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1/7/21

VIA OVERNIGHT MAIL

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
 439-455 Homestead Ave, Hartford, CT 06112
 Lat.: 41.7835919° Long.: -72.7041989°

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 439-455 Homestead Avenue in the City of Hartford, Connecticut. Crown Castle is the owner of the tower and Talar Properties LLC is the owner of 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 30KW Diesel Generator within a 14'10" x 8' expansion of the fenced grade-level equipment compound as demonstrated on the plans enclosed as Attached 1. The proposed expansion is located within AT&T's lease area and as such, it meets the definition of "site" provided in the Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-2a(22).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.

¹ RCSA Section 16j-50j-2a(22) defines "site" as "a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements, on which a facility and associated equipment are located, shall be located, or are proposed to be located."

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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 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 as noted above;
- 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.

The facility was originally approved by the Siting Council on April 9, 1990 in Docket No. 126. This modification complies with the conditions of the aforementioned approvals.

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



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within the grade-level fenced equipment compound. Thus, AT&T respectfully requests a waiver from submission of information relating to the existing tower structure or the radio-frequency emissions. AT&T also notes that there will be no changes to the frequencies or services supported by this facility.

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 by email to Mayor Luke A. Bronin and the Department of Development Services as well as by first class mail to Crown Castle as the owner of the structure and Talar Properties Inc. as the owner of the underlying property. Certificates of mailing 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 blue ink, appearing to read "DP".

Daniel Patrick

Attachments

cc: Mayor Luke A. Bronin, City of Hartford (via email)

I. Charles Mathews, Acting Director of Department of Development Services (via email)

Crown Castle, Tower Owner (via first-class mail)

Talar Properties Inc., Property Owner (via first-class mail)

AT&T

General Dynamics Information Technology

Lucia Chiocchio, Esq. & Julie Durkin, Cuddy & Feder, LLP

ATTACHMENT 1

**SITE NAME: NW HARTFORD
FA LOCATION CODE: 10071191
CROWN BUN: 806369**



at&t Mobility

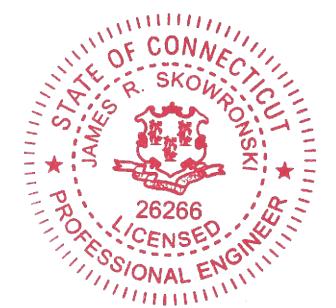
GENERATOR PROJECT 30KW GENERAC DIESEL GENERATOR 200A GENERAC ATS

**439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112**

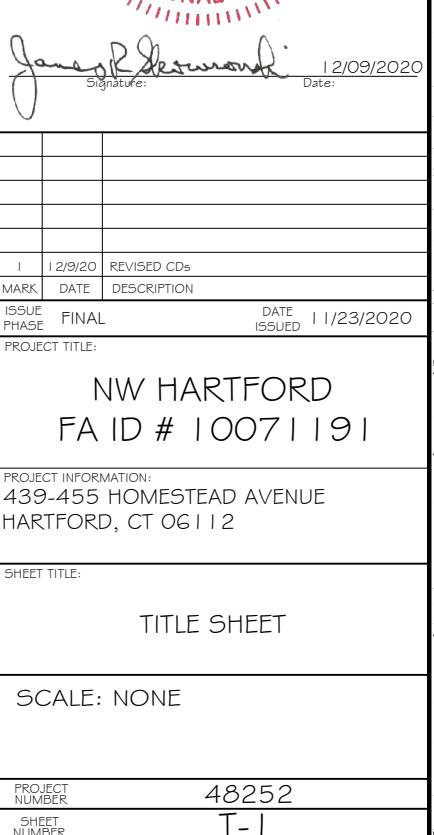
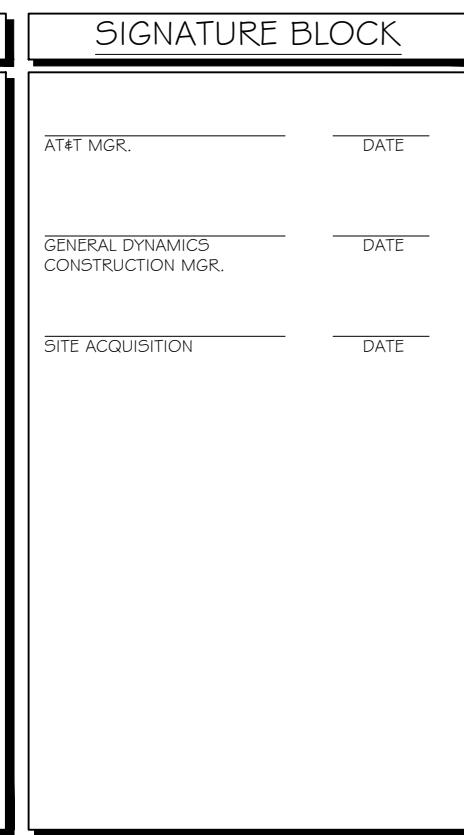
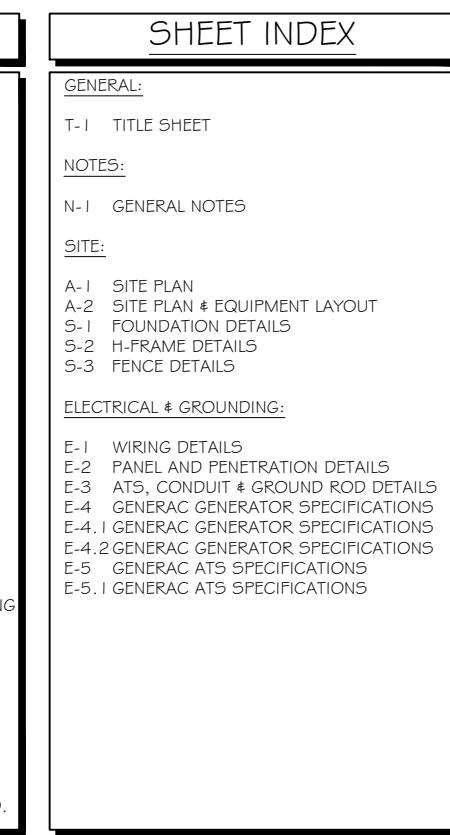
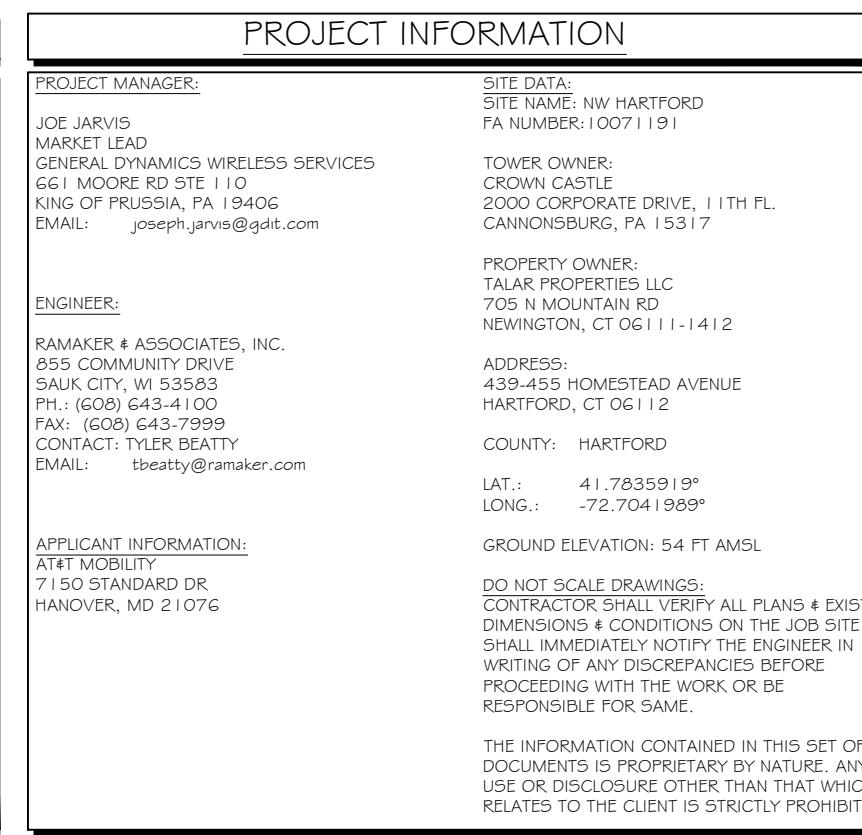
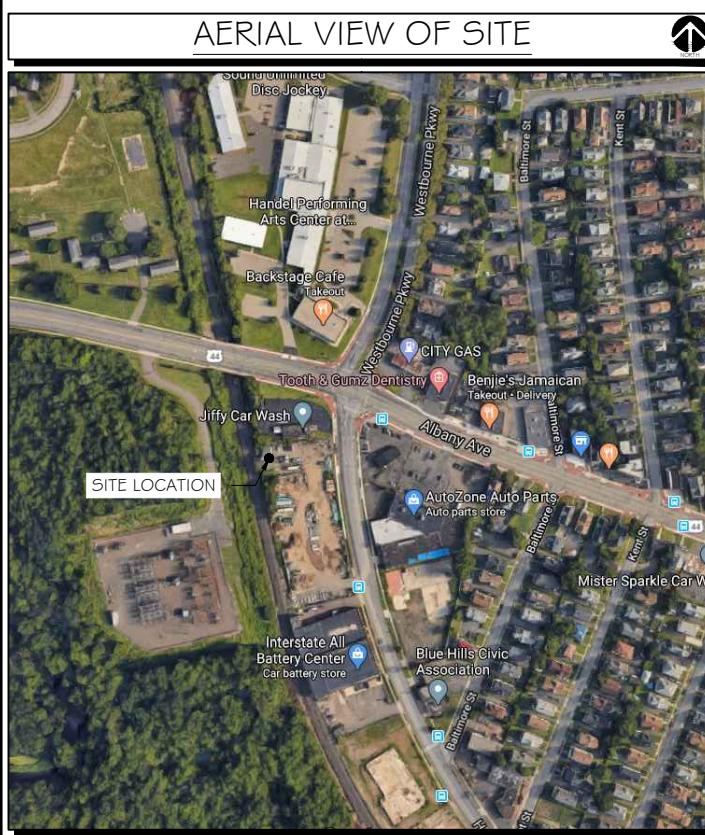
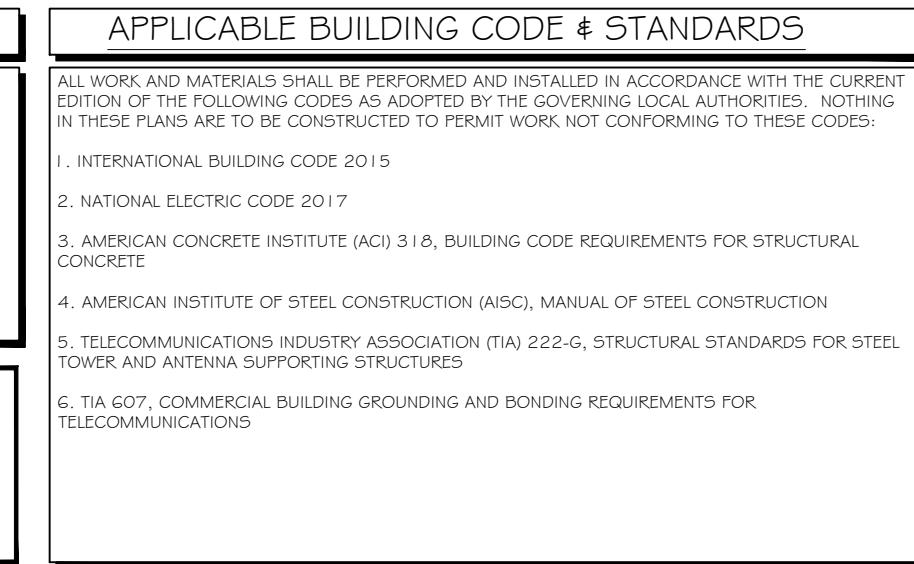
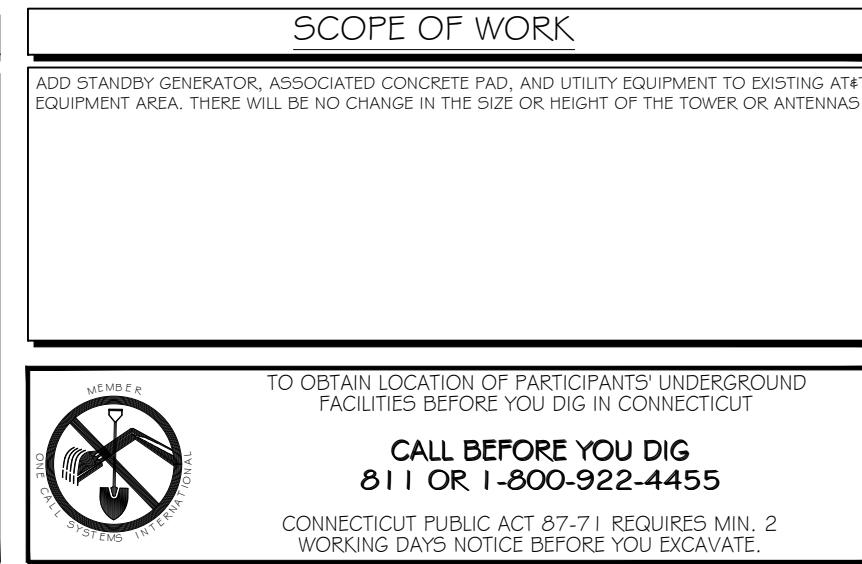
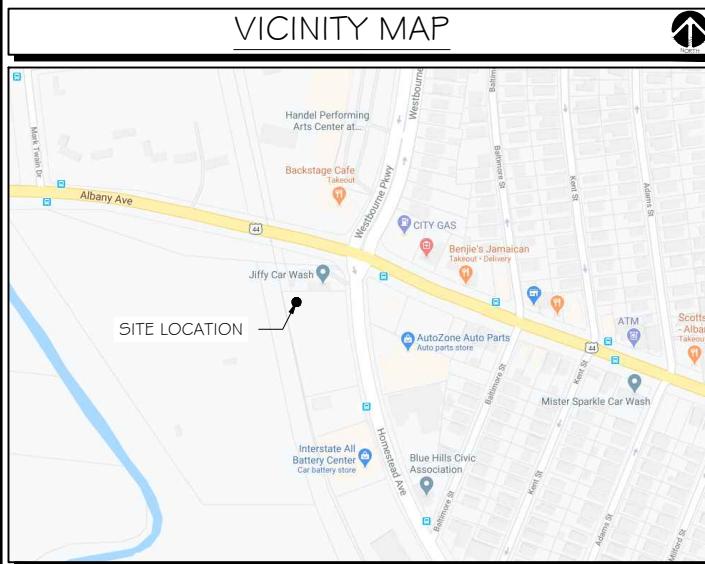
**CONSULTANT:
GENERAL DYNAMICS**

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: 12/09/2020



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. IECIA (INSULATED CABLE ENGINEERS ASSOCIATION)
 - e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
 - f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
 - g. NFSC (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 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 WIRING.

10. INSTALL PULL STRING IN ALL CONDUIT.

11. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RG5, 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 PLUMIN 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 RECEIPTIVITY (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.



(608) 643-4100 www.ramaker.com



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: 12/09/2020
I 12/9/20 REVISED Cds
MARK DATE DESCRIPTION
ISSUE PHASE FINAL DATE ISSUED 11/23/2020
PROJECT TITLE: NW HARTFORD FA ID # 10071191

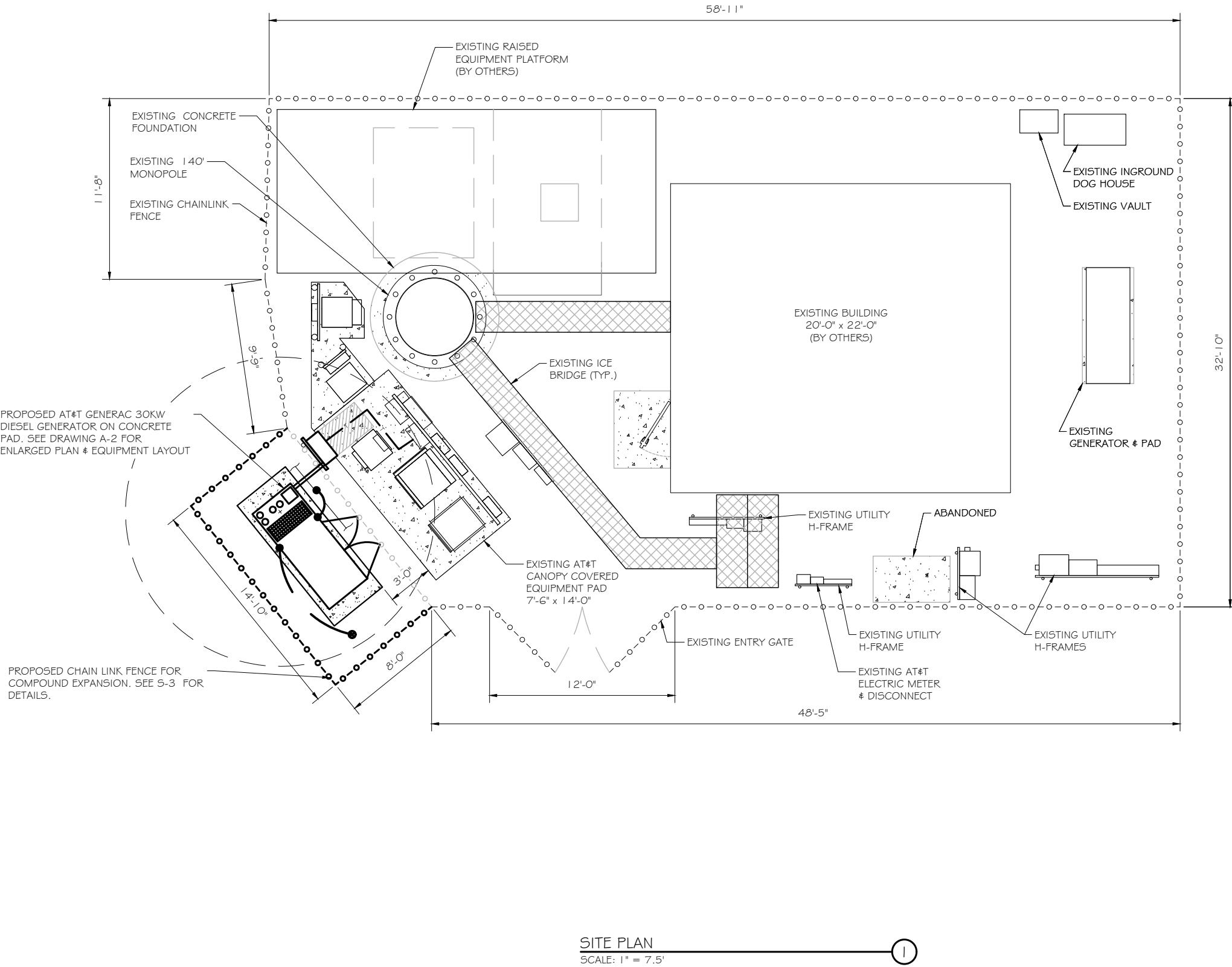
PROJECT INFORMATION: 439-455 HOMESTEAD AVENUE

HARTFORD, CT 06112

SHEET TITLE: GENERAL NOTES

SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER N-1



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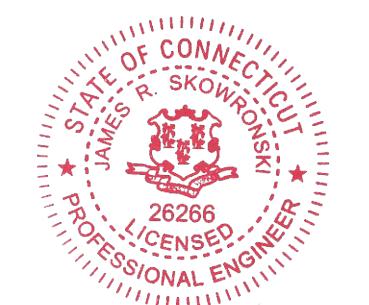
PREPARED FOR:



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: 12/09/2020

I 12/9/20 REVISED CDS
MARK DATE DESCRIPTION
ISSUE PHASE FINAL DATE ISSUED 11/23/2020

PROJECT TITLE: NW HARTFORD FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
SITE PLAN

0 3.75' 7.5' 15'
11" x 17" - 1" = 7.5'
22" x 34" - 1" = 3.75'
PROJECT NUMBER 48252
SHEET NUMBER A-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 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

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.
- (1) 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.



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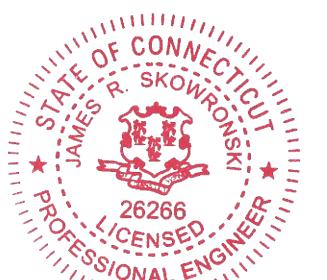
PREPARED FOR:



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: 12/09/2020

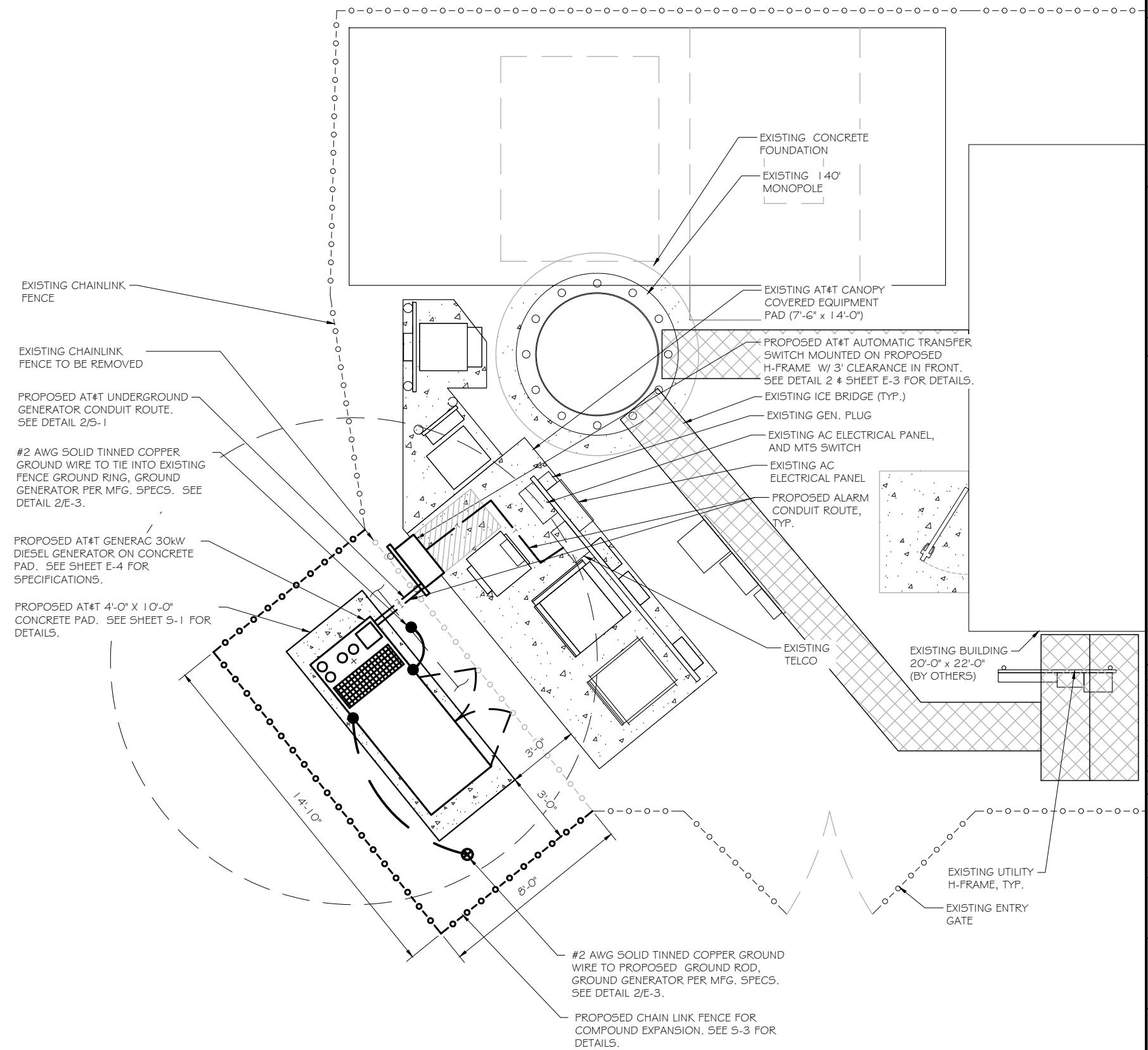
I 12/9/20 REVISED CDS
MARK DATE DESCRIPTION
ISSUE PHASE FINAL DATE ISSUED 11/23/2020

PROJECT TITLE: NW HARTFORD FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

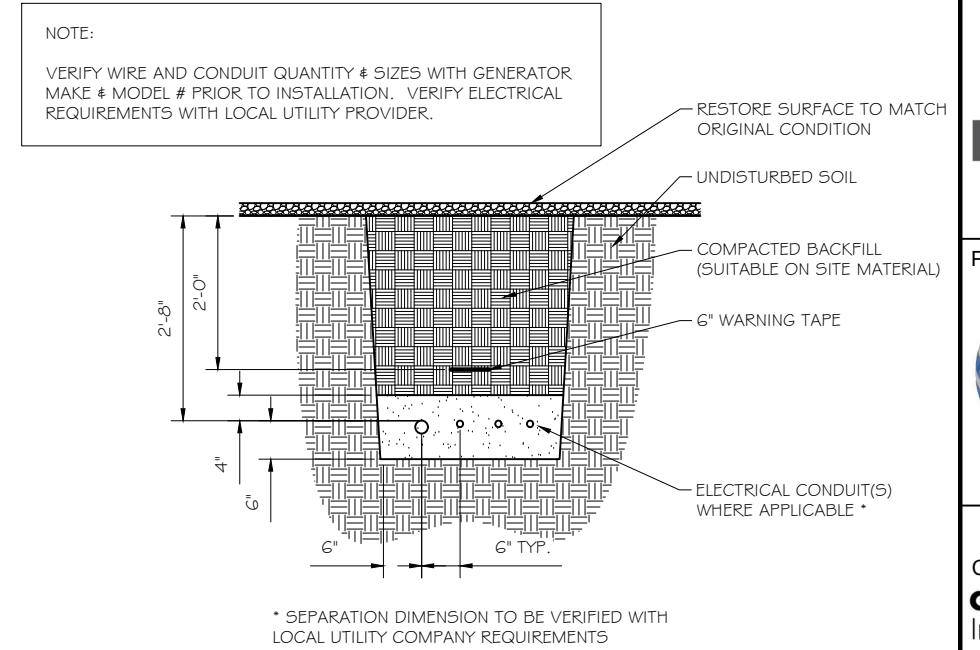
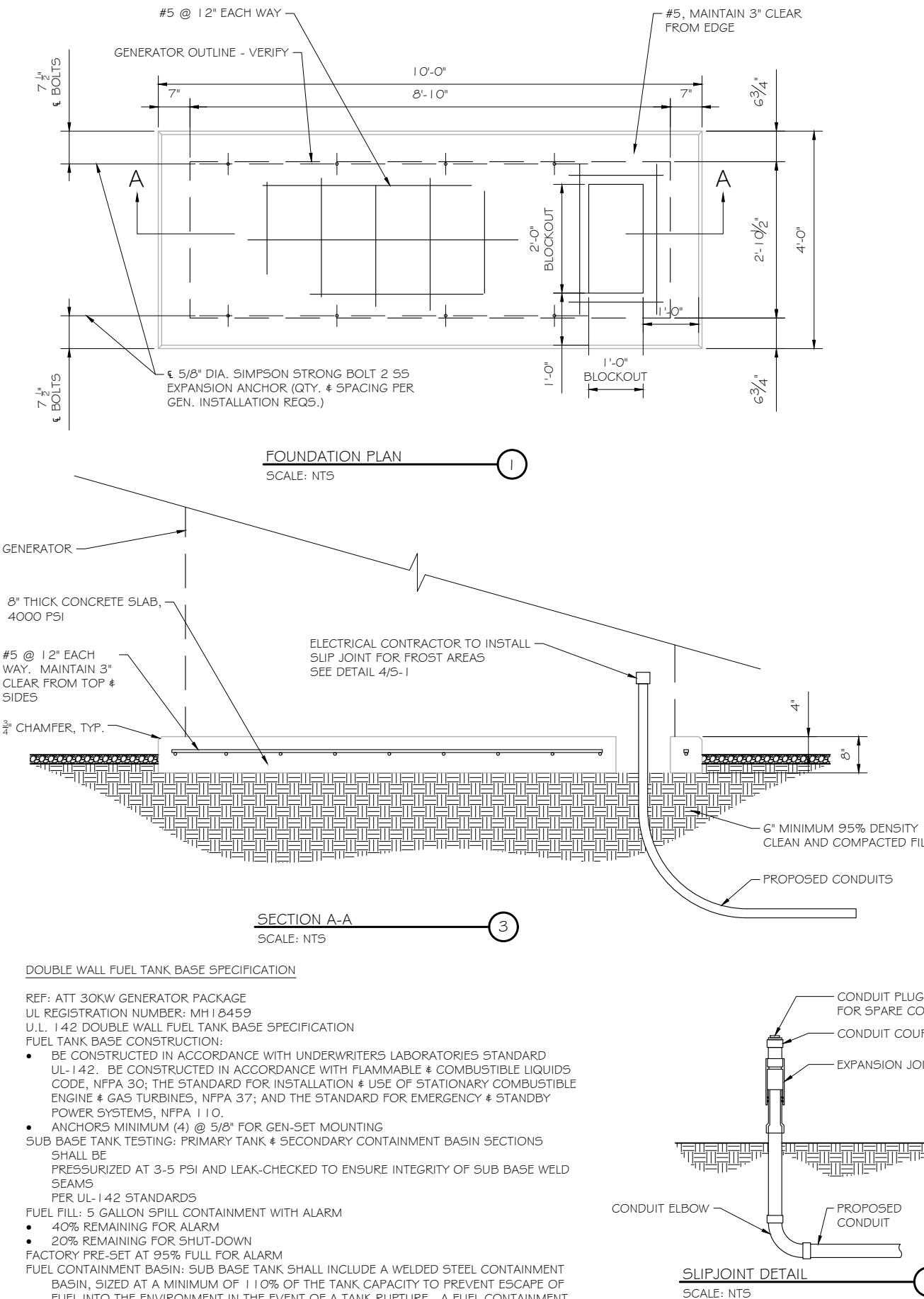
SHEET TITLE:
 SITE PLAN & EQUIPMENT LAYOUT

0 2.5' 5' 10'
11" x 17" - 1" = 5'
22" x 34" - 1" = 2.5'
PROJECT NUMBER 48252
SHEET NUMBER A-2



SITE PLAN & EQUIPMENT LAYOUT

SCALE: 1" = 5'



NOTES:

1. 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

1.0 GENERAL CONDITIONS

- 1.1 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.
- 1.2 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 VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
- 1.5 DESIGN LOADS ARE (GENERAC):

LIVE LOAD : 100 PSF
EQUIPMENT SIZE : 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID : 3974 LBS
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	: ACI318-11
CONSTRUCTION	: ACI301
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-220
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.

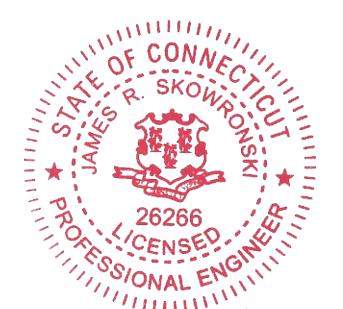
3.7 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.

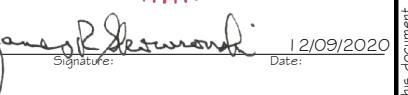
4.0 FOUNDATION & EXCAVATION NOTES

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.



Signature: 
Date: 12/09/2020

I 12/9/20 REVISED CDs
MARK DATE DESCRIPTION
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PROJECT TITLE: NW HARTFORD FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE: FOUNDATION DETAILS

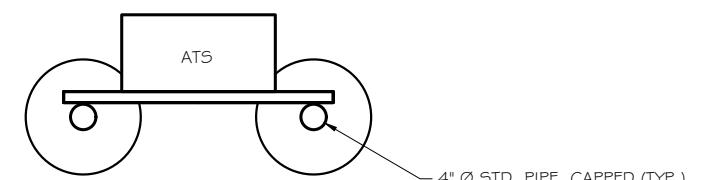
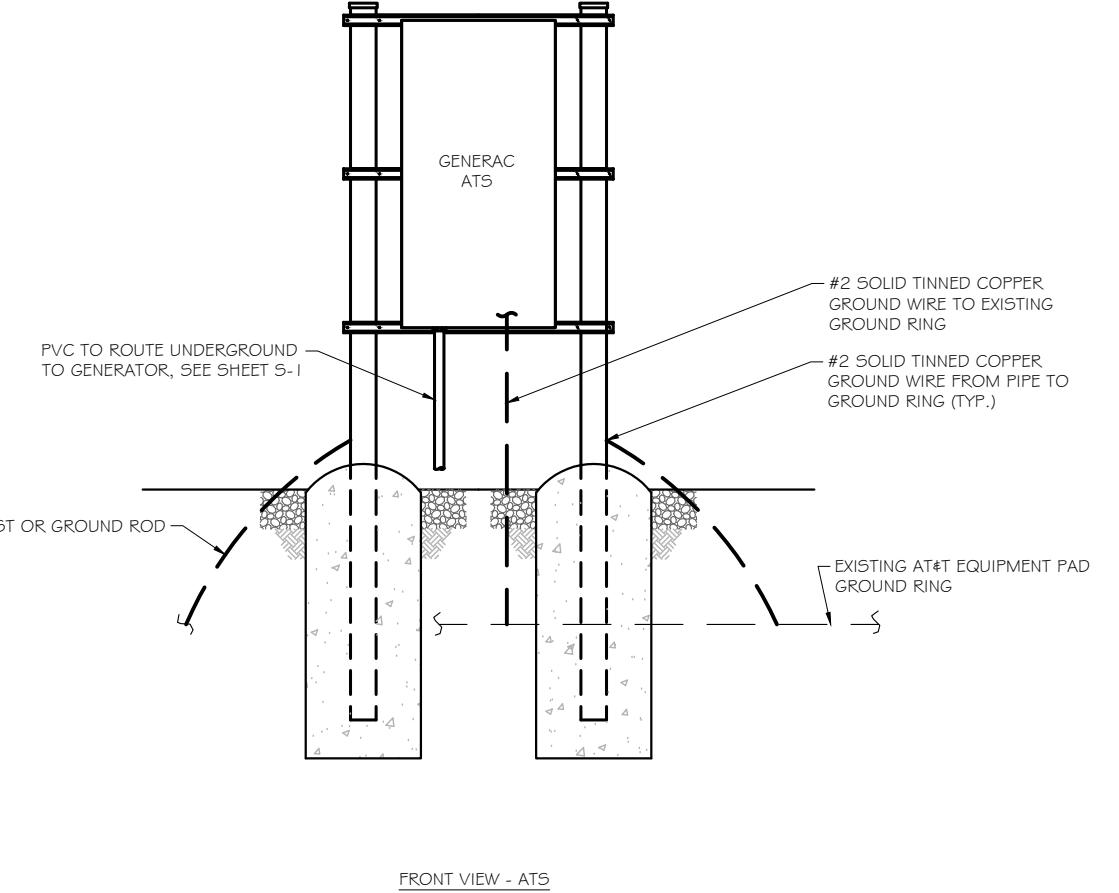
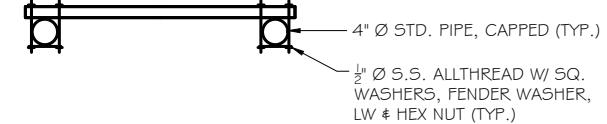
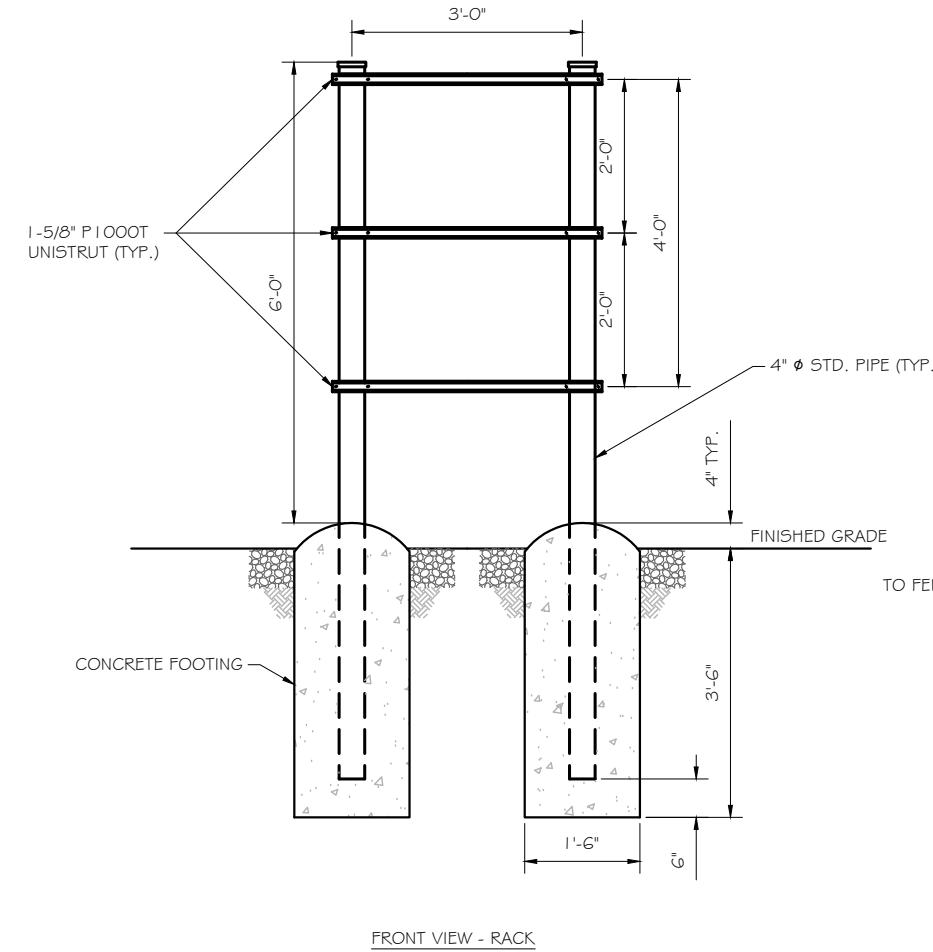
SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER S-1

SCOPE OF WORK DETAILS

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.



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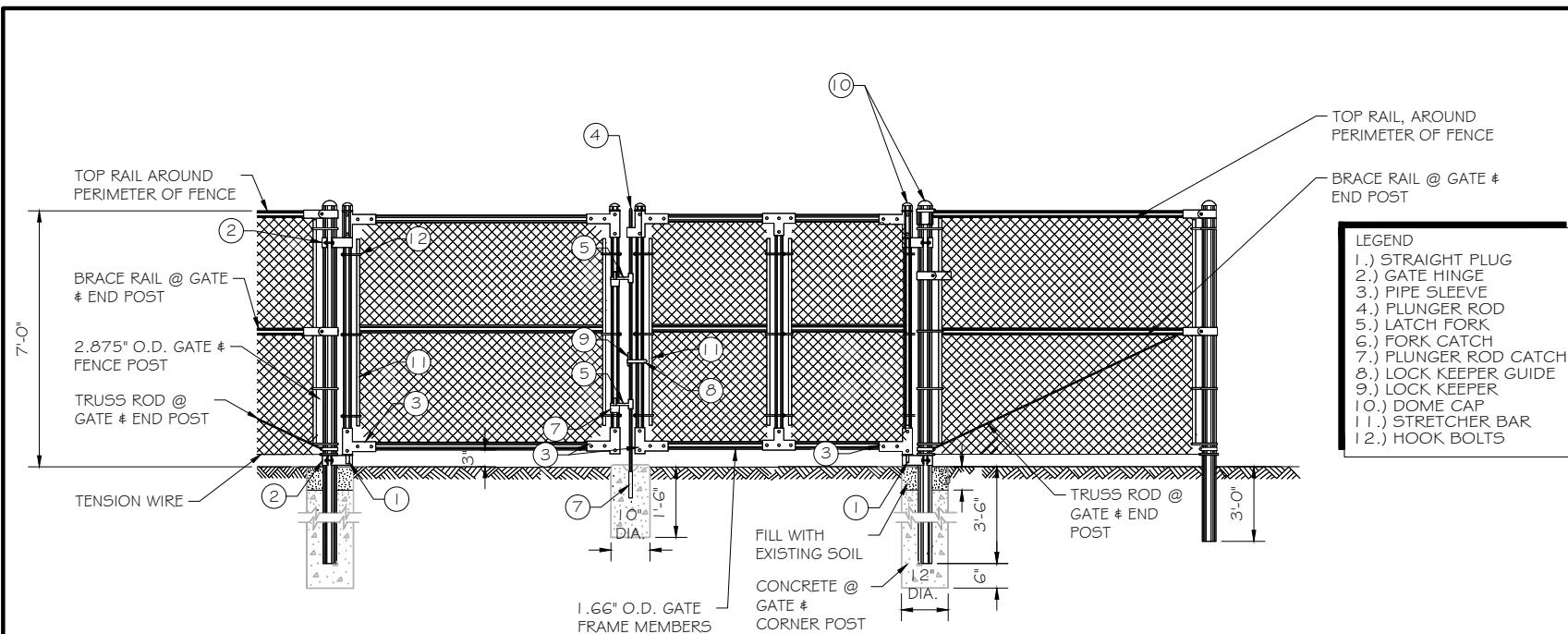
SHEET TITLE:
H-FRAME DETAILS

SCALE: NONE

PROJECT NUMBER	48252
SHEET NUMBER	S-2

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PREPARED FOR:

1. SCOPE:

1.1 THIS SECTION COVERS THE REQUIREMENTS FOR THE MATERIALS AND THE CONSTRUCTION OF SITE FENCING, GUY AREA FENCING, ACCESS ROAD GATES AND CATTLE GUARDS. SEE SITE PLAN AND DRAWINGS FOR DETAILS.

2. SPECIAL REQUIREMENTS

2.1 ALL WIRE, FABRIC, FITTINGS, HARDWARE AND STEEL MEMBERS USED FOR SITE AREA FENCING, GUY ANCHOR FENCING AND ACCESS ROAD GATES SHALL BE HOT DIPPED GALVANIZED OR OTHER APPROVED NON-CORROSION MATERIAL.
2.2 ALL NON-CORROSION MATERIAL SHALL BE APPROVED BY THE USCC PROJECT MANAGER.
2.3 ANY DAMAGE TO GALVANIZING OR NON-CORROSION COATING DURING CONSTRUCTION SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S RECOMMENDED METHODS. USCC INSTALLATION PRACTICE:

3. FENCE POSTS

3.1 LOCATION OF CORNER POSTS SHALL BE DETERMINED FROM STAKES AND PROPERTY PINS INSTALLED BY THE REGISTERED LAND SURVEYOR UNDER CONTRACT TO USCC. IF THE STAKES ARE NOT PRESENT OR DO NOT CONFORM TO THE SITE PLAN, CONSULT WITH THE USCC PROJECT MANAGER.
3.2 CORNERS AND GATE POST FOR SITE SHALL BE 2.875" O.D. GALVANIZED PIPE. UNLESS SPECIFIED OTHERWISE
3.3 CORNER POSTS SHALL BE SET WITHIN ONE INCH (1") OF DIMENSIONS INDICATED ON THE SITE PLAN.
3.4 FENCE POSTS SHALL BE VERTICALLY PLUMB IN ALL PLANES WITHIN 1/2 INCH (1/2").
3.5 CORNER & GATE POST FOUNDATIONS SHALL BE A MINIMUM FOUR FEET (4') DEEP OR SIX INCHES (6") BELOW THE FROST LINE, WHICHEVER IS GREATER, WITH MINIMUM SIX INCH (6") CLEARANCE BETWEEN BOTTOM OF POST AND BOTTOM OF THE HOLE.
3.6 CORNER POSTS AND GATE POSTS SPACING SHALL BE EQUAL WITH A TEN FOOT (10') MAXIMUM SPACING. GATE POST SPACING AND SPECIFIC LOCATIONS SHALL BE IN ACCORDANCE WITH SITE PLAN AND SHALL BE VERIFIED WITH USCC PROJECT MANAGER.
3.7 ALL POSTS EXCEPT GATE POSTS SHALL BE CAPPED WITH A COMBINATION CAP AND BARB WIRE SUPPORTING ARM. GATE POSTS SHALL BE TWELVE INCHES (12") HIGHER THAN CORNER OR LINE POSTS TO PROVIDE FOR TERMINATION OF BARBED WIRE. GATE POSTS SHALL BE CAPPED WITH STANDARD CAP.
3.8 ALL CORNER, GATE AND END PANELS SHALL HAVE MINIMUM $\frac{3}{8}$ " DIAMETER DIAGONAL TRUSS RODS WITH TUMBuckles. HORIZONTAL BRACE RODS, 1-1/2" INSIDE DIMENSION PIPE, SHALL BE INSTALLED BETWEEN POSTS.
3.9 A TOP RAIL (1-3/8" I.D.) GALVANIZED PIPE SHALL BE INSTALLED BETWEEN POSTS.
3.10 ALL FOUR CORNER POSTS AND BOTH GATE POSTS SHALL BE CONNECTED TO THE SITE GROUNDING SYSTEM (REFER TO GROUNDING SYSTEM STANDARD).

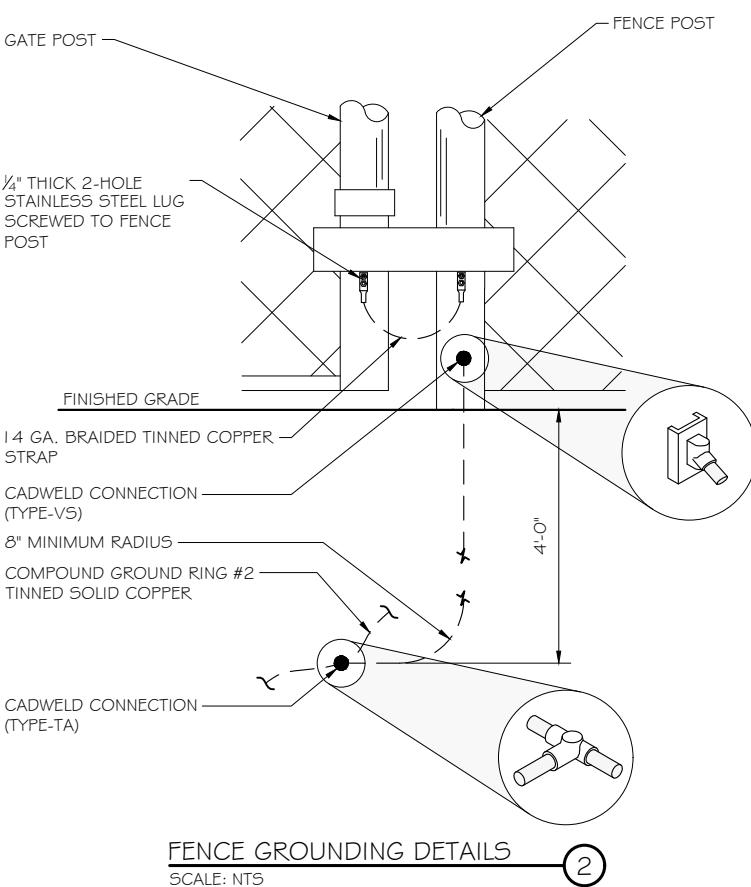
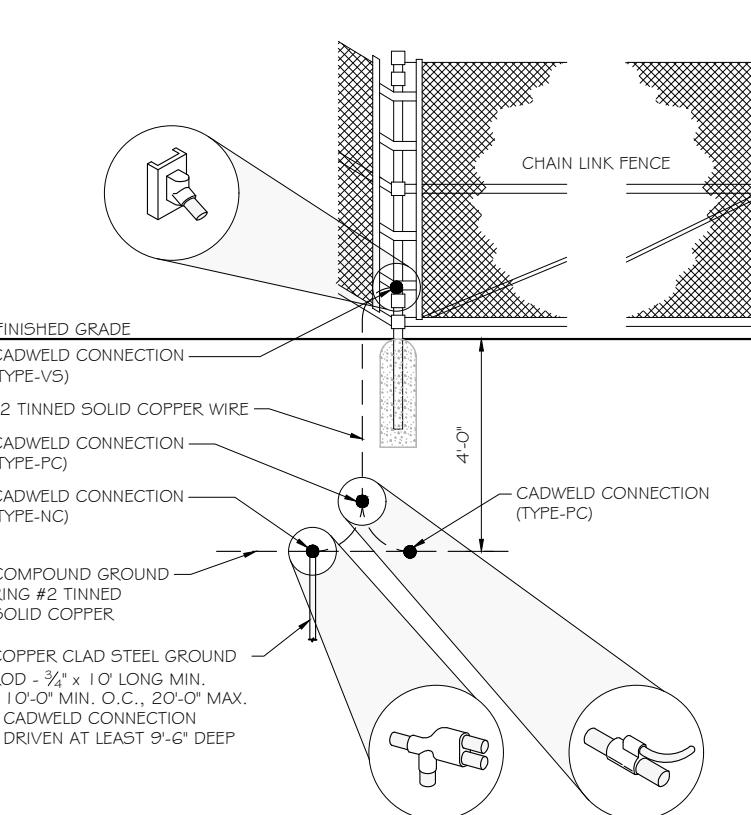
4. FABRIC

4.1 FENCE FABRIC SHALL BE SEVEN FOOT (7') HIGH, UNLESS OTHERWISE SPECIFIED. #9 GAUGE, GALVANIZED CHAIN LINK FABRIC WITH TWISTED TOP SELVAGE AND KNUCKLED BOTTOM SELVAGE. 4.2 FABRIC SHALL BE TENSIONED PER MANUFACTURER'S RECOMMENDATIONS TO PRESENT A NEAT APPEARANCE. A MAXIMUM THREE INCH (3") GAP SHALL BE PERMITTED BETWEEN FABRIC AND FINAL GRADE.
4.3 FABRIC SHALL BE SECURED AT CORNER AND GATE POSTS USING STRETCHER BARS AND TENSION BAND CLIPS.
4.4 FABRIC SHALL BE SECURED TO THE TOP RAIL AND BRACE RODS USING TIE CLIPS.
4.5 THREE (3) RUNS OF 4-POINT GALVANIZED BARBED WIRE SHALL BE INSTALLED ALONG TOP OF FENCE. BARBED WIRE SHALL BE TENSIONED PER MANUFACTURER'S RECOMMENDATIONS TO PRESENT A NEAT APPEARANCE.

5. GATE

5.1 LOCATION OF GATE SHALL CONFORM TO THE SITE PLAN. GATE SIZE SHALL BE 12'-0" WIDE. UNLESS SPECIFIED OTHERWISE
5.2 ALL JOINTS BETWEEN TUBULAR GATE MEMBERS SHALL BE WELDED OR HEAVY FITTINGS PROVIDING RIGID AND WATERTIGHT CONNECTIONS.
5.3 GATE HINGES SHALL PROVIDE FOR 180 DEGREE RADIUS GATE SWING. ALL HINGE NUTS SHALL BE ON THE INSIDE AND DOUBLE-NUT TO DETER UNAUTHORIZED ENTRY.
5.4 GATE STOPS SHALL BE INSTALLED AND SHALL HOLD GATE IN "OPEN" POSITION.
5.5 BARBED WIRE GUARD SHALL BE INSTALLED ON TOP OF GATES. ADEQUATE CLEARANCE SHALL BE MAINTAINED TO ALLOW GATE OPERATION.
5.6 GATE SHALL BE INSTALLED PLUMB AND SHALL OPEN AND CLOSE FREELY.
5.7 GATE POSTS SHALL NOT BE SHARED AS A CORNER POST.
5.8 THE FOLLOWING GATE TYPE SHALL BE PROVIDED AND INSTALLED AS INDICATED ON THE SITE PLAN AND VERIFIED WITH THE PROJECT MANAGER.

FENCE CONSTRUCTION DETAIL
SCALE: NTS

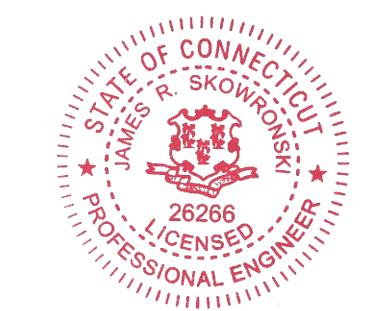


FENCE GROUNDING DETAILS
SCALE: NTS

CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.

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

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Signature: *James R. Skowronski* Date: 12/09/2020

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PROJECT TITLE:

NW HARTFORD
FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
FENCE DETAILS

SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER S-3

DIAGRAM CIRCUIT SCHEDULE						
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/O	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/O	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/O	(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	(1) #12 (1) #12 (1) #12	1"	CIRCUIT FOR GENERATOR BLOCK HEATER & BATTERY HEATER CIRCUIT FOR BATTERY CHARGER CIRCUIT FOR ATS
6	GENERATOR	AUTOMATIC TRANSFER SWITCH	12-PAIR 24 AWG OR 2EA 6-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 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	12-PAIR 24 AWG OR 2EA 6-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

CIRCUIT DETAIL
SCALE: NTS

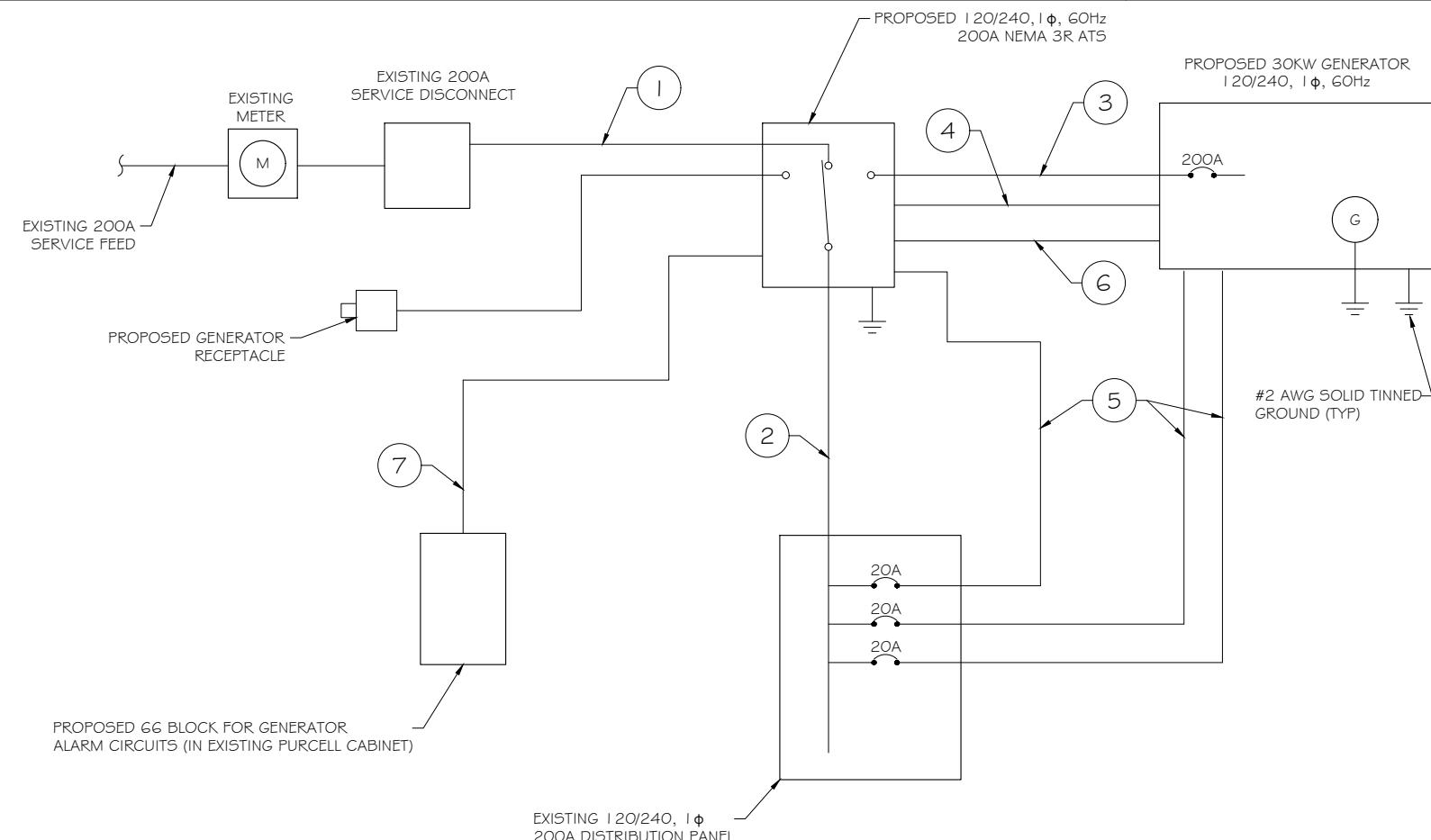
PROPOSED WIRING DIAGRAM
SCALE: NTS

ALARM WIRE IDENTIFICATION CHART

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

*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE

ALARM WIRING IDENTIFICATION CHART
SCALE: NTS



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439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
WIRING DETAILS

SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER E-1

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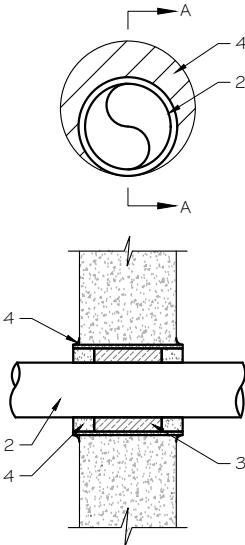


AC Distribution Panel - Layout Diagram									
Breaker Position	Breaker Type	On/Off	Size	Circuit Label	Breaker Position	Breaker Type	On/Off	Size	Circuit Label
1	2P	ON	30	MCLEAN AC UNIT	2	2P	ON	60	MAIN
3					4	1P	ON	15	TDOA E911
5	1P	ON	20	EMERSON UTILITY	6	1P	ON	15	TDOA E911
7	1P	ON	20	ATS	8	1P	OFF	30	TDOA E911
9	1P	ON	20	BLOCK HEATER	10	2P	OFF	15	HEATER CIRCUIT
11	1P	ON	20	BATTERY CHARGER	12				

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

EXISTING PANEL SCHEDULE

SCALE: NTS



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

1. 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 9CAT2) 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 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.
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 MATERIAL.
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 CP6015 OR CP604 SEALANT IS USED.

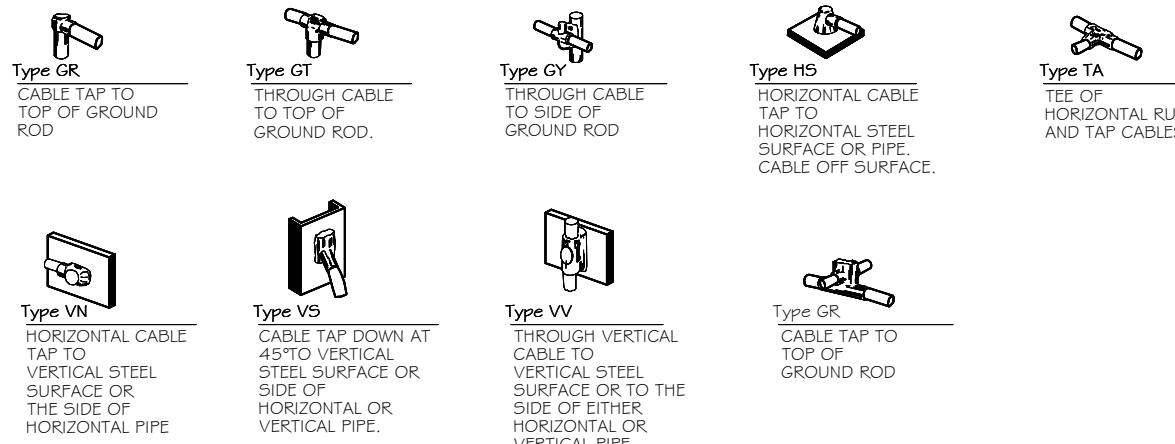
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP6015, CP604, CP606, OR FS-ONE SEALANT.

* 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



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



PREPARED FOR:



CONSULTANT:
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PROJECT INFORMATION:
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HARTFORD, CT 06112

SHEET TITLE:
PANEL AND PENETRATION
DETAILS

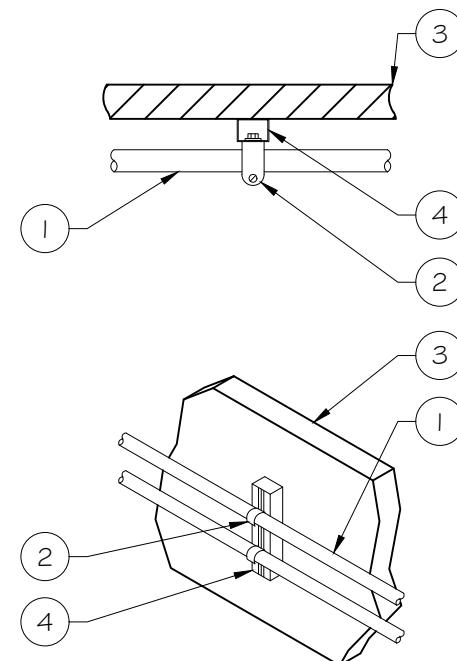
SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER E-2

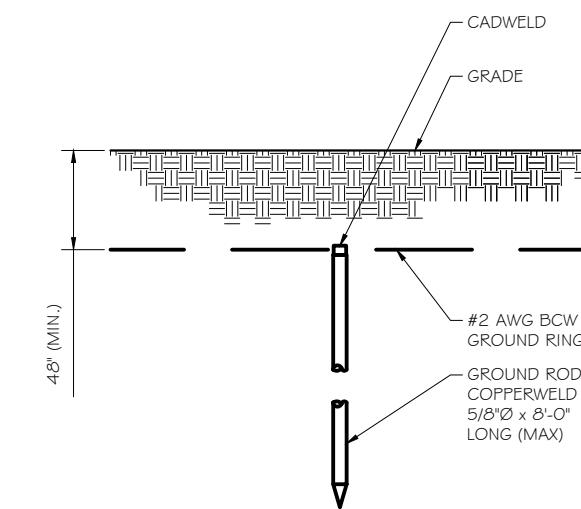
- 1 CONDUIT (TYP)
- 2 BUTTERFLY CLAMP AS REQUIRED
- 3 EXISTING WALL/CEILING
- 4 VERTICAL "UNISTRUT" P1000 'T' SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

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



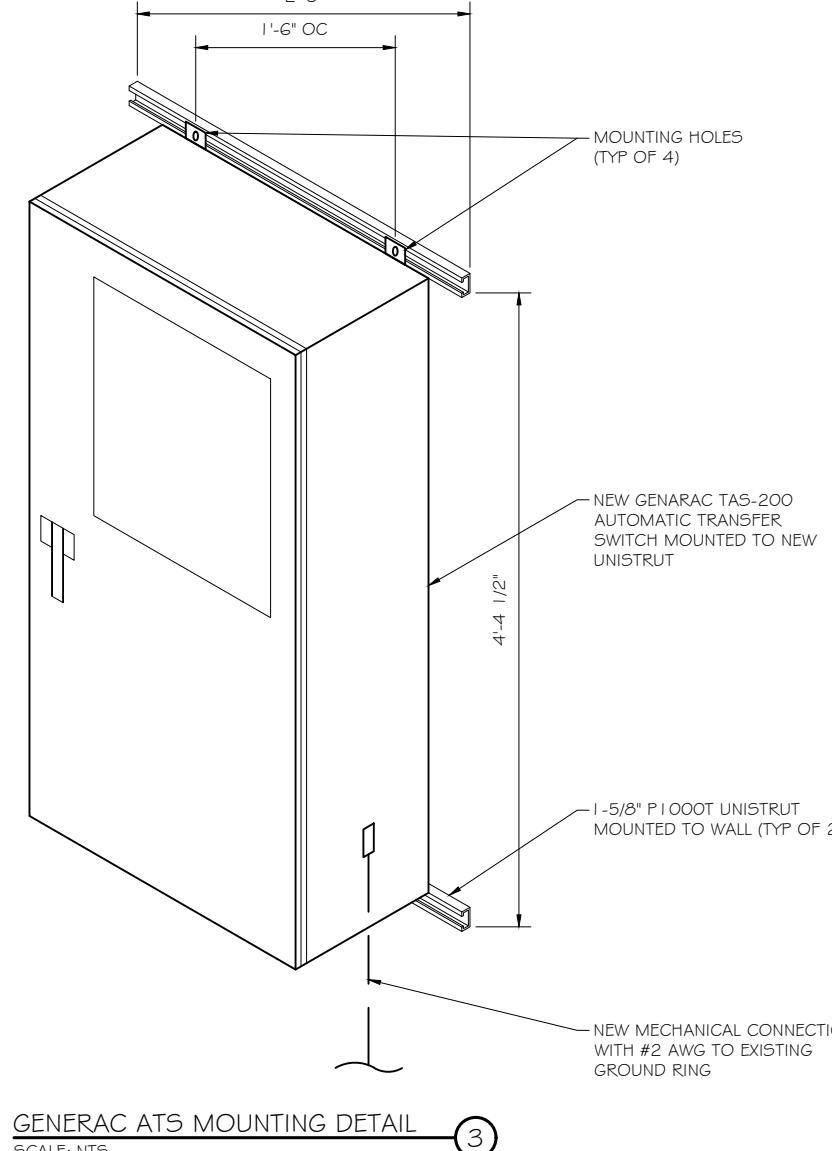
CONDUIT WALL MOUNT
SCALE: NTS



GROUND ROD DETAIL
SCALE: NTS

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:
1. 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



GENERAC ATS MOUNTING DETAIL
SCALE: NTS

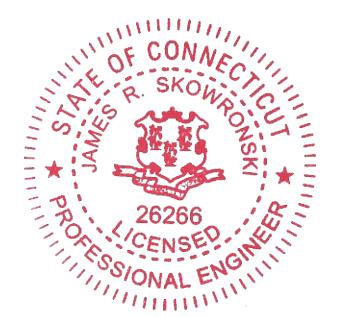
NOTE:

1. GROUND RODS MAY BE:
 - COPPER CLAD STEEL
 - SOLID COPPER
2. GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
3. SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
4. A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
5. 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 ANSI/TIA-EIA-222-G)
6. PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

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: 12/09/2020

I 12/9/20 REVISED CDS
MARK DATE DESCRIPTION
ISSUE PHASE FINAL DATE ISSUED 11/23/2020
PROJECT TITLE:

NW HARTFORD
FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
ATS, CONDUIT & GROUND ROD DETAILS

SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER E-3

RAMAKER
employee-owned
(608) 643-4100 www.ramaker.com

PREPARED FOR:


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



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

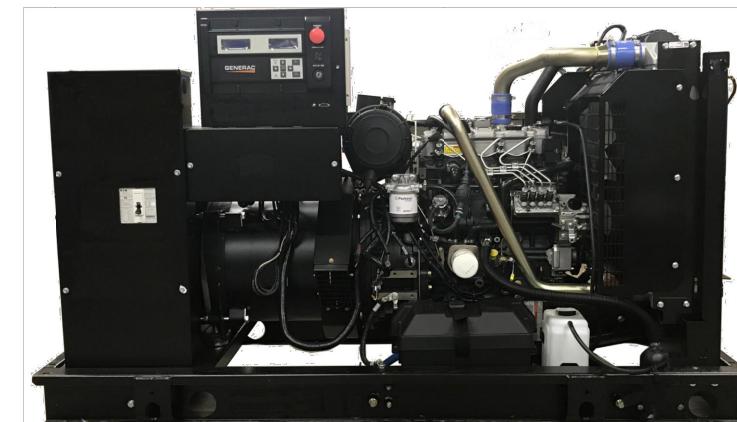


Image used for illustration purposes only

GENERAC INDUSTRIAL POWER

Codes and Standards

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



UL2200, UL508, UL489, UL142



CSA C22.2



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41

Powering Ahead

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

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

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

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

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

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

CONTROL SYSTEM



Digital H Control Panel- Dual 4x20 Display

Program Functions

- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors

1 of 6

SPEC SHEET

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 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)

AUDIO ALARMS AND SHUTDOWNS

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

ALARMS AND WARNINGS

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

2 of 6

SPEC SHEET

GENERAC INDUSTRIAL POWER

ENCLOSURE (If Selected)

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

FUEL TANKS (If Selected)

- UL 142/ULC S601
- Double Wall
- Normal and Emergency Vents
- Sloped Top
- Sloped Bottom
- Factory Pressure Tested
- Rupture Basin Alarm
- Fuel Level
- Check Valve In Supply and Return Lines
- RhinoCoat™ - Textured Polyester Powder Coat Paint
- Stainless Steel Hardware



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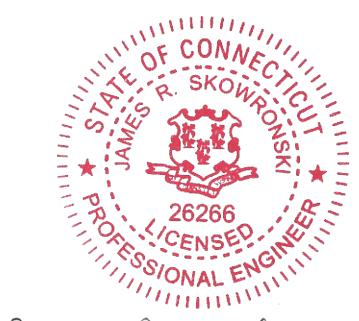
PREPARED FOR:



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: 12/09/2020

I	12/9/20	REVISED CD's
MARK	DATE	DESCRIPTION
ISSUE PHASE	FINAL	DATE ISSUED 11/23/2020

PROJECT TITLE: NW HARTFORD FA ID # 10071191

PROJECT INFORMATION:	439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112	

SHEET TITLE: GENERAC 30KW GENERATOR SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER	48252
SHEET NUMBER	E-4

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Oil Heater
- Critical Silencer (Open Set Only)
- Radiator Stone Guard
- 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
- Anti-Condensation Heater
- Tropical Coating
- Permanent Magnet Excitation

GENERATOR SET

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

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Isolation Ball Valves
- Fluid Containment Pan

CONTROL SYSTEM

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

GENERAC | INDUSTRIAL POWER

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

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CONTROL SYSTEM

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

CIRCUIT BREAKER OPTIONS

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

ENCLOSURE

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

WARRANTY (Standby Gensets Only)

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

CONTROL SYSTEM

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

FUEL TANKS (Size On Last Page)

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

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emission Data Sheet

Cylinder #

4

Type

In-Line

Displacement - in³ (L)

135 (2.22)

Bore - in (mm)

3.3 (84)

Stroke - in (mm)

3.9 (100)

Compression Ratio

23.3:1

Intake Air Method

Turbocharged

Cylinder Head

Cast Iron

Piston Type

Aluminum

Crankshaft Type

Forged Steel

Engine Governing

Governor

Electronic Isochronous

Frequency Regulation (Steady State)

±0.5%

Engine Electrical System

System Voltage

12 VDC

Battery Charger Alternator

Standard

Oil Pump Type

Gear

Oil Filter Type

Full-Flow

Crankcase Capacity - qt (L)

11.2 (10.6)

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

Cooling System

Cooling System Type	Closed Recovery
Water Pump Type	Pre-Lubed, Self Sealing

Fan Type

Pusher

Fan Speed - RPM

1,980

Fan Diameter - in (mm)

18 (457)

Fuel System

Fuel Type

Ultra Low Sulfur Diesel Fuel #2

Fuel Specifications

ASTM

Fuel Filtering (Microns)

5

Fuel Inject Pump

Distribution Injection Pump

Fuel Pump Type

Engine Driven Gear

Injector Type

Mechanical

Fuel Supply Line - in (mm)

0.31 (7.9) ID

Fuel Return Line - in (mm)

0.2 (4.8) ID

ALTERNATOR SPECIFICATIONS

Standard Model

K0035124Y21

Poles

4

Field Type

Revolving

Insulation Class - Rotor

H

Insulation Class - Stator

H

Total Harmonic Distortion

<5% (3-Phase)

Telephone Interference Factor (TIF)

< 50

Standard Excitation

Brushless

Bearings

Single Sealed

Coupling

Direct via Flexible Disc

Load Capacity - Standby

100%

Prototype

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

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

MOTOR STARTING CAPABILITIES (skVA)

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

FUEL CONSUMPTION RATES*

Diesel - gph (Lph)		
Fuel Pump Lift- ft (m)	Percent Load	Standby
3 (1)	25%	1.0 (3.7)
	50%	1.4 (5.2)
	75%	2.0 (7.5)
	100%	2.8 (10.5)
16.6 (63)		

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

COOLING

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

COMBUSTION AIR REQUIREMENTS

Standby		
Flow at Rated Power scfm (m³/min)	88 (2.5)	

ENGINE

EXHAUST		
Exhaust Flow (Rated Output)	scfm (m³/min)	296.6 (8.4)
Max. Allowable Backpressure (Post Turbocharger)	inHg (kPa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	892 (478)

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

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

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

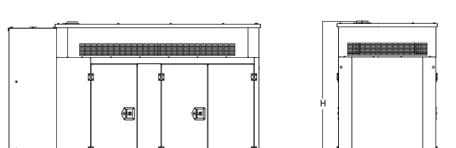
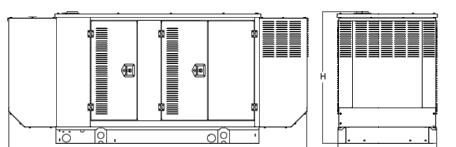
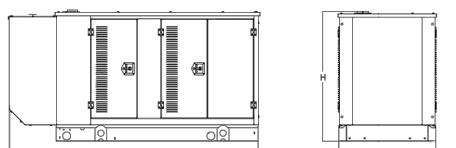
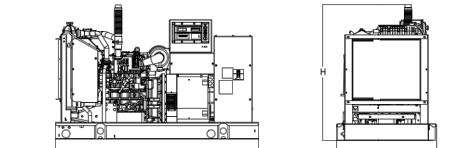
Standby - See Bulletin 0187500SSB

Prime - See Bulletin 0187510SSB

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



GENERAC | INDUSTRIAL POWER

EPA Certified Stationary Emergency

OPEN SET (Includes Exhaust Flex)

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	76.0 (1,930) x 37.4 (950) x 44.8 (1,138)	1,641 (745)
19	54 (204)	76.0 (1,930) x 37.4 (950) x 57.8 (1,468)	2,121 (963)
47	132 (501)	76.0 (1,930) x 37.4 (950) x 69.8 (1,773)	2,351 (1,067)
75	211 (799)	76.0 (1,930) x 37.4 (950) x 81.8 (2,078)	2,560 (1,162)
107	300 (1,136)	92.9 (2,360) x 37.4 (950) x 81.8 (2,078)	2,623 (1,190)

WEATHER PROTECTED ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	94.8 (2,409) x 38.0 (965) x 49.5 (1,258)	
19	54 (204)	94.8 (2,409) x 38.0 (965) x 62.5 (1,588)	372 (241)
47	132 (501)	94.8 (2,409) x 38.0 (965) x 74.5 (1,893)	(170)
75	211 (799)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	
107	300 (1,136)	94.8 (2,409) x 38.0 (965) x 86.5 (2,198)	

LEVEL 1 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	112.5 (2,857) x 38.0 (965) x 49.5 (1,258)	
19	54 (204)	112.5 (2,857) x 38.0 (965) x 62.5 (1,582)	505 (338)
47	132 (501)	112.5 (2,857) x 38.0 (965) x 74.5 (1,893)	(230)
75	211 (799)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	
107	300 (1,136)	112.5 (2,857) x 38.0 (965) x 86.5 (2,198)	

LEVEL 2 ACOUSTIC ENCLOSURE

Run Time - Hours	Usable Capacity - Gal (L)	L x W x H - in (mm)	Weight - lbs (kg)
No Tank	-	94.8 (2,407) x 38.0 (965) x 61.1 (1,551)	
19	54 (204)	94.8 (2,407) x 38.0 (965) x 74.1 (1,881)	510 (341)
47	132 (501)	94.8 (2,407) x 38.0 (965) x 86.1 (2,186)	(232)
75	211 (799)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)	
107	300 (1,136)	94.8 (2,407) x 38.0 (965) x 98.1 (2,491)	

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

TTS Series Switches

200 Amps
600 VAC



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

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

Optional Features

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

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 3-Point Latching System with Pad-Lockable Handles
Mounting Options	Wall H-frame
Installed	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 Announcer 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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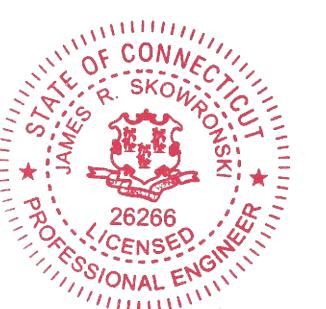
PREPARED FOR:



CONSULTANT:
GENERAL DYNAMICS
Information Technology, Inc.

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

Certification & Seal:
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Signature: 
Date: 12/09/2020

I	12/9/20	REVISED CDS
MARK	DATE	DESCRIPTION
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PROJECT TITLE:		11/23/2020

NW HARTFORD
FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

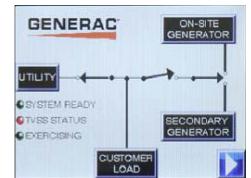
SCALE: NONE

PROJECT NUMBER: 48252
SHEET NUMBER: E-5



TTS Control Systems

Touch Screen Interface



TAS200

3 of 3

INDICATORS AND BUTTONS

<ul style="list-style-type: none">System Ready indicatorStandby Operating indicatorUtility Available indicatorGEN/UTIL Switch Position indicatorTVSS status	<ul style="list-style-type: none">Normal Test buttonFast Test buttonReturn to Normal buttonReset buttonExercising indicator
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DETAILS SCREEN

System Settings: <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 voltageOver Voltage: 105%-125% of nominal voltagePickup (hysteresis): fixed at 5 voltsDelay time: 0-60sUtility Interrupt Delay: 0-60sReturn to Utility Timer: 1-30 minutesTransfer:<ul style="list-style-type: none">In-phase, orTime-Delay-Neutral at 0.0-10.0s in 1 second increments	Exercise Settings: <ul style="list-style-type: none">Time of dayDay of weekExercise:<ul style="list-style-type: none">Exercise with/without loadExercise once every 1, 2, or 4 weeksExercise time-of-dayExercise day of weekExercise duration: 15-30 minutes
Engine Settings: <ul style="list-style-type: none">Engine Warm-up timer: 0-20 minutesGenerator Load Accept:<ul style="list-style-type: none">Time-Delay-Neutral at 0.0-10.0s in 1 second incrementsVoltage: 85-95% of nominalFrequency: 85-95% of nominalEngine Minimum Run Timer: 5-30 minutesEngine Cooldown Timer: 0-20 minutes	Screen Settings: <ul style="list-style-type: none">Brightness & Contrast buttonScreen Calibration buttonStartup/Clean screen Diagnostics: <ul style="list-style-type: none">Digital I/O bits statusVoltage A/D readings Mimic Diagram: <ul style="list-style-type: none">System ReadyTransfer switch positionUtility availableStandby availableMaintenance/Auto switch positionGenerator source TS positionTVSS status

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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.



James R. Skowronski
Signature: Date: 12/09/2020

I 12/9/20 REVISED CDS
MARK DATE DESCRIPTION
ISSUE PHASE FINAL DATE ISSUED 11/23/2020
PROJECT TITLE:

NW HARTFORD
FA ID # 10071191

PROJECT INFORMATION:
439-455 HOMESTEAD AVENUE
HARTFORD, CT 06112

SHEET TITLE:
GENERAC ATS SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 48252
SHEET NUMBER E-5.1

Unofficial Property Record Card - Hartford, CT**General Property Data**

Parcel ID	152-181-002	Account Number	
Prior Parcel ID			
Property Owner	TALAR PROPERTIES LLC	Property Location	441-455 HOMESTEAD AVE
Mailing Address	705 N MOUNTAIN RD	Property Use	VAC LAND IND
City	NEWINGTON	Most Recent Sale Date	3/7/2001
Mailing State	CT	Legal Reference	04350-0044
ParcelZoning	CX-1	Grantor	HUDSON ASSOCIATES
		Sale Price	0
		Land Area	79,715.000 acres

Current Property Assessment

Card 1 Value	Building Value 0	Xtra Features Value 0	Land Value 224,630	Total Value 224,630
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Building Description

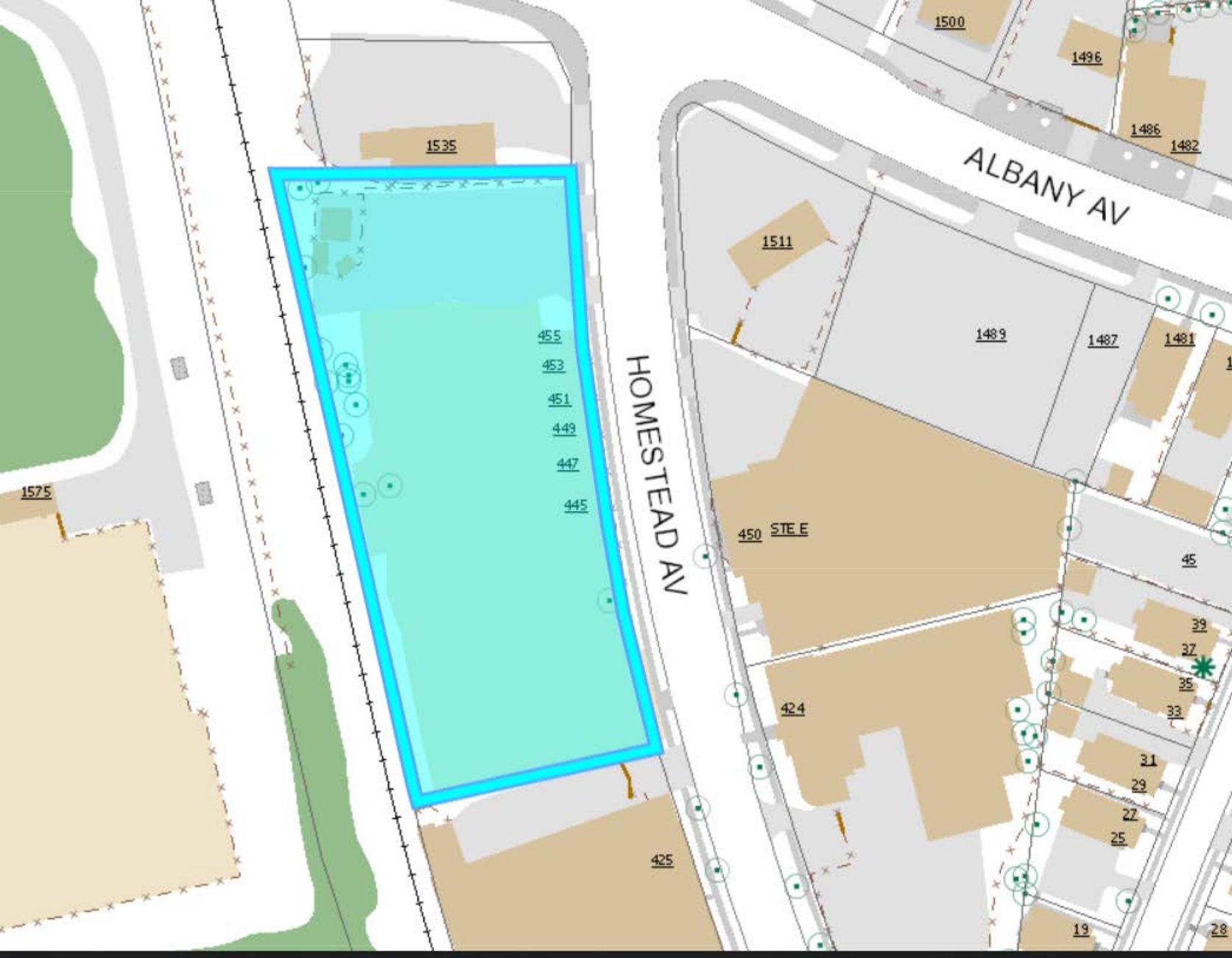
Building Style N/A	Foundation Type N/A	Flooring Type N/A
# of Living Units 0	Frame Type N/A	Basement Floor N/A
Year Built N/A	Roof Structure N/A	Heating Type N/A
Building Grade N/A	Roof Cover N/A	Heating Fuel N/A
Building Condition N/A	Siding N/A	Air Conditioning 0%
Finished Area (SF) 0	Interior Walls N/A	# of Bsmt Garages 0
Number Rooms 0	# of Bedrooms 0	# of Full Baths 0
# of 3/4 Baths 0	# of 1/2 Baths 0	# of Other Fixtures 0

Legal Description**Narrative Description of Property**

This property contains 79,715.000 acres of land mainly classified as VAC LAND IND with a(n) N/A style building, built about N/A, having N/A exterior and N/A roof cover, with 0 commercial unit(s) and 0 residential unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 0 half bath(s).

Property Images

Disclaimer: This information is believed to be correct but is subject to change and is not warranted.



ATTACHMENT 2

DOCKET NO. 126 - AN APPLICATION OF : Connecticut Siting
METRO MOBILE CTS OF HARTFORD, INC., : Council
FOR A CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED FOR
THE CONSTRUCTION, OPERATION, AND : April 9, 1990
MAINTENANCE OF A CELLULAR TELEPHONE
TOWER AND ASSOCIATED EQUIPMENT IN
THE CITY OF HARTFORD, CONNECTICUT.

D E C I S I O N A N D O R D E R

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of a cellular telephone facility at the proposed Hartford site, including effects on the natural environment; ecological integrity and balance; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by Section 16-50k of the General Statutes of Connecticut (CGS), be issued to Metro Mobile CTS of Hartford, Inc., for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed site in Hartford, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The monopole tower including antennas and associated equipment shall not exceed a height of 153 feet above ground level, 215 feet AMSL.
2. The facility shall be constructed in accordance with the State of Connecticut Basic Building Code.
3. The tower shall be designed and constructed to withstand 125 mph winds with two-inch radial ice accumulation.
4. The Certificate Holder shall prepare a Development and Management (D&M) plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans of the site preparation with a soil boring report; plans, design details, and specifications for the tower foundation; and a site plan with placement of the tower as far removed from abutting properties and structures as possible.

5. The Certificate Holder shall prepare the D&M plan in consultation with the City of Hartford, which may provide its comments to the Council within 20 days of submission to the City.
6. The Certificate Holder shall comply with existing and any future radio frequency (RF) standard promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facility granted in this Decision and Order shall be brought into compliance with such standards.
7. The Certificate Holder shall provide the Council a recalculated report of power density if and when additional channels over the proposed 90 channels, higher wattage over the proposed 100 watts per channel, or if other circumstances in operation cause a change in power density above the levels originally calculated in the application.
8. The Certificate Holder shall permit public or private entities to share space on the tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
9. If this facility does not initially provide, or permanently ceases to provide, cellular service following the completion of construction, this Decision and Order shall be void, and the tower and all associated equipment in this application shall be dismantled and removed or reapplication of any new use shall be made to the Council before any such new use is made.
10. Unless otherwise approved by the Council, this Decision and Order shall be void if construction authorized herein is not completed within three years of the effective date of this Decision and Order.

Pursuant to Section 16-50p of the CGS, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below. A notice of issuance shall be published in the Hartford Courant.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of State Agencies.

The parties or intervenors to this proceeding are:

(Applicant)

Metro Mobile CTS of
Hartford, Inc.
100 Corporate Drive
Windsor, CT 06095
Attn: Gary N. Schulman
Vice President and
General Manager

(Its Representative)

Robinson & Cole
One Commercial Plaza
Hartford, CT 06103-3597
Attn: Earl W. Phillips
Jr., Esq.

(Intervenor)

SNET Cellular, Inc.
227 Church Street
New Haven, CT 06506

(Its Representative)

Peter J. Tyrrell
Senior Attorney
SNET Cellular, Inc.
227 Church Street
Room 1021
New Haven, CT 06506

JAW

4248E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 126 - An application of Metro Mobile CTS of Hartford, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telephone tower and associated equipment in the City of Hartford, Connecticut, or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 9th day of April, 1990.

Council Members

Vote Cast

Gloria Dibble Pond

Gloria Dibble Pond
Chairperson

Yes

Peter Boucher
Commissioner Peter Boucher
Designee: Robert A. Pulito

Yes

Leslie Carothers
Commissioner Leslie Carothers
Designee: Brian Emerick

Yes

Harry E. Covey
Harry E. Covey

Yes

Mortimer A. Gelston
Mortimer A. Gelston

Yes

Daniel P. Lynch, Jr.
Daniel P. Lynch, Jr.

Yes

Paulann H. Sheets
Paulann H. Sheets

Abstain

William H. Smith
William H. Smith

Yes

Colin C. Tait
Colin C. Tait

Yes

ATTACHMENT 3

CERTIFICATION

I hereby certify that on the 7th day of January, 2021, a copy of AT&T's Exempt Modification Request to the Connecticut Siting Council was sent by electronic mail to the chief elected official and the planning and zoning department of the municipality in which the facility is located as well as by first class mail to the property owner and tower/facility owner.



Dated: January 7, 2021

Cuddy & Feder LLP
445 Hamilton Avenue, Floor 14
White Plains, NY 10601
Attorneys for:
New Cingular Wireless PCS, LLC (AT&T)