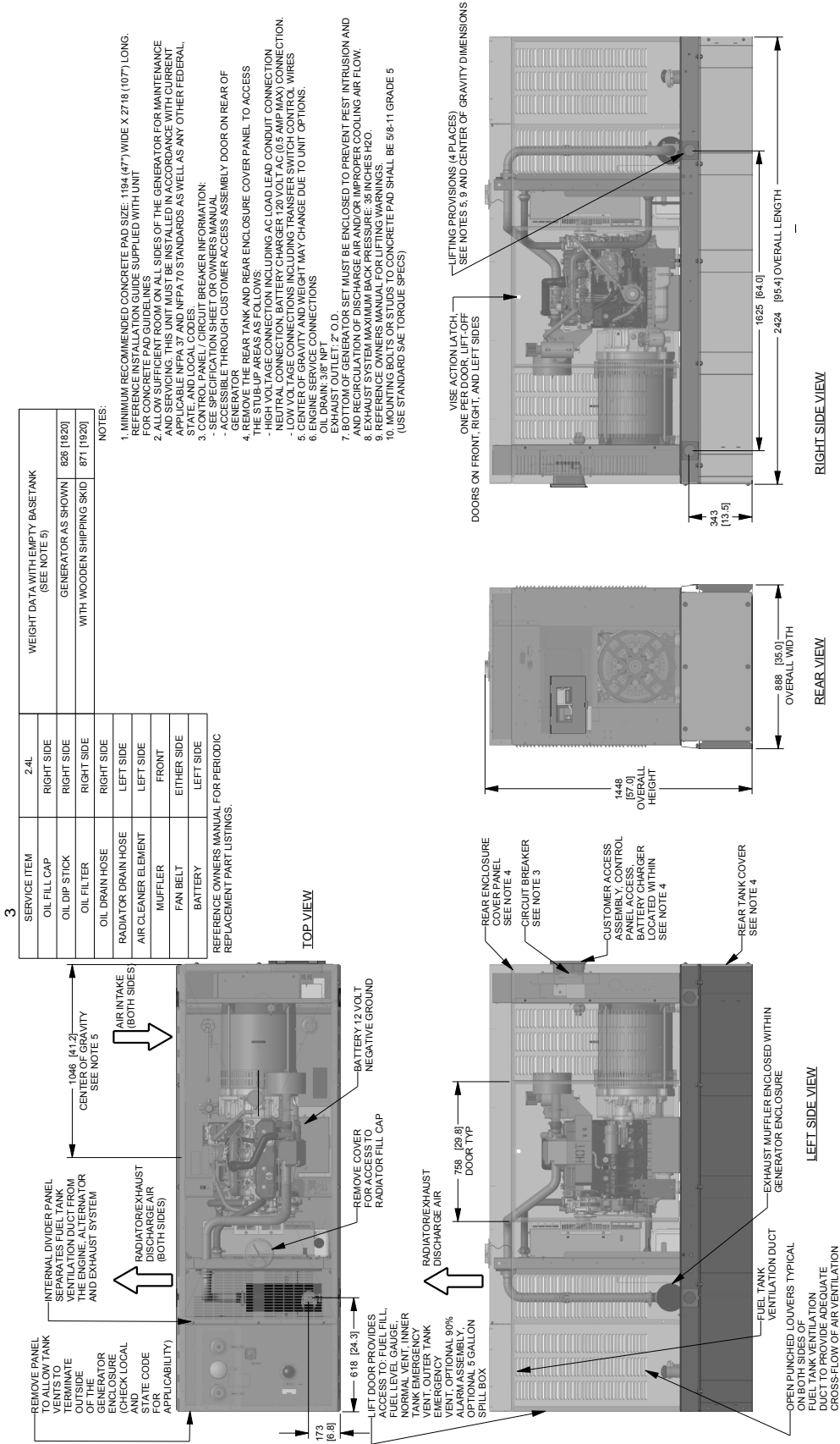
CAPACITY: LITER (GALLON)  
DIMENSIONS: MM (INCH)

TANK IS LISTED TO UL42 AND UL5601



30 kW

Drawing #0K7002-C (1 of 2)



# 30 kW

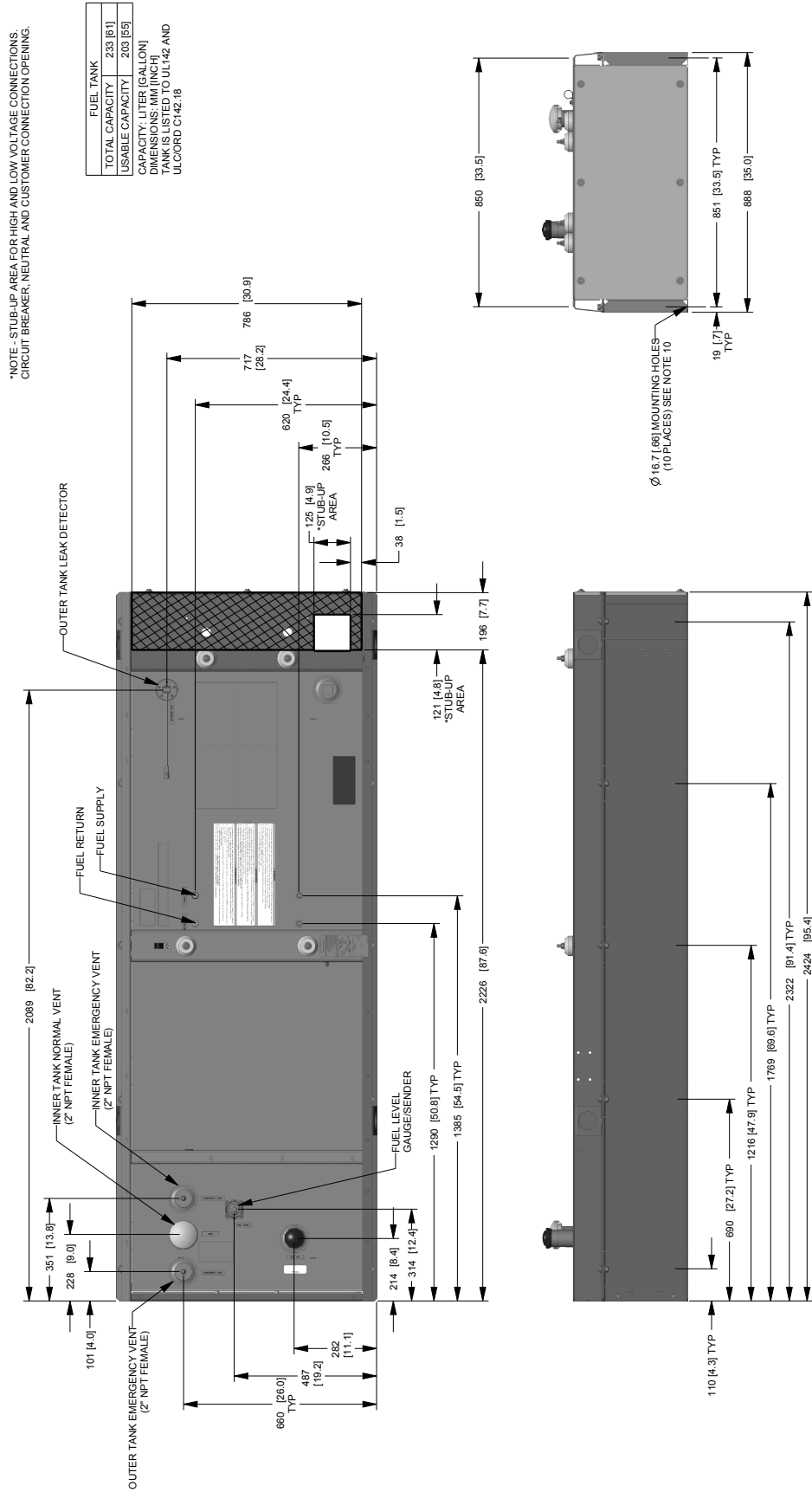
# GENERAC®

## installation layout

Drawing #0K7002-B (2 of 2)

Protector™ Series

9 of 12



# GENERAC®

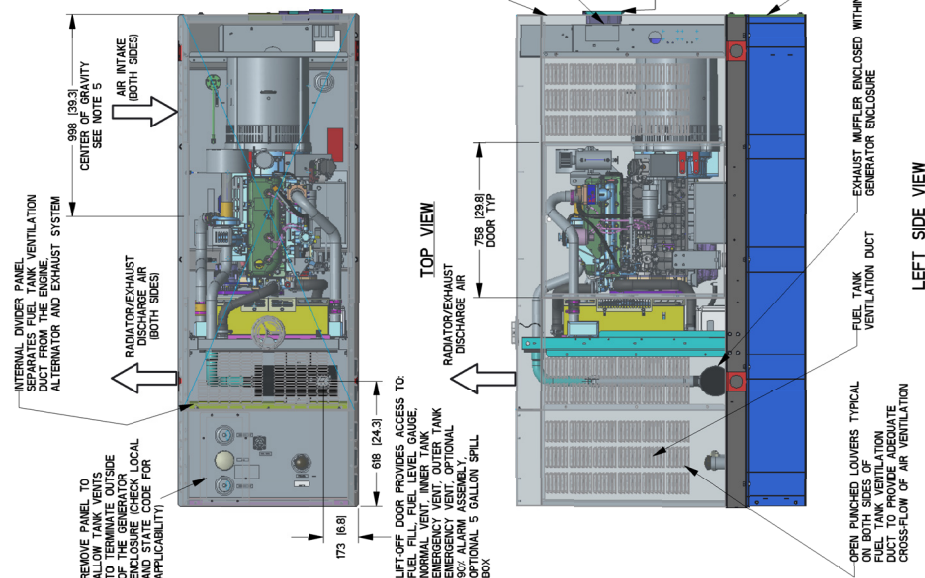
## installation layout

Drawing #0K6968-C (1 of 2)

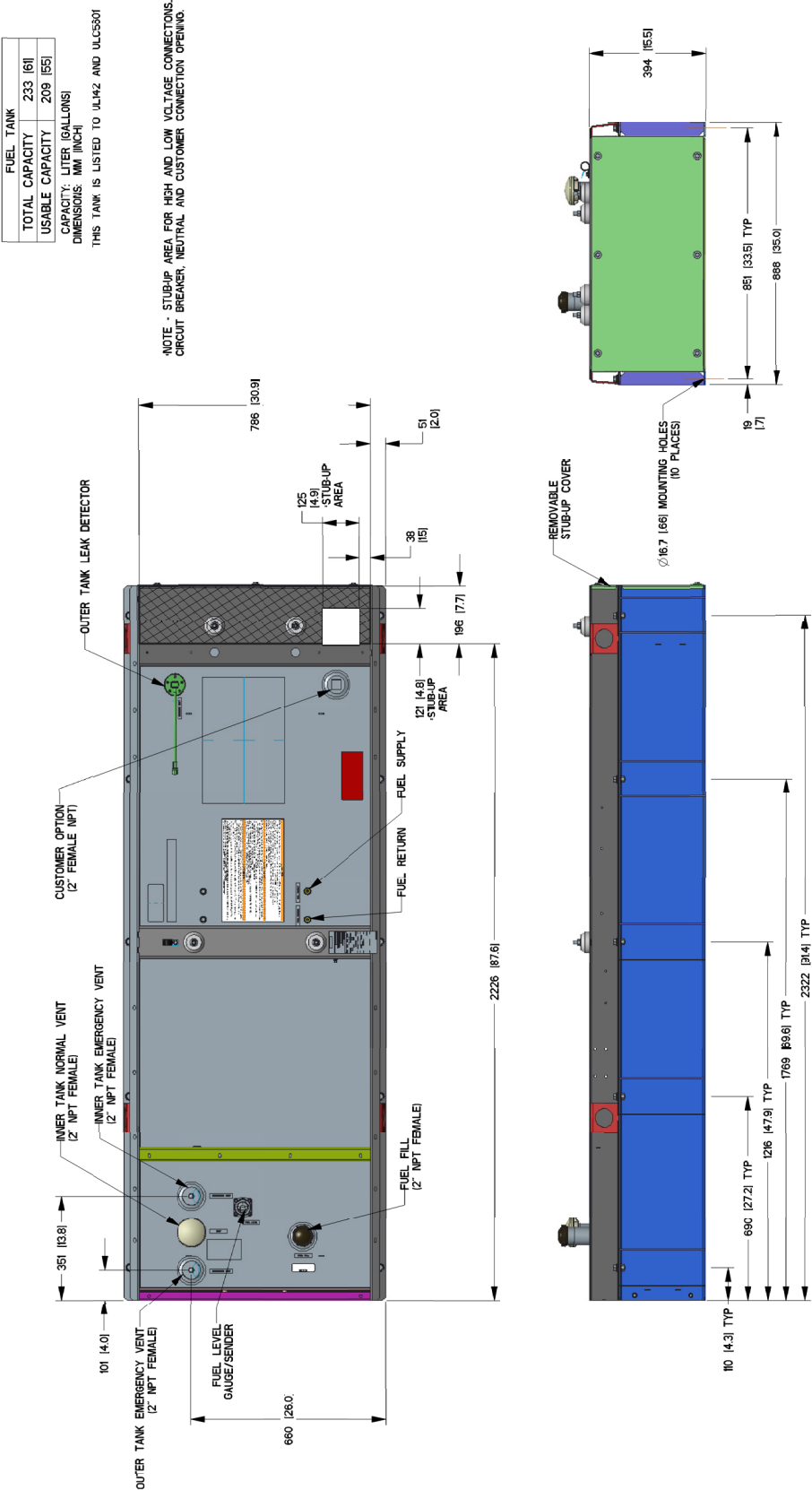
NOTES:

- MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1654 477" WIDE, V. 278"  
INCHES  
FOR CONCRETE PAD GUIDELINES  
ALLOWED FOR THE FOLLOWING:  
ALL WORKS AND CONNECTIONS ON ALL SIZES OF THE GENERATOR PER MAINTENANCE  
AND REPAIR REQUIREMENTS AS WELL AS BEING INSTALLED IN ACCORDANCE WITH THE  
FOLLOWING STANDARDS:  
APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL,  
STATE AND LOCAL CODES.  
BREATHER INFORMATION:  
CATHODIC PROTECTION SYSTEM OR CATHODIC PROTECTION SYSTEM MANUAL  
SPECIFICATIONS THROUGH CUSTOMER ACCESSORY DOOR ON REAR OF  
GENERATOR.  
REPAIR INFORMATION:  
THE FOLLOWING ARE REQUIRED:  
HIGH VOLTAGE CONNECTION INCLUDING A LOW LEAD CONDUIT CONNECTION  
NEUTRAL CONNECTION, BATTERY CHARGER 20 VOLT AC 60 AMP MAXI CONNECT  
TO THE GENERATOR, 20 VOLT AC 60 AMP MAXI CONNECT TO THE CONTROL WIRES  
CENTER OF GRAVITY AND WEIGHT MAIN CHANGE DUE TO UNIT OPTIONS.  
ENGINE SERVICE CONNECTIONS  
OIL DRAIN 3/8" NPT  
DRAIN PIPING  
BOTTOM OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INFESTION AND  
RECIRCULATION OF DISCHARGE AIR AND/OR IMPROPER COOL AIR FLOW  
EXHAUST SYSTEM MAXIMUM BACK PRESSURE .35 INCHES H<sub>2</sub>O  
MAXIMUM EXHAUST TEMPERATURE 900°F  
MOUNTING BOLTS OR STUDS TO CONCRETE PAD SHALL BE 5/8"x1 GRADE 5  
(USE STANDARD SAE TORQUE SPECS)

REFERENCE OWNERS MANUAL FOR PERIODIC  
REPLACEMENT PART LISTINGS.



48 & 50 kW



**15 • 20 • 30 • 48 • 50 kW****available accessories**

Model #	Product	Description
G006463-4	Mobile Link™	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message. Note: Harness Adapter Kit required. Available in the U.S. only.
G006478-0	Harness Adapter Kit	The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link™.
G006502-0	Spill Box	The 5-gallon spill box screws into the existing fuel fill port of the base tank. It captures and contains fuel if over fueling or spilling occurs during the fill process.
G006504-0	90% Fuel Level Alarm	The 90% fuel level alarm alerts the fuel fill operator when the tank reaches a 90% fill level by sounding an audible alarm and triggering an LED warning light.
G006505-0 - 15 & 20 kW G006506-0 - 30, 48 & 50 kW	Tank Risers	Tank risers are required in some municipalities to help avoid potential base tank corrosion caused by mounting on rough surfaces.
G006507-0	Fuel Fill Drop Tube	A powder coat painted, steel fuel fill drop tube is required in some municipalities to prevent sparking due to static electricity buildup, which can be caused by the fuel dropping into the tank from the fill area. Using a drop tube also results in submerged filling, which increases the fuel delivery flow rate and reduces vapors, foam and potential tank evaporation.
G006513-0 - 15 & 20 kW G006517-0 - 30 kW G006516-0 - 48 & 50 kW	Stainless Steel Fuel Lines	Some municipalities require the use of stainless steel fuel lines instead of the standard hoses provided with the diesel generator products. These stainless steel lines are fire resistant for additional safety.
G006510-0	E-Stop	E-stop allows for immediate fuel shutoff and generator shutdown in the event of an emergency.
G006511-0	Spill Box Drainback Kit	The spill box drainback kit allows fuel that was captured in the 5-gallon spill box to be drained directly back into the fuel tank to avoid vapors.
G006588-1	Vent Extension Support Kit	The vent extension support kit consists of two aluminum plates with the appropriate pipe cutouts to secure the vent extension pipes coming through the top of the generator enclosure. It helps to minimize stress on the NPT fittings integrated on the tank and also helps protect against pests.
G006512-0	Lockable Fuel Cap	The cast iron, lockable fuel cap provides the ability to lock the fuel system to prevent unwanted fuel tampering or fuel siphoning.
G006572-0 - 15 & 20 kW G006571-0 - 30 kW G006570-0 - 48 & 50 kW	Maintenance Kits	The Protector Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac Protector generators.
G006560-0 - 15 & 20 kW G006559-0 - 30 kW G006558-0 - 48 & 50 kW	Cold Weather Kits	Recommended for generators installed in regions where the temperature regularly falls below 32 °F (0 °C). The Cold Weather Kits consist of a block heater with all necessary mounting hardware and a battery warmer with a thermostat built into the battery wrap.
G005704-0	Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
G006664-0	Local Wireless Remote	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house.
G006665-0	Wireless Remote Extension Harness	Recommended for use with the Wireless Remote on units up to 60 kW, required for use on units 70 kW or greater.
G006873-0	Smart Management Module (50 Amps)	Manage large loads by utilizing up to 8 individual Smart Management modules. These devices are installed directly in line with existing appliance wiring for easy installation.



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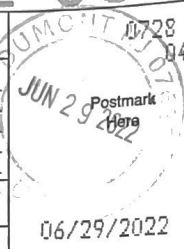
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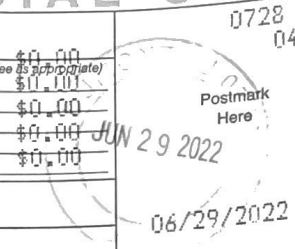
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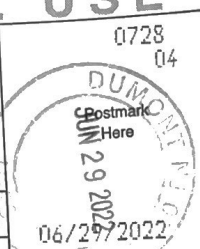
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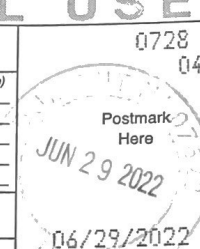
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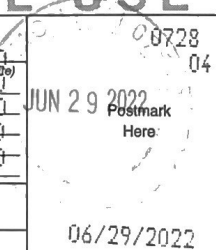
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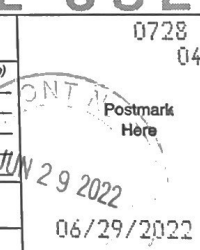
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City, State, ZIP+4®

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☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

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Postage \$0.58

Total Postage and Fees \$4.33

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7021 0950 0001 2887 2594

# U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

East Haven, CT 06512

Certified Mail Fee \$3.75

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

Total Postage and Fees \$4.33

Sent To *Rossano Realty LLC*

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

7021 0950 0001 2887 2624

# U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

East Haven, CT 06512

Certified Mail Fee \$3.75

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.58

Total Postage and Fees \$4.33

Sent To *Rita Campos*

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

East Haven, CT 06512

Certified Mail Fee	\$3.75
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\$	\$0.00
Extra Seals \$ 5	

Extra Services & Fees (check box, add fee as appropriate)  
☐ Return Receipt (hardcopy) \$ 0.00

☐ Return Receipt (electronic) \$ \$0.00

☐ Certified Mail Restricted Delivery \$ \$0.00

☐ Adult Signature Required \$ ~~\$0.00~~

☐ Adult Signature Restricted Delivery \$

Postage \$11.58

\$ 40.50

**Total Postage and Fees** 34.33

\$

Sent To BBC Development

Street and Apt. No., or PO Box No.

.....

City, State, ZIP+4®

PS Form 3800, April 2015 PSN 7530-02-000-9047

0728  
04

Postmark  
Here

JUN 20 1967

06/29/2022

111

lll

**See Reverse for Instructions**

7021 0950 0001 2887 2556

PS Form 3800, April 2015 PSN 7530-02-000-9047

**See Reverse for Instructions**



ERIC BREUN  
2016587728  
1 INTERNATIONAL BLVD.  
MAHWAH NJ 07495

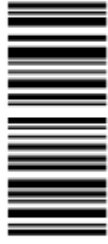
1 LBS

1 OF 1

**SHIP TO:**  
JOSEPH CARFORA  
250 MAIN STREET  
**THE CENTRE CT 06512**

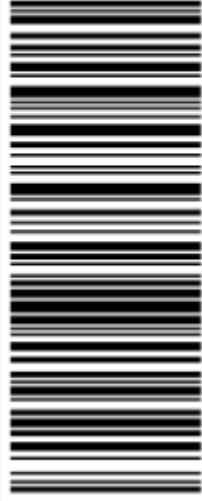


**CT 064 7-01**



**UPS GROUND**

TRACKING #: 1Z V25 742 03 9605 8896



BILLING: P/P

Reference #1: CT11623B

XGL 22.06.15 NV45 27.0A 06/2022\*



TM

ERIC BREUN  
2016587728  
1 INTERNATIONAL BLVD.  
MAHWAH NJ 07495

1 LBS

1 OF 1

**SHIP TO:**  
ATTN: LICENSING DOCUMENT EXECUTION  
CROWN CASTLE USA  
2000 CORPORATE DRIVE  
**CANONSBURG PA 15317**



**PA 153 0-10**



**UPS GROUND**

TRACKING #: 1Z V25 742 03 9826 8889



BILLING: P/P

Reference #1: CT11623B

XGL 22.06.15 NV45 27.0A 06/2022\*



TM

ERIC BREUN 2016587728 1 INTERNATIONAL BLVD. MAHWAH NJ 07495	1 LBS 1 OF 1
SHIP TO: JOSEPH BUDROW 250 MAIN STREET THE CENTRE CT 06512	
	CT 064 7-01 
UPS GROUND TRACKING #: 1Z V25 742 03 9886 8909	
	
BILLING: P/P	
Reference #1: CT11623B <small>XGL 22.06.15 NV45 27.0A 06/2022*</small>	
	

Hello, your package has been delivered.

Delivery Date: Friday, 07/01/2022

Delivery Time: 10:38 AM

Signed by: VIGLIONE

## TRANSCEND WIRELESS

Tracking Number: [1ZV257420396698918](#)

Ship To:

STEPHEN VIGLIONE  
 259 COMMERCE STREET  
 MOMAUGUIN, CT 06512  
 US

Number of Packages: 1

UPS Service: UPS Ground

Package Weight: 1.0 LBS

Reference Number: [CT11623B](#)

**Hello, your package has been delivered.**

**Delivery Date:** Friday, 07/01/2022

**Delivery Time:** 3:08 PM

**Signed by:** MAURO

**TRANSCEND WIRELESS**

**Tracking Number:** [1ZV257420398868909](#)

**Ship To:** JOSEPH BUDROW  
250 MAIN STREET  
THE CENTRE, CT 06512  
US

**Number of Packages:** 1

**UPS Service:** UPS Ground

**Package Weight:** 1.0 LBS

**Reference Number:** CT11623B

**Hello, your package has been delivered.**

**Delivery Date:** Friday, 07/01/2022

**Delivery Time:** 3:08 PM

**Signed by:** MAURO

**TRANSCEND WIRELESS**

**Tracking Number:** [1ZV257420396058896](#)

**Ship To:** JOSEPH CARFORA  
250 MAIN STREET  
THE CENTRE, CT 06512  
US

**Number of Packages:** 1

**UPS Service:** UPS Ground

**Package Weight:** 1.0 LBS

**Reference Number:** CT11623B

**Hello, your package has been delivered.**

**Delivery Date:** Tuesday, 07/05/2022

**Delivery Time:** 11:09 AM

**Signed by:** HERROD

## **TRANSCEND WIRELESS**

**Tracking Number:** [1ZV257420398268889](#)

**Ship To:** CROWN CASTLE USA  
2000 CORPORATE DRIVE  
CANONSBURG, PA 15317  
US

**Number of Packages:** 1

**UPS Service:** UPS Ground

**Package Weight:** 1.0 LBS

**Reference Number:** CT11623B