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3/17/20

BY OVERNIGHT FED EX

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
315 Old Hartford Road, Colchester, CT 06415
Lat.: 41.580483°; Long.: -72.349845°

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 at 315 Old Hartford Road in Colchester, Connecticut. AT&T is the owner of both the existing facility as well as the underlying property. 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 20kW 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



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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 customers during a power outage” because certain companies had limited backup generator capacity.¹ 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.”² The planned modifications will ensure continuity of services by reinforcing AT&T’s back-up 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”;³
- 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.

The Council approved the existing facility as a replacement of the previous 60’ lattice tower by Petition Number 605 on February 11, 2003 enclosed as Attachment 2. This modification complies with the aforementioned approval.

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 fenced equipment compound. Thus, AT&T respectfully requests

¹ See Council Administrative Notice Item No. 39

² See Council Administrative Notice Item No. 39.

³ R.C.S.A. § 22a-69-1.8.



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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. § 16-50j-73, a copy of this letter and enclosure are being sent to the Town First Selectwoman Mary Bylone as well as the property owner and structure owner identified above. Proof of notification 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,

A handwritten signature in cursive script that reads "Lucia Chiochio".

Lucia Chiochio

Attachments

cc: First Selectwoman Mary Bylone, Town of Colchester
AT&T (as owner of underlying property and structure)
General Dynamics Information Technology
Daniel Patrick, Esq. & Julie Durkin, Cuddy & Feder, LLP

ATTACHMENT 1



at&t Mobility

SITE NAME: COLCHESTER NORTH CENTRAL
FA LOCATION CODE: 10070973
CROWN BUN: 842860

GENERATOR PROJECT
20KW GENERAC DIESEL GENERATOR
200A GENERAC ATS

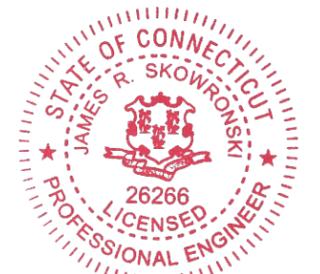
315 OLD HARTFORD ROAD
COLCHESTER, CT 06415

RAMAKER & ASSOCIATES, INC.
100% EMPLOYEE-OWNED
855 Community Dr, Sauk City, WI 53583
608-643-4100 www.Ramaker.com
Sauk City, WI • Willmar, MN
Woodcliff Lake, NJ • Bayamon, PR



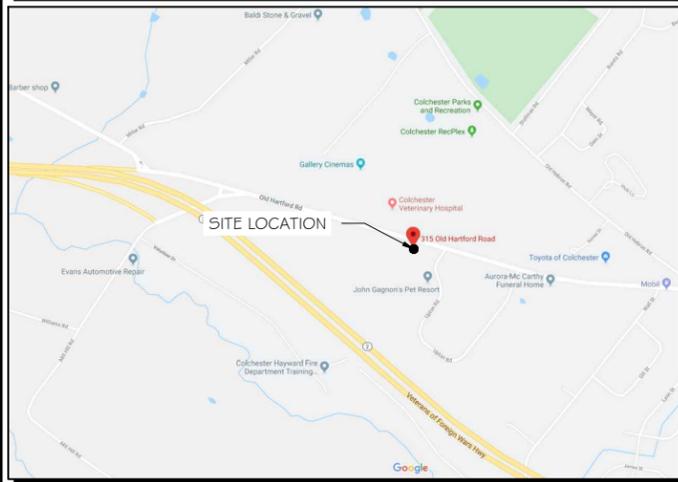
PREPARED FOR:
GENERAL DYNAMICS
Information Technology, Inc.
GENERAL DYNAMICS
661 MOORE RD STE 110
KING OF PRUSSIA, PA 19406

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 Connecticut.



James R. Skowronski
Signature: _____ Date: 3/12/2020

VICINITY MAP



SCOPE OF WORK

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

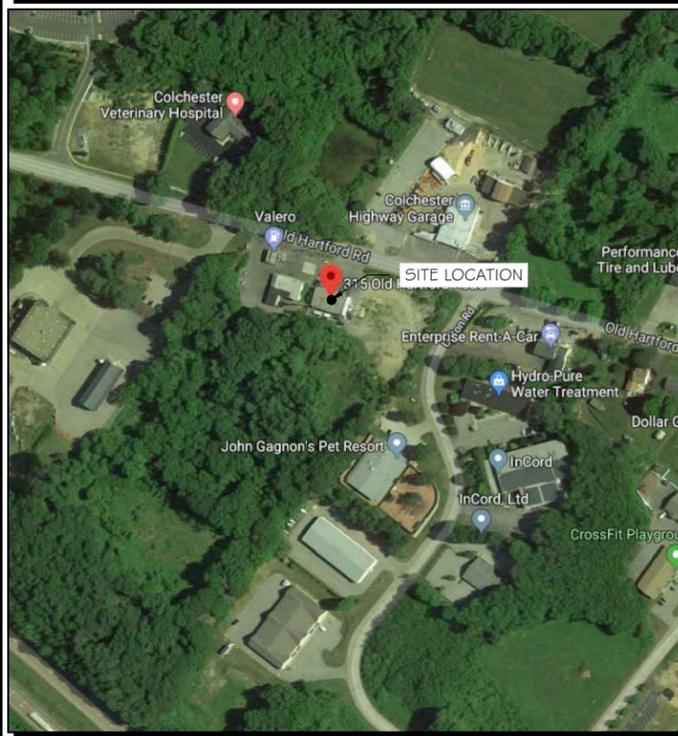
APPLICABLE BUILDING CODE & STANDARDS

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

- INTERNATIONAL BUILDING CODE 2015
- NATIONAL ELECTRIC CODE 2014
- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- 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
- TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

MEMBER
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.

AERIAL VIEW OF SITE



PROJECT INFORMATION

PROJECT MANAGER:
JOE JARVIS
MARKET LEAD
GENERAL DYNAMICS WIRELESS SERVICES
661 MOORE RD STE 110
KING OF PRUSSIA, PA 19406
EMAIL: joseph.jarvis@gdit.com

SITE DATA:
SITE NAME: COLCHESTER NORTH CENTRAL
FA NUMBER: 10070973

TOWER OWNER:
AT&T MOBILITY
550 COCHITUATE ROAD, SUITE 13 #14
FRAMINGHAM, MA 01701

PROPERTY OWNER:
315 COLCHESTER REALTY LLC
425 GOLD STAR HIGHWAY
GROTON, CT 06340

ADDRESS:
315 OLD HARTFORD ROAD
COLCHESTER, CT 06415

COUNTY: NEW LONDON

LAT.: 41.580483°
LONG.: -72.349845°

GROUND ELEVATION: 428 FT AMSL

ENGINEER:
RAMAKER & ASSOCIATES, INC.
855 COMMUNITY DRIVE
SAUK CITY, WI 53583
PH.: (608) 643-4100
FAX: (608) 643-7999
CONTACT: TYLER BEATTY
EMAIL: tbeatty@ramaker.com

APPLICANT INFORMATION:
AT&T MOBILITY
7150 STANDARD DR.
HANOVER, MD 21076

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

THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO THE CLIENT IS STRICTLY PROHIBITED.

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SIGNATURE BLOCK

AT&T MGR.	DATE
GENERAL DYNAMICS CONSTRUCTION MGR.	DATE
SITE ACQUISITION	DATE

MARK	DATE	REVISED CD's	DESCRIPTION
1	3/12/20		
ISSUE PHASE	FINAL	DATE ISSUED	02/24/2020
PROJECT TITLE: COLCHESTER NORTH CENTRAL FA ID # 10070973			
PROJECT INFORMATION: 315 OLD HARTFORD ROAD COLCHESTER, CT 06415			
SHEET TITLE: TITLE SHEET			
SCALE: NONE			
PROJECT NUMBER	45800		
SHEET NUMBER	T-1		

NOTES TO SUBCONTRACTOR:

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

2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK.

4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

5. SITE GROUNDING SHALL COMPLY WITH AT&T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T TOWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF TOWER.

6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.

7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.

8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.

9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.

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

11. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.

12. CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR.

13. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

14. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD.

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

16. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.

17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

GENERAL NOTES:

1. THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER AND TOWER.

2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.

3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP

ACCESS IS REQUIRED)

4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.

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

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

7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.

8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.

9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

ELECTRICAL NOTES:

A. GENERAL

1. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.

2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.

3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED

4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED, THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.

5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.

6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.

7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
a. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
b. ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS)
c. ETL (ELECTRICAL TESTING LABORATORY)
d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
j. UL (UNDERWRITER'S LABORATORY)

10. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.

11. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.

12. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

B. WIRING/CONDUIT

1. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) EXIST IN A CONDUIT RUN.

2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

3. SCHEDULE 80 PVC CONDUIT SHALL BE USED ABOVE GROUND, WHERE ABOVE GRADE IS DEFINED AS THE GROUND OF THE TURN-UP

4. BELL END OR TERMINAL ADAPTER MUST BE INSTALLED ON END OF PVC CONDUIT PER NEC 352.46. 300.4 F, (3)

5. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 1 2" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.

6. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.

7. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.

8. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.

9. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

11. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.

12. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.

13. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

C. EQUIPMENT

1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.

2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED.

D. GROUNDING

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

2. ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING BONDING.

3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.

4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.

5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.

6. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.

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

9. PROVIDE PRE AND POST GROUND TEST RESULTS, USING CLAMP-ON TESTER. TEST RESULTS SHALL BE PHOTOS WITH DIGITAL TIME AND GPS STAMPED/EMBEDDED.

E. INSPECTION/DOCUMENTATION

1. THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.

2. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RECEPTIVITY (MAX. 5 OHMS).

3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY AT&T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL.

4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.

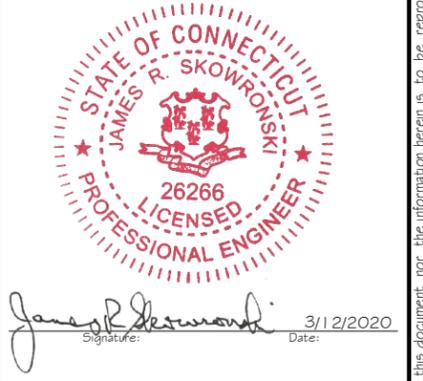
RAMAKER & ASSOCIATES, INC.
100% EMPLOYEE-OWNED
855 Community Dr, Sauk City, WI 53583
608-643-4100 www.Ramaker.com
Sauk City, WI • Willmar, MN
Woodcliff Lake, NJ • Bayamon, PR

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 Connecticut.



Signature: *James R. Skowronski* Date: 3/12/2020

MARK	DATE	DESCRIPTION
1	3/12/20	REVISED CDs
ISSUE PHASE	FINAL	DATE ISSUED 02/24/2020

PROJECT TITLE:
COLCHESTER NORTH CENTRAL
FA ID # 10070973

PROJECT INFORMATION:
315 OLD HARTFORD ROAD
COLCHESTER, CT 06415

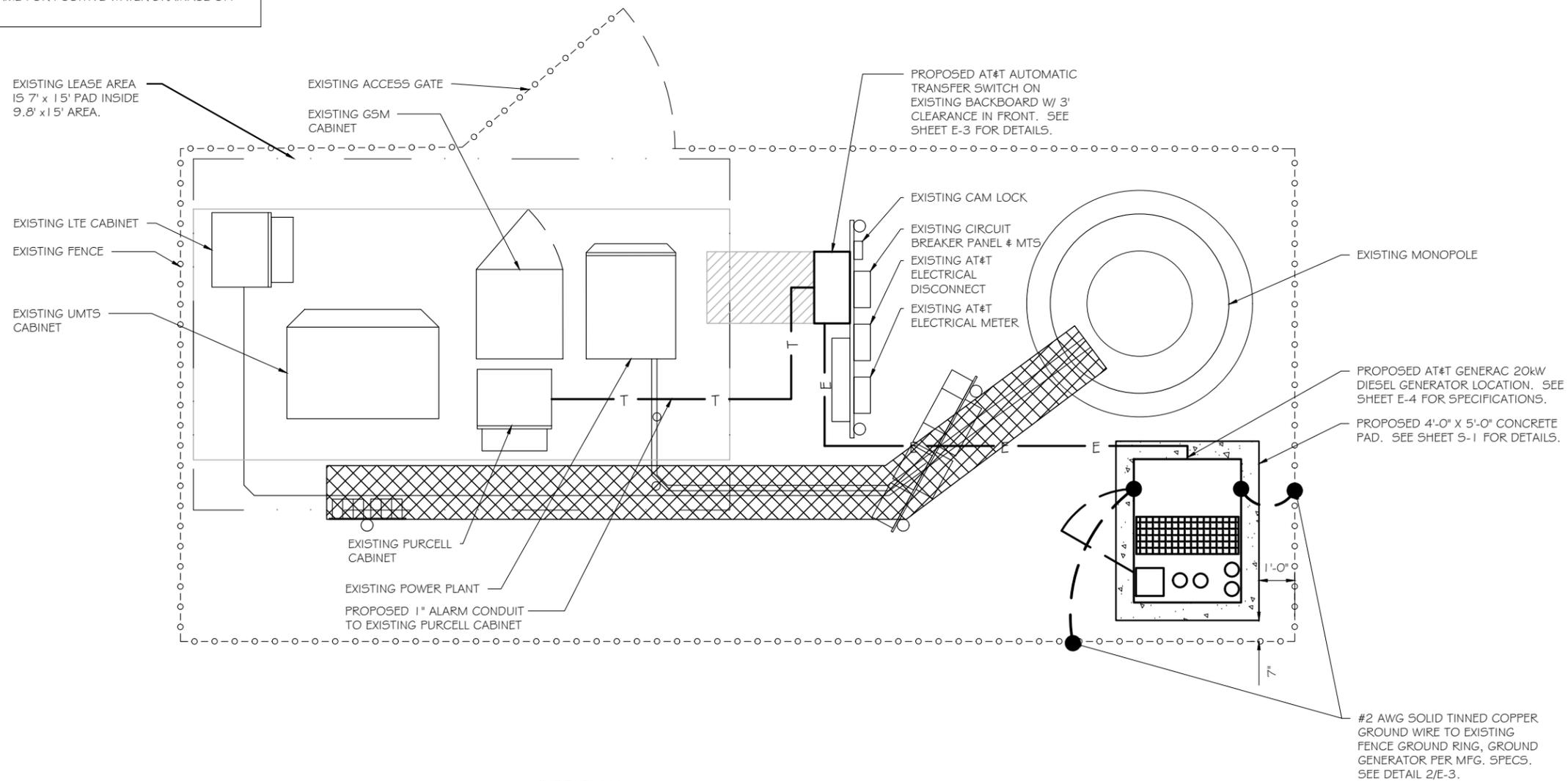
SHEET TITLE:
GENERAL NOTES

SCALE: NONE

PROJECT NUMBER: 45800
SHEET NUMBER: N-1

SCOPE OF WORK DETAILS

- GENERAL:**
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS # INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
 - NEW 4'-0" X 5'-0" CONCRETE PAD PROVIDED # INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
 - NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS # INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 # E-5.
 - CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
 - CONTRACTOR SHALL RESTORE # REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION
- CONDUITS:**
- INSTALL PULL STRING IN EACH CONDUIT
 - (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 # E-3.
 - (2) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED # INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 # E-3.
 - (1) NEW 1" ALARM CONDUIT # CABLING PROVIDED # INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 # E-3.
- GROUNDING:**
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.
- H-FRAME:**
- PROVIDE NEW H-FRAME IF REQUIRED, MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME. USE ALL GALVANIZED COMPONENTS, WHITE PLASTIC END CAPS ON UNISTRUTS, WEATHER CAPS ON TOPS OF PIPE AND CONCRETE SUPPORTS BELOW FROST LINE. TOP OF FOOTING SHOULD BE AT LEAST 2" ABOVE EXISTING GROUND LEVEL. SLOPE THE GROUND AWAY FROM THE H-FRAME FOR POSITIVE WATER DRAINAGE OFF THE FORM.



SITE PLAN
 SCALE: 1" = 3.75'

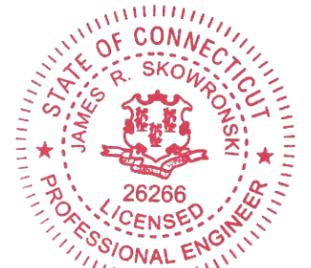


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PREPARED FOR:

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



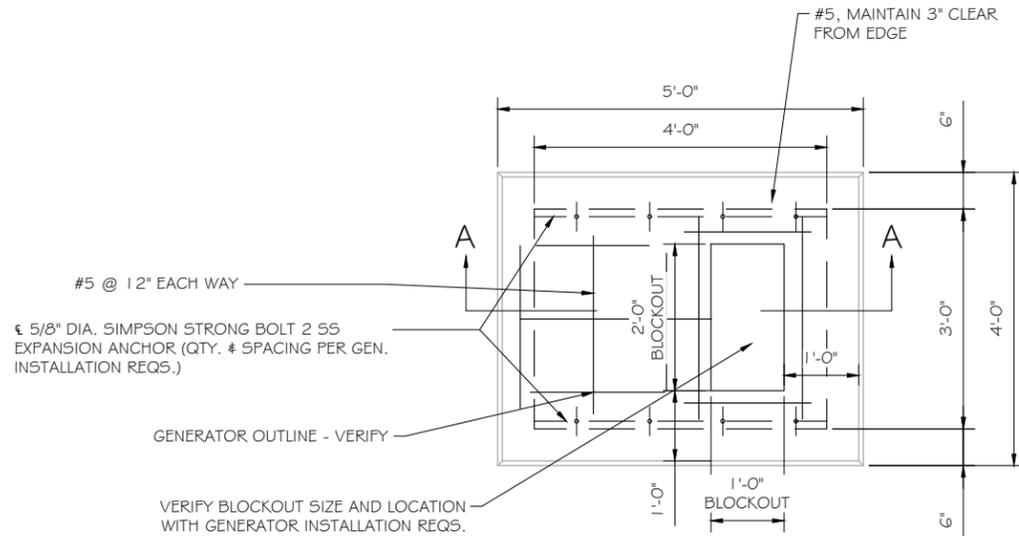
Signature: *James P. Skowronski* Date: 3/12/2020

MARK	DATE	REVISION DESCRIPTION
1	3/12/20	REVISED CD's

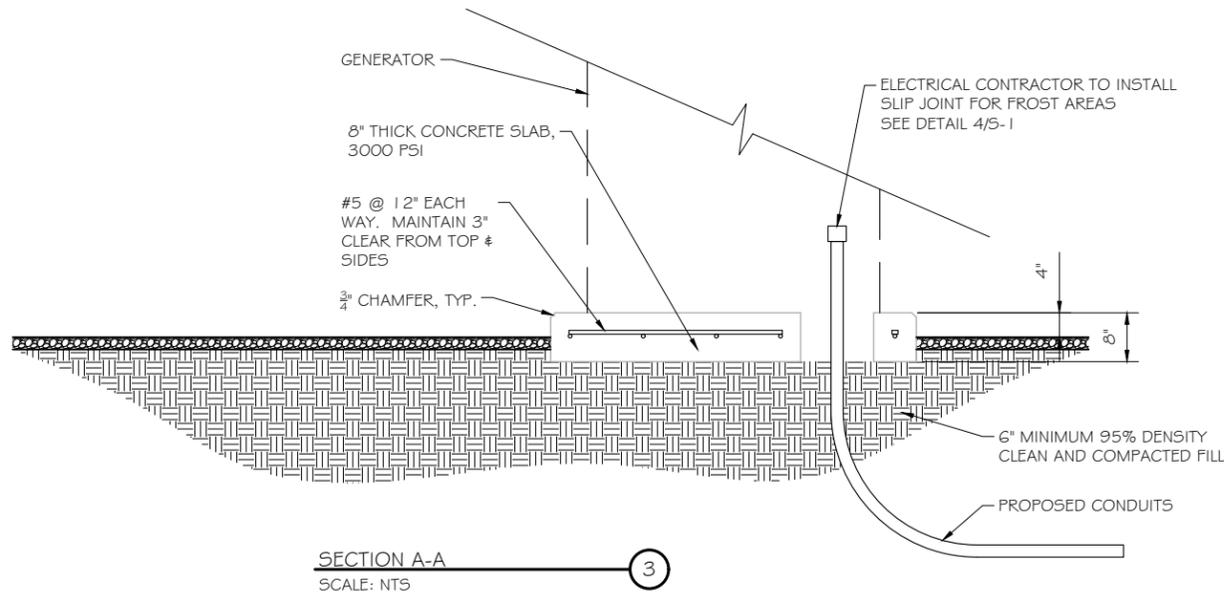
ISSUE PHASE: FINAL DATE ISSUED: 02/24/2020
 PROJECT TITLE:
COLCHESTER NORTH CENTRAL
 FA ID # 10070973

SHEET TITLE:
 SITE PLAN

PROJECT NUMBER: 45800
 SHEET NUMBER: A-1



FOUNDATION PLAN
 SCALE: NTS

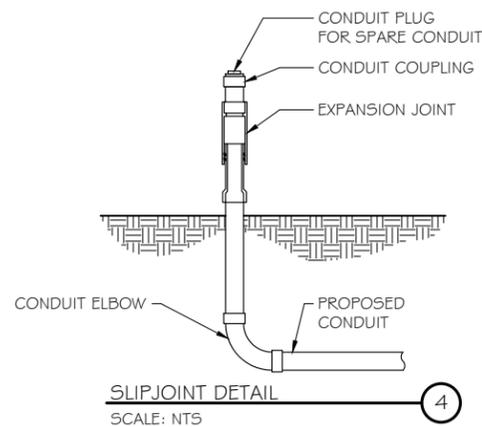


SECTION A-A
 SCALE: NTS

DOUBLE WALL FUEL TANK BASE SPECIFICATION

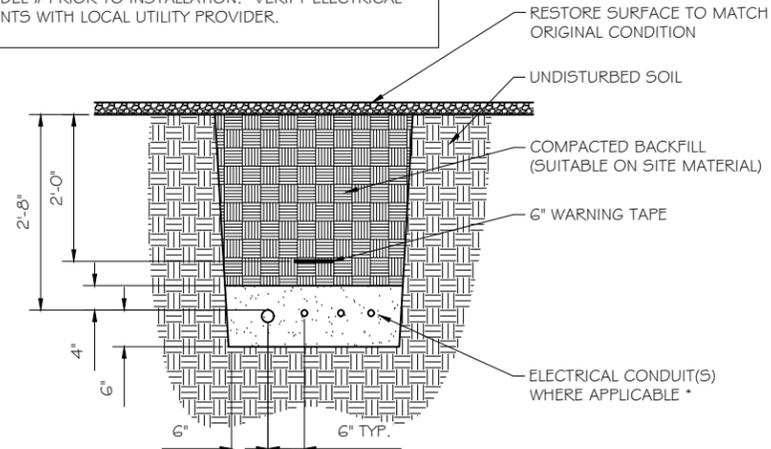
REF: ATT 30KW GENERATOR PACKAGE
 UL REGISTRATION NUMBER: MH18459
 U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION
 FUEL TANK BASE CONSTRUCTION:

- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
- ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING
- SUB BASE TANK TESTING: PRIMARY TANK & SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS
- FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM
- 40% REMAINING FOR ALARM
- 20% REMAINING FOR SHUT-DOWN
- FACTORY PRE-SET AT 95% FULL FOR ALARM
- FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.



SLIPJOINT DETAIL
 SCALE: NTS

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



* SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS

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

UTILITY CONDUIT TRENCH
 SCALE: NTS

STRUCTURAL GENERAL NOTES

- GENERAL CONDITIONS
 - 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.
 - 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.
 - DO NOT SCALE DRAWINGS
 - VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
 - DESIGN LOADS ARE (GENERAC):

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID	
ENCLOSED GENERATOR	: 3974 LBS
- FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- CONCRETE
 - MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:

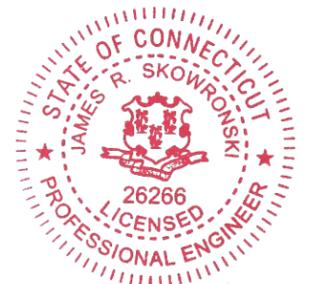
DESIGN	: ACI 318-11
CONSTRUCTION	: ACI 301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
MIXING	: ASTM C 94. READY MIX CONCRETE
AIR ENTRAINMENT	: ACI 318 AND ASTM C-260
AGGREGATE	: ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)
 - CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
 - DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
 - PROVIDE AIR ENTRAINMENT CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
 - MAXIMUM AGGREGATE SIZE: 3/4"
 - DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
 - MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- FOUNDATION & EXCAVATION NOTES
 - SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 1800 PSF.
 - ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.

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 Information Technology, Inc.
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Signature: *James R. Skowronski* Date: 3/12/2020

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1	3/12/20	REVISED CD's

PROJECT TITLE:
COLCHESTER NORTH CENTRAL
 FA ID # 10070973

PROJECT INFORMATION:
 315 OLD HARTFORD ROAD
 COLCHESTER, CT 06415

SHEET TITLE:
FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 45800
 SHEET NUMBER: S-1

DIAGRAM CIRCUIT SCHEDULE

NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) #3	(1) #8	1 1/4"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1"	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR, ATS	(2) #12 (2) #12 (2) #12	(1) #12 (1) #12 (1) #12	1" 1" 1"	CIRCUIT FOR GENERATOR BLOCK HEATER & BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	1 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (1) 1 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	1 2-PAIR 24 AWG OR 2EA G-PAIR CAT5	N/A	1"	ALARM CABLES (1) 1 2 PAIR 24 AWG (RUN TO PURCELL CABINET & INTO ALARM BOX). PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

CIRCUIT DETAIL
 SCALE: NTS

1

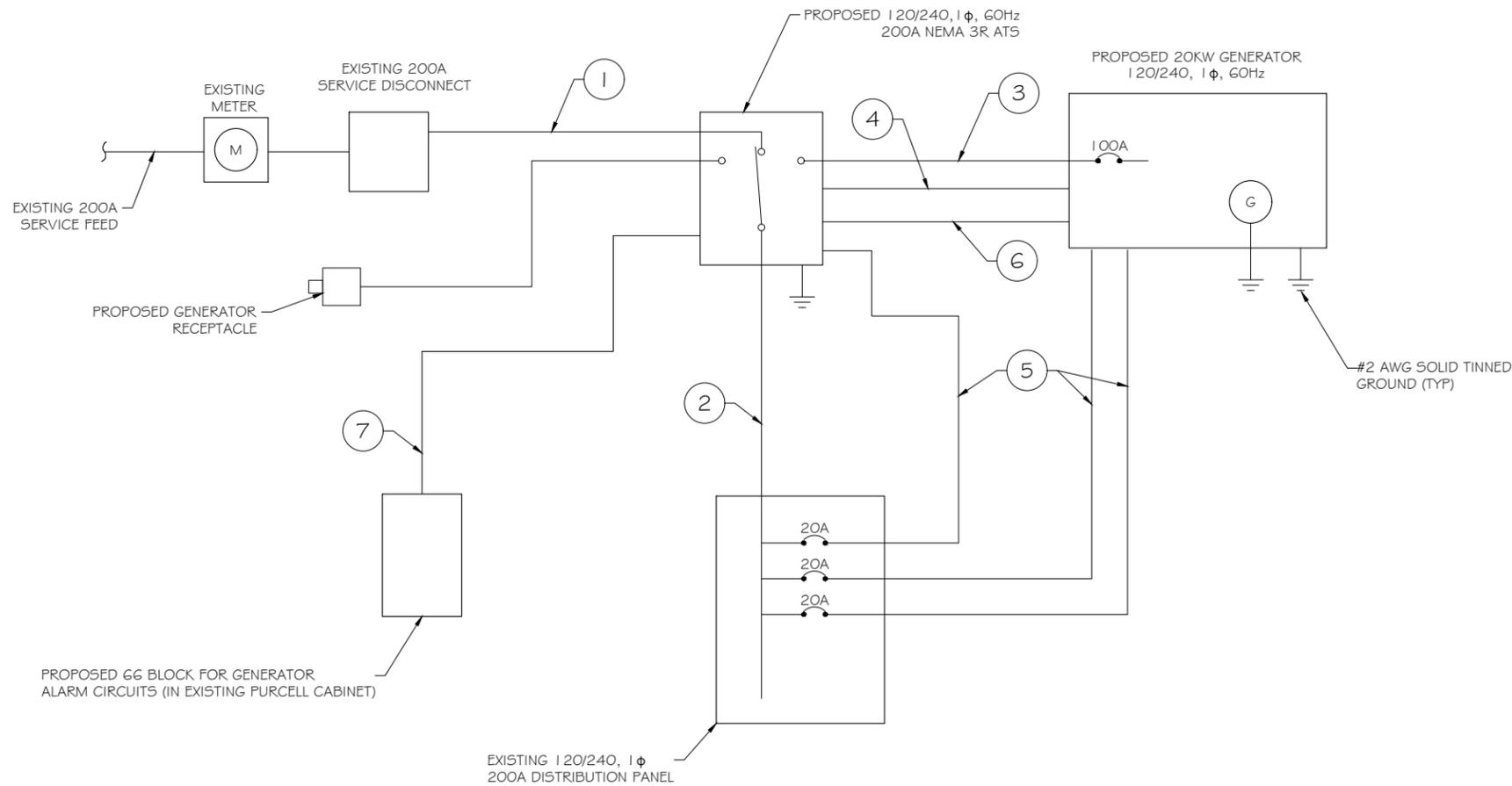
ALARM WIRE IDENTIFICATION CHART

WIRE	ALARM
BROWN / WHITE	GENERATOR RUNNING
GREEN / WHITE	CRITICAL FAULT
BLUE / WHITE	MINOR FAULT
ORANGE / WHITE	LOW FUEL
BROWN *	FUEL LEAK
BROWN / WHITE *	

*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE

ALARM WIRING IDENTIFICATION CHART
 SCALE: NTS

2



PROPOSED WIRING DIAGRAM
 SCALE: NTS

3

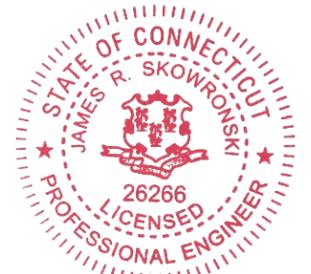
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COLCHESTER NORTH CENTRAL
 FA ID # 10070973

PROJECT INFORMATION:
 315 OLD HARTFORD ROAD
 COLCHESTER, CT 06415

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

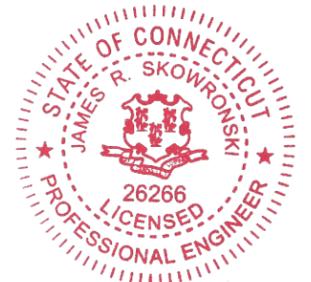
PROJECT NUMBER: 45800
 SHEET NUMBER: E-1

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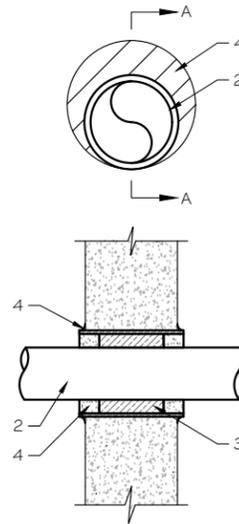
PROJECT INFORMATION:
 315 OLD HARTFORD ROAD
 COLCHESTER, CT 06415

SHEET TITLE:
PANEL AND PENETRATION DETAILS

SCALE: NONE

PROJECT NUMBER 45800
 SHEET NUMBER E-2

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



- 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 (CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1 - 3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
 - A. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
 - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
 - C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3- 1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- 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 CP6015 OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP6015, CP604, CP606, OR FS-ONE SEALANT.

* BEARING THE UL CLASSIFICATION MARK

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

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)

SCALE: NTS

Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	1P	ON	40	12V POWER FOR GE POWER PLANT	2	2P	ON	30	SUPPRESSOR
3	1P	OFF	40	SPARE	4	2P	ON	30	
5	2P	ON	50	GE POWER PLANT RECTIFIER #1	6	1P	ON	20	PNL Bd PLUG
7	2P	ON	50		8	1P	ON	20	PNL Bd Lt.
9	2P	ON	50	GE POWER PLANT RECTIFIER #2	10	1P	ON	20	PANEL PLUG
11	2P	ON	50		12	1P	ON	20	TELCO PLUG
13	2P	ON	50	UMTS	14	1P	ON	15	RECEPTACLE FOR MCU IN PURCELL BEHIND GSM
15	2P	ON	50		16	1P	OFF	30	SPARE
17	2P	ON	50	GE POWER PLANT RECTIFIER #3	18	1P	ON	20	ATS
19	2P	ON	50		20	1P	ON	20	BLOCK HEATER
21	2P	ON	50	GE POWER PLANT RECTIFIER #4	22	1P	ON	20	BATTERY CHARGER
23	2P	ON	50		24				BLANK

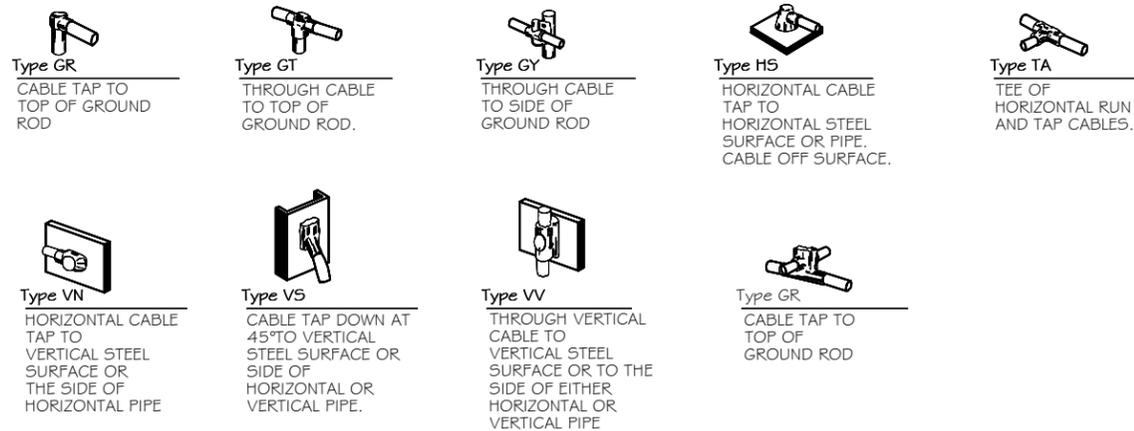
PROPOSED 20A BREAKERS FOR ATS, BLOCK HEATER AND BATTERY CHARGER ON NEW AT&T GENERATOR

PANEL SCHEDULE

SCALE: NTS

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

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



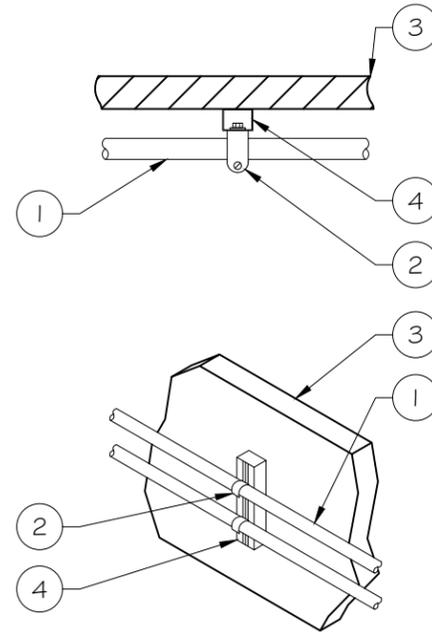
CADWELD DETAILS

SCALE: NTS

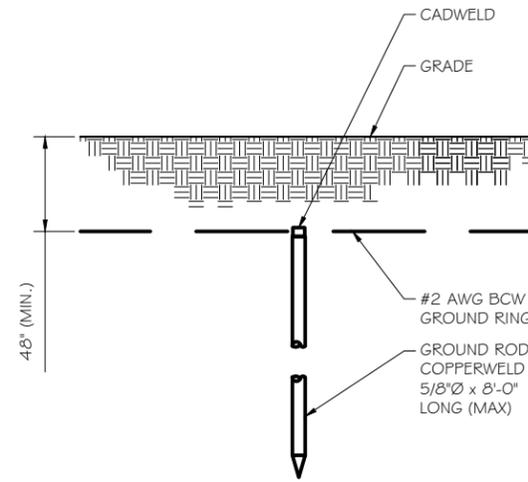
- 1 CONDUIT (TYP)
- 2 BUTTERFLY CLAMP AS REQUIRED
- 3 EXISTING WALL/CEILING
- 4 VERTICAL "UNISTRUT" P1000 T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT & CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-0" O.C. LENGTH OF RUN



CONDUIT WALL MOUNT
 SCALE: NTS

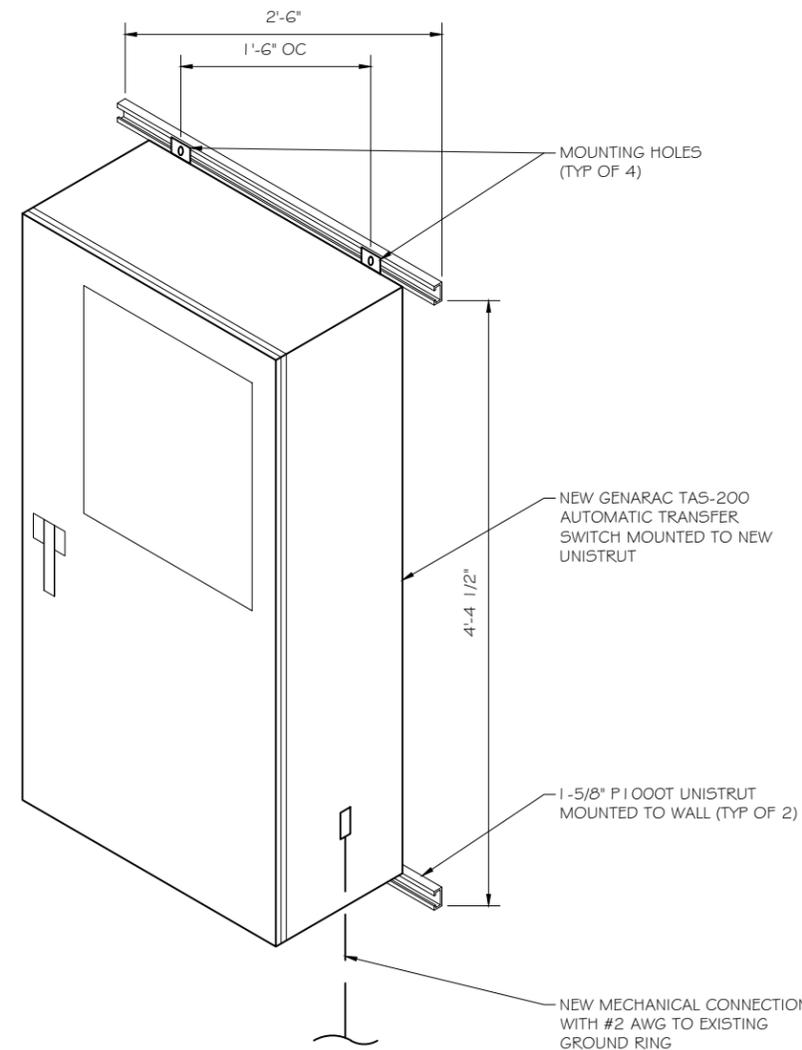


GROUND ROD DETAIL
 SCALE: NTS

- NOTE:
- GROUND RODS MAY BE:
 - COPPER CLAD STEEL
 - SOLID COPPER
 - GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
 - SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
 - 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 PREVENT GALVANIC CORROSION OF TOWER. (SEE ANSITIA-EIA-222-G)
 - PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

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

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



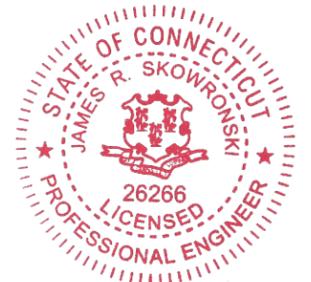
GENERAC ATS MOUNTING DETAIL
 SCALE: NTS

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SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER: 45800
 SHEET NUMBER: E-3

SDC20 | 2.5L | 20 kW - AC
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



Model G007098-0 (Steel)

Standby Power Rating
20 kW AC, 60 Hz



Image used for illustration purposes only



Codes and Standards

Generac products are designed to the following standards:

- UL2200, UL508, UL142, UL489
- NFPA 37, 70, 99, 110
- NEC700, 701, 702, 708
- ISO 3046, 7637, 8528, 9001
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C62.41

Powering Ahead

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

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

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

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

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

SPEC SHEET

SDC20 | 2.5L | 20 kW - AC
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



Model G007098-0 (Steel)

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner with Service Indicator
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Exhaust Silencer with Drain
- Factory Filled Oil & Coolant

Fuel System

- Primary Fuel Filter

Cooling System

- 120V AC Coolant Heater
- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

Electrical System

- Battery Charging Alternator
- AGM Spill Proof Battery
- Battery Cables
- Sealed/Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor
- Output Circuit Breaker

CONTROL SYSTEM

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485 Communications
- All-Phase Sensing Voltage Regulator
- Full System Status
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage

MODEL OPTIONS

CONTROL SYSTEM

- 21 Light Annunciator- Shipped Loose Kit and Field Installed
- External E-Stop-Shipped Loose Kit and Field Installed

ENCLOSURE

- Aluminum Enclosure
- Extreme Cold Weather Kit - Shipped Loose Kit and Field Installed

ALTERNATOR SYSTEM

- Class H Insulation Material
- Vented Rotor
- 2/3 Pitch
- Skewed Stator
- Amortisseur Winding
- Brushless Excitation
- Sealed Bearings
- Rotor Dynamically Spin Balanced
- Full Load Capacity Alternator
- Protective Thermal Shutdown

GENERATOR SET

- Single Side Service
- Internal Genset Vibration Isolators
- Separation of Circuits- High/Low Voltage
- Silencer Heat Shield
- High Heat Wrapped Exhaust Piping
- Silencer Enclosed Within Generator
- 5 Year Extended Warranty
- Extended Factory Testing
- 12 Gallon System Spill Containment
- 2.5 Gallon Fuel Fill Spill Containment

Frequency

- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground Connections
- 15 Channel Data Logging
- 0.2 msec High Speed Data Logging
- Alarm Information Automatically Comes Up On the Display

Alarms

ENCLOSURE

- Serviceable Items Accessible Through Lift-Off Door
- High Performance Sound-Absorbing Material
- Gasketed Door
- Stamped Air-Intake Louvers
- Single Door Latch Lockable with Key & Padlock
- Rhino Coat™ - Textured Polyester Powder Coat
- 150 MPH Wind Rating
- 36" Snow Rating

FUEL TANK

- UL 142 Compliant
- Double Wall Construction
- Factory Pressure Tested (5 psi)
- Rupture Basin Alarm
- Fuel Level Gauge and Sender
- Check Valve in Supply Line
- Rhino Coat™ - Textured Polyester Powder Coat
- Stainless Steel Hardware
- Integrated Fork Pockets

TANKS

- External Fuel Vent- Shipped Loose Kit and Field Installed



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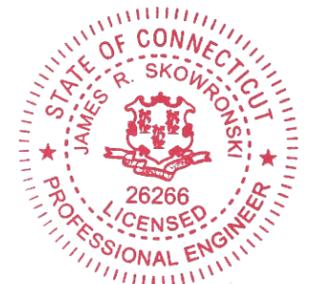
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CONSULTANT:
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Information Technology, Inc.

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Signature: *James R. Skowronski* Date: 3/12/2020

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1	3/12/20	REVISED CD's	
ISSUE PHASE FINAL DATE ISSUED 02/24/2020			

PROJECT TITLE:
**COLCHESTER NORTH
CENTRAL
FA ID # 10070973**

PROJECT INFORMATION:
315 OLD HARTFORD ROAD
COLCHESTER, CT 06415

SHEET TITLE:
**GENERAC 20KW GENERATOR
SPECIFICATIONS**

SCALE: NONE

PROJECT NUMBER 45800
SHEET NUMBER E-4

SPEC SHEET

SDC20 | 2.5L | 20 kW - AC INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General		Cooling System	
Make	Mitsubishi	Cooling System Type	Forced Circulation
EPA Emissions Compliance	Interim Tier 4	Water Pump Type	Centrifugal Pump
Cylinder #	4	Fan Type	Pusher
Type	In-Line	Fan Speed (rpm)	2100
Displacement - L (Cu In)	2.5 (158)	Fan Diameter - mm (in)	431.8 (17)
Bore - mm (in)	88 (3.5)	Coolant Heater Wattage	1000
Stroke - mm (in)	103 (4.1)	Coolant Heater Voltage	120
Compression Ratio	22:1		
Intake Air Method	Naturally Aspirated		
Engine Governing		Fuel System	
Governor	Electronic Isochronous	Fuel Type	Ultra Low Sulfur Diesel #2
Frequency Regulation (Steady State)	± 0.25%	Fuel Specifications	ASTM
		Fuel Filtering (microns)	6
		Fuel Inject Pump Make	Bosch
		Injector Type	Engine Driven Gear
		Engine Type	Diesel
		Fuel Supply Line - mm (in.)	6.6 (0.26)
Lubrication System		Engine Electrical System	
Oil Pump Type	Trochoid Gear Pump	System Voltage	12 VDC
Oil Filter Type	Filtering Paper, Full Flow	Battery Charger Alternator	12V-50A
Crankcase Capacity - L (qts)	6.5 (6.9)	Battery Size	650 CCA
		Battery Group	35
		Battery Voltage	12 VDC
		Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	Mecc Alte ECP 28-2L/4	Bearings	Dual Sealed
Poles	4	Coupling	Belt, Pulley
Field Type	Revolving	Load Capacity - Standby	100%
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	H	Voltage Regulator Type	Digital
Total Harmonic Distortion	<5%	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<45	Regulation Accuracy (Steady State)	±0.5%
Standard Excitation	Brushless		

RATING DEFINITIONS

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

GENERAC INDUSTRIAL POWER

Model G007098-0 (Steel)

SPEC SHEET

3 of 5

GENERAC 20KW GENERATOR
SPECIFICATIONS
SCALE: NTS

SDC20 | 2.5L | 20 kW - AC INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

Single-Phase 120/240 VAC @1.0pf	20 kW	Amps: 83
Circuit Breaker Size	100A	

FUEL CONSUMPTION RATES*

Diesel - gph (lph)

Percent Load	Standby
25%	0.74 (2.80)
50%	0.99 (3.75)
75%	1.41 (5.30)
100%	1.90 (7.19)

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

COOLING

	gpm (lpm)	Standby
Coolant Flow per Minute		11.9 (45)
Coolant System Capacity	gal (L)	3.5 (13.2)
Heat Rejection to Coolant	BTU/hr	238,200
Inlet Air	cfm (m ³ /min)	2365 (67)
Max. Operating Ambient Temperature (Before Derate)	°F (°C)	77° (25°)
Maximum Radiator Backpressure	in H ₂ O	0.50

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm (m ³ /min)	88 (2.49)

ENGINE

	rpm	Standby
Rated Engine Speed	1800	
Horsepower at Rated kW**	hp	33.5
Piston Speed	ft/min	1220.47
BMEP	psi	96.5

EXHAUST

	cfm (m ³ /min)	Standby
Exhaust Flow (Rated Output)	193 (328)	
Max. Backpressure (Post Silencer)	inHg (kPa)	1.38 (4.67)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	928 (497.7)

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

SPEC SHEET

4 of 5

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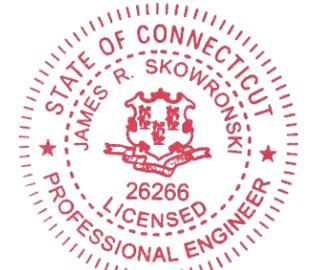
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Signature: *James R. Skowronski* Date: 3/12/2020

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FA ID # 10070973

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COLCHESTER, CT 06415

SHEET TITLE:
GENERAC 20KW GENERATOR
SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 45800
SHEET NUMBER: E-4.1

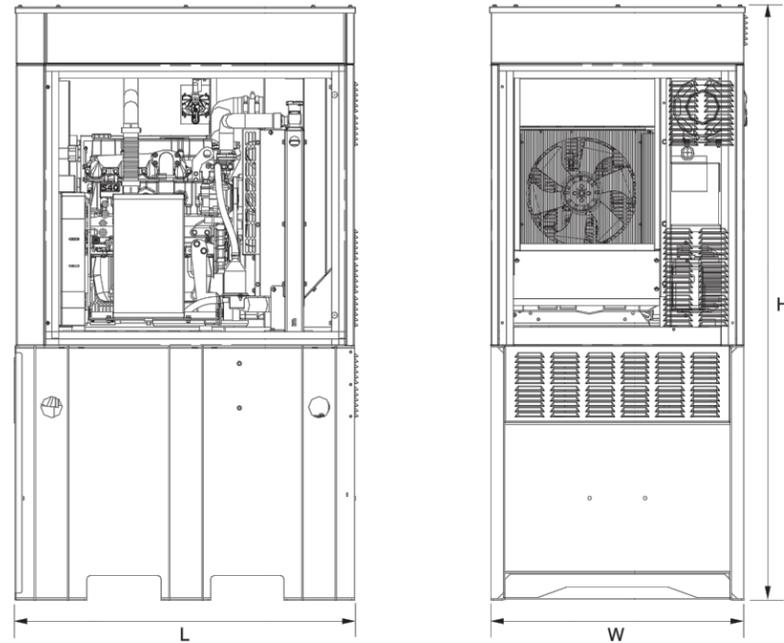
SDC20 | 2.5L | 20 kW - AC
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



Model G007098-0 (Steel)



Level 2 Sound Attenuation Enclosure

Run Time Hours	48
Usable Capacity Gal (L)	92 (348.2)
L x W x H in (mm)	48 x 36 x 90 (1219.2 x 914.4 x 2286)
Weight lbs (kg)	2400 (1089)
Sound Level	71 dBA

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

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

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Document No. 1000009019
 Rev. WIP 11/04/16

GENERAC 20KW GENERATOR SPECIFICATIONS
 SCALE: NTS

SPEC SHEET

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SDC20 | 2.5L | 20 kW - AC
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



Model G007098-0 (Steel)

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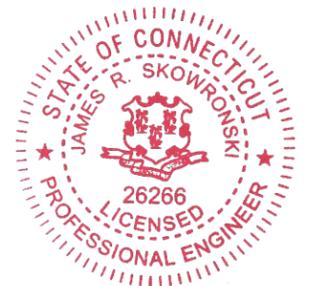
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GENERAC 20KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER: 45800
 SHEET NUMBER: E-4.2

SPEC SHEET

6 of 5

**TTS Series
Switches**
**200 Amps
600 VAC**

GENERAC | **INDUSTRIAL
POWER**

TAS200
200A Automatic Transfer Switch

TAS200
TAS200
1 of 3 2 of 3

The Generac TAS200 Automatic Transfer Switch

Flexibility for multiple application installations

Multiple generator support with 3 source panel

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

Camlock functionality for mobile generator sources



Image used for illustration purposes only.

Features

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

Optional Features

- **EXTENDED WARRANTY**
- **THREE-PHASE VOLTAGE CONFIGURATIONS**

Codes and Standards

Generac products are designed to the following standards:



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



NEC 700, 701 and 702



NEMA 250

Application and Engineering Data

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

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

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



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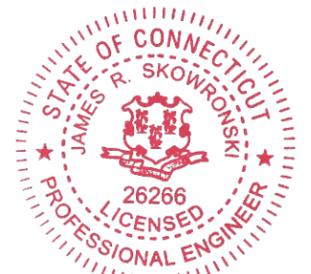
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COLCHESTER, CT 06415

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

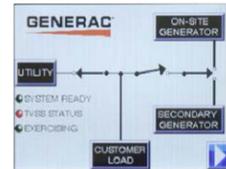
PROJECT NUMBER: 45800
SHEET NUMBER: E-5

TTS Control Systems

TAS200

3 of 3

Touch Screen Interface



INDICATORS AND BUTTONS

<ul style="list-style-type: none"> System Ready indicator Standby Operating indicator Utility Available indicator GEN/UTIL Switch Position indicator TVSS status 	<ul style="list-style-type: none"> Normal Test button Fast Test button Return to Normal button Reset button Exercising indicator
---	---

DETAILS SCREEN

<p>System Settings:</p> <ul style="list-style-type: none"> System Voltage/Phases: <ul style="list-style-type: none"> 120/240V single phase (standard) 120/208V three phase (optional) 120/240V three phase (optional) Utility Fail Monitor: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> In-phase, or Time-Delay-Neutral at 0.0-10.0s in 1 second increments 	<p>Exercise Settings:</p> <ul style="list-style-type: none"> Time of day Day of week Exercise: <ul style="list-style-type: none"> 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
	<p>Screen Settings:</p> <ul style="list-style-type: none"> Brightness & Contrast button Screen Calibration button Startup/Clean screen
	<p>Diagnostics:</p> <ul style="list-style-type: none"> Digital I/O bits status Voltage A/D readings
<p>Engine Settings:</p> <ul style="list-style-type: none"> Engine Warm-up timer: 0-20 minutes Generator Load Accept: <ul style="list-style-type: none"> 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 	<p>Mimic Diagram:</p> <ul style="list-style-type: none"> System Ready Transfer switch position Utility available Standby available Maintenance/Auto switch position Generator source TS position TVSS status

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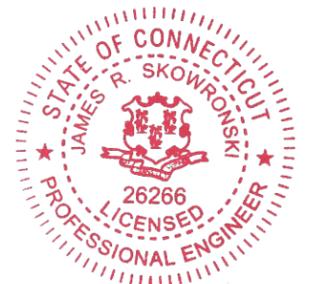
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SHEET NUMBER E-5.1

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ATTACHMENT 2

Petition No. 605
AT&T Wireless PCS LLC
Colchester, Connecticut
Staff Report
February 11, 2003

On February 3, 2003, Gerald Heffernan of the Connecticut Siting Council (Council) and Robert Erling of the Council staff met Christopher Fisher of AT&T Wireless, Bryan R. Lazuka of Site Acquisition Consultants and Christopher K. Daddi of Dewberry-Goodkind, Inc., for a field review of this petition. AT&T is petitioning the Council for a declaratory ruling that the proposed replacement of an existing 60-foot lattice tower with a 60-foot monopole tower would not have a significant adverse environmental impact, and therefore would not require a Certificate of Environmental Compatibility and Public Need.

The existing lattice tower is adjacent to a commercial garage used by the Laidlaw Bus Company. The existing tower holds several antennas for bus communications. This tower does not have the structural capacity to support AT&T's proposed six-panel antennas. The proposed replacement monopole would be located approximately 10 feet from the existing tower and will be capable of holding both the existing whip and yagi antennas used by the bus company and AT&T's antennas, which would be installed at the 57.5-foot level of this tower. AT&T would install two equipment cabinets 10-foot 3¼-inch by 6-foot concrete pads near the base of the proposed replacement tower. The tower and equipment cabinets would be surrounded by a 6-foot chain link fence.

The replacement tower would be installed in an area which is currently cleared. Surrounding property uses include a garage and car wash, a recreational field and a State Department of Transportation garage. There are no homes in the immediate area.

Operation of the proposed AT&T antennas combined with those of the bus company would not result in a radio frequency power density in excess of State of federal standards at the base of the proposed tower.

The use of this site would allow AT&T to close a coverage gap which now exists on Routes 2, 16, and 85 between existing AT&T tower sites in Colchester.

ATTACHMENT 3



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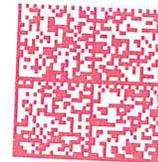
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