

445 Hamilton Avenue, 14th Floor White Plains, New York 10601 T 914 761 1300 F 914 761 5372 cuddyfeder.com

Daniel Patrick dpatrick@cuddyfeder.com

7/12/21

### VIA ELECTRONIC AND FEDERAL EXPRESS

Melanie A. Bachman Executive Director Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: New Cingular Wireless PCS, LLC ("AT&T")

Notice of Exempt Modification Emergency Back-up Generator

239 Middle Turnpike East, Manchester, CT 06040

Lat.: 41.78439190°; Long.: -72.51169890°

### Dear Ms. Bachman:

This letter and enclosures are respectfully submitted on behalf of New Cingular Wireless PCS, LLC ("AT&T"). AT&T currently maintains its wireless telecommunications facility on the existing tower located at 239 Middle Turnpike East in the Town of Manchester, Connecticut. The underlying property and tower structure are owned by the Town of Manchester. AT&T submits this letter and enclosures to the Connecticut Siting Council ("Council") to notify the Council of AT&T's intent to perform modifications to the existing facility that do not have substantial adverse environmental effects and thus do not require a certificate pursuant to Section 16-50k of the Connecticut General Statutes.

AT&T intends to install one (1) new Generac 30kW Diesel Generator within the existing grade-level fenced equipment compound as demonstrated on the plans enclosed as Attachment 1. AT&T's existing facility supports its FirstNet program which provides first responders with priority access to AT&T's network to ensure adequate communication capabilities in the event of emergency. AT&T's proposed generator will ensure that critical communication capability for first responders and the public are not lost in the event of a loss of power.

AT&T's proposed generator will also advance the State's goal of natural disaster and emergency preparedness. As discussed in the Council's Docket 432 Findings and Report and Docket 440 proceedings and Findings of Fact (Nos. 76-77), in response to two significant storm events in 2011, the State formed a Two Storm Panel (the "Panel") that evaluated Connecticut's approach to planning and mitigation of impacts associated with emergencies and natural disasters. The Panel found that "wireless telecommunications service providers were not prepared to serve residential and business

WESTCHESTER | NEW YORK CITY | HUDSON VALLEY | CONNECTICUT



7/12/21 Page 2

customers during a power outage" because certain companies had limited backup generator capacity. The Panel also noted that "[t]he failure of a large portion of Connecticut's telecommunications system during the two storms is a life safety issue." The Panel recommended that State regulatory bodies review "telecommunications services currently in place to verify that the vendors have sufficient generator and backhaul capacity to meet the emergency needs of consumers and businesses" and that the "Connecticut Siting Council should require continuity of service plans for any cellular tower to be erected." The planned modifications will ensure continuity of services by reinforcing AT&T's backup power and backhaul capacity to meet the emergency needs of first responders, consumers, and businesses in the event of a power outage.

The planned modifications to the facility fall squarely within the activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2) as the planned modifications:

- Will not result in an increase in the height of the existing structure;
- Will not require the extension of the site boundary;
- Will not increase noise levels at the facility by more than six decibels or more, or to levels that exceed state or local criteria since emergency backup generators are exempt from noise regulations as "noise created as a result of, or relating to, an emergency";
- Will not increase radio frequency emission at the facility to a level at or above the Federal Communications Commission safety standards;
- Will not cause a change or alteration in the physical or environmental characteristics of the site; and
- Will not impair the structural integrity of the facility.

Correspondence from the Town of Manchester indicates that the facility was approved by the Manchester Planning and Zoning Commission on March 18, 2002. A copy of the acting General Manager memorandum memorializing the above referenced approval is enclosed as Attachment 2. AT&T's proposed modifications comply with the original approvals and approvals for subsequent modifications.

The proposed modifications will have no impact on the existing tower structure itself or the radio-frequency emissions as the proposed modifications only consist of the addition of one new generator within the grade-level equipment compound. Thus, AT&T respectfully requests a waiver from submission of information relating to the existing tower structure or the radio-frequency emissions.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-73. In accordance with R.C.S.A. §



7/12/21 Page 3

16-50j-73, a copy of this letter and enclosures are being sent to Mayor Jay Moran of the Town of Manchester as well as the property owner and structure owner identified above. Certification of Service is enclosed as Attachment 3.

For the foregoing reasons, AT&T respectfully submits that the proposed modification to the above referenced wireless telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Very truly yours,

Daniel Patrick

### Attachments

cc: Mayor Jay Moran, Town of Manchester

Gary Anderson, Director of Planning and Economic Development, Town of Manchester Scott Shanley, Town of Manchester General Manager (property and structure owner) General Dynamics Information Technology, Inc.

Lucia Chiocchio, Esq.

Julie Durkin

## **ATTACHMENT 1**



### SITE NAME: MANCHESTER CENTRAL FA LOCATION CODE: 10071105

### **GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR 200A GENERAC ATS**

### 239 MIDDLE TURNPIKE EAST **MANCHESTER, CT 06040**

### VICINITY MAP

SITE LOCATION



### SCOPE OF WORK

ADD STANDBY GENERATOR, ASSOCIATED CONCRETE PAD, AND UTILITY EQUIPMENT TO EXISTING AT\$T EQUIPMENT AREA. THERE WILL BE NO CHANGE IN THE SIZE OR HEIGHT OF THE TOWER OR ANTENNAS.



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN CONNECTICUT

### CALL BEFORE YOU DIG 811 OR 1-800-922-4455

CONNECTICUT PUBLIC ACT 87-71 REQUIRES MIN. 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE.

### APPLICABLE BUILDING CODE & STANDARDS

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING LOCAL AUTHORITIES. NOTHING I THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2015
- . NATIONAL ELECTRIC CODE 2017
- 3. AMERICAN CONCRETE INSTITUTE (ACI) 3 I 8. BUILDING CODE REQUIREMENTS FOR STRUCTURAL
- . AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
- . TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
- 5. TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

### AERIAL VIEW OF SITE



### PROJECT MANAGER:

GENERAL DYNAMICS WIRELESS SERVICES GGI MOORE RD STE I I O

KING OF PRUSSIA, PA 19406 joseph.jarvis@gdit.com

RAMAKER & ASSOCIATES INC. 855 COMMUNITY DRIVE 5AUK CITY, WI 53583 PH.: (608) 643-4100 CONTACT: TYLER BEATTY

APPLICANT INFORMATION: 150 STANDARD DR ANOVER, MD 21076

### PROJECT INFORMATION

SITE NAME: MANCHESTER CENTRAL FA NUMBER: 1007 | 105

PROPERTY OWNER: TOWN OF MANCHESTER 41 CENTER STREET MANCHESTER, CT 06040

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

COUNTY: HARTFORD

41.78439190° -72.51169890°

GROUND ELEVATION: 285 FT AMSL

DO NOT SCALE DRAWINGS CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED

### SHEET INDEX

T- I TITLE SHEET

### NOTES:

N-I GENERAL NOTES

A-I SITE PLAN

S-I FOUNDATION DETAILS

### ELECTRICAL & GROUNDING:

- E-I WIRING DETAILS
- E-2 PANEL AND PENETRATION DETAILS ATS. CONDUIT & GROUND ROD DETAILS
- GENERAC GENERATOR SPECIFICATIONS
- E-4. I GENERAC GENERATOR SPECIFICATIONS
- E-4.2 GENERAC GENERATOR SPECIFICATIONS GENERAC ATS SPECIFICATIONS
- E-5. I GENERAC ATS SPECIFICATIONS

### SIGNATURE BLOCK

AT¢T MGR. DATE

DATE GENERAL DYNAMICS CONSTRUCTION MGR.

SITE ACQUISITION DATE

### **GENERAL DYNAMICS**

CONSULTANT:

PREPARED FOR:

Information Technology, Inc.

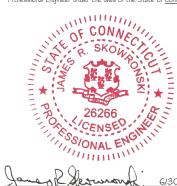
RAMAKER

(608) 643-4100 www.ramaker.com

at&t

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

nereby certify that this plan, specification, or report was prepared y me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



ARK DATE DESCRIPTION

DATE 6/30/2021

MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

TITLE SHEET

SCALE: NONE

50182 T- I

THE INFORMATION CONTAINED IN THIS SET OF

NOTES TO SUBCONTRACTOR:

- THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS. CONDITIONS AND FLEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- 2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
- 3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK
- 4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED. IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- . SITE GROUNDING SHALL COMPLY WITH AT&T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT\$T TOWERS GROUNDING CHECKLIST, LATEST VERSION, WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF TOWER.
- 3. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM
- 7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER
- . THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL
- IO. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- I. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.
- 2 CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR
- 3. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
- 4. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD
- 15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
- 6. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT
- 7. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

### GENERAL NOTES:

- THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER AND TOWER
- 2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
- 3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP

- ACCESS IS REQUIRED)
- 4 OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
- 5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
- 6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
- 8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
- 9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS

### ELECTRICAL NOTES: A. GENERAL

- I. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT\$T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
- 2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.
- 3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED
- 4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED. THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE
- 5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.
- 6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
- 7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T'S REPRESENTATIVE.
- 8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
- 9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
  - ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE) ASTIM (AMERICAN SOCIETY FOR TESTING MATERIALS)
  - ETL (ELECTRICAL TESTING LABORATORY)
  - ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - IFFE (INSTITUTE OF FLECTRICAL AND FLECTRONIC ENGINEERS)
  - MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS) NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
  - NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
  - UL (UNDERWRITER'S LABORATORY)
- IO. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS. BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION. SHALL BE INCLUDED.
- II. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT\$T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE
- I 2. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (380 DEGREES TOTAL) EXIST IN A CONDUIT RUN.
- 2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

- 3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP
- 4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352.46, 300.4 F. (3)
- CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER
- 6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
- 7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
- 8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
- 9. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND
- 10. INSTALL PULL STRING IN ALL CONDUIT.
- II. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS. UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES. PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
- 12. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
- 1.3 ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT

### C. EQUIPMENT

- EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.
- 2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED

- ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.
- ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING
- 3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM
- 4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.
- ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED
- EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL
- PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (1999) AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE
- 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS
- PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

### E. INSPECTION/DOCUMENTATION

- THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWING INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
- CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).
- 3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY AT\$T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL
- 4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT ULLISTING FOR THAT EQUIPMENT IS NOT VOIDED



PREPARED FOR:



### CONSULTANT:

### **GENERAL DYNAMICS**

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was pre me or under my direct supervision and that I am a duly Licensed onal Engineer under the laws of the State of <u>Connecticut</u>.



DATE DESCRIPTION DATE 6/30/202

### MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

GENERAL NOTES

SCALE: NONE

50182

N- I





(608) 643-4100 www.ramaker.com

PREPARED FOR:



CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was prepare, by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.

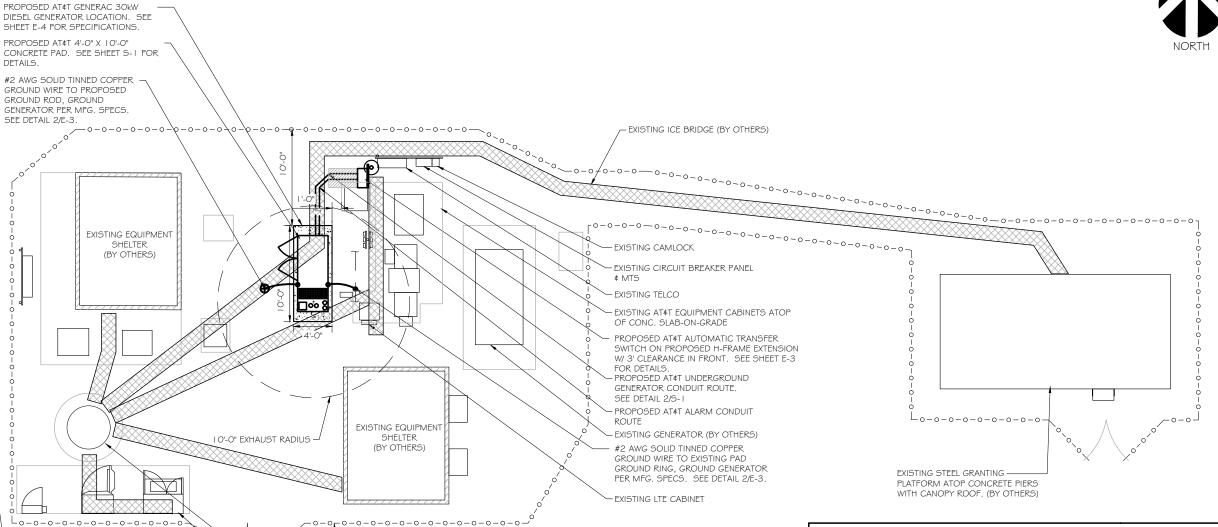
IARK DATE DESCRIPTION DATE 6/30/2021

MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

SITE PLAN

10' 20 - | " = | O' - | " = 5' 50182 A- I



SCOPE OF WORK DETAILS

### GENERAL

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

INSTALL PULL STRING IN EACH CONDUIT

- EXISTING AT&T METER & DISCONNECT

- (I) NEW 2" AND (I) NEW I" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.
- (I) NEW I" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED \$ INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 \$ E-3.
- (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 ¢ E-3.

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

SITE PLAN SCALE: | " = 10"

1'-6" EXISTING POST PROPOSED PIOOO-HG UNISTRUT EA. SIDE (TYP.) FIELD - PROPOSED 4" Ø STD. PIPE LOCATE FOR (TYP.) EQUIPMENT INSTALLATION #2 AWG GROUND WIRE TO EXISTING GROUND - PROPOSED CONCRETE FOOTING EXISTING GROUND RING

H-FRAME EXTENSION DETAIL

- EXISTING CHAIN LINK FENCE AT PERIMETER OF COMPOUND EXISTING COMPOUND ACCESS GATE

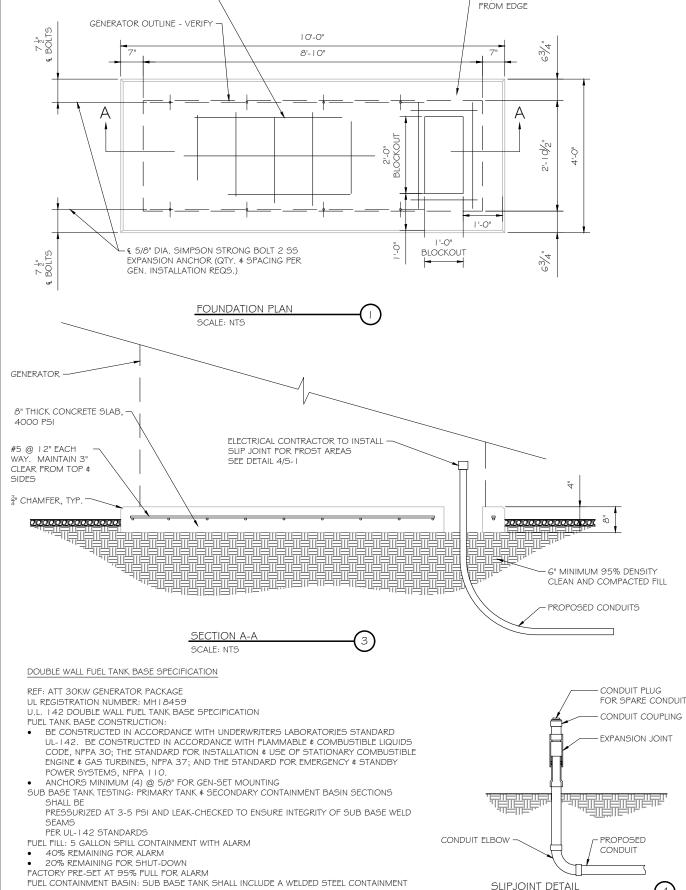
- EXISTING ± 184' TALL MONOPOLE TOWER

- FXISTING FQUIPMENT PAD (BY OTHERS)



#5 @ 12" EACH WAY

 $\odot$ 



BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF

FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT

BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

#5 MAINTAIN 3" CLEAR

SCALE: NTS

NOTE: VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE \$ MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL RESTORE SURFACE TO MATCH REQUIREMENTS WITH LOCAL UTILITY PROVIDER. ORIGINAL CONDITION UNDISTURBED SOIL COMPACTED BACKFILL (SUITABLE ON SITE MATERIAL) 6" WARNING TAPE ELECTRICAL CONDUIT(S) WHERE APPLICABLE \* 6" TYF

> \* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

I. PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW. 2. PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)

3. INSTALL UTILITY PULLBOXES PER NEC.

UTILITY CONDUIT TRENCH SCALE: NTS

### STRUCTURAL GENERAL NOTES

- I.I DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
- I.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH CONSTRUCTION MANAGER, THE OWNER, \$ THEIR AGENTS FROM ANY LIABILITY WHATSOEVER \$ HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTIONS WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS
- 1.4 VERIPY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS 1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD

EQUIPMENT SIZE : 889.1" H, 106" W, 38" D

WEIGHT WITH WOODEN SHIPPING SKID ENCLOSED GENERATOR

: 3974 LBS 2.0 FOR DESIGN \$ ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF 3.0 CONCRETE

3.1 MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

DESIGN : ACI3 | 8- | | CONSTRUCTION : ACI301

CRSI MANUAL OF STANDARD PRACTICE DETAILING REINF. STEEL ASTM A 615 GRADE 60, DEFORMED MIXING ASTM C 94. READY MIX CONCRETE

AIR ENTRAINMENT : ACI 3 | 8 AND ASTM C-260 AGGREGATE : ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)

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



PREPARED FOR:



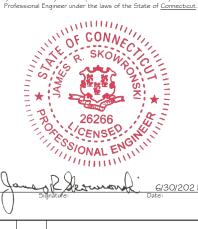
CONSULTANT:

### **GENERAL DYNAMICS**

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was prey me or under my direct supervision and that I am a duly Licenses



ARK DATE DESCRIPTION DATE 6/30/2021

### MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

FOUNDATION DETAILS

SCALE: NONE

50182 5-1

DIAGRAM CIRCUIT SCHEDULE

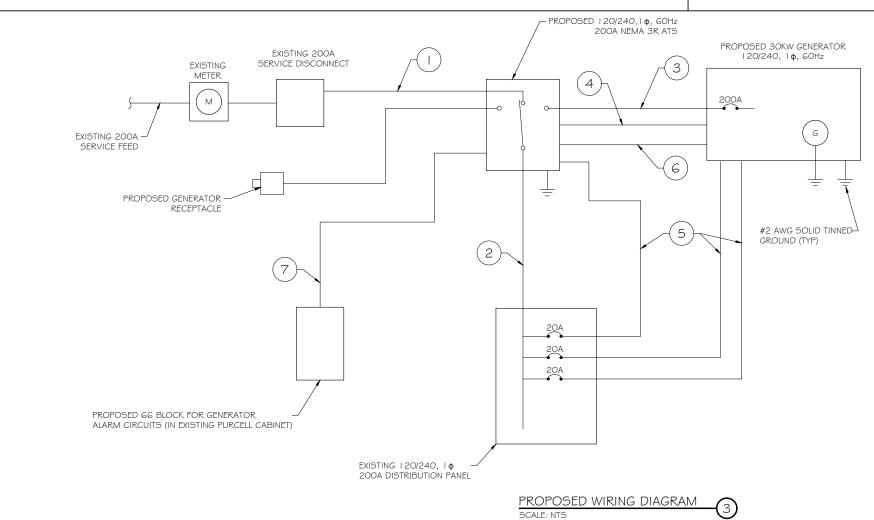
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1"	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(I) #I2 (I) #I2 (I) #I2	"	CIRCUIT FOR GENERATOR BLOCK HEATER \$ BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (I) I 2 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
7	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	I 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1 "	ALARM CABLES (1) 12 PAIR 24 AWG (RUN TO PURCELL CABINET \$ INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT\$T TECH. LABEL ALL WIRES

### ALARM WIRE IDENTIFICATION CHART

WIRE	ALARM
BROWN BROWN / WHITE	GENERATOR RUNNING
GREEN GREEN / WHITE	CRITICAL FAULT
BLUE BLUE / WHITE	MINOR FAULT
ORANGE ORANGE / WHITE	LOW FUEL
BROWN * BROWN / WHITE *	FUEL LEAK
*CAT5 CAE	BLE ONLY, FROM 2ND CAT5 CABLE

CIRCUIT DETAIL

ALARM WIRING IDENTIFICATION CHART (2) SCALE: NTS





PREPARED FOR:



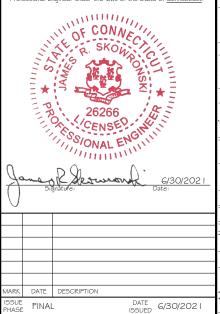
CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

WIRING DETAILS

SCALE: NONE

50182 E- I

23 1P

				AC Distribution Pan	el - Layout Di	iagram			
Breaker	Breaker				Breaker	Breaker			
Position	Туре	On/Off	Size	Circuit Label	Position	Type	On/Off	Size	Circuit Label
1	2P	Off	30	BOOSTER	2	2P	On	30	
3		011	30	BOOSTER	4		OII	30	
5	1P	ON	20	<b>₄</b> ATS	6	2P	On	30	RECT. 1 BLUE
7	1P	ON	20	BLOCK HEATER	8	۷.	Oli	30	NECT. I BLOC
9	1P	ON	20 /	BATTERY CHARGER	10	2P	On	30	RECT. 2 ORANGE
11			//	7	12	21	OII	30	NECT. 2 ONAINGE
13	2P	On	30///	(	14	2P	On	30	RECT. 3 YELLOW
15	21	Oii	30///		16		Oil	30	NECT. 3 TELLOW
17	2P	On	[ <i>[</i> [/	UMTS	18	1P	On	20	TELCO GFI
19	25		<i>[50</i>	OIVIT3	20	1P	On	20	LIGHT/GFI
21	1P				22	1P	On	30	SPARE

PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER

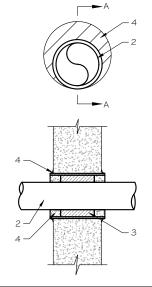
AND BATTERY CHARGER ON NEW AT&T GENERATOR

**1**P

On

15

NOKIA GFI RECEPT.



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

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

- I. FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- 2. THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM O". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED: A. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER)

  - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE. C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- 3. PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL
- 4. FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CPGO IS OR CPGO4 SEALANT IS

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)



EXISTING PANEL SCHEDULE

Type GR

Type VN

TAP TO VERTICAL STEEL

SURFACE OR

THE SIDE OF

HORIZONTAL PIPE

HORIZONTAL CABLE

CABLE TAP TO TOP OF GROUND



Type VS

SIDE OF

CABLE TAP DOWN AT

45°TO VERTICAL STEEL SURFACE OR

HORIZONTAL OR

VERTICAL PIPE.





THROUGH CABLE

Type GY

TO SIDE OF

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



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





TEE OF HORIZONTAL RUN AND TAP CABLES.

NOTE:
CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR
SIMILAR LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS.

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER AND BLOCK HEATER





GROUND ROD

FA ID # 10071105 239 MIDDLE TURNPIKE EAST

MANCHESTER, CT 06040

MARK DATE DESCRIPTION

PANEL AND PENETRATION **DETAILS** 

MANCHESTER CENTRAL

DATE 6/30/2021

RAMAKER

(608) 643-4100 www.ramaker.com

GENERAL DYNAMICS

hereby certify that this plan, specification, or report was prepare, by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.

Information Technology, Inc.

**Mobility** 

PREPARED FOR:

CONSULTANT:

**GENERAL DYNAMICS** 

661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

SCALE: NONE

50182 SHEET E-2

CADWELD DETAILS SCALE: NTS

CONDUIT (TYP)

(4

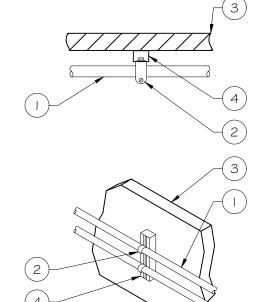
2 BUTTERFLY CLAMP AS REQUIRED

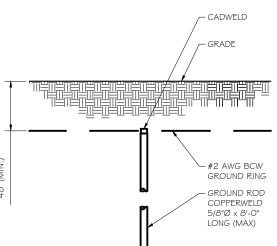
(3) EXISTING WALL/CEILING

VERTICAL "UNISTRUT" P I 000 T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-20 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	3/8" DIA. HILTI HY- I 50 WITH SCREEN, MINIMUM EMBEDMENT 2- I /2"

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT \$ CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-O" O.C. LENGTH OF RUN





2

NOTE:

GROUND RODS MAY BE:

THE LENGTH OF ROD

AVAILABLE

SEE RESISTIVITY REPORT FOR VERIFICATION AS

A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL GROUND RODS INSTALLED

WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM,

SHALL BE GALVANIZED TO

CORROSION OF TOWER,

(SEE ANSI/TIA-EIA-222-G)

PROVIDE (I) GROUND LEAD TO EACH SIDE OF THE GENERATOR

PREVENT GALVANIC

- COPPER CLAD STEEL - SOLID COPPER GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE

# ₽

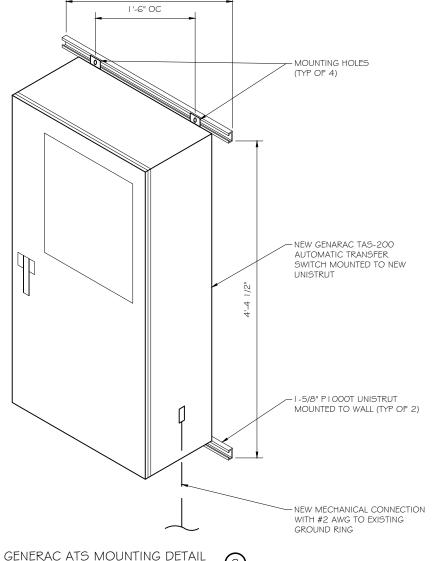
GROUND ROD	DETAIL	
SCALE: NTS		•

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/16" DIA. HILTI HY-20 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	7/16" DIA, HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

CONDUIT WALL MOUNT

SCALE: NTS

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





(608) 643-4100 www.ramaker.com

PREPARED FOR:



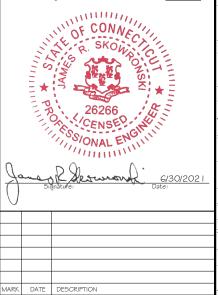
CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc.

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

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



DATE 6/30/2021

MANCHESTER CENTRAL

FA ID # 10071105 239 MIDDLE TURNPIKE EAST

MANCHESTER, CT 06040

ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

50182 SHEET E-3

2'-6"

SCALE: NTS

SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

Standby Power Rating

30 kW, 38 kVA, 60 Hz

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







Image used for illustration purposes only

GENERAC INDUSTRIAL

### **Codes and Standards**

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



UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



**SAE J1349** 



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001

NEMA ICS10, MG1, 250, ICS6, AB1



(ANSI

ANSI C62.41

### **Powering Ahead**

For over 50 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

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

### SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

### STANDARD FEATURES

### **ENGINE SYSTEM**

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

### **Fuel System**

- Fuel Lockoff Solenoid
- Primary Fuel Filter

### **Cooling System**

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

### **Electrical System**

- Battery Charging Alternator
- Battery Cables
- Battery Tray

CONTROL SYSTEM

GENERAC

Program Functions

Programmable Crank Limiter

• 7-Day Programmable Exerciser

RS-232/485 Communications

2-Wire Start Capability

Digital H Control Panel- Dual 4x20 Display

Special Applications Programmable Logic Controller

· All Phase Sensing Digital Voltage Regulator

• Date/Time Fault History (Event Log)

Isochronous Governor Control

· Waterproof/Sealed Connectors

- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

### **ALTERNATOR SYSTEM**

- UL2200 GENprotect<sup>™</sup>
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Rotor Dynamically Spin Balanced
- Amortisseur Winding (3-Phase Only)
- Full Load Capacity Alternator

### Protective Thermal Switch

**GENERATOR SET** 

- Internal Genset Vibration Isolation
- . Separation of Circuits High/Low Voltage
- Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Unit Only)

### **ENCLOSURE (If Selected)**

- Rust-Proof Fasteners with Nylon Washers to
- High Performance Sound-Absorbing Material (Sound Attenuation Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ Textured Polyester Powder Coat Paint

### FUEL TANKS (If Selected)

- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Check Valve In Supply and Return Lines
- RhinoCoat™ Textured Polyester Powder Coat Paint
- Stainless Steel Hardware

### · Audible Alarms and Shutdowns

- Not in Auto (Flashing Light) Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- · Customizable Alarms, Warnings, and Events
- Modbus<sup>®</sup> Protocol
- Predictive Maintenance Algorithm Sealed Boards
- Password Parameter Adjustment Protection Single Point Ground
- 16 Channel Remote Trending
- 0.2 msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

### **Full System Status Display**

- Power Output (kW)
- Power Factor
- · kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents

- Oil Pressure
- Coolant Level
- Engine Speed
- · Battery Voltage

- · Coolant Temperature
- Engine Overspeed
- Battery Voltage
- Snap Shots of Key Operation Parameters During Alarms and Warnings

GENERAC INDUSTRIAL

- UL 142/ULC S601

- Rupture Basin Alarm
- Fuel Level

- Coolant Temperature
- Frequency

### **Alarms and Warnings**

- Oil Pressure
- Coolant Level
- Alarms and Warnings Time and Date Stamped
- Alarms and Warnings Spelled Out (No Alarm Codes)

PREPARED FOR:

RAMAKER

(608) 643-4100 www.ramaker.com

CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc. GENERAL DYNAMICS 661 MOORE RD STE 110

KING OF PRUSSIA, PA 19406

hereby certify that this plan, specification, or report was prepare. y me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



DATE 6/30/2021

MANCHESTER CENTRAL FA ID # 1007 | 105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

RK DATE DESCRIPTION

GENERAC 30KW GENERATOR **SPECIFICATIONS** 

SCALE: NONE

50182

GENERAC 30KW GENERATOR SPECIFICATIONS

F-4

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET GENERAC INDUSTRIAL

**EPA Certified Stationary Emergency** 

### **CONFIGURABLE OPTIONS**

### **ENGINE SYSTEM**

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

### **FUEL SYSTEM**

NPT Flexible Fuel Line

### **ELECTRICAL SYSTEM**

- 10A UL Listed Battery Charger
- Battery Warmer

### ALTERNATOR SYSTEM

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

### **GENERATOR SET**

- O 8 Position Load Center

**ENGINEERED OPTIONS** 

Coolant Heater Isolation Ball Valves

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

O Pad Vibration Isolation

**ENGINE SYSTEM** 

Fluid Containment Pan

CONTROL SYSTEM

- Extended Factory Testing

### CIRCUIT BREAKER OPTIONS

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

### ENCLOSURE

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

### WARRANTY (Standby Gensets Only)

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

### CONTROL SYSTEM

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

### FUEL TANKS (Size On Last Page)

- O 8 in (203.2 mm) Fill Extension
- O 13 in (330.2 mm) Fill Extension
- O 19 in (482.6 mm) Fill Extension
- Overfill Protection Valve

O Fire Rated Stainless Steel Fuel Hose

- O 5 Gallon Spill Box Return Hose
- O 5 Gallon Spill Box
- Tank Risers
- O Fuel Level Switch and Alarm
- 12' Vent System

### **ALTERNATOR SYSTEM**

O 3rd Breaker System

### **GENERATOR SET**

O Special Testing

### **FUEL TANKS**

O UL2085 Tank

Vent Extensions

- Stainless Steel Tanks
- Special Fuel Tanks

### SD030 | 2.2L | 30 kW

INDUSTRIAL DIESEL GENERATOR SET

**EPA Certified Stationary Emergency** 

### APPLICATION AND ENGINEERING DATA

### **ENGINE SPECIFICATIONS**

- 1	$\mathbf{r}$	n	n	0	ma	

/lake	Perkins
PA Emissions Compliance	Stationary Emergency
PA Emissions Reference	See Emission Data Sheet
Sylinder #	4
ype	In-Line
Displacement - in <sup>3</sup> (L)	135 (2.22)
lore - in (mm)	3.3 (84)
stroke - in (mm)	3.9 (100)
Compression Ratio	23.3:1
ntake Air Method	Turbocharged
Sylinder Head	Cast Iron
Piston Type	Aluminum
rankshaft Type	Forged Steel

### **Engine Governing**

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	±0.5%

Lubrication System			
Oil Pump Type	Gear		
Oil Filter Type	Full-Flow		
Crankcase Capacity - qt (L)	11.2 (10.6)		

### Cooling System

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

GENERAC INDUSTRIAL

### Fuel System

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

### **Engine Electrical System**

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

### **ALTERNATOR SPECIFICATIONS**

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

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

# RAMAKER (608) 643-4100 www.ramaker.com PREPARED FOR:

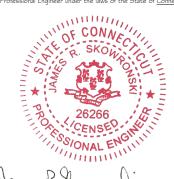
CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was prepare, by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



RK DATE DESCRIPTION

DATE 6/30/2021

MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

50182 F-4 I

GENERAC 30KW GENERATOR SPECIFICATIONS SCALE: NTS

**TTS Series Switches 200 Amps** 

**600 VAC** 

**GENERAC**° INDUSTRIAL

TAS200 TAS200

**200A Automatic Transfer Switch** 

**TAS200** 

1 of 3 2 of 3

# The Generac TAS200 Automatic Transfer Switch

Flexibility for multiple application installations

Multiple generator support with 3 source panel

Designed with a 6 inch touch screen controller for improved user interface

Camlock functionality for mobile generator sources



### **Features**

- STEEL CONSTRUCTION
- NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS
- STAINLESS STEEL HARDWARE
- CAMLOCK "QUICK CONNECT" CAPABILITY
- OPERATIONAL STATUS VIEW VIA **6 INCH TOUCH SCREEN**
- TEST FUNCTION FAST TEST & NORMAL TEST
- UL1008 LISTED FOR EMERGENCY SYSTEMS

### **Optional Features**

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

### **Codes and Standards**

Generac products are designed to the following standards:



UL1008, UL508, UL50. CSA C22.2 No. 178



NEC 700, 701 and 702



**NEMA 250** 

### **Application and Engineering Data**

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

Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker
Dieakei	Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #6 AWG
Output to Site	350MCM - #6 AWG
Generator Annunciator Connector	Deutsch DTM04-12PA-L012
	Generator Run Alarm
	Generator Fail — Shutdown Alarm
Alarm Tarminal Board	Generator Fail – Non Shutdown Alarm
Alarm Terminal Board	Low Fuel Alarm
	Generator Theft Alarm
	AC Utility Fail Alarm

Camlock Component		
Camlock Component	ock Component Shipped loose for multiple installation options	
Dimensions	9" W x 9.4" D x 24.25" H	GENERACI
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground	
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground	
	Uses 4 CH E1016 Male Connectors	
	Mating Connector – CH E1016 Female	



PREPARED FOR:



CONSULTANT:

### GENERAL DYNAMICS

Information Technology, Inc.

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

hereby certify that this plan, specification, or report was prepare by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



MARK DATE DESCRIPTION DATE ISSUED 6/30/2021

### MANCHESTER CENTRAL FA ID # 10071105

239 MIDDLE TURNPIKE EAST MANCHESTER, CT 06040

GENERAC ATS SPECIFICATIONS

SCALE: NONE

50182 E-5

GENERAC ATS SPECIFICATIONS



### **TTS Control Systems**

TAS200

### **Touch Screen Interface**





### INDICATORS AND BUTTONS

- System Ready indicator
- · Standby Operating indicator
- Utility Available indicator
- · GEN/UTIL Switch Position indicator
- TVSS status

- Normal Test button
- Fast Test button
- Return to Normal button
- Reset button
- Exercising indicator

### **DETAILS SCREEN**

### System Settings:

- System Voltage/Phases:
- 120/240V single phase (standard)
- 120/208V three phase (optional)
- 120/240V three phase (optional)
- Utility Fail Monitor:
- Under Voltage: 75-95% of nominal voltage
- Over Voltage: 105%-125% of nominal voltage
- Pickup (hysteresis): fixed at 5 volts
- Delay time: 0-60s
- Utility Interrupt Delay: 0-60s
- Return to Utility Timer: 1-30 minutes
- Transfer:
- In-phase, or
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments

### **Engine Settings:**

- Engine Warm-up timer: 0-20 minutes
- Generator Load Accept:
- Time-Delay-Neutral at 0.0-10.0s in 1 second increments
- Voltage: 85-95% of nominal
- Frequency: 85-95% of nominal
- Engine Minimum Run Timer: 5-30 minutes
- Engine Cooldown Timer: 0-20 minutes

### Exercise Settings:

- Time of day
- · Day of week
- Exercise:
- Exercise with/without load
- Exercise once every 1, 2, or 4 weeks.
- Exercise time-of-day
- Exercise day of week
- Exercise duration: 15-30 minutes

### Screen Settings:

- Brightness & Contrast button
- Screen Calibration button
- Startup/Clean screen

### Diagnostics:

- Digital I/O bits status
- Voltage A/D readings

### Mimic Diagram:

- System Ready
- · Transfer switch position
- Utility available
- Standby available
- Maintenance/Auto switch position
- Generator source TS position
- TVSS status

Generac Power Systems, Inc. • S45 W29290 HWY. 59, Waukesha, WI 53189 • generac.com ©2013 Generac Power Systems, Inc. All rights reserved. All specifications are subject to change without notice. Bulletin 0195670SBY-B / Printed in U.S.A. 03/13/13



PREPARED FOR:



CONSULTANT:

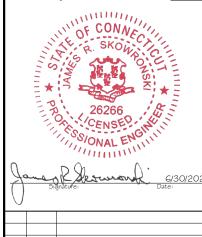
### GENERAL DYNAMICS

Information Technology, Inc.

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

Certification # Seal:

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of <u>Connecticut</u>.



 MARK
 DATE
 DESCRIPTION

 ISSUE
 FINAL
 DATE ISSUED
 6/30/2021

 PROJECT TITLE:
 FINAL
 DATE ISSUED
 6/30/2021

MANCHESTER CENTRAL

FA ID # 1007 | 105

PROJECT INFORMATION:
239 MIDDLE TURNPIKE EAST

MANCHESTER, CT 06040

GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT 50182
SHEET E-5. I

### 239 MIDDLE TURNPIKE EAST

Location 239 MIDDLE TURNPIKE EAST Mblu 92/3950/239//

Acct# 395000239 Owner MANCHESTER TOWN OF

**Assessment** \$4,243,700 **Appraisal** \$6,062,100

PID 10705 Building Count 2

DISTRICT X CONCRETE

### **Current Value**

Appraisal				
Valuation Year Improvements Land Total				
2020	\$5,573,900	\$488,200	\$6,062,100	
	Assessment			
Valuation Year	Improvements	Land	Total	
2020	\$3,901,900	\$341,800	\$4,243,700	

### **Owner of Record**

 Owner
 MANCHESTER TOWN OF
 Sale Price

 Address
 41 CENTER ST
 Certificate

 41 CENTER ST
 Certificate
 C

 MANCHESTER, CT 06040-5096
 Book & Page
 /0

Sale Date Instrument \$0

### **Ownership History**

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
MANCHESTER TOWN OF	\$0	С	/0		

### **Building Information**

### **Building 1: Section 1**

 Year Built:
 1995

 Living Area:
 46,701

 Replacement Cost:
 \$6,306,043

### **Replacement Cost**

Less Depreciation: \$5,044,800

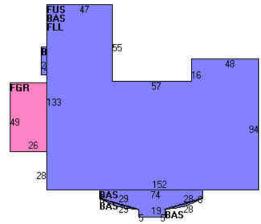
Building Attributes		
Field	Description	
Style:	Other Municip	
Model	Ind/Comm	
Grade	Average +10	
Stories:	2	
Occupancy	1.00	
Exterior Wall 1	Brick Veneer	
Exterior Wall 2	Stucco/Masonry	
Roof Structure	Flat	
Roof Cover	Tar + Gravel	
Interior Wall 1	Minim/Masonry	
Interior Wall 2	Drywall/Sheetr	
Interior Floor 1	Carpet	
Interior Floor 2	Tile/Vinyl Cmp	
Heating Fuel	Gas	
Heating Type	Forced Air-Duc	
AC Type	Central	
Struct Class		
Bldg Use	Municipal 96	
Total Rooms		
Total Bedrms	00	
Total Baths	0	
1st Floor Use:	9011	
Heat/AC	Heat/AC Packag	
Frame Type	Steel	
Baths/Plumbing	Average	
Ceiling/Wall	Susp Ceil & WI	
Rooms/Prtns	Average	
Wall Height	10.00	
% Comn Wall	0.00	

### **Building Photo**



(http://images.vgsi.com/photos2/ManchesterCTPhotos/\\00\03\29\13.jpg)

### **Building Layout**



(http://images.vgsi.com/photos2/ManchesterCTPhotos//Sketches/10705\_1

	Building Sub-Areas (sq ft)		
Code	Description	Gross Area	Living Area
BAS	First Floor	16,283	16,283
FLL	Finished Lower Level	15,209	15,209
FUS	Upper Story, Finished	15,209	15,209
FGR	Garage	1,274	0
		47,975	46,701

### **Building 2 : Section 1**

 Year Built:
 1975

 Living Area:
 7,000

 Replacement Cost:
 \$506,690

**Replacement Cost** 

Less Depreciation: \$309,100

Building Attributes : Bldg 2 of 2		
	Field	Description

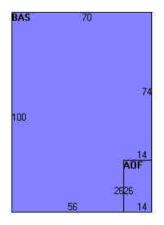
Style:	Service Shop
Model	Ind/Comm
Grade	Average
Stories:	1
Occupancy	1.00
Exterior Wall 1	Brick Veneer
Exterior Wall 2	Brick verteer
Roof Structure	Cable/His
	Gable/Hip
Roof Cover	Asphalt Shingl
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Concr-Finished
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Struct Class	
Bldg Use	Municipal 96
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	9011
Heat/AC	Heat/AC Packag
Frame Type	Masonry
Baths/Plumbing	Average
Ceiling/Wall	Ceil & Min WI
Rooms/Prtns	Average
Wall Height	19.00
% Comn Wall	0.00

### **Building Photo**



(http://images.vgsi.com/photos2/ManchesterCTPhotos/\\00\03\29\14.jpg)

### **Building Layout**



Building Sub-Areas (sq ft) <u>Legen</u>			
Code	Description	Gross Area	Living Area
BAS	First Floor	6,636	6,636
AOF	Office, (Average)	364	364
		7,000	7,000

### **Extra Features**

Extra Features <u>Leg</u>				
Code	Description	Size	Value	Bldg #
MEZ1	Mezzanine-Unfin	1900.00 S.F.	\$13,300	2
SPR1	Sprinklers-Wet	47975.00 S.F.	\$54,000	1

### Land

_and Use	Land Line Valuation

Use Code 901l

Description Municipal 96

Zone RA
Neighborhood 4000
Alt Land Appr No

Category

 Size (Acres)
 3.97

 Frontage
 0

 Depth
 0

**Assessed Value** \$341,800 **Appraised Value** \$488,200

### Outbuildings

Outbuildings				<u>Legend</u>		
Code	Description	Sub Code	Sub Description	Size	Value	Bldg #
PAV1	Paving Asphalt			97700.00 S.F.	\$122,100	1
FN4	Fence 8' Chain			128.00 L.F.	\$1,900	1
LT1	Lights 1Fix			15.00 UNITS	\$12,900	1
CNP1	Canopy Ave			360.00 S.F.	\$7,800	1
SHD2	Shed W/Imp			120.00 S.F.	\$1,300	1
SHD1	Shed			168.00 S.F.	\$1,500	1
FN3	Fence 6' Chain			160.00 L.F.	\$3,700	1
SHD2	Shed W/Imp			140.00 S.F.	\$1,500	1

### **Valuation History**

Appraisal					
Valuation Year	Improvements	Land	Total		
2020	\$5,573,900	\$488,200	\$6,062,100		
2015	\$4,365,100	\$488,200	\$4,853,300		
2010	\$4,125,100	\$423,400	\$4,548,500		

Assessment					
Valuation Year	Improvements	Land	Total		
2020	\$3,901,900	\$341,800	\$4,243,700		
2015	\$3,055,600	\$341,800	\$3,397,400		
2010	\$2,887,500	\$296,400	\$3,183,900		

# Town of Manchester, CT

Address: 239 MIDDLE TURNPIKE EAST

**RPKEY:** 395000239

### **Property Information:**

**Mailing** 239 MIDDLE TPKE E **Address:** MANCHESTER, CT

**Owner Name:**TOWN OF MANCHESTER

**Owner** 41 CENTER ST

Address: MANCHESTER, CT 06040-5096

**Land Class:** Municipal 94

Land Use Code: 901

**Zoning:** RA

Acreage: 3.97

Year Built: 1995

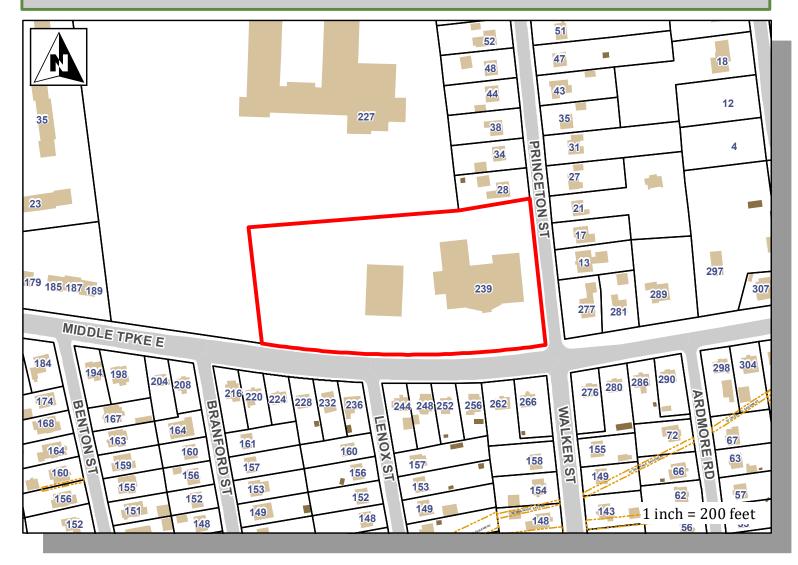
**Appraisal:** 6062100

**Assessment:** 4243700

Sale Price: \$0.00

**Sale Date:** 00/00/0000

Book/Page: 0/0



# ATTACHMENT 2

### TOWN OF MANCHESTER PLANNING DEPARTMENT

TO:

Steven R. Werbner, General Manager

FROM: Mark Pellegrini, Director of Neighborhood Services and Economic Development

and Economic Development

DATE:

March 21, 2002

RE:

Mandatory Referral Report

Police Station Radio Tower and Parking Lot Expansion (MR-0201)

At its meeting of March 18, 2002 the Planning and Zoning Commission voted unanimously to endorse the proposal to construct a monopole tower at the Manchester Police Headquarters, dismantle the existing tower, and build a new parking lot as shown on plans submitted by the Manchester Police Department dated September 11, 2001 and amended to September 26, 2001. In making this decision the Planning and Zoning Commission considered my memorandum of March 14, 2002 (copy attached) as well as a review of the site plan and photo simulations of the proposed new tower presented by Lt. Marc Montminy at their meeting.

MP/s

R:\SHARON09\MARK\MEMOS\Werbner-MR0102.doc

Attach.

## TOWN OF MANCHESTER PLANNING DEPARTMENT

**TO:** Planning and Zoning Commission

FROM: Mark Pellegrini, Director of Neighborhood Services

And Economic Development

**DATE:** March 14, 2002

**RE:** Mandatory Referral Report

Police Station Radio Tower and Parking Lot Expansion (MR-0201)

The Planning and Zoning Commission is being asked to report on a proposal developed by the Manchester Police Department to replace its current radio tower and build a new parking lot in the location of the current tower at the Police Headquarters.

### Description of Project

The police department has an existing 190' high lattice-type radio tower to serve its radio communications needs. The department wishes to replace this tower and equipment. They also have experienced parking problems, especially on Princeton Street, during daytime hours. The activity at the department's headquarters has created a greater demand for daytime parking than originally anticipated. Relocating the tower would provide room to add parking in front of the garage along Middle Turnpike. Attached is a site plan showing the proposed new tower location and the new parking lot, as well as a series of photo simulations showing the potential visual impact of the new monopole tower proposed to be constructed here.

There is no PZC approval aside from this mandatory referral report required for this project. The parking lot is less than one-half acre and therefore no erosion control plan will be needed. The new monopole tower is a permitted accessory structure and will only require a building permit and zoning permit from the Zoning Enforcement Officer.

### Construction and Other Uses

The Police Department, through the Town, issued a request for proposals for the construction of the replacement tower. The proposal favored by the department was received from Sprint PCS. Under this proposal Sprint would pay for the construction of the new tower, provide new radio and related equipment to allow for a "hot" transfer so there will be no interruption in police communication during the switch-over from one tower to the other. Sprint PCS will also construct the parking lot and landscaping as proposed on the attached plans. In exchange for

these services, the police department will allow Sprint to locate a personal communications system antenna array on the tower and related hardware on the ground near the tower. The tower will also be capable of holding additional PCS arrays at the discretion of the Town.

### Recommendation

The proposed improvements to the police department's headquarters site would be generally consistent with our Plan of Conservation and Development. The police department does require a tall communications antenna for its communication needs, which has become more sophisticated as communications and computing technology have evolved. It would also be beneficial to have more on-site parking at the police department to relive the traffic problems experienced on Princeton Street and to a lesser extent on Middle Turnpike during certain times of the day.

The construction of a 190±' monopole in this location will have some visual impact. It is possible through the proposed planting around the base of the unit and equipment cabinets to minimize the view of the lowest portions of the tower from passing motorists, but this area would primarily be visible to people driving into the Illing Middle School. The upper portions of the tower will be visible from various locations in the vicinity as shown on the attached photo simulations. The only alternative to a monopole tower would be a lattice-type tower, which in some respects is less intrusive since there is so much open air around the structure itself. However, we have been advised that such towers may become less attractive if multiple antenna arrays are placed on them and increased cabling is run up to the arrays. Lattice towers also require a larger footprint.

MP/s
R\SHARON09\PZCMEMOS\18MAR02-PZC memos\MR-0201.doc

Attach.

# ATTACHMENT 3

### CERTIFICATE OF SERVICE

I herby certify that on the 12<sup>th</sup> day of July, 2021 one original and two copies of AT&T's Exempt Modification Request was sent to the Connecticut Siting Council electronically and via overnight mail and a copy of the same was sent via Certificate of Mailing to:

Jay Moran, Mayor Town of Manchester 41 Center Street Manchester, CT 06040

Gary Anderson, AICP Town of Manchester Planning Department Lincoln Center, Second Floor 494 Main Street, PO Box 191 Manchester, CT 06045-0191

Scott Shanley Office of the General Manager, Town of Manchester 41 Center Street Manchester, CT 06040

Dated: July 12, 2021

Daniel Patrick Cuddy & Feder LLP

445 Hamilton Ave, 14<sup>th</sup> Floor

White Plains, NY 10601

(914) 761-1300

Attorneys for the Applicant