

G. Scott Shepherd, Sr. Property Specialist - SBA Communications 134 Flanders Rd., Suite 125, Westborough, MA 01581 508.251.0720 x 3807 - GShepherd@sbasite.com

November 5, 2021

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

RE: Notice of Exempt Modification 540 Cherry Brook Rd., Canton, CT Latitude: 41.894052 Longitude: -72.893850 T-Mobile Site #: CTHA530A_Hardening

Dear Ms. Bachman:

T-Mobile currently maintains nine (9) antennas at the 129-foot level of the existing 150-foot Monopole Tower at **540 Cherry Brook Rd., Canton, CT.** The tower is owned by SBA Towers, LLC. The property is owned by North Canton Volunteer Fire Association. T-Mobile now intends to add one (1) Generac RD025 Diesel generator and 4' x 10' concrete pad, within a 65' x 62' fenced compound lease area. The proposed generator and concrete pad will sit fully within the leased area of the compound and will not require additional space for the supplementary tank.

Ground

Install New:

- (1) Generac RD0 25kw Diesel generator
- (1) 4' x 10' concrete pad
- (1) 2" RGS Conduit for emergence power routed from proposed ATS to Existing PPC
- (1) 2" RGS conduit for emergency power routed from proposed generator to proposed ATS
- (1) 1-1/2" RGS conduit for generator heater & Battery charger routed from existing PPC to proposed generator
- (1) 2" RGS conduit for Ethernet cable for generator controls & Alarms from exist. Equip. cabinet to prop. generator
- Generac 200A, 120/240v automatic transfer switch mounted to proposed H-Frame



Remaining:

- T-Mobile Emerson Nextend Compact 2416 fiber cabinet
- Existing PPC
- T-Mobile cables routed along exist. Ice bridge
- T-Mobile Ericsson B160 cabinet
- T-Mobile Ericsson 6160 equip. Cabinet
- Existing 12' x 15' concrete pad

Reason for Request / Change in Generator Size and Fuel

In an effort to further enhance network reliability, T-Mobile is proposing to install a diesel-based backup generator, the Generac RD025 25kw Diesel Generator. T-Mobile is currently in the middle of a National Hardening Project.

The proposed diesel generator measures 84.2" x 35" x 91.7" (w/fuel tank: 103.4" x 35" x 91.7"). It will sit fully within the leased area of the compound and will not require additional space for the supplementary tank.

Generac's RD025 25kw Diesel Generator carries up to 98 hours of run time with 100% load, 125 hours of run time with a 75% load and 161 hours of run time with a 50% load. It can operate in temperatures of 122 degrees Fahrenheit.

Monitoring, Prevention and Containment Measures

It will be filled by a licensed fuel filling company. The Generac's RD025 25kw Diesel Generator is fuel efficient, rodent and corrosion resistant, and has a sound attenuated aluminum enclosure with a Rated Load Sound Output at 23ft. of -65dB. It further supports advanced, remote monitoring for diagnostics and control and is installed with a tank alarm system. The Sound Output from the Generac RD025kw meets/exceeds the allowable noise emissions levels for the Town of Canton, CT which is as follows:

Maximum Continuous Noise Levels (measured in dBA):

Ordinance Amending Chapter 23 of the Hartford Municipal Code: Section 23-3:

- (a) It shall be unlawful for any person to emit or cause to be emitted any noise beyond the boundaries of his/her premises in excess of the noise levels established in these regulations.
- (b) Noise level standards
- (1) No person in a residential zone shall emit noise beyond the boundaries of his/her premises exceeding the levels stated herein and applicable to adjacent residential, commercial or industrial zones:



Emitter's Zone:

- Residential Receptor's Zone : Maximum Level:
- Industrial...62dBA
- Commercial...55 dBA
- Residential/Day...55 dBA
- Residential/Night...45 dBA

The proposed modification will remain within the existing $65' \times 62'$ fenced compound. The new generator and tank will be surrounded by the existing security fence and 12' 6'' wide double leaf gate and will be placed on a plinth secured to a proposed 4' x 10' concrete pad.

Additional safety specifications:

- Automatic Voltage Regulation with Over and Under Protection
- Overspeed Shutdown
- High Tempature Shutdown
- Meets ANSI/IEEE C62.41, SA CSA 22.2, SAE J1349, NFPA 37, 70 99

Revised Construction Drawings and Full Spec Sheets referencing the above are attached herewith.

The revised ground configuration continues to meet all requirements for a Notice of Exempt Modifications. The request remains technically, legally, environmentally, and economically feasible and meets public safety concerns per Connecticut General Statute Section 16-50aa.

There is no environmental impact associated with the revised ground configuration, including, but not limited to, visibility, wetlands and water resources, air quality or noise.

T-Mobile's revised ground configuration:

- Will not have any significant adverse visual impact on the surrounding areas
- Does not affect or alter the existing site with regard to wetlands, water resources or air quality
- The generator would only be used in cases of emergency and would provide backup time of approximately 60 hours in time of need.

The proposed work is not thought to have any substantial adverse environmental impact. Public Need for the additional coverage outweighs any minor environmental effects that would result from the construction, operation, and maintenance of the proposed collocation.

A Map of the Site Showing Nearest Wetlands, depicted in feet, is attached herewith.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2). In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of Canton's First Selectman, Robert Bessel and Neil Pade, Dir. Of Planning & Zoning, as well as, to the Chief Administrative Officer for the North Canton Volunteer Fire Association, Robert Skinner. (Separate notice is not being sent to tower owner, as it belongs to SBA.)



The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

- 1. The proposed modifications will not result in an increase in the height of the existing structure.
- 2. The proposed modification will not require the extension of the site boundary.
- 3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
- 4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
- 5. The proposed modification will not cause a change or alteration in the physical or environmental characteristics of the site.
- 6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above-referenced telecommunication facility constitute an exempt modifications under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

G. Scott Shepherd Sr. Property Specialist SBA COMMUNICATIONS CORPORATION 134 Flanders Rd., Suite 125 Westborough, MA 01581 508.251.0720 x3807 + T 508.366.2610 + F 508.868.6000 + C GShepherd@sbasite.com

Attachments

 cc: Robert Bessel, First Selectman / with attachments Canton Town Hall, 4 Market St, PO Box 168, Collinsville, CT 06022
 Neil Pade, AICP, Dir. Of Planning & Zoning Canton Town Hall, 4 Market St, PO Box 168, Collinsville, CT 06022
 Robert Skinner, Chief Admin. Officer North Canton Volunteer Fire Association / with attachments PO Box 393, North Canton, CT 06059-0393 {SBA remit to address on file}



Exhibit List

Exhibit 1	Check Copy	x
Exhibit 2	FedEx Labels	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Zoning Documents	Town of Canton Special Permit (10/19/00),
		Superior Court Judicial District of Hartford,
		No. CV0005954065 (10/18/00)
Exhibit 6	Construction Drawings	Chappell 10/29/21
Exhibit 7	Generator Specifications	x
Exhibit 8	Wetlands Map	x

EXHIBIT 1

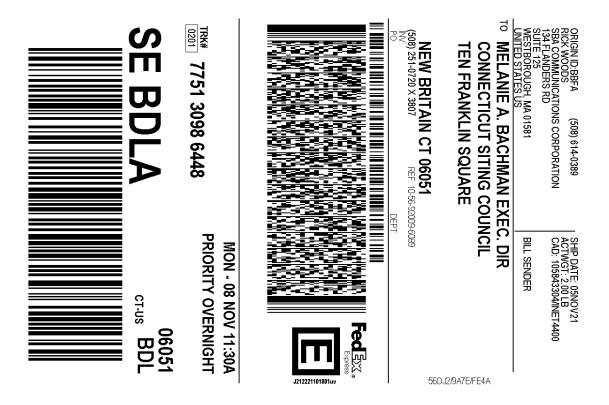
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Copy of Check for filing fee.

EXHIBIT 2

FedEx Labels



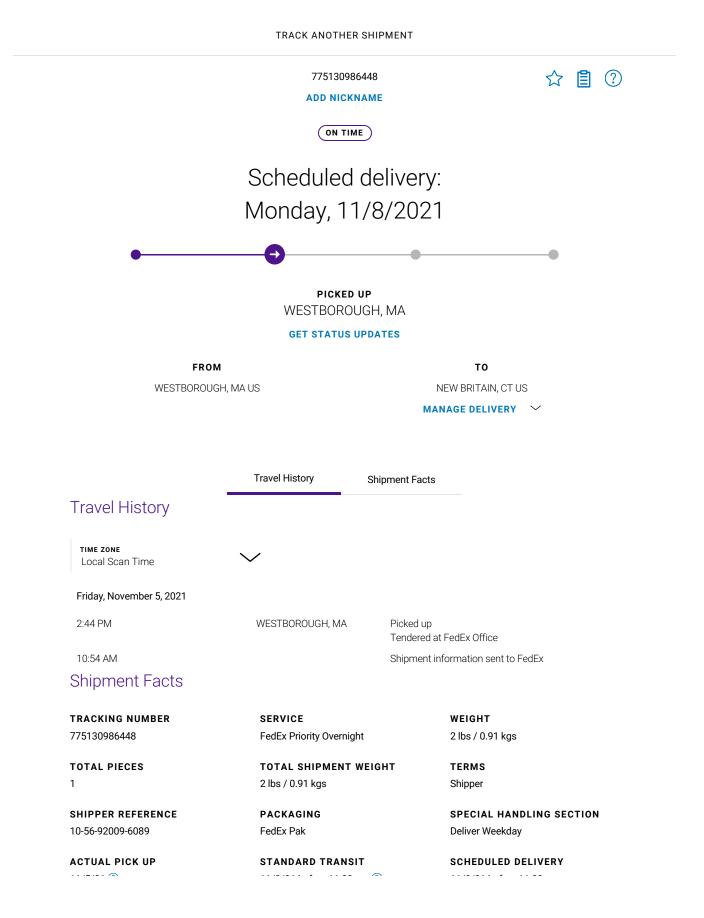
After printing this label:

- 1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
- 2. Fold the printed page along the horizontal line.
- 3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

FedEx.



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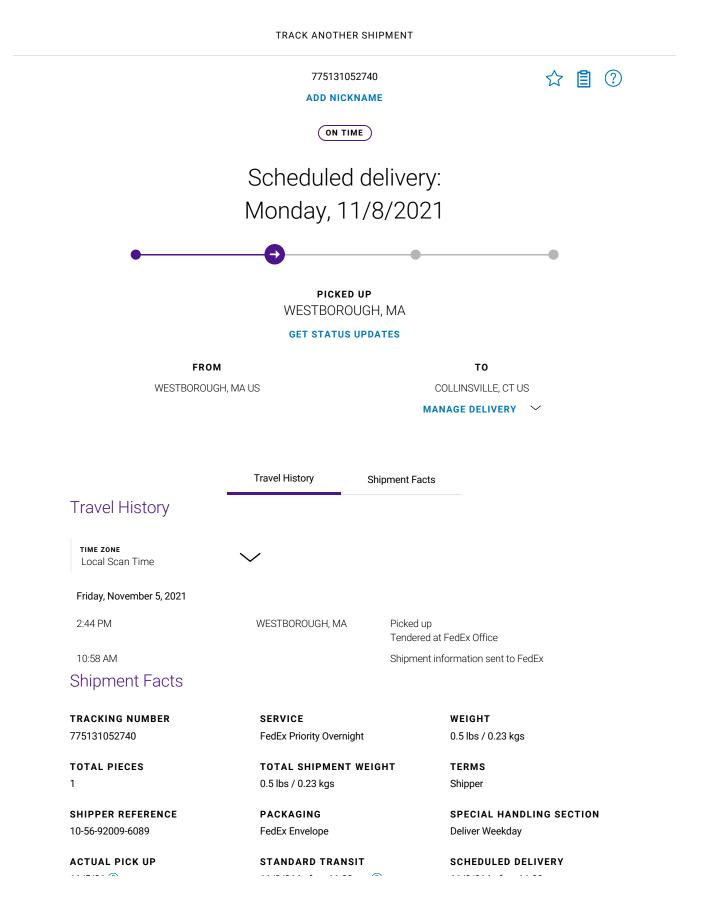
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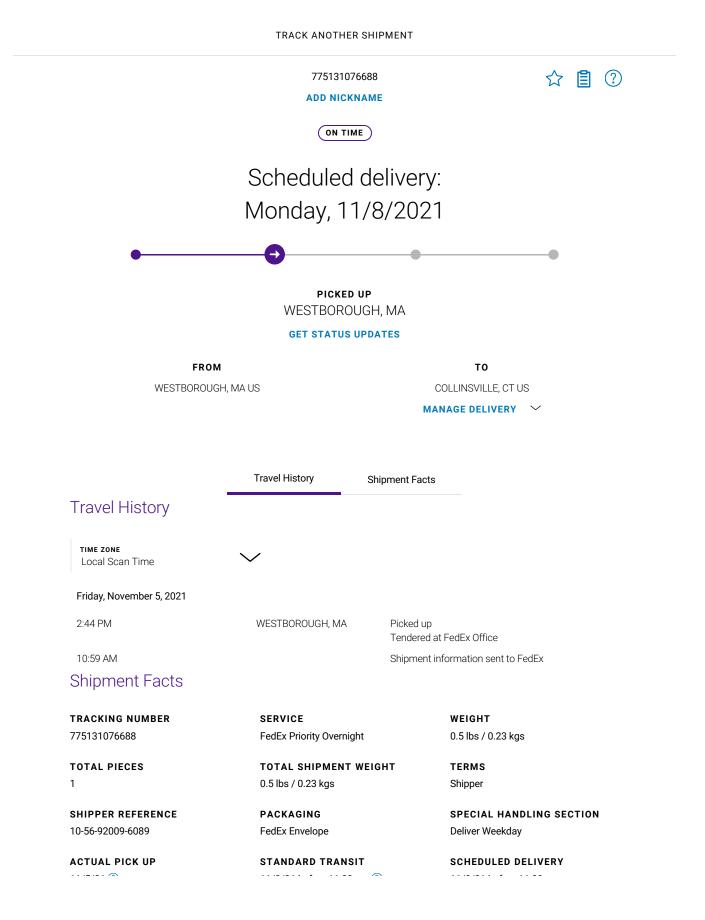
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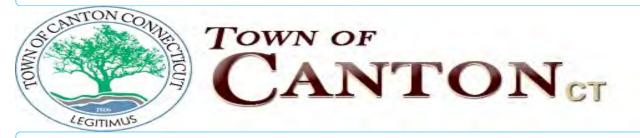


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SCA COMMUNICATION g. She phend Saule 125 Last Robor S H, NA SY FUNDERS TD. Total Grand Total: Product 11/05/2021 (Insurance Up to \$50.00 included prity Mail® 2-Day 1 North Canton, CT 06059 North Canton, CT 06059 WESTBOROUGH 150 E MAIN ST WESTBOROUGH, MA 0158 <1ng #: 9505 5112 4893 1309 6282 01 on 11/08/2021 POSTAL SERVIC 0UGH, MA 01581-9998 (800)275-8777 Qty Price 12:57 PM \$7.95 \$7.95 \$0.00 \$7.95 Price P.O. Box 393 NORTH CANTON VOL. FIRE C/O ROBERT SKINNER NORTH CPUTON, CT 06059-0392 210

EXHIBIT 3 Property Card

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



Information on the Property Records for the Municipality of Canton was last updated on 11/4/2021.

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Parcel Information

Location:	540 CHERRY BROOK ROAD	Property Use:	Automotive	Primary Use:	Serv Sta w/o Bays
Unique ID:	1850540	Map Block Lot:	7/185/0540	Acres:	5.77
490 Acres:	0.00	Zone:	MCPF	Volume / Page:	438/ 33
Developers Map / Lot:		Census:			

Value Information

	Appraised Value	Assessed Value
Land	171,310	119,910
Buildings	591,394	413,980
Detached Outbuildings	4,800	3,360

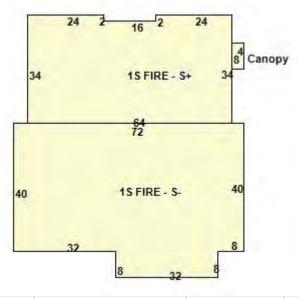
	Appraised Value	Assessed Value
Total	767,504	537,250

Owner's Information

Owner's Data
CANTON TOWN OF
PO BOX 168
COLLINSVILLE, CT 06022

Building 1

Photo Not Available



Category:	Public Use	Use:	Fire Station - Staffed	GLA:	5,280
Stories:	1.00	Construction:	Metal	Year Built:	2006

Heating:	FHA	Fuel:	Oil	Cooling Percent:	0
Siding:	Metal	Roof Material:	Asphalt	Beds/Units:	0

Special Features

Attached Components

Туре:	Year Built:	Area:
Canopy	2006	32

Detached Outbuildings

Туре:	Year Built:	Length:	Width:	Area:
Paving	2006	0.00	0.00	6,000

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
CANTON TOWN OF	0438	0033	01/25/2018	Warranty Deed	\$0
NORTH CANTON FIRE DEPT	0057	344-			\$O

Information Published With Permission From The Assessor

EXHIBIT 4 Property Map



https://canton.mapxpress.net/ags_map/default.htm?UNIQUE_ID=1850540

Google Maps 540 Cherry Brook Rd



Imagery ©2021 CNES / Airbus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2021 200 ft 🛽

EXHIBIT 5 Zoning Documents

SITE ID #4275-011

SITE NAME: North Canton, 2

JOB COST #001500

ZONING/PERMITTING COMPLETION FORM

Zoning Classification for Site: AR-3

Special Relief (setback, height variance, special use permit, wetlands permit etc.):

Special Permit Approval

* Date of Zoning Decision: 10/19/00

Summary of zoning conditions (Include details of any conditions relative to time restrictions, expiration dates, renewal obligations, monetary obligations, performance obligation, inspection fees).

See attached Stipulation for Judgment. Settlement was reached via litigation. Included in the stipulated judgment is a condition that the Special Permit is to be renewed by SBA every five years.

Submitted by: Esther McNany

Title: Territory Manager

Territory Manager Approval:

* Attach a copy of the Zoning decision and forward to the Regional Compliance Manager as soon as possible, after the decision.

John W. Knuff JWK@hurwitz-sagarin.com

HURWITZ @ SAGARIN LLC

October 23, 2000

Sheila Becker, Esq. SBA, Inc. 900 Cummings Center Suite 216U Beverly, MA 01915

Ms.Esther McNany SBA, Inc. 80 Eastern Boulevard Glastonbury, CT 06033

Re: SBA v. Canton

Dear Sheila and Esther:

Enclosed please find a Motion For Judgment and Stipulation For Judgment in the captioned matter. The Court entered judgment in accordance with the stipulation this morning. Counsel for the Town will let me know when the special exception will be issued. Once it is, the federal action will be withdrawn.

Please call me with any questions.

Very truly yours,

John W. Knuff JWK:kvc

Enclosures

147 North Broad Street, P.O. Box 112, Milford, Connecticut 06460-0112

NO. CV 00 0595406S

SUPERIOR COURT

OF HARTFORD

JUDICIAL DISTRICT

SBA COMMUNICATIONS, INC.

v.

ZONING COMMISSION OF THE TOWN OF CANTON

OCTOBER 23, 2000

MOTION FOR JUDGMENT

Defendant Zoning Commission of the Town of Canton hereby move for judgment in accordance with the attached Stipulation of Judgment. John Knuff, counsel for plaintiff SBA Communications, Inc. has been contacted regarding this Motion and has no objection.

> DEFENDANT, ZONING COMMISSION OF THE TOWN OF CANTON

Harris By . Harris

Matthew Ranelli For Shipman & Goodwin LLP Its Attorneys

ORAL ARGUMENT REQUESTED TESTIMONY NOT REQUIRED

SHIPMAN & GOODWIN U.P . COUNSELORS AT LAW

HARTFORD, CONNECTICUT 06103-2819 • (860) 251-5000 • FAX (860) 251-5099 • JURIS NO. 57385

ORDER

The foregoing Motion having been heard, it is hereby ORDERED: GRANTED/DENIED.

BY THE COURT,

DATE

Judge/Assistant Clerk

CERTIFICATION OF SERVICE

I hereby certify that a copy of the foregoing Motion for Judgment was mailed, postage prepaid, this 23rd day of October, 2000, to:

John W. Knuff, Esq. Margaret E. Haering, Esq. Hurwitz & Sagarin, LLC 147 North Broad Street Milford, Connecticut 06460

Matthew Ranelli

276153

SHIPMAN & GOODWIN LLP • COUNSELORS AT LAW ONE AMERICAN ROW • HARTFORD, CONNECTICUT 06103-2819 • (860) 251-5000 • FAX (860) 251-5099 • JURIS NO. 57385

NO. CV 00 05954065	: SUPERIOR COURT
SBA COMMUNICATIONS, INC.	: JUDICIAL DISTRICT OF HARTFORD
v.	
ZONING COMMISSION OF THE TOWN OF CANTON	: : OCTOBER 19, 2000

STIPULATION FOR JUDGMENT

The parties hereby stipulate to the following facts:

 Plaintiff SBA Communications, Inc. ("SBA") is a Florida corporation in the business of providing services to licensed personal wireless telecommunications carriers.

 The Zoning Commission of the Town of Canton (the "Commission") is the duly authorized Zoning Commission of the Town of Canton.

3. On September 2, 1999, SBA submitted to the Commission an application for a special exception and site plan approval for a facility consisting of a 195 foot monopole with a fenced-in compound area to be located on property owned by the North Canton Volunteer Fire Association, Inc. (the "Fire Association"). The plan included provisions to tear down the existing communications tower also located on the Fire Association's property and to erect a 195 foot monopole and relocate the Fire Association's emergency radio service antennas to the new pole.

4. The location of the proposed tower is zoned AR-3.

5. Telecommunication towers are a permitted use in all districts, including AR-3, in Canton subject to approval of a special exception. The regulations limit tower height to 70 feet and impose front and side yard setback requirements.

6. On August 9, 1999, SBA obtained a variance from the Canton Zoning Board of Appeals of the tower height limitation.

7. After holding duly-noticed public hearings on November 17, 1999 and December 15, 1999, the Commission denied SBA's application for special exception for the reasons stated in its denial letter to SBA dated April 10, 2000.

8. On January 4, 2000, SBA appealed the Commission's decision to the Connecticut Superior Court and filed an action in the United States District Court for the District of Connecticut (<u>SBA Communications, Inc. v. Zoning Commission of the Town of Canton</u>, Civil Action No. 3:00 CV 007 (RNC)) setting forth claims under the federal Telecommunications Act of 1996, 47 U.S.C. § 332.

-2-

9. While these state and federal court claims were pending, the parties made cooperative settlement efforts resulting in this Stipulation for Judgment.

10. The parties agree that this Stipulation is subject to Superior Court approval.

11. The defendant Commission hereby agrees to issue a special exception and site plan approval for a 150 foot monopole at the Fire Association site in settlement of the state and federal court actions as approved at its October 18, 2000 meeting. The monopole would house the Fire Association's emergency communications system and be subject to the following conditions:

a. The facility is approved and will be constructed in accordance with the revised site plan dated December 13, 1999 except that the tower height shall be a maximum of 150 feet rather than 195 feet and that the diameter of the tower at the base and top shall be the lesser of the dimensions shown on the reference plan or as prescribed by the ANSI standard;

 b. If more than five carriers are to be installed, the applicant must submit a site plan modification;

c. Additional landscaping shall be provided to satisfactorily screen the fencing and auxiliary structures according to the requirements of the Town Planner;

d. Any auxiliary equipment deviations from the drawings dated December 13, 1999 must be submitted for site plan review;

e. A removal bond must be posted in the initial amount of \$50,000 and adjusted upon renewal dates to reflect the true cost of removal;

f. The tower shall be inspected for structural integrity every five years and the removal bond shall be renewed concurrently;

g. Approval is for a five year period and is renewable for an additional five years subject to a successful submission of a re-inspection report and renewals of a removal bond; and

h. Approval of the special exception is subject to approval of the settlement by the Superior Court.

12. The defendant Commission will issue the special exception permit to plaintiff SBA promptly after the Court's approval and entry of this Stipulation for Judgment. Within five days after issuance of the special exception by the

- 4 -

defendant Commission in accordance with this Stipulation, the parties will file a Stipulation of Dismissal of the pending action in the United States District Court for the District of Connecticut.

13. Plaintiff SBA agrees to provide counsel for defendant with an executed Stipulation of Dismissal to be held in escrow, pending issuance of the special exception permit and site plan.

THE PLAINTIFFS

Βv Elias A. Alexiades

John W. Knuff Hurwitz & Sagarin, Lhe 147 North Broad Street Milford, Connecticut 06460 Juris No. 26616 Telephone: (203) 877-8000 THE DEFENDANTS

By: John Harris

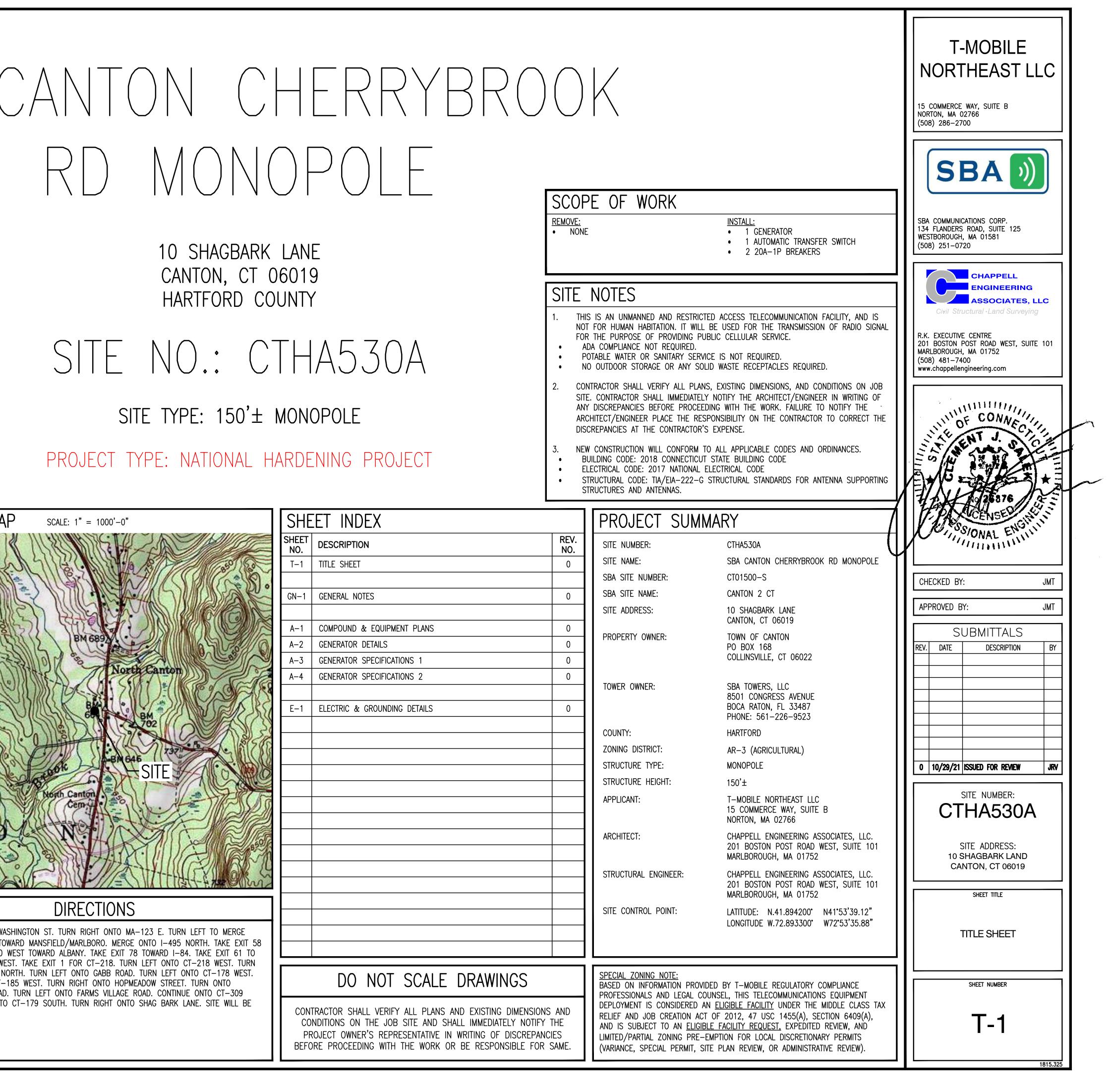
John T. Harris Matthew Ranelli Shipman & Goodwin, LLP One American Row Hartford, Connecticut 06101 Juris No. Telephone: 860-251-5602

EXHIBIT 6

Constrcution Drawings

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APPROVALS				1
PROJECT MANAGER:	DATE:	ZONING/SITE ACQ.:	DATE:	
<u>CONSTRUCTION:</u>	DATE:	<u>OPERATIONS:</u>	DATE:	
<u>RF ENGINEERING:</u>	DATE:	TOWER OWNER:	DATE:	
SECTOR A:ACCESSSECTOR B:ACCESSSECTOR C:ACCESS	AL RESTRICTION BY CERTIFIED BY CERTIFIED BY CERTIFIED BY CERTIFIED BY CERTIFIED BY CERTIFIED RICTED RICTED RICTED	<u>ONS</u> CLIMBER CLIMBER CLIMBER		
GENERAL NOTES				- VICINITY MAF
 THE CONTRACTOR SHALL GIVE ALL NOTICES LAWS, ORDINANCES, RULES, REGULATIONS AN ANY PUBLIC AUTHORITY, MUNICIPAL AND UTIL SPECIFICATIONS, AND LOCAL AND STATE JUR BEARING ON THE PERFORMANCE OF THE WO PERFORMED ON THE PROJECT AND THE MAT BE IN STRICT ACCORDANCE WITH ALL APPLIC REGULATIONS, AND ORDINANCES. THE ARCHITECT/ENGINEER HAVE MADE EVERY IN THE CONSTRUCTION AND CONTRACT DOCU SCOPE OF WORK. THE CONTRACTOR BIDDING NEVERTHELESS CAUTIONED THAT MINOR OMIS THE DRAWINGS AND OR SPECIFICATIONS SHA CONTRACTOR FROM COMPLETING THE PROJEC ACCORDANCE WITH THE INTENT OF THESE D BITHE CONTRACTOR OR BIDDER SHALL BEAR T NOTIFYING (IN WRITING) THE OMNIPOINT REP CONFLICTS, ERRORS, OR OMISSIONS PRIOR T CONTRACTOR'S PROPOSAL OR PERFORMANCE OF DISCREPANCIES THE CONTRACTOR SHALL OR EXTENSIVE WORK, UNLESS DIRECTED IN THE SCOPE OF WORK SHALL INCLUDE FURN EQUIPMENT, LABOR AND ALL OTHER MATERIA NECESSARY TO COMPLETE THE WORK/PROJE HEREIN. THE CONTRACTOR SHALL VISIT THE JOB SITE SUBMISSION OF BIDS OR PERFORMING WORK WITH THE FIELD CONDITIONS AND TO VERIFY BE CONSTRUCTED IN ACCORDANCE WITH THE THE CONTRACTOR SHALL OBTAIN AUTHORIZAT CONSTRUCTION PRIOR TO STARTING WORK O DEFINED BY THE CONSTRUCTION DRAWINGS/M THE CONTRACTOR SHALL INSTALL ALL EQUIP ACCORDING TO THE MANUFACTURER'S/VENDCUNLESS NOTED OTHERWISE OR WHERE LOCA TAKE PRECEDENCE. 	ID LAWFUL ORDERS OF JTY COMPANY ISDICTIONAL CODES RK. THE WORK ERIALS INSTALLED SHALL ABLE CODES, (EFFORT TO SET FORTH MENTS THE COMPLETE THE JOB IS SIONS OR ERRORS IN LL NOT EXCUSE SAID CT AND IMPROVEMENTS IN DCUMENTS. HE RESPONSIBILITY OF RESENTATIVE OF ANY TO THE SUBMISSION OF OF WORK. IN THE EVENT PRICE THE MORE COSTLY WRITING OTHERWISE. ISHING ALL MATERIALS, LS AND LABOR DEEMED CT AS DESCRIBED E PRIOR TO THE CT FAMILIARIZE HIMSELF THAT THE PROJECT CAN CONTRACT DOCUMENTS. ION TO PROCEED WITH N ANY ITEM NOT CLEARLY CONTRACT DOCUMENTS. MENT AND MATERIALS DR'S SPECIFICATIONS	 REMAINING ON THE PROPERTY. PREMISES S CONDITION AND FREE FROM PAINT SPOTS, ANY NATURE. 14. THE CONTRACTOR SHALL COMPLY WITH ALL THEY APPLY TO THIS PROJECT. 15. THE CONTRACTOR SHALL NOTIFY THE PROJ REPRESENTATIVE WHERE A CONFLICT OCCUP CONTRACT DOCUMENTS. THE CONTRACTOR I MATERIAL OR CONSTRUCT ANY PORTION OF CONFLICT UNTIL CONFLICT IS RESOLVED BY REPRESENTATIVE. 16. THE CONTRACTOR SHALL VERIFY ALL DIMEN PROPERTY LINES, ETC. ON THE JOB. 17. ALL UNDERGROUND UTILITY INFORMATION W SURFACE INVESTIGATIONS AND EXISTING PLJ CONTRACTOR SHALL LOCATE ALL UNDERGRO FIELD PRIOR TO ANY SITE WORK. 	RTY. AL WORK AREA CLEAN AND DISPOSE OF ALL DIRT, NOT SPECIFIED AS SHALL BE LEFT IN CLEAN DUST, OR SMUDGES OF . OSHA REQUIREMENTS AS ECT OWNER'S RS ON ANY OF THE IS NOT TO ORDER THE WORK THAT IS IN THE LESSEE/LICENSEE ISIONS, ELEVATIONS, AS DETERMINED FROM ANS OF RECORD. THE DUND UTILITIES IN THE RIOR TO ACTOR IS	
	ET OF CONSTRUCTION E LATEST REVISIONS AND OR THE USE BY ALL RECT THE PROJECT . BE SOLELY S, METHODS, AND FOR COORDINATING ONTRACT. VIDING ALL NECESSARY HING AND MAINTAINING TRUCT ALL IMPROVEMENTS	REQUIRED TO CALL DIG S		TURN LEFT ONTO S WAS ONTO I-495 NORTH TOW TO MERGE ONTO I-90 W MERGE ONTO I-291 WES RIGHT ONTO CT-189 NO TURN RIGHT ONTO CT-1 STRATTON BROOK ROAD. WEST. TURN LEFT ONTO ON THE LEFT.
12. THE CONTRACTOR SHALL MAKE NECESSARY EXISTING IMPROVEMENTS, EASEMENTS, PAVING CONSTRUCTION. UPON COMPLETION OF WORK	G, CURBING, ETC. DURING			

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<u>GENERAL NOTES:</u>	<u>CONCRETE</u>
 FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR – T–MOBILE SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION) 	1. ALL CONCR DESIGN AND C
OWNER – T-MOBILE OEM – ORIGINAL EQUIPMENT MANUFACTURER	2. ALL CONCR HIGHER STREN REQUIREMENTS
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.	3. REINFORCIN FABRIC SHALL "B" AND ALL F
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.	4. THE FOLLON DRAWINGS: CONCRET CONCRET
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.	#6 A #5 A CONCRET
5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.	OR NOT SLAB
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.	BEAM 5. A CHAMFER
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.	4.2.4. 6. INSTALLATIO
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.	PROCEDURE. T DEPTH OR AS HOLES IN CON
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.	MANUFACTUREF GALVANIZED. E 7. CONCRETE
ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION. 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.	(IBC1905.6.2.3 (A) RESULT (B) CERTIFI FOR GREATER
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.	8. AS AN ALTE CONCRETE FRO
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.	9. EQUIPMENT CYLINDER TES
13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.	STRUCTUR
14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.	1. ALL STEEL UNLESS OTHEF DRAWINGS. STE CONSTRUCTION
15. CONSTRUCTION SHALL COMPLY WITH ALL T-MOBILE STANDARDS AND SPECIFICATIONS.	2. ALL WELDIN
16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR	WHERE FILLET CONSTRUCTION
PROCEEDING WITH CONSTRUCTION.	3. BOLTED CO UNLESS NOTEI
17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.	4. NON-STRUG OTHERWISE.
18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN	5. CONTRACTO STEEL 6. ALL STRUC
TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.	SOIL COM
SITE WORK GENERAL NOTES: 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.	1. EXCAVATE A AS REQUIRED.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE	2. COMPACTIO ENGINEER IS /
PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.	3. AS AN ALTI "COMPACTION METHOD C.
3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.	4. COMPACTED
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.	3" LIFTS ABOV 5. AS AN ALTI
5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.	COMPACTOR (S AND SOFT ARE
6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.	COMPACTED AS COMPACTI
7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.	1. HAND OPER
8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.	CONSTRUC 1. FIELD VERIF SUBCONTRACTO
9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.	2. COORDINATI SUBCONTRACTO
10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.	3. CABLE LAD SUBCONTRACTO REQUIRED TO
11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T—MOBILE SPECIFICATION FOR SITE SIGNAGE.	

ETE AND REINFORCING STEEL NOTES:

INCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE ND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.

NCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A RENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE ENTS

RCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE IALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS ALL HOOKS SHALL BE STANDARD, UNO.

DLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON

CRETE EXPOSED TO EARTH OR WEATHER: \$6 AND LARGER2 IN. #5 AND SMALLER & WWF1½ IN. RETE NOT EXPOSED TO EARTH OR WEATHER

NOT CAST AGAINST THE GROUND: SLAB AND WALL

MFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION

ATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED E. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN URER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED . EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

TE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS 6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER; SULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT. RTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED. TER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.

ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF FROM EACH DIFFERENT BATCH PLANT.

IENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

TURAL STEEL NOTES:

EEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T-MOBILE SPECIFICATIONS THERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL TION (AISC) "MANUAL OF STEEL CONSTRUCTION".

LDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. LET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL TION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4 ") AND SHALL HAVE MINIMUM OF TWO BOLTS OTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

TRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE $\frac{5}{8}$ " DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED

CTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL

RUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

<u>OMPACTION NOTES FOR SLAB ON GRADE:</u>

TE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE

CTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR IS ACCEPTABLE.

ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION. THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH ION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557

CTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN ABOVE COMPACTED SOIL, GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE R (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND D AS STATED ABOVE.

CTION EQUIPMENT:

DPERATED DOUBLE DRUN, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

RUCTION NOTES:

ERIFICATION:

ACTOR SHALL FIELD VERIFY SCOPE OF WORK, T-MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.

INATION OF WORK:

ACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.

ACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.

2. SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL. 3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND

TELCORDIA.

4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND. 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION. OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).

8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.

9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER). 600 V. OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).

15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.

16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.

USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.

UL. ANSI/IEEE AND NEC.

25. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.

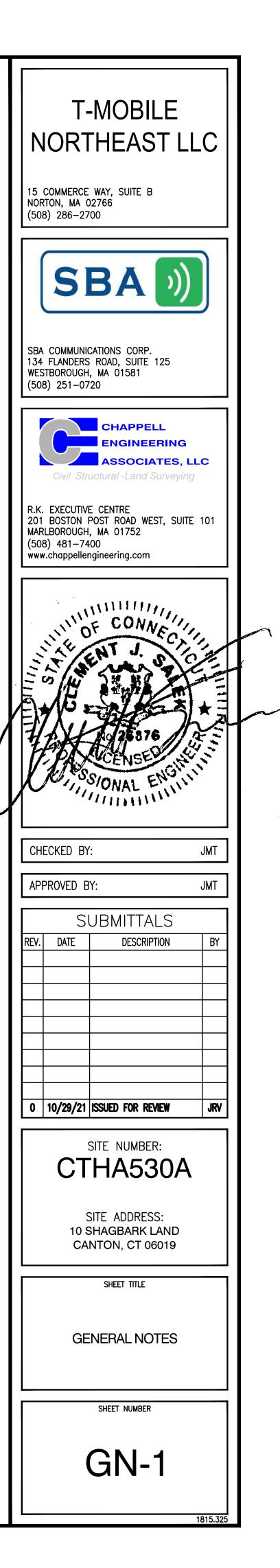
32. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

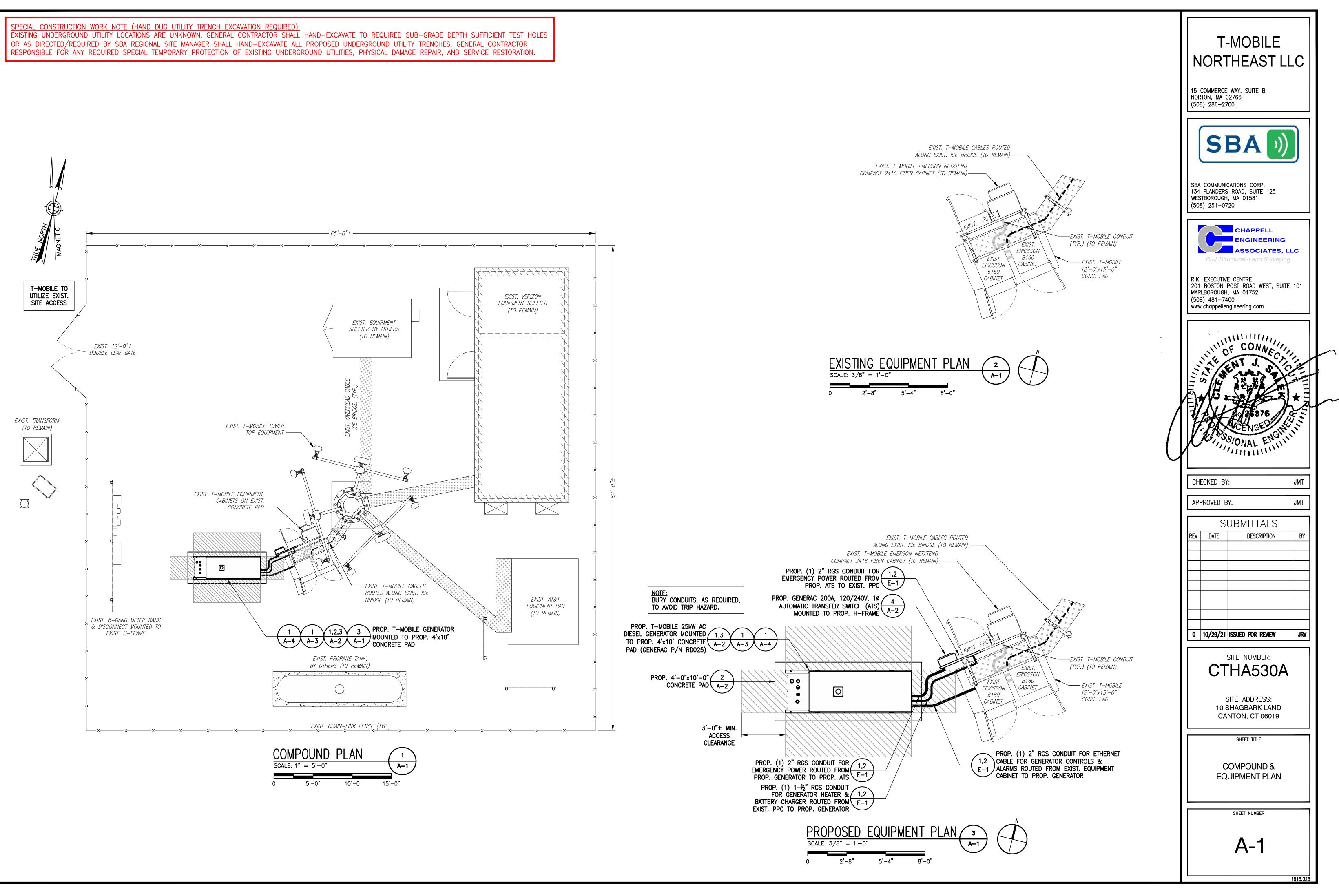
21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE

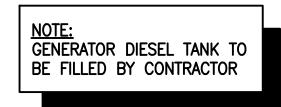
22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION

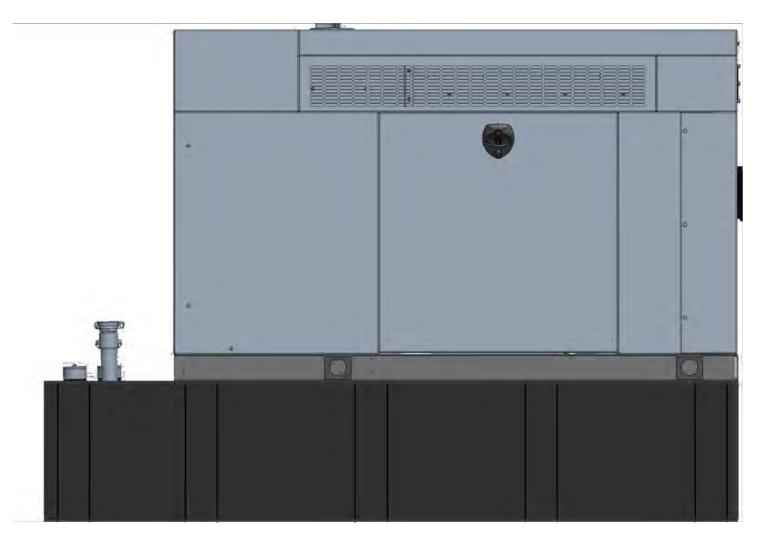
23. CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA,

24. CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.

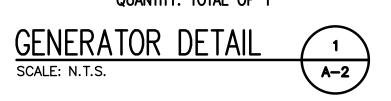


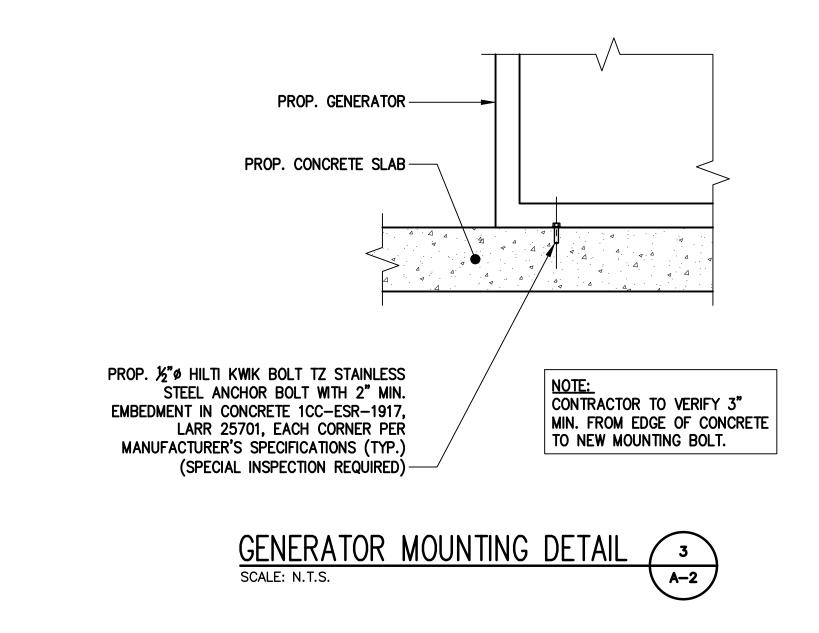


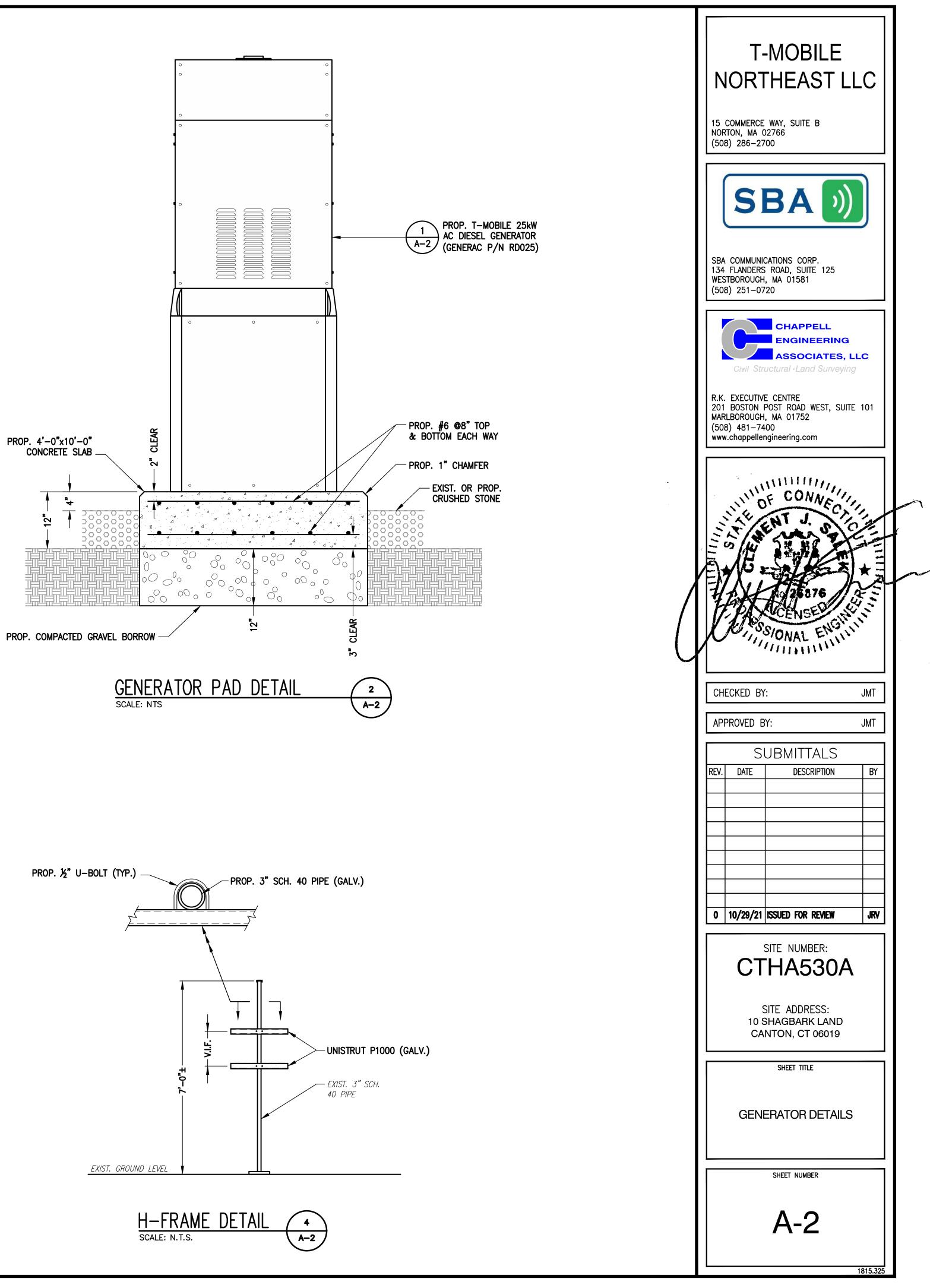




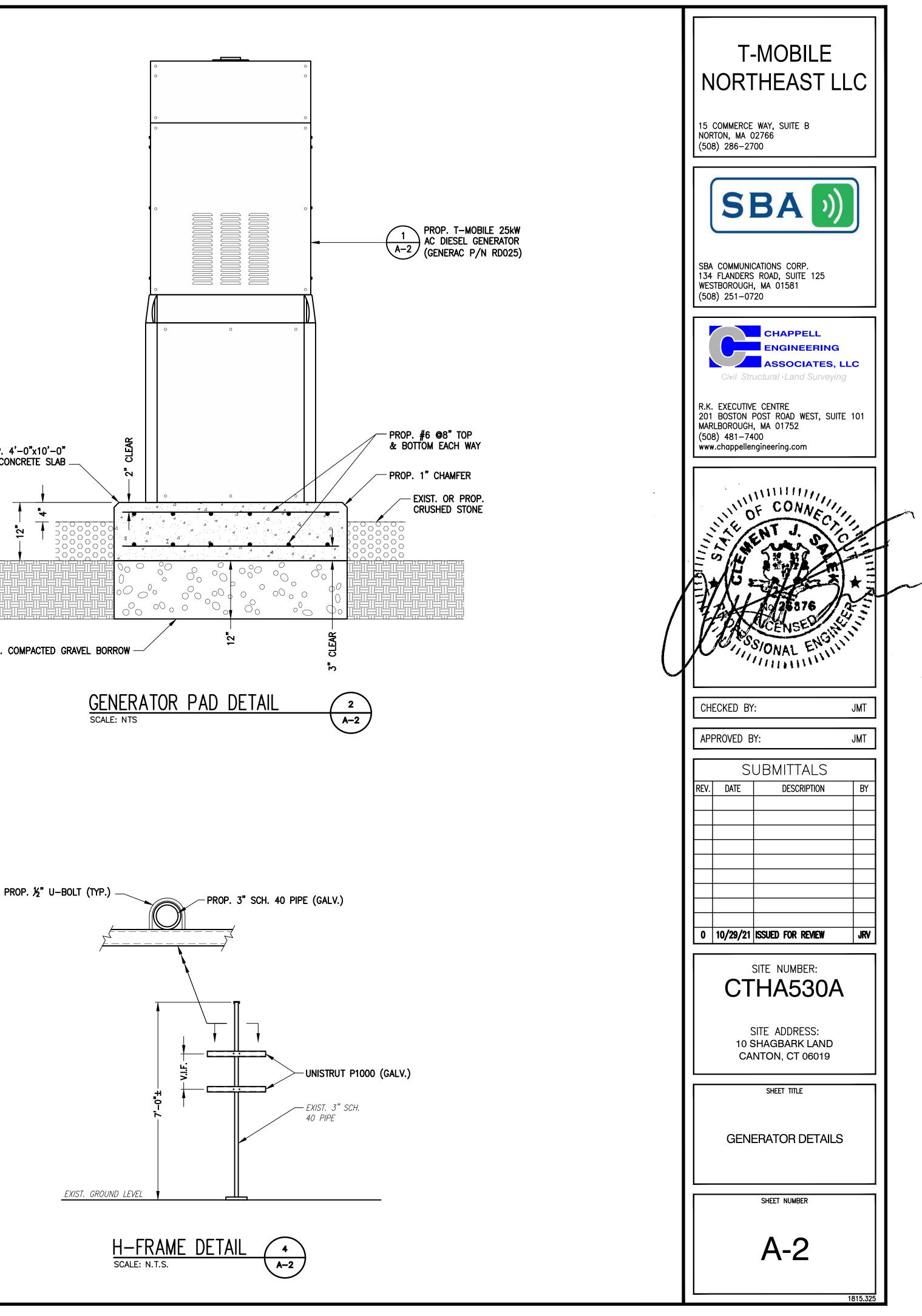
GENERAC RD025 25kW AC DIESEL GENERATOR DIMENSIONS: 103.4"L x 35.0"W x 91.7"H WEIGHT: 2,946 lbs QUANTITY: TOTAL OF 1

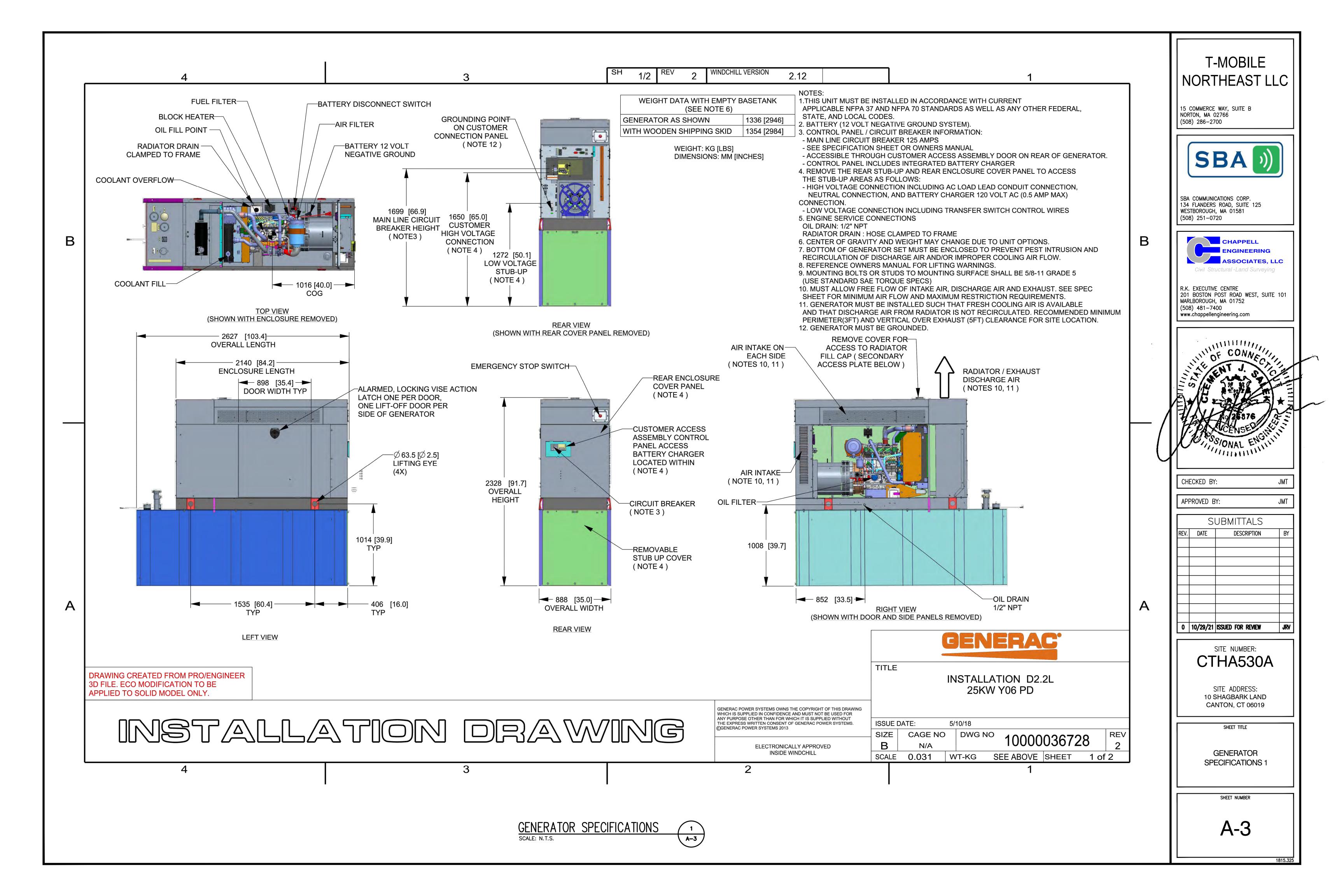


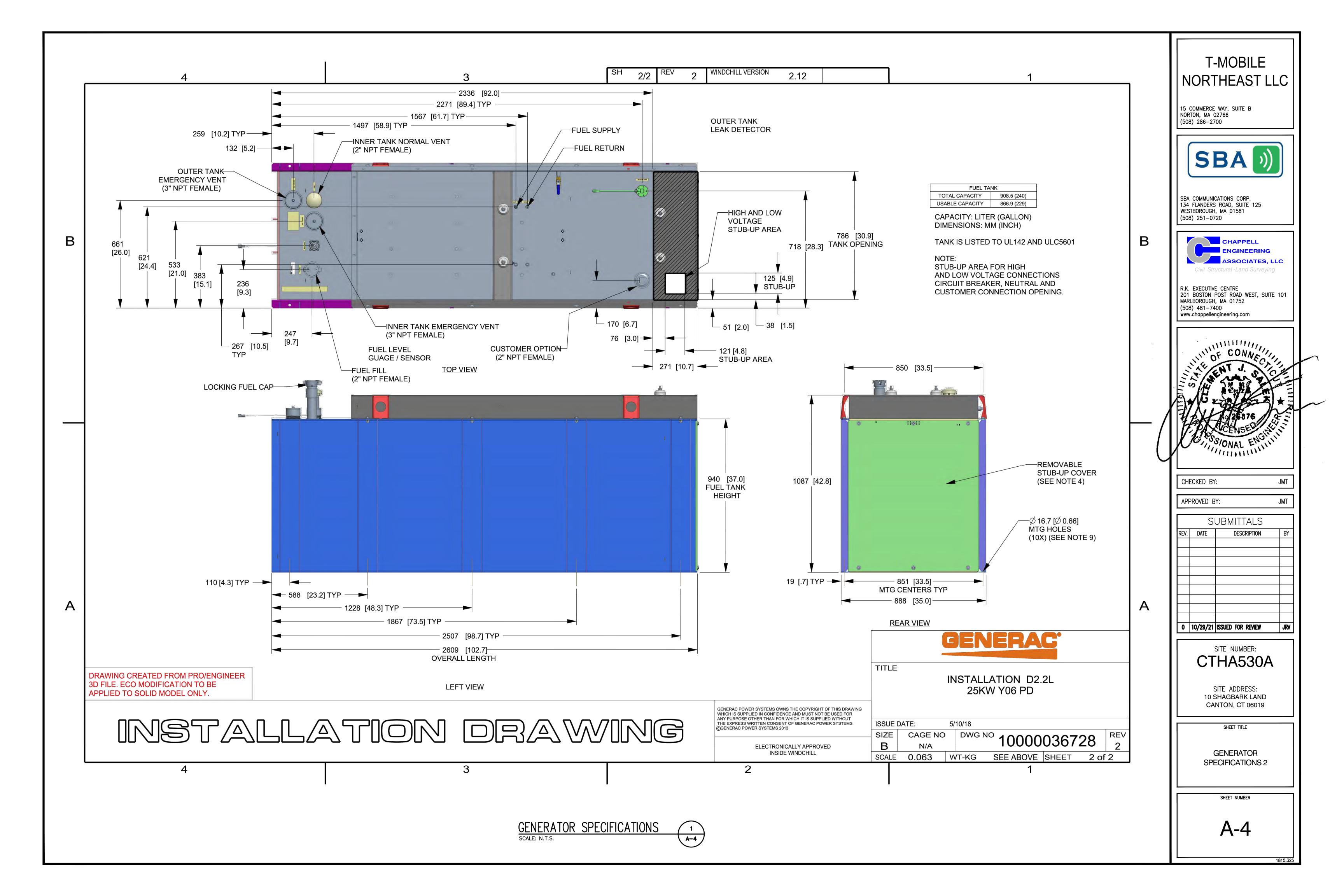


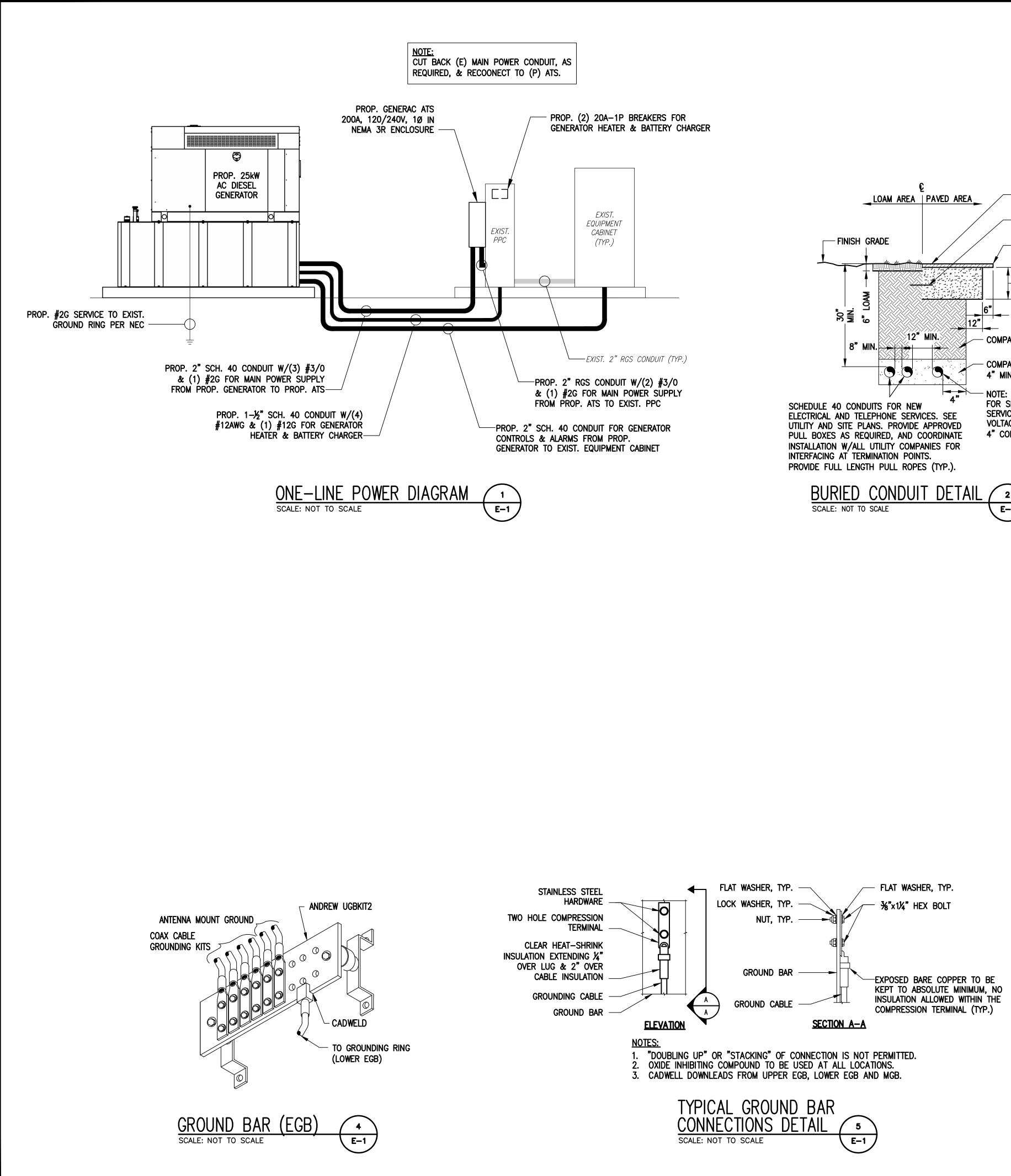


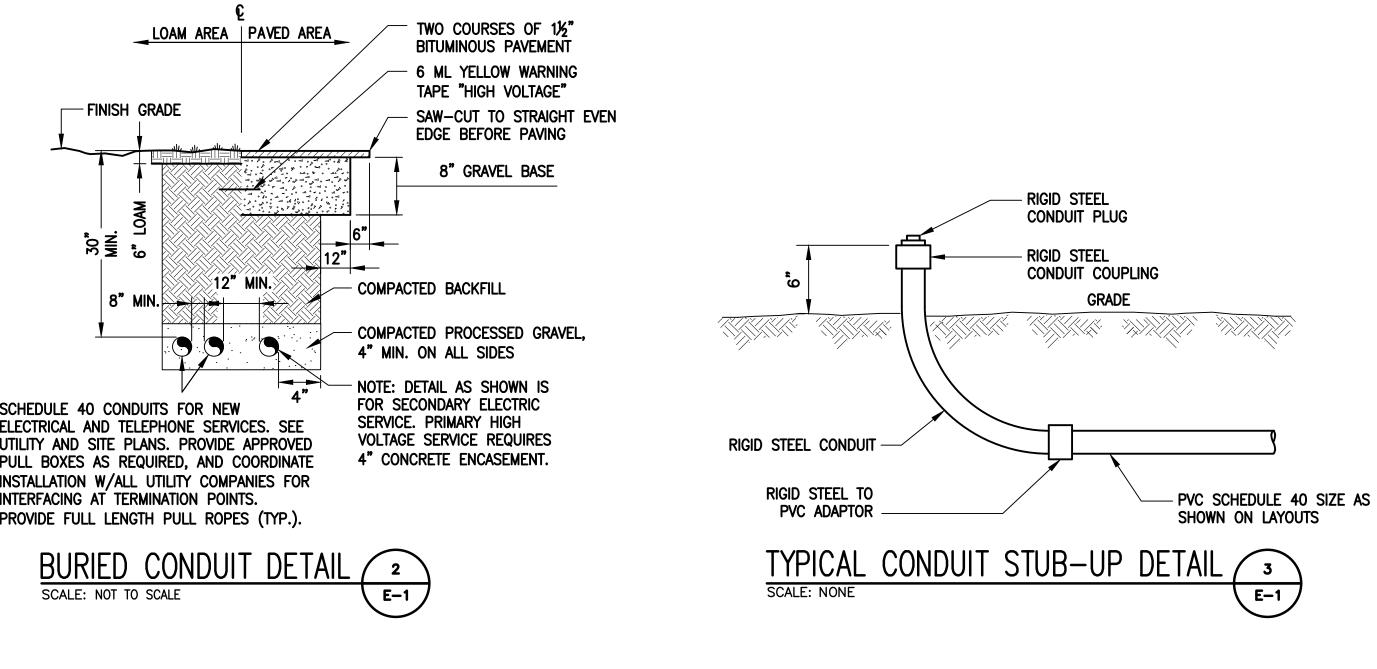






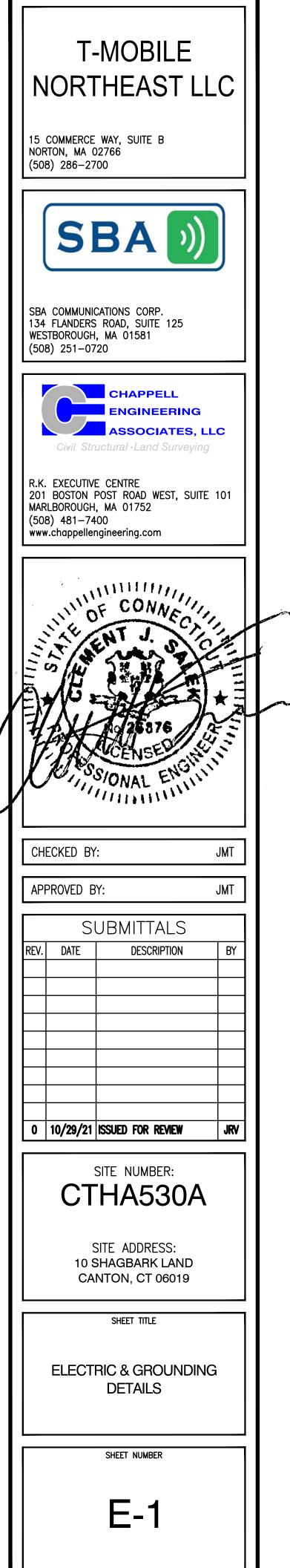






ELECTRICAL AND GROUNDING NOTES

- AND LOCAL CODES.
- PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- 4. GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 6. BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- 7. ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
- MEASURING TAPE AT EACH END.
- 11. ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- 12. PPC SUPPLIED BY PROJECT OWNER.
- ACCORDANCE WITH "T-MOBILE BTS SITE GROUNDING STANDARDS".
- OWNER.
- BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- RING
- ALL LOCATIONS.
- 19. APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- RESISTANCE REQUIRED.
- RECORD RESULTS FOR PROJECT CLOSE OUT.



1. ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE

2. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.

3. THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO

5. ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.

8. RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY. 9. RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS

CABINET AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT

10. WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.

13. GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN

14. GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT

15. USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING. 16. ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW

17. ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING

18. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO

20. CONTRACTOR SHALL PROVIDE AND INSTALL OMNI DIRECTIONAL ELECTRONIC MARKER SYSTEM (EMS) BALLS OVER EACH GROUND ROD AND BONDING POINT BETWEEN EXIST. TOWER/ MONOPOLE GROUNDING RING AND EQUIPMENT GROUNDING RING. 21. CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMNS MINIMUM

22. CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND

EXHIBIT 7

Generac RD025 25 KW 25kw Diesel Specifications

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standby Power Rating 25 kW, 31.25 kVA, 60 Hz



GENERAC

Image used for illustration purposes only

INDUSTRIAL

Codes and Standards

ANSI

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



Powering Ahead

For over 50 years, Generac has led the industry with 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's 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 application under adverse conditions.

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

RD025 | 2.2L | 25 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

Standard Features

ENGINE SYSTEM

- Cold Weather Kit
- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection •
- Factory Filled Oil & Coolant
- Critical Exhaust Silencer •

GENERATOR SET

- Sound Attenuated Aluminum Enclosure
- Internal Genset Vibration Isolation
- Separation of Circuits High/Low Voltage
- Wrapped Exhaust Piping
- Standard Factory Testing •
- 5 Year Limited Warranty
- Ready to Accept Full Load in <10 Seconds
- E-Stop

CONTROL SYSTEM



Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray •
 - **Rubber-Booted Engine Electrical Connections**
- Solenoid Activated Starter Motor ٠
- Smart Battery Charger

ALTERNATOR SYSTEM

- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Sealed Bearings
- Low Temperature Rise (>120°C)
- Low THD (<5%)

Cooling System

- Closed Coolant Recovery System
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension
- Can Operate at up to 122°F (50°C) Ambient Temperature

Fuel System

- · Fuel Lockoff Solenoid
- Primary Fuel Filter
- Stainless Steel Fuel Lines

TANKS

- 24 Hour Run Time Tank
- UL142 Listed Tank

Evolution [™] Controller

- Two-Line Plain Text LCD Display
- Programmable Start Delay Between 10-30 seconds
- 10 second Engine Start Sequence ۰
- 5 second Engine Warm Up
- 1 minute Engine Cool-Down
- Starter Lock-Out
- Smart Battery Charger
- Automatic Voltage Regulation with Over and **Under Protection**
- Automatic Low Oil Pressure Shutdown
- Overspeed Shutdown
- High Temperature Shutdown

- Overcrank Protection
- · Safety Fused
- · Failure to Transfer Protection
- Low Battery Protection
- 50 Even Run Log
- Future Set Capable Exerciser
- Incorrect Wiring Protection
- Internal Fault Protection
- · Common External Fault Capability
- · Governor Failure Protection

Optional Shipped Loose and Field Install Kits

ENGINE SYSTEM

Base Plug Kit

GENERATOR SET

- Paint Kit
- Scheduled Maintance Kit

CONTROL SYSTEM

○ Mobile Link [™] and Adapter Kit

TANKS

- Spill Box
- 90% Fuel Alarm
- Tank Risers
- Spill Box Drainback Kit
- Vent Extension Support Kit
- 5 Day Run Time Tank

SPEC SHEET





EPA Certified Stationary Emergency

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make	Perkins
EPA Emission Compliance	Tier 4 Interim
Cylinder #	4
Туре	In-Line
Displacement - in ³ (L)	2.22 (135)
Bore - in (mm)	3.3 (84.0)
Stroke - in (mm)	3.9 (100.0)
Compression Ratio	23.3:1
Intake Air Method	Turbocharged/Aftercooled
Piston Type	Aluminum
Crankshaft Type	Forged Steel
Engine Block Type	Cast Iron
Engine Governing	

Cooling System

Cooling System Type	Closed Recovery
Fan Type	Pusher
Fan Speed- rpm	1,980
Fan Diameter - in (mm)	18.0 (457.2)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specification	ASTM
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Lin (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	4.76/.19 (ID)
Fuel Filtering (microns)	25

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%
Lubrication System	
010 -	0

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity with Filters- qt (L)	11.2 (10.6)

Engine Electrical System

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

ALTERNATOR SPECIFICATIONS

Standard Model	Generac	Standard Excitation	Direct	
Poles	4	Bearings	Single Sealed	
Field Type	Rotating	Coupling	Flexible Disc	
Insulation Class - Rotor	Н	Prototype Short Circuit Test	Yes	
Insulation Class - Stator	Н	Voltage Regulator Type	Full Digital	
Total Harmonic Distortion	<5%	Number of Sensed Phases	2	
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±1%	



INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

OPERATING DATA

POWER RATINGS

	Standby	
Single-Phase 120/480 VAC @0.1pf	25 kW	Amps: 104
Three-Phase 120/208 VAC @0.8pf	25 kW	Amps: 87
Three-Phase 120/240 VAC @0.8pf	25 kW	Amps: 75
Three-Phase 277/480 VAC @0.8pf	25 kW	Amps: 37

MOTOR STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip at 30%

120/240 V, Single-Phase at 0.4pf	168
120/208 V, Three-Phase at 0.4pf	144
120/240 V, Three-Phase at 0.4pf	125
120/240 V, Three-Phase at 0.4pf	64

FUEL CONSUMPTION RATES*

Percent Load	Diesel gal/hr (L/hr)	
25%	0.97 (3.67)	
50%	1.37 (5.19)	
75%	1.97 (7.46)	
100%	2.77 (10.49)	

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

COOLING

		Standby
Air Flow (Radiator and Alternator)	ft ³ /min (m ³ /min)	2800 (79)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr (MJ/hr)	128,638 (135.7)
Max. Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.50 (0.12)

COMBUSTION AIR REQUIREMENTS

Flow at Rated Power ft³/min (m³/min)

Standby

88 (2.5)

ENGINE			EXHAUST		
		Standby			Standby
Rated Engine Speed	rpm	1,800	Exhaust Flow (Rated Output)	ft ³ /min (m ³ /min)	296.6 (8.4)
			Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	930 (499)

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. Standby - See Bulletin 0187500SSB



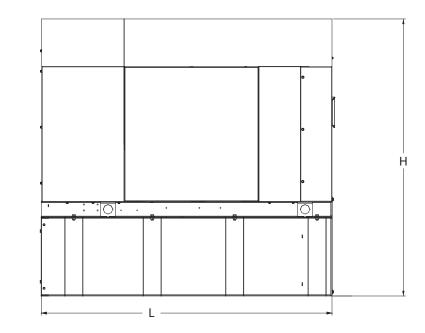


RD025 | 2.2L | 25kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency

DIMENSIONS AND WEIGHTS*



Weights and Dimensions

– W –

Unit Weight - Ibs	Init Weight - Ibs Unit Weight with Skid -		Dimensions (L x W x H) in		
2,811 2,849			84.2 x 35.0 x 91.7		
25kW Fuel Consumption			with fuel tank 103.4" 35" x 91.7"		
Fuel Tank Gross Total Capacity					
Fuel Tank Gross Usable Capacity					
Fuel Tank Net Usable Capacity (Run Hours Based on Net Usable Capacity)				-	
Run Hours 100% Load				-	
Run Hours 75% Load				•	
Run Hours 50% Load				-	
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Sound Emission Data

Rated Load Sound Output at 23ft - dB(A) 65

* All measurements are approximate and for estimation purposes only. Drawing is for illustration purposes only, not to scale.

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.



EXHIBIT 8

Map showing nearest wetlands

