

Cell Site No.: MNL05087
Cell Site Name: GRAND RAPIDS DT
Fixed Asset No.: 10125043
Market: ND / SD / NE / MN / IA
Address: 936 Northwest 6th Street

**THIRD AMENDMENT TO
LEASE FOR COMMUNICATIONS FACILITY AND
LIMITED USE OF WATER TOWER**

THIS THIRD AMENDMENT TO LEASE FOR COMMUNICATIONS FACILITY AND LIMITED USE OF WATER TOWER ("Third Amendment"), dated as of the latter of the signature dates below (the "Effective Date"), is by and between:

Grand Rapids Public Utilities Commission, and State of Minnesota 500 Southeast 4th Street Grand Rapids, MN 55744 (hereinafter referred to as "GRPUC")	New Cingular Wireless PCS, LLC, a Delaware limited liability company 1025 Lenox Park Blvd NE, 3rd Floor, Atlanta, GA 30319 (hereinafter referred to as "Lessee").
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WHEREAS, GRPUC (or its respective predecessor-in-interest) and Lessee (or its respective predecessor-in-interest) entered into a Lease for Communications Facility and Limited Use of Water Tower dated November 10, 2004, as amended by First Amendment to Lease for Communications Facility and Limited Use of Water Tower dated August 26, 2010, and as again amended by a Second Amendment to Lease for Communications Facility and Limited Use of Work Tower dated November 18, 2013 (hereinafter, collectively, the "Agreement"), whereby GRPUC leased to Lessee certain site ("Site"), therein described, that are a portion of the property ("Property") located at 936 Northwest 6th Avenue, Grand Rapids, MN; and

WHEREAS, GRPUC and Lessee desire to amend the Agreement to increase the size of the Premises leased to Lessee to accommodate Lessee's desire to install a generator upon the Premises; and

WHEREAS, GRPUC and Lessee desire to amend the Agreement to adjust the Rent (as defined below) in conjunction with the modifications to the Agreement contained herein and to provide an option to extend the Lease Term; and

WHEREAS, GRPUC and Lessee desire to amend the Agreement to modify the notice section thereof; and

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, GRPUC and Lessee agree that the recitals set forth above are incorporated herein as if set forth in their entirety and further agree as follows:

1. Lease of Premises. Lessor agrees to increase the size of the Premises leased to Lessee to accommodate Lessee's needs and to permit Lessee to install a generator (the "Generator") upon the Premises, as more completely described on attached **EXHIBIT A-3. EXHIBIT**

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A-3 hereby supplements **EXHIBIT A-2** to the Agreement. Hereafter, the Communications Facility shall be deemed to include the Generator.

2. Term. The remaining Term of the Lease will be five (5) years commencing as of December 1, 2019, with one (1) single five (5) year option to renew.
3. Rent. Commencing on the first day of the month following the date that Lessee commences construction of the modifications set forth in this Amendment, Rent shall be increased by One thousand four hundred sixty nine and eighty five hundredths Dollars (\$1,469.85) per year, subject to further adjustments as provided in the Agreement.
4. Other Terms and Conditions Remain. In the event of any inconsistencies between the Agreement and this Third Amendment, the terms of this Third Amendment shall control. Except as expressly set forth in this Third Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Without limitation to the generality of the foregoing, Lessee affirms that, prior to construction and installation of the Generator, Lessee shall comply with all design and construction approvals, and all governmental approvals, as set forth in the Agreement, including, but not limited to, Section 1 of the November 10, 2004 Lease. Each reference in the Agreement to itself shall be deemed also

Section 12 of the Agreement, Lessee's Notice address, is hereby deleted in its entirety and replaced with the following:

Notices. All notices, requests, and demands hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows.

If to Lessee:

New Cingular Wireless PCS, LLC
Attn: Network Real Estate Administration
Re: Cell Site #: MNL05087; Cell Site Name: Grand Rapids DT (MN)
Fixed Asset #: 10125043
1025 Lenox Park Blvd NE, 3rd Floor
Atlanta, GA 30319-5309

With the required copy of legal notice sent to Tenant at the address above, a copy to the Legal Department:

New Cingular Wireless PCS, LLC
AT&T Legal Department – Network
Re: Cell Site #: MNL05087; Cell Site Name: Grand Rapids DT (MN)
Fixed Asset #: 10125043

208 S. Akard Street
Dallas, TX 75202-4206

A copy sent to the Legal Department is an administrative step which alone does not constitute legal notice.

5. Capitalized Terms. All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.
6. Memorandum of Agreement. The parties shall execute the Memorandum of Agreement attached hereto as **EXHIBIT B**, which Lessee may elect to record.

[NO MORE TEXT ON THIS PAGE - SIGNATURES TO FOLLOW ON NEXT PAGE]

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IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute this Third Amendment on the dates set forth below.

GRPUC:
Grand Rapids Public Utilities Commission,
State of Minnesota

By _____

Date _____, 2022

GRPUC ACKNOWLEDGMENT:

State of _____)
)SS:
County of _____)

I certify that I know or have satisfactory evidence that Stephen R. Welliver is the person who appeared before me, and said person acknowledged that said person signed this instrument, on oath stated that said person was authorized to execute the instrument and acknowledged it as the President of Grand Rapids Public Utilities Commission, State of Minnesota, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: _____, 2022

(Signature of Notary)

(Legibly Print or Stamp Name of Notary)

[Notary Seal]

Notary Public in and for the State of

My appointment expires: _____

[See additional signature page.]

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[Signature page 4 to Third Amendment to Lease for
Communications Facility and Limited Use of Water Tower.]

LESSEE
New Cingular Wireless PCS, LLC,
a Delaware limited liability company

By: AT&T Mobility Corporation
Its: Manager

By Kristan Knutson

Print Name: _____ Kristan Knutson
Real Estate & Construction Mgr

Title: _____

Date: June 14, 2022

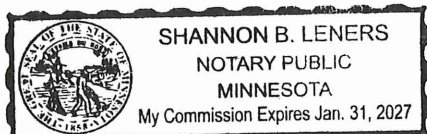
LESSEE ACKNOWLEDGMENT:

State of Minnesota)
)SS:
County of Ramsey)

I certify that I know or have satisfactory evidence that Kristan Knutson
is the person who appeared before me, and said person acknowledged that said person signed this
instrument, on oath stated that said person was authorized to execute the instrument and
acknowledged it as the REC Manager of AT&T Mobility Corporation, the Manager of
New Cingular Wireless PCS, LLC, a Delaware limited liability company, to be the free and
voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: June 14, 2022

Shannon B. Leners
(Signature of Notary)



[Notary Seal]

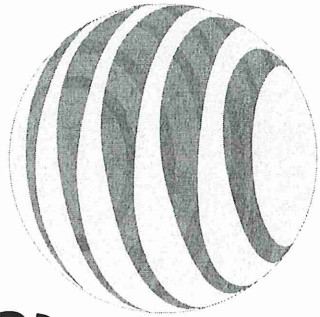
Shannon B. Leners
(Legibly Print or Stamp Name of Notary)

Notary Public in and for the State of

My appointment expires: 1/31/2027

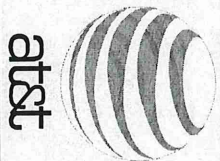
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EXHIBIT A-3



atst

GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE



GENERAL DYNAMICS
 Wireless Services
 12905 SHELBURNE ROAD STE 240
 LONSVILLE, KY 40243
 502.653.6563

BENCHMARK SERVICES, INC.
 Consulting Engineers
 Land Surveyors
 P.O. Box 5, 318 North Main Street
 Grand Rapids, MN 55744
 Phone: 620.682.3046



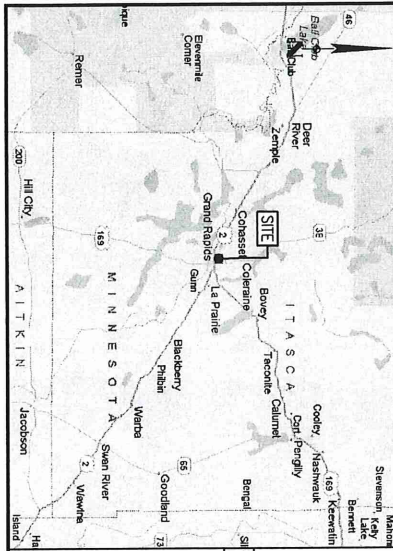
GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE

TITLE SHEET
 SHEET NO. T-1
 REVISION NUMBER 1

SITE INFORMATION

GOVERNING CODE: BEC & NEC
SITE ADDRESS: 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
COUNTY: ITASCA
PROPERTY OWNER: GRAND RAPIDS PUBLIC UTILITIES COMMISSION
PROPERTY OWNER CONTACT: 216.926.7466
APPLICANT: AT&T MOBILITY
 2500 W. WASHINGTON
 SOCIALBURNING, IL 60173
SCOPE OF WORK: INSTALL NEW GENERAC 30KW DIESEL GENERATOR (W/ EXHAUST EXTENSION) ON NEW CONCRETE PAD, INSTALL NEW AUTOMATIC TRANSFER SWITCH (ATS) ON AT&T SHELTER EXTERIOR, INTEGRATE EXISTING ALARM AND ELECTRICAL CONNECTIONS WITH NEW EQUIPMENT, ADD NEW FENCE AND GATE. APPROX. 80% OF THE NEW GENERATOR UPGRADE STRUCTURE, ABOVE GROUND, THE PLANS SHOW. THE REMAINING 20% OF THE STRUCTURE, ABOVE GROUND, STRUCTURE AND CON EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY STATE AND LOCAL UTILITY EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE CONTRACTOR'S EXPENSE.
UTILITY INFORMATION:
 (1) FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
 (2) HANDICAP ACCESS IS NOT REQUIRED.
 (3) FACILITY HAS NO PLUMBING OR PAVING.
 (4) NO GRADING WILL BE REQUIRED FOR THIS SITE.

AREA MAP



APPROVALS

AT&T CONSTRUCTION MANAGER	DATE
GENERAL DYNAMICS CONSTR. MGR	DATE
PROPERTY OWNER	DATE
SITE ACQUISITION	DATE
CONTRACTOR	DATE
CONTRACTOR	DATE

PROJECT TEAM

ENGINEER: BENCHMARK SERVICES, INC.
 ROBERT BERMAN
 GARY VAN WINKLE
 PO BOX 318 NORTH MAIN STREET
 HUNTINGBURG, IN 47542
 TEL. 812.683.3046
 WWW.BENCHMARKSERVICESINC.COM

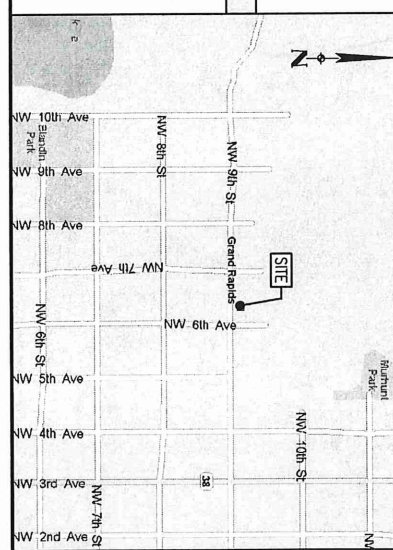
MARKET LEAD: ROBERT BERMAN
 GENERAL DYNAMICS
 WIRELESS SERVICES
 8871 LUDLOW AVE
 HUNTINGBURG, IN 47542
 OFFICE: 502.653.4608

TOWER COORDINATES:
 LATITUDE: 47.24189111 LONGITUDE: -93.539
 DRIVING DIRECTIONS:
 FROM THE US2/195 INTERCHANGE SOUTHWEST OF DULUTH, MN:
 1. HEAD WEST ON US2 W / HIGHWAY 2
 2. TURN LEFT TO STAY ON US2 W / HIGHWAY 2, 62.4 MI
 3. TURN RIGHT ONTO NE 8TH AVE, 0.2 MI
 4. TURN LEFT ONTO US-195 S / NE 4TH ST, 0.5 MI

SHEET INDEX

SHT. NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
SP-1	GENERAL NOTES	1
A-1	SITE PLAN	1
E-1	FOUNDATION DETAILS	1
E-1	WARNING DIAGRAM	1
D-1	PANEL AND PENETRATION DETAILS	1
D-1	A/S, CONDUIT, TRENCH AND GROUND ROD DETAILS	1
G-1	GENERATOR DETAILS	1
G-2	GENERATOR DETAILS	1
G-3	GENERATOR DETAILS	1
G-4	GENERATOR DETAILS	1

VICINITY MAP



CONTRACTOR SHALL VERIFY ALL DATA & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL UNDERSTAND AND AGREE TO PROCEED WITH THE WORK OR BE RESPONSIBLE FOR SAME.
 SHEET NAME: TITLE SHEET
 SHEET NO.: T-1
 REVISION NUMBER: 1

NOTES TO CONTRACTOR:

1. THE GENERAL CONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE STARTING WORK. ALL DISCREPANCIES SHALL BE RESOLVED 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 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORMWORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
3. THE CONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE PROPERLY TRAINED AND EXPERIENCED IN THE NECESSARY TASKS AND WHO NEED TO BE PROPERLY SUPERVISED AND MONITORED AT ALL TIMES.
4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES, EXISTING CONCRETE AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF FEA LIGHTING AND MARKING IS PRESENT ON SITE AND IS POWERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION FROM THE POWER AGENTS BEFORE ANY WORK IS PERFORMED TO EVENT OF A PROBLEMA.
5. SITE GROUNDINGS SHALL COMPLY WITH AT&T MOBILITY WIRELESS STANDARDS. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL WIRELESS CHECKLIST, LATEST VERSION, WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT, THEY SHALL GOVERN.
6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONCRETE AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF FEA LIGHTING AND MARKING IS PRESENT ON SITE AND IS POWERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMISSION FROM THE POWER AGENTS BEFORE ANY WORK IS PERFORMED TO EVENT OF A PROBLEMA.
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 CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
10. CONSTRUCTION SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE ENTIRE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY ADJACENT DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
12. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FURNISHING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
13. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORKS AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF DRAWINGS. THE RECORD DRAWINGS SHALL BE KEPT ON SITE THROUGHOUT THE PROJECT UNTIL COMPLETION OF THE PROJECT.
14. RECORD PHOTOS: INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE DURING CONSTRUCTION.
15. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATIONS.
17. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
18. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL VERIFY GENERAL DIMENSIONS AND WIRELESS SERVICES OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
19. 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 PROPERTY OUTSIDE OF THE LEASED PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
20. ALL SUITABLE MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID EXCESS TOP-SOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATION APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

GENERAL NOTES:

21. SEEDING AND MULCHING OF THE SITE SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING AN ADEQUATE VEGETATION IN A MANNER THAT WILL PROTECT THE SITE FOR A MINIMUM PERIOD OF ONE YEAR.
- GENERAL NOTES:**
1. THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.
 2. THE PROPOSED FACILITY IS UNMANNED AND DOES NOT REQUIRE PORTABLE WATER OR SEWER SERVICE.
 3. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
 4. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROVIDED.
 5. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 6. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL VERIFY AT&T OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES:

1. GENERAL
1. CORRESPONDING LOCATION AND PROPER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T MOBILITY AND EQUIPMENT SUPPLIES PRIOR TO INSTALLATION.
2. CORROSION LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE PROPERTY REPRESENTATIVE. 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 BY CONTRACTOR AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY WIRING SHALL BE INSTALLED IN A MANNER THAT DOES NOT COMPROMISE THE INTEGRITY OF THE EXISTING ELECTRICAL SERVICE. CONTRACTOR SHALL OBTAIN PERMISSION FROM THE POWER AGENTS BEFORE ANY WORK IS PERFORMED TO INTERRUPT THE SERVICE. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREA AFFECTED. THIS REQUEST 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 MOBILITY'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
6. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE NOTED. EXACT EQUIPMENT LOCATIONS AND PROXY REPRESENTATIVE SHALL BE DETERMINED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T MOBILITY'S REPRESENTATIVE.
7. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
8. ALL MATERIALS SHALL BE FINISHED 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. IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS ASSOCIATION
 - D. IEEE INSULATED CABLE ENGINEERS ASSOCIATION
 - E. IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
 - F. NERF NATIONAL BOARD OF FIRE UNDERWRITERS
 - G. NFPA NATIONAL ELECTRICAL SAFETY CODE
 - H. NFPA NATIONAL FIRE PROTECTION ASSOCIATION
 - I. UL UNDERWRITERS LABORATORY
9. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CORRECT ALL DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE HIS OWN TAGS FOR MATERIAL, QUANTITIES AND TYPES BASED ON ACTUAL SITE CONDITIONS. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL AND TEST ALL WORKING PARTS WHICH ARE SPECIALLY DESIGNED HEREIN WORKING INSTALLATION, SHALL BE INCLUDED.
10. CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING AT&T MOBILITY'S REPRESENTATIVE OF ANY DISCREPANCIES IN THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF CORRECTING WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
11. ALL ROOFERS WHEN PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CODE DRILLED AND THEN REPROTECTED.

WIRING/CONDUIT

1. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (90 DEGREE) TOTAL EXIST IN/ON CONDUIT RUN.
 2. ALL POWER AND CONTROL /INCOGNITION WIRING SHALL BE TYPE THHN/TMHN 900V RATED 75 DEGREE Celsius, UNLESS NOTED OTHERWISE.
 3. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 348-10, NO RIGHT ANGLE BENDS OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM RADIUS BETWEEN CONDUIT 2" OR LARGER.
 4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
 5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE. ALL POWER CONDUIT SHALL CONTAIN A BRANDED WIRE.
 6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
 7. CONDUCTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.
 8. INSTALL PULL STRING IN ALL CONDUIT.
 9. FOR ROOFTOP INSTALLS AND BUILDING CONDUITS, WIRE SHALL BE PULLED AND ON ROOF SHALL BE FOS, UNLESS OTHERWISE NOTED. FOR RAIN LAND SITES, ALL CONDUITS, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
 10. MAINTAIN MINIMUM 1" OF VERTICAL AND 1" OF HORIZONTAL SEPARATION FROM ANY OTHER CONDUIT OR PIPING.
 11. ALL WIRING ROUNDED IN PLUMB TO BE ALUMINUM RATED OR IN METALLIC FLEX (ROUND) CONDUIT.
 12. INSPECTION WINDOWS ARE REQUIRED ON ALL INDOOR LUGS.
- 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 3R RATED.
 3. ALL EQUIPMENT SHALL BE PROTECTED BY GROUNDING.
 4. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNETORS, PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL EQUIPMENT GROUND CONNECTIONS.
 5. ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEMS SHALL BE STRIPPED OF ALL PAINT AND OIL. CONNECTIONS TO WARDON METALS SHALL BE OF A TYPE AS NOT CALLED A GALVANIC OR CORROSION REACTION. AREA SHALL BE REPAINTED WITH COULD GALVANIZING SPRAY FOLLOWING BONDING.
 6. ANY METALLIC ITEM WITHIN 6" OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
 7. EXTERIOR, ABOVE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LUBRICANT. PROTECTIVE COATING OF ANTI-CORROSION COMPOUND.
 8. 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.
 9. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD.
 10. ALL EQUIPMENT SHALL BE BOND TO GROUNDING SYSTEM AS SHOWN, AS POSSIBLE, USE EXISTING GROUNDING LOCATION UNLESS NOTED OTHERWISE.
 11. CONDUCTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
 12. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE ENTIRE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY ADJACENT DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
 13. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND FURNISHING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
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 19. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL VERIFY GENERAL DIMENSIONS AND WIRELESS SERVICES OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
 20. 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 PROPERTY OUTSIDE OF THE LEASED PROPERTY SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
 21. ALL SUITABLE MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID EXCESS TOP-SOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATION APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

GENERAL NOTES

CONTRACTOR SHALL OBTAIN ALL PERMITS & OBTAIN DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL MAINTAIN A RECORD OF ALL DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

GENERAL NOTES

936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744


GEN ERATOR UPGRAD E

CONTRACTOR SHALL OBTAIN ALL PERMITS & OBTAIN DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL MAINTAIN A RECORD OF ALL DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

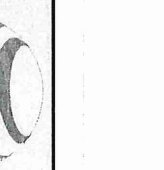
SHEET NAME: **GENERAL NOTES**

SHEET NO.: **SP-1**

REVISION NUMBER: **1**



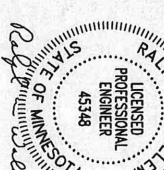
GENERAL DYNAMICS
Wireless Services
12906 SHELVILLE ROAD, STE 230
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502-653-6993



BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
P.O. Box 5, 918 South Main Street
Grand Rapids, MN 55744
Phone: (612) 983-3049

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CD'S	3/5/21	ABB
1	REN'D ADDITION	4/22/22	MEB



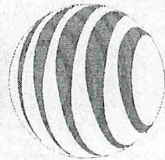
RALPH M. WALKER
LICENSED PROFESSIONAL ENGINEER
45348

GRAND RAPIDS DT

FA#: 10125043
USD: 95022

SHEET NO.: **SP-1**

REVISION NUMBER: **1**



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0	100% CD	3/5/21	ABB
1	FENCE ADDITION	4/22/22	MSB



GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
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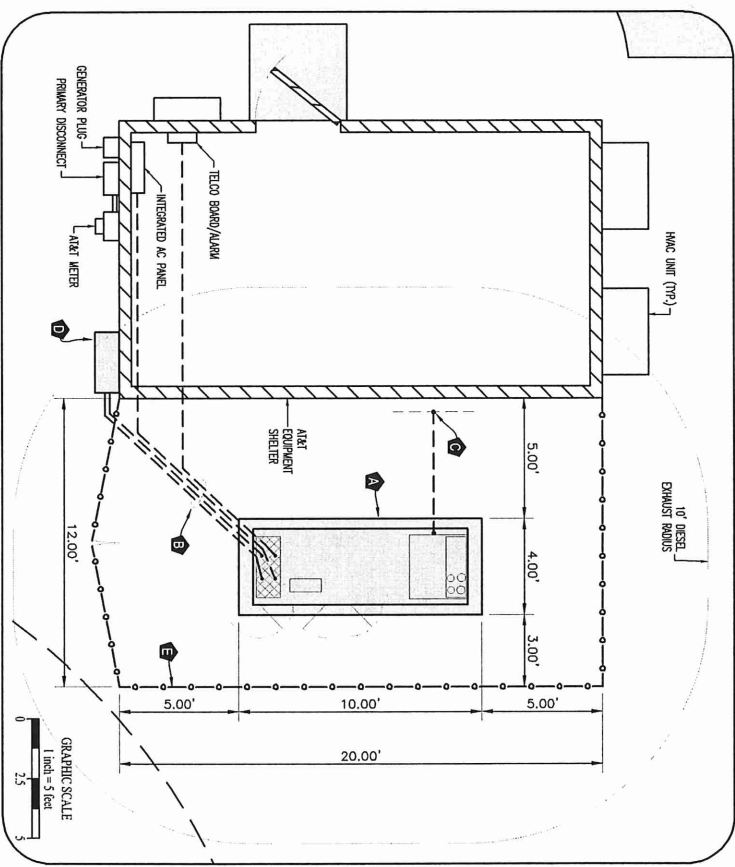
SHEET NAME
 GENERATOR UPGRADE

SHEET NO.
 A-1

REVISION NUMBER
 1

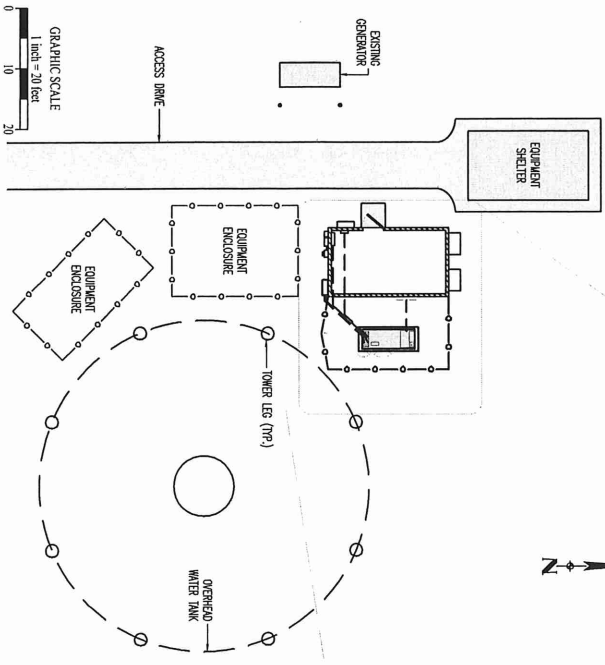
CONSTRUCTION LEGEND

- A. INSTALL GENERATOR (W/ EXHAUST EXTENSION) PER MANUFACTURER'S SPECIFICATIONS.
- B. PROPOSED AT&T UNDERGROUND ELECTRICAL SERVICE & CONTROL FROM GENERATOR TO EQUIPMENT INSIDE EQUIPMENT SHELTER. SEE SHEET E-1. LOCATE EXISTING UTILITIES & GROUND RING.
- C. 1 - #2 AWG BARE TINNED GROUND WIRE TO EXISTING SITE GROUND RING. GROUND GENERATOR PER MANUFACTURER'S RECOMMENDATIONS. SEE SHEET D-1. INSTALL AUTOMATIC TRANSFER SWITCH (ATS) ON AT&T SHELTER EXTERIOR.
- D. NEW 6' BOARD SHADOW BOX FENCE WITH SWING GATE. NEW FENCE TO MATCH EXISTING FENCE TYPES AND COLOR.



SCOPE OF WORK NOTES

- GENERAL:**
- VERIFY LOCATION OF ALL EQUIPMENT ON SITE.
 - NEW GENERATOR (W/ EXHAUST EXTENSION) SHALL BE INSTALLED BY GENERAL CONTRACTOR.
 - GENERAL DYNAMICS AND INSTALLED BY GENERAL CONTRACTOR.
 - NEW CONCRETE PAD PROVIDED AND INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED). SEE S-1.
 - NEW AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL CONTRACTOR AND INSTALLED BY CONTRACTOR (AS REQUIRED).
 - CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
- GROUNDING:**
- NEW EXTERIOR CONNECTION FROM EXISTING GROUND RING TO NEW GENERATOR SHALL BE MADE AT THE POINT OF CONNECTION BY GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 6'-0" APART.
- H-FRAME:**
- PROVIDE NEW H-FRAME IF REQUIRED. MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME.
 - PROVIDE NEW H-FRAME WITH PLASTIC CHAS ON UN-STRUTS, WEATHER CAPS ON TOPS OF PIPE AND CONCRETE.
 - SUPPORTS BELOW ROOF 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 OF THE FORM.
- CONDUITS:**
- INSTALL PULL STRING IN EACH CONDUIT.
 - (1) NEW 2" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1.
 - (2) NEW 1" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR HEATER/CHASER CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1.
 - (3) NEW 1" CONDUITS FOR START CIRCUIT AND ALARM CABLING. AFTER INTERCEPTING MAIN POWER FEED BEHIND PRIMARY DISCONNECT, ROUTE MAIN POWER FEED TO NEW ATS, THEN INTERCONNECT NEW ATS INTO MAIN AT&T POWER SOURCE. SEE SHEET E-1.
 - CONNECT NEW ATS TO TELEO/ALARM BOARD. SEE SHEET E-1.



STRUCTURAL GENERAL NOTES

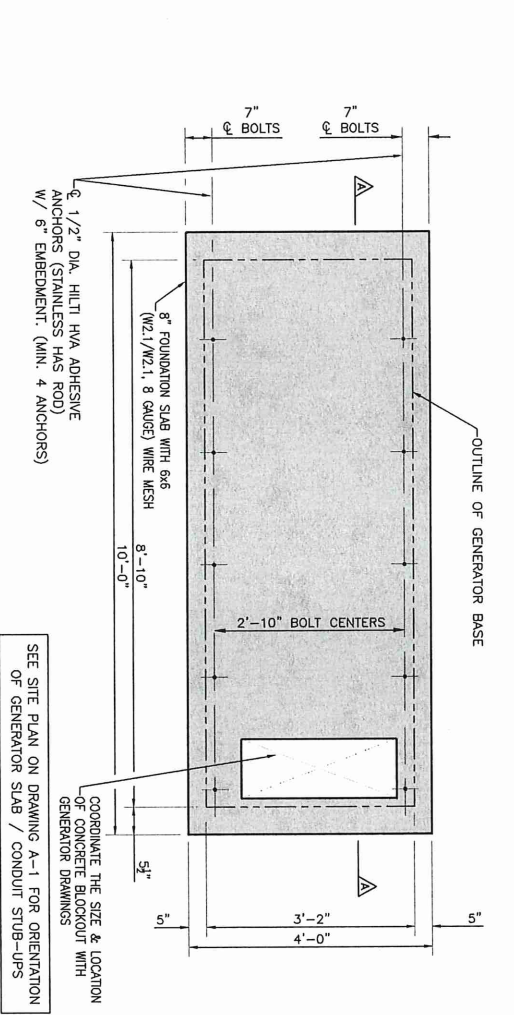
- 1.0 GENERAL CONDITIONS
- 1.1 DESIGN AND CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11, IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
- 1.2 IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONSULTANT OR INSPECTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, CONSTRUCTION MANAGER, THE OWNER, AND THEIR AGENTS FROM ANY LIABILITY WHATSOEVER AND HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MANNER FROM THE WRONGFUL OR NEGLIGENT ACT OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTION WITH THE WORK.
- 1.3 DO NOT SCALE DRAWINGS.
- 1.4 VERIFY ALL ELEMENT DIMENSIONS PER MANUFACTURER DRAWINGS.
- 1.5 DESIGN LOADS SHALL BE AS SHOWN ON DRAWINGS.
- 2.0 CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- 3.0 CONCRETE
- 3.1 MEET OR EXCEED THE FOLLOWING CODES AND STANDARDS:

- DESIGN: ACI 318-11
- CONSTRUCTION: ACI 301
- DETAILS: CSI MANUAL OF STANDARD PRACTICE
- REIN. STEEL: ASTM A603
- WELDS: ACI 318 AND ASTM C-280
- AIR ENTRAINMENT: ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)
- AGGREGATE: 3/4"
- 3.2 CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM.
- 3.3 PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WATER.
- 3.4 MAXIMUM AGGREGATE SIZE: 3/4"
- 3.5 DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
- 3.6 MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- 4.1 REINFORCING STEEL SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.
- 4.2 ALL ORGANIC AND / OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION AND SLAB SUBGRADE AND BACKFILL AREAS, AND THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
- 4.3 THE CONTRACTOR SHALL PROVIDE ALL NECESSARY REVISIONS TO PREPARE ANY WATER PROOF, OR ICE PROOF MEMORANDUM, AND SHALL BE RESPONSIBLE FOR THE SUBMITTAL, SIGNATURE BEFORE AND AFTER FILING OF CONCRETE, AND UNIT, SUCH CONCRETE HAS FULLY CURED.

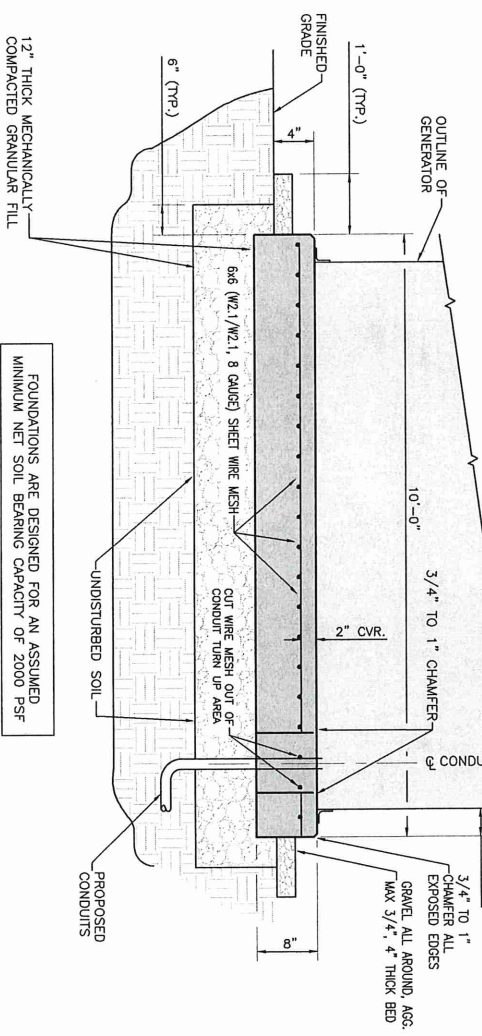
DOUBLE WALL FIBR. TANK BASE SPECIFICATION

- UL-142 DOUBLE WALL FIBR. TANK BASE SPECIFICATION
- FIBR. TANK BASE CONSTRUCTION:
 - BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142, BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION AND USE OF STATIONARY COMBUSTIBLE ENGINE AND GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS, NFPA 110.
 - ANCHORS MINIMUM (2) @ 5/8" FOR GEN-SET MOUNTING
 - SUB BASE TANK DESIGN: PRIMARY TANK AND SECONDARY CONTAMINANT BASIN SECTIONS SHALL BE CONSTRUCTED TO BE IDENTICAL.
 - REINFORCING STEEL SHALL BE TESTED PER UL-142 STANDARDS
 - FIBR. TANK SHALL BE CONSTRUCTED WITH ALUMI.
 - 20% REMAINING FOR SHUT-DOWN
 - FACTORY PRE-SET AT 95% FILL FOR ALUMI
- FIBR. CONTAMINANT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAMINANT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FIBR INTO THE ENVIRONMENT IN THE EVENT OF TANK RUPTURE. A FIBR CONTAMINANT BASIN DECK DETECTOR SWITCH SHALL BE PROVIDED.

FOUNDATION PLAN VIEW



FOUNDATION SECTION A-A



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REV.	DESCRIPTION	DATE	BY
0	100% CD'S	3/5/21	AMB
1	FENCE LOCATION	4/22/22	MOB

RALPH M. WALKER
LICENSED PROFESSIONAL ENGINEER
45348

GRAND RAPIDS DT
FA#: 10125043
USD: 95022

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GRAND RAPIDS, MN 55744
GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL SIZES & GEOMETRIES BEFORE BEGINNING WORK. THE ENGINEER SHALL VERIFY ALL SIZES & GEOMETRIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

FOUNDATION DETAILS

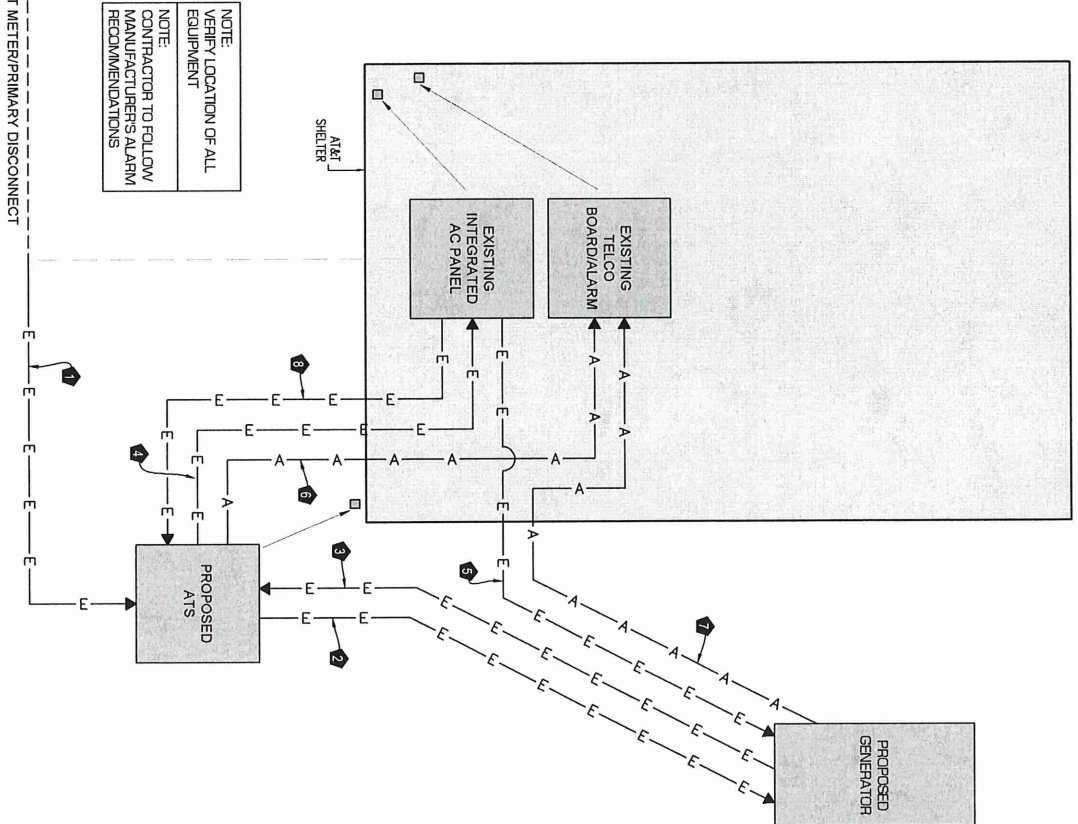
SHEET NO: S-1
REVISION NUMBER: 1

DIAGRAM CIRCUIT SCHEDULE


NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	METER/PRIMARY DISCONNECT	PROPOSED ATS	(3) 3/0	(1) #4	2"	POWER FEED
2	PROPOSED ATS	PROPOSED GENERATOR	(2) #14	(1) #14	1"	START CIRCUIT
3	PROPOSED GENERATOR	PROPOSED ATS	(3) #1	(1) #4	2"	POWER FEED
4	PROPOSED ATS	EXISTING INTEGRATED AC PANEL	(3) 3/0	(1) #4	2"	POWER FEED
5	EXISTING INTEGRATED AC PANEL	PROPOSED GENERATOR	(2) #12 (2) #12	(1) #12 (1) #12	1"	2-20 AMP CIRCUITS FOR (1) GENERATOR BLOCK HEATER & (2) BATTERY HEATER/CHARGER
6	PROPOSED ATS	EXISTING TELCO BOARD/ALARM	4-PAIR 24 AWG	N/A	1"	ALARM CABLES FROM ATS PROVIDE 10' OF SLACK CABLE. FINAL PUNCH DOWN IS BY A&T TECH. LABEL ALL WIRES BE INSULATED TO PREVENT SHORTS. LABEL ALL WIRES BE SHORTS WITH CONDUCTORS.
7	PROPOSED GENERATOR	EXISTING TELCO BOARD/ALARM	12-PAIR 24 AWG	N/A	1"	ALARM CABLES FROM ATS PROVIDE 10' OF SLACK CABLE. FINAL PUNCH DOWN IS BY A&T TECH. LABEL ALL WIRES BE INSULATED TO PREVENT SHORTS. LABEL ALL WIRES BE SHORTS WITH CONDUCTORS.
8	EXISTING AC PANEL	PROPOSED ATS	(2) #12	(1) #12	1"	20 AMP CIRCUIT FOR ATS POWER
Pair #		Colors	AT&T Nomenclature		GenDyn cards nomenclature	
1	Blue/White	White	RBS Generator Rupture Basin			Critical Failure
2	Orange/White	White	RBS Generator Overfill			Fuel Leak/Overflow
3	Green/White	White	RBS Generator Running			Generator Running
4	Brown/White	White	RBS Generator Low Fuel			Low Fuel
5	Slate/White	White	RBS Generator Shutdown			Major Fault
6	Red/Blue	Red	RBS Generator Common			Minor Fault
7	FROM ATS TO 66 BLOCK	White/White	Commercial Power/Fail			Commercial Power/Fail

1 PROPOSED WIRING DIAGRAM
SCALE: NONE

FROM AT&T METER/PRIMARY DISCONNECT



NOTE: VERIFY LOCATION OF ALL EQUIPMENT
NOTE: CONTRACTOR TO FOLLOW MANUFACTURERS ALARM RECOMMENDATIONS



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0	100% CDS	3/5/21	ABB
1	REVISION ADDITION	4/22/22	MA3



Ralph M. Walker

GRAND RAPIDS DT
FA#: 10125043
USID: 95022

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GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL STATE & LOCAL REGULATIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET VALUE

WIRING DETAILS

SHEET NO. E-1

REVISION NUMBER 1

VOLTAGE	240 VOLTS	MANUFACTURER	NOT SPECIFIED
MAIN BREAKER	200 AMP	PHASE	SINGLE
MOUNT	200 AMPS	BUSS BATTING	YES
ENCLOSURE TYPE	NEMA 3R	NEUTRAL BAR	YES
PANEL STATUS	EXISTING	NEUTRAL TO GROUND BOND	YES

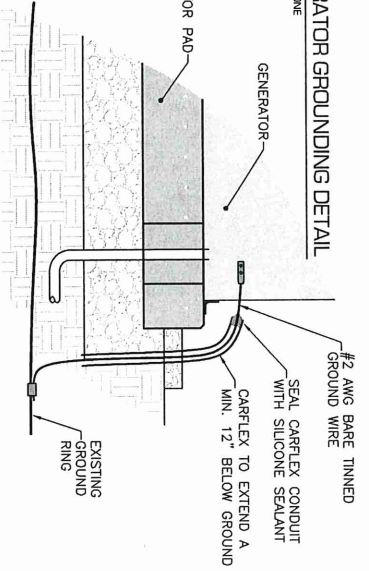
LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CCT
1 RECEPT	30	2	ON	ON	2	60	HMC	3
5 RECEPT	30	2	ON	ON	2	60	HMC	6
7 RECEPT	30	2	ON	ON	2	60	HMC	8
9 RECEPT	30	2	ON	ON	2	60	HMC	10
11 RECEPT	30	2	ON	ON	2	60	HMC	12
13 RECEPT	30	2	ON	ON	2	60	HMC	14
15 RECEPT	30	2	ON	ON	2	60	HMC	16
17 RECEPT	30	2	ON	ON	2	60	HMC	18
19 RECEPT	30	2	ON	ON	2	60	HMC	20
21 RECEPT	30	2	ON	ON	2	60	HMC	22
23 RECEPT	30	2	ON	ON	2	60	HMC	24
25 RECEPT	30	2	ON	ON	2	60	HMC	26
27 RECEPT	30	2	ON	ON	2	60	HMC	28
29 RECEPT	30	2	ON	ON	2	60	HMC	30
31 RECEPT	30	2	ON	ON	2	60	HMC	32
33 RECEPT	30	2	ON	ON	2	60	HMC	34
35 RECEPT	30	2	ON	ON	2	60	HMC	36
37 RECEPT	30	2	ON	ON	2	60	HMC	38
39 RECEPT	30	2	ON	ON	2	60	HMC	40
41 EXT RECEPT	20	1	ON	ON	1	20	[VACANT]	42

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

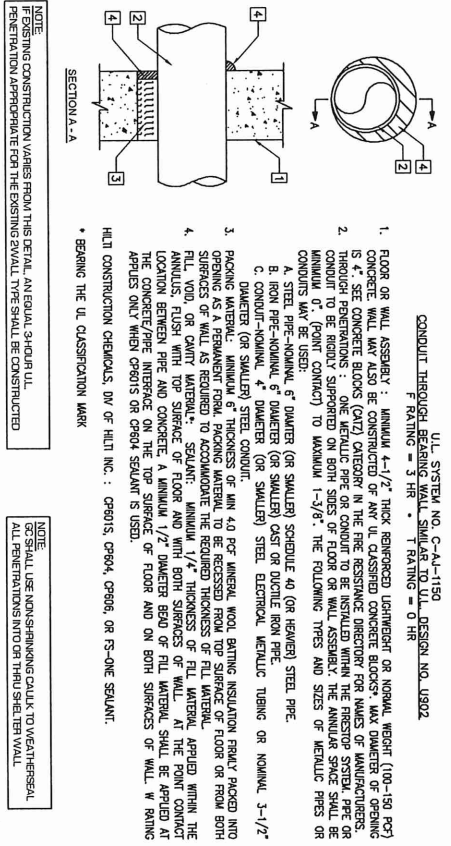
CONTRACTOR TO UTILIZE NEXT AVAILABLE IN EQUAL OR SINGLE BREAKER POSITION FOR GENERATOR BATTERY CHARGER, BATTERY HEATER AND BLOOD HEATER.

1 EXISTING PANELS
SCALE NONE

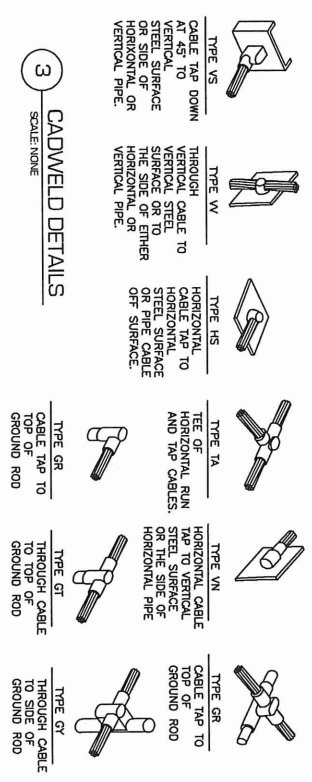
4 GENERATOR GROUNDING DETAIL
SCALE NONE



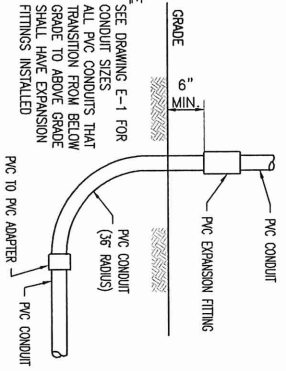
2 OUTER WALL PENETRATION DETAIL (IF APPLICABLE)
SCALE NONE



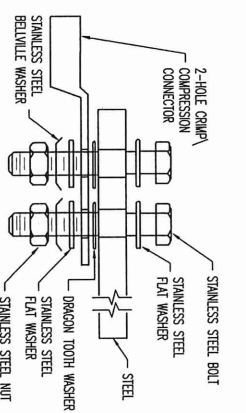
3 CADWELD DETAILS
SCALE NONE



5 UNDERGROUND ELEC./TELE CONDUIT STUB-UP
SCALE NONE



6 GROUND WIRE CONNECTION DETAIL
SCALE NONE



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DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CD'S	3/4/21	ABB
1	REVISION ADDITION	4/22/22	MEB

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GENERATOR UPGRADE

PANEL & PENETRATION DETAILS

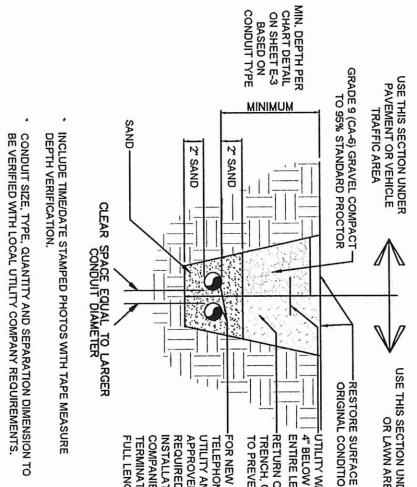
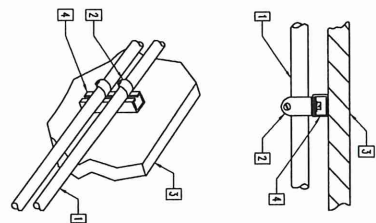
SHEET NO: D-1
REVISION NUMBER: 1

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" Ø TOGGLE BOLT
HOLLOW, AT STUD	3/8" Ø LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" Ø HLT HT-20 WITH SCREEN, MIN. EMBEDMENT 2"-1/2"
CONCRETE (SOLID)	3/8" Ø HLT HT-150 WITH SCREEN, MIN. EMBEDMENT 2"-1/2"

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTIONS FROM THIS SPACE UNITS

3-Ø O.C. LENGTH OF RUN

1 CONDUIT WALL MOUNT
SCALE: NONE



2 CONDUCTOR BURIAL REQUIREMENTS
SCALE: NONE

MINIMUM BURIAL IN INCHES	TYPE OF WIRING METHOD OR CIRCUIT	LOCATION OF WIRING METHOD OR CIRCUIT	DIRECT BURIAL CABLES OR CONDUCTORS	RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT
24 INCHES	ALL LOCATIONS NOT BELOW		24 INCHES	6 INCHES
18 INCHES	IN TRENCH BELOW 2' MIN. OR EQUIVALENT		18 INCHES	6 INCHES
24 INCHES	UNDER STREETS OR HIGHWAYS		24 INCHES	24 INCHES
30 INCHES	CROWN COMPOUNDS		30 INCHES	30 INCHES

COVER IS DEFINED AS THE SHORTEST DISTANCE IN INCHES MEASURED BETWEEN THE TOP OF THE CONDUIT OR CABLE OR RACEWAY AND THE TOP SURFACE OF FINISHED GRADE. CONCRETE, OR SIMILAR COVER.

INSTALL WARNING TAPE 4" BELOW GRADE FOR THE ENTIRE LENGTH OF TRENCH.

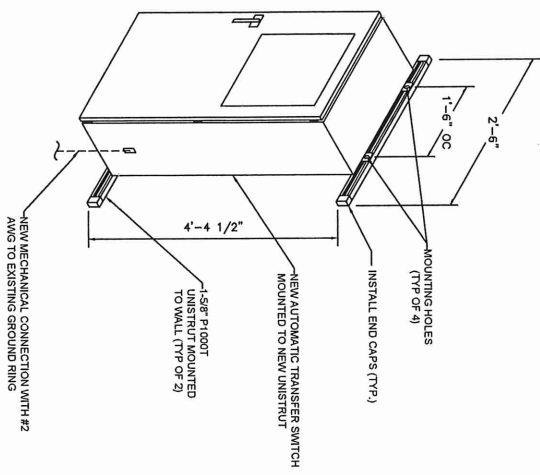
PROVIDE AT LEAST 2" OF SAND BED ABOVE CONDUIT AND 2" OF SAND BED BELOW THE SAND BED.

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

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS

NOTE: OC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL

4 INTERSECT ATS MOUNTING DETAIL
SCALE: NONE



NOTE: GROUND RODS MAY BE COPPER OR GALV. STEEL

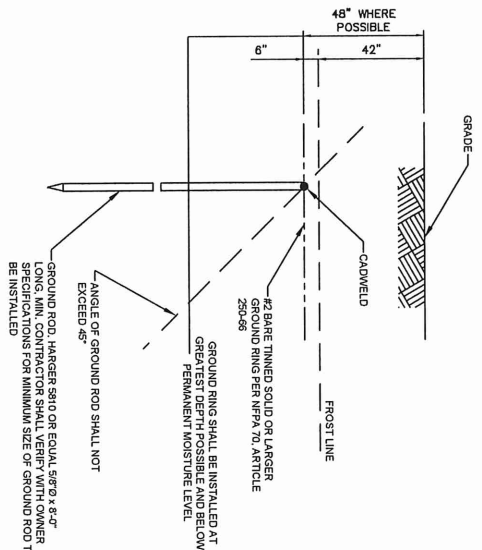
NOTE: GROUND RODS SHALL HAVE A MINIMUM SPACING TWICE THE LENGTH OF ROD

NOTE: SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE

NOTE: A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS AND/OR AREAS WITH HIGHLY ACIDIC SOIL

NOTE: GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2000 OHM-CM SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER. (SEE ANSI/ISA-EM-222-G)

3 GROUND ROD DETAIL
SCALE: NONE



GROUND ROD, HARGER S810 OR EQUAL, 5/8" Ø x 8'-0" LONG, MIN. CONTRACTOR SHALL VERIFY WITH OWNER TO PREPARE SPECIFICATIONS FOR MINIMUM SIZE OF GROUND ROD TO BE INSTALLED

ANGLE OF GROUND ROD SHALL NOT EXCEED 45°

GROUND RING SHALL BE INSTALLED AT GREATEST DEPTH POSSIBLE AND BELOW PERMANENT MOISTURE LEVEL

2" BARE TINNED SOLID OR LARGER GROUND RING PER NFPA 70, ARTICLE 250.46

CONTRACTOR SHALL VERIFY ALL DATA & GENERAL DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME

SHEET NAME: PANEL & PENETRATION DETAILS

SHEET NO.: D-2

REVISION NUMBER: 1



GRAND RAPIDS DT
FA#: 10125043
USID: 95022

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GENERATOR UPGRADE

GENERAL DYNAMICS
Wireless Services
12305 SHELBURNE ROAD, STE 230
LOUISVILLE, KY 40243
502-659-6993

BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
P.O. Box 5, 318 North Main Street
Louisville, KY 40202
Phone: (618) 682-2049

REV.	DESCRIPTION	DATE	BY
0	100% CDs	3/5/21	ABB
1	REVISION ADDITION	4/22/22	MB3

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency



OPERATING DATA

Model Name	120/240VAC 50/60 Hz	30 kW	30 kW
Rated Power (kW)	30.0	30.0	30.0
Rated Power (kVA)	36.0	36.0	36.0
Rated Power (HP)	40.2	40.2	40.2
Rated Power (kW) @ 0.8 PF	30.0	30.0	30.0
Rated Power (kVA) @ 0.8 PF	36.0	36.0	36.0
Rated Power (HP) @ 0.8 PF	40.2	40.2	40.2
Rated Power (kW) @ 0.9 PF	33.3	33.3	33.3
Rated Power (kVA) @ 0.9 PF	39.9	39.9	39.9
Rated Power (HP) @ 0.9 PF	44.4	44.4	44.4

MOTOR STARTING CAPABILITIES (kW)

30kVA vs Voltage Dg

277/480 VAC 3ØW 200% 200/240VAC 3ØW	480/277V 3ØW 200% 200/240VAC 3ØW	480/277V 3ØW 200% 200/240VAC 3ØW	480/277V 3ØW 200% 200/240VAC 3ØW
100% 100%	100% 100%	100% 100%	100% 100%
80% 80%	80% 80%	80% 80%	80% 80%
60% 60%	60% 60%	60% 60%	60% 60%
40% 40%	40% 40%	40% 40%	40% 40%
20% 20%	20% 20%	20% 20%	20% 20%

FUEL CONSUMPTION RATES*

Rated Power (kW)	Rated Power (kVA)	Rated Power (HP)	Rated Power (kW) @ 0.8 PF	Rated Power (kVA) @ 0.8 PF	Rated Power (HP) @ 0.8 PF
30.0	36.0	40.2	30.0	36.0	40.2
30.0	36.0	40.2	30.0	36.0	40.2
30.0	36.0	40.2	30.0	36.0	40.2
30.0	36.0	40.2	30.0	36.0	40.2
30.0	36.0	40.2	30.0	36.0	40.2

COOLING

Cooling System	Rated Power (kW)	Rated Power (kVA)	Rated Power (HP)
Direct Cooling	1.3	1.6	1.7
Indirect Cooling	1.3	1.6	1.7
Water Cooled	1.3	1.6	1.7
Air Cooled	1.3	1.6	1.7

COMBUSTION AIR REQUIREMENTS

Engine	Exhaust	Exhaust	Exhaust
Rated Power (kW)	30.0	30.0	30.0
Rated Power (kVA)	36.0	36.0	36.0
Rated Power (HP)	40.2	40.2	40.2
Rated Power (kW) @ 0.8 PF	30.0	30.0	30.0
Rated Power (kVA) @ 0.8 PF	36.0	36.0	36.0
Rated Power (HP) @ 0.8 PF	40.2	40.2	40.2

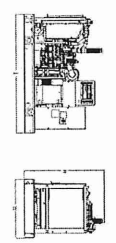
* Refer to "Generator Data Sheet" for maximum HP for EPA and ISO24000 pending approval.
 ** Refer to "Generator Data Sheet" for maximum HP for EPA and ISO24000 pending approval.
 * Based on operational characteristics consider maximum without conditions. These ratings may vary under different conditions.
 Power output is based on power system manufacturer's data. All performance ratings in accordance with ISO24000, ISO24000, and ISO24000.
 Standby - See Bulletin 01702002SS
 Prime - See Bulletin 01702002SS

5-4-3 SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency



DIMENSIONS AND WEIGHTS*



OPEN SET (Includes Exhaust Fan)

Item	Dimensions	Weight
Generator Set	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Exhaust Fan	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Control Panel	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Generator Set + Exhaust Fan	1.3' W x 41.1" H (33.8 mm)	930 lbs (420 kg)
Generator Set + Control Panel	1.3' W x 41.1" H (33.8 mm)	930 lbs (420 kg)
Generator Set + Exhaust Fan + Control Panel	1.3' W x 41.1" H (33.8 mm)	1395 lbs (630 kg)

WEATHER PROTECTED ENCLOSURE

Item	Dimensions	Weight
Generator Set	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Weather Enclosure	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Generator Set + Weather Enclosure	1.3' W x 41.1" H (33.8 mm)	930 lbs (420 kg)

LEVEL 1 ACoustic ENCLOSURE

Item	Dimensions	Weight
Generator Set	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Acoustic Enclosure	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Generator Set + Acoustic Enclosure	1.3' W x 41.1" H (33.8 mm)	930 lbs (420 kg)

LEVEL 2 ACoustic ENCLOSURE

Item	Dimensions	Weight
Generator Set	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Acoustic Enclosure	1.3' W x 41.1" H (33.8 mm)	465 lbs (210 kg)
Generator Set + Acoustic Enclosure	1.3' W x 41.1" H (33.8 mm)	930 lbs (420 kg)

* Dimensions and weights are based on standard configuration. Generator set dimensions and weights may vary based on configuration.
 ** Dimensions and weights are based on standard configuration. Generator set dimensions and weights may vary based on configuration.
 *** Dimensions and weights are based on standard configuration. Generator set dimensions and weights may vary based on configuration.

5-4-3 SPEC SHEET

**GENERATOR MANUFACTURER
 DETAIL - FOR REFERENCE ONLY**

GENERAL DYNAMICS
 Wireless Services
 12906 SHEPHERD ROAD, STE 230
 LOUISVILLE, KY 40243
 502.653.6993

BENCHMARK SERVICES, INC.
 Consulting Engineers
 Land Surveyors
 P.O. Box 5, 918 North Main Street
 Louisville, KY 40203
 Phone: (502) 883-3049

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	RENC ADDITION	4/22/22	MGB

RALPH M. W. ALLEN
 LICENSED PROFESSIONAL ENGINEER
 45348
 STATE OF MINNESOTA
 R. M. Allen
 4/22/2022

GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE

GENERATOR DETAILS

SHEET NO: G-2
 REVISION NUMBER: 1

TTS Series Switches

**200 Amps
600 VAC**

GENERAC INDUSTRIAL POWER

**TAS200
200A Automatic Transfer Switch**

TAS200

TAS200

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
- Carlock functionality for mobile generator sources

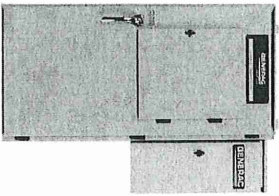


Image used for reference purposes only.

Features

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

Optional Features

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

Codes and Standards

Generac products are designed to the following standards:

UL1108, UL508, UL501, CSA C22.2 No. 178

UL1008, UL508, UL501, CSA C22.2 No. 178

UL1008, UL508, UL501, CSA C22.2 No. 178

UL1008, UL508, UL501, CSA C22.2 No. 178

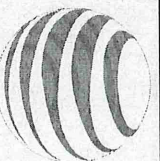
Application and Engineering Data

Cabinet Specifications	
Dimensions	24" W x 12" D x 48" H
Weight	270 lbs.
Construction	Single Chamber with Main Door
Material	Steel
Finish	UL Type / NEMA 3R Paint
Coatings	Fluoropolymer Coating for Corrosion Resistance
Locking	C-UL-Listed - Automatic Transfer Switch
Hardware	Stainless Steel Hardware
Mounting Options	3-Point Latching System with Padlockable Handles
Warning Options	None
Insulation	UL-90mm
Accessories	Pre-wired alarm terminal strip

Electrical Specifications	
Voltage/Phase/Type	120/240 Single-Phase 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Edson 200 amp Utility Breaker
Maximum RMS Symmetrical Fault Current - Amps	Edson 200 amp Generator Breaker
Protective Device Configuration Rating (kA)/ Amp	25k AIC Breaker
Input to Generator	200
Output to Load	350/400A - #2 AWG
Generator Armature Connection	Delta-3 120V-4 125V-0/12
Alarm Terminal Board	Generator Fail Alarm Generator Trip Alarm Low Fuel Alarm Generator Over Temp Alarm AC Utility Fail Alarm

Cabinet Component	
Dimensions	Shipped loose for multiple installation options
Weight	5" W x 8.4" D x 24.25" H
Construction	Single-Phase Breaker UL, Red 12, White-Neutral, Green-Ground
Material	3-Phase Break UL, Red 12, Blue 13, White-Neutral, Green-Ground
Mounting Options	Uses 4 OH E1016 Main Connectors
Accessories	Mating Connector - CH1016 Female

GENERAC ATS MANUFACTURER
DETAIL - FOR REFERENCE ONLY



GENERAL DYNAMICS
Wireless Services
12905 SHEPHERD ROAD, STE 230
LOUISVILLE, KY 40243
502-659-6993

BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
P.O. Box 5, 318 North Main Street
Louisville, KY 40202
Phone: (618) 988-3049

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	REVISION ADDITION	4/28/22	MCB



GRAND RAPIDS DT
FA#: 10125043
USID: 95022

936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744
GENERATOR UPGRADE
GENERAL CONTRACTOR
GENERAL CONTRACTOR

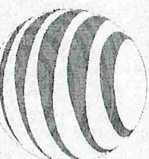
SHEET NO: G-3
REVISION NUMBER: 1

GENERAC INDUSTRIAL POWER GEN

TTS Control Systems

TAS200

3 of 5



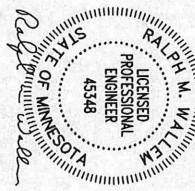
GENERAL DYNAMICS
Wireless Services
12906 SHERBURY ROAD, STE 230
LOUISVILLE, KY 40243
502.653.6993

BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveys
PO Box 5, 318 North Main Street
Harrisburg, PA 17104
Phone: (610) 855-3445

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	PRICE ADJUSTMENT	4/22/22	MCB

GRAND RAPIDS DT
FA#: 10125043
USID: 95022



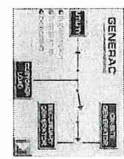
CONTRACTOR SHALL VERIFY ALL PAGES & DIMENSIONS OF THIS DRAWING FOR ACCURACY AND COMPLETENESS BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

GENERAC ATS MANUFACTURER DETAIL - FOR REFERENCE ONLY

GENERAC ATS MANUFACTURER DETAIL - FOR REFERENCE ONLY

SHEET NO: **G-4** ENGINE NUMBER: **1**

Touch Screen Interface



INDICATORS AND BUTTONS

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

DETAILS SCREEN

<p>System Settings:</p> <ul style="list-style-type: none"> System Voltage/Phase: <ul style="list-style-type: none"> - 120/240V single phase (standard) - 120/240V three phase (optional) - 120/240V three phase (optional) Utility Fail Monitor: <ul style="list-style-type: none"> - Under Voltage: 75-95% of nominal voltage - Over Voltage: 105%-125% of nominal voltage - Pickup (system): fixed at 5 volts - Delay time: 0-60s - Utility Return Delay: 0-60s - Return to Utility Timer: 1-30 minutes - Transfer: <ul style="list-style-type: none"> - In-phase, or - Time-Delay/Neutral at 0.0-1.0s in 1 second increments 	<p>Exercising Settings:</p> <ul style="list-style-type: none"> Time of day Day of week Exercises: <ul style="list-style-type: none"> - Exercise with/without load - Exercise once every 1, 2, or 4 weeks - Exercise time-of-day - Exercise day of week - Exercise duration: 15-30 minutes
<p>Engine Settings:</p> <ul style="list-style-type: none"> Engine Warm-up timer: 0-30 minutes Generator Load Accept: <ul style="list-style-type: none"> - Time-Delay/Neutral at 0.0-1.0s in 1 second increments - Voltage: 85-95% of nominal - Frequency: 85-95% of nominal - Engine Minimum Run Time: 5-30 minutes - Engine Cool-down Timer: 0-30 minutes 	<p>Screen Settings:</p> <ul style="list-style-type: none"> Brightness & Contrast button Screen Calibration button Startup/Screen Lock
<p>Diagnostic:</p> <ul style="list-style-type: none"> Digital I/O bit status Voltage A/D readings 	<p>Diagnostic:</p> <ul style="list-style-type: none"> Digital I/O bit status Voltage A/D readings
<p>Minute Diagram:</p> <ul style="list-style-type: none"> System Ready Transfer switch position Utility available Standby available Maintenance/Auto switch position Generator source TS position TVSS status 	<p>Minute Diagram:</p> <ul style="list-style-type: none"> System Ready Transfer switch position Utility available Standby available Maintenance/Auto switch position Generator source TS position TVSS status

Generac Power Systems, Inc. • 545 W29290 HWY 59, Waukegan, WI 53189 • generac.com
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**THIS DOCUMENT WAS DRAFTED BY, and
WHEN RECORDED RETURN TO:**

Vice President

(502)265-8536
General Dynamics
5809 Bucks Lane
Louisville, KY 40291

Re: Cell Site #: MNL05087
Cell Site Name: GRAND RAPIDS DT (MN)
Fixed Asset Number: 10125043
State: MN
County: Itasca

**MEMORANDUM
OF
AGREEMENT**

This Memorandum of Agreement is entered into on this ___ day of _____, 201_, by and between Grand Rapids Public Utilities Commission, State of Minnesota, having a mailing address at 500 Southeast 4th Street, Grand Rapids, MN 55744 (hereinafter referred to as "GRPUC") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 1025 Lenox Park Blvd NE, 3rd Floor, Atlanta, GA 30319 (hereinafter referred to as "Lessee").

1. GRPUC and Lessee (or their predecessors in interest) entered into a certain Lease for Communications Facility and Limited Use of Water Tower dated November 10, 2004, as amended by that certain First Amendment to Lease for Communications Facility and Limited Use of Water Tower dated August 26, 2010, as amended by that certain Second Amendment to Lease for Communications Facility and Limited Use of Water Tower dated November 18, 2013, and as further amended by that certain Third Amendment to Lease for Communications Facility and Limited Use of Water Tower dated _____, 201 (hereinafter, collectively, the "Agreement") for the purpose of installing, operating and maintaining a communications facility and other improvements at GRPUC's real property located in the City of Grand Rapids, County of Itasca, commonly known as 936 Northwest 6th Street. All of the foregoing are set forth in the Agreement.
2. The remaining Term will be five (5) years commencing on December 1, 2019, with one (1) single five (5) year option to renew.
3. The portion of the land being leased to Lessee (the "Site") is described in **Exhibit 1** annexed hereto.

4. This Memorandum of Agreement is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Agreement and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

[NO MORE TEXT ON THIS PAGE - SIGNATURES TO FOLLOW ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement as of the day and year first above written.

GRPUC:
Grand Rapids Public Utilities Commission,
State of Minnesota

LESSEE:
New Cingular Wireless PCS, LLC,
a Delaware limited liability company

By: AT&T Mobility Corporation
Its: Manager

By: _____

By: Knutson

Print Name: _____

Print Name: Kristan Knutson
Real Estate & Construction Mgr

Title: _____

Title: _____

Date: _____

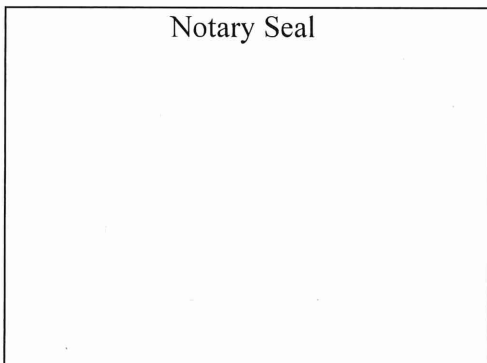
Date: June 14, 2022

GRPUC ACKNOWLEDGEMENT

STATE OF _____)
) SS.
COUNTY OF _____)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that said person signed this instrument, on oath stated that said person was authorized to execute the instrument and acknowledged it as the _____ of **Grand Rapids Public Utilities Commission, State of Minnesota**, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: _____.



(Signature of Notary)

(Legibly Print or Stamp Name of Notary)
Notary Public in and for the State of

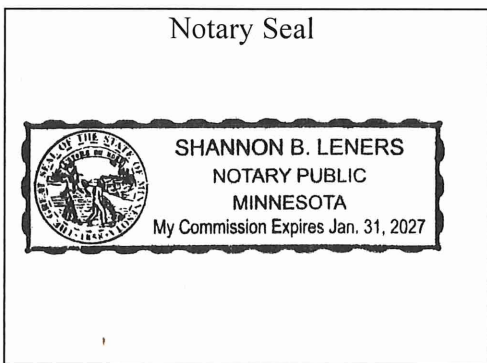
My appointment expires: _____

LESSEE ACKNOWLEDGEMENT

STATE OF Minnesota)
) SS.
COUNTY OF Ramsey)

I certify that I know or have satisfactory evidence that Kristan Knutson is the person who appeared before me, and said person acknowledged that he/she signed this instrument, on oath stated that he/she was authorized to execute the instrument and acknowledged it as the REC Manager of AT&T Mobility Corporation, the Manager of **New Cingular Wireless PCS, LLC, a Delaware limited liability company**, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: June 14, 2022



(Signature of Notary) Shannon B. Leners

(Legibly Print or Stamp Name of Notary)
Notary Public in and for the State of

My appointment expires: 1/31/2027

Exhibit 1 to Memorandum of Agreement

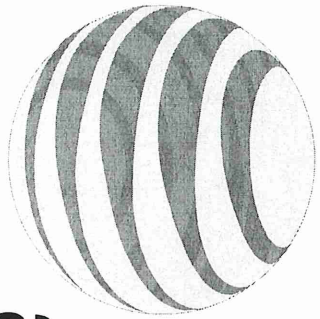
Legal Description

Street Address: 936 Northwest 6th Street, Grand Rapids, MN 55744

Parcel #: 91-550-0350

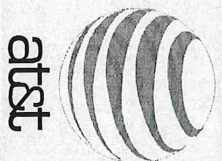
That certain Site (and access and utility easements) on a portion of the real property described as follows:

[INSERT LEGAL DESCRIPTION HERE]



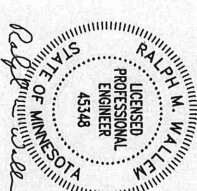
atst

GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE



GENERAL DYNAMICS
 Wireless Services
 12305 SHELVILLE ROAD, STE 230
 LOUISVILLE, KY 40243
 502.653.6553

BENCHMARK SERVICES, INC.
 Consulting Engineers
 Land Surveyors
 P.O. Box 3 318 North Main Street
 Grand Rapids, MN 55744
 Phone: 612.953.3049



GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL DATA & EXISTING CONDITIONS & CONDITIONS ON THE JOB SITE & SHALL UNDERSTAND THAT THE ENGINEER IN WITNESS OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
 SHEET VALUE
TITLE SHEET
 SHEET NO. T-1
 REVISION NUMBER 1

SITE INFORMATION

GOVERNING CODE: IRC & NEC
 SITE ADDRESS: 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 COUNTY: ITASCA
 PROPERTY OWNER: GRAND RAPIDS PUBLIC UTILITIES COMMISSION
 PROPERTY OWNER CONTACT: 218-928-7486
 APPLICANT: AT&T MOBILITY
 930 NATIONAL PKWY., 4TH FLOOR
 SUITE 1000
 GRAND RAPIDS, MN 55742
 SCOPE OF WORK: INSTALL NEW GENERATOR, GENERATOR DIESEL, GENERATOR (W/ EXHAUST EXTENSION) ON NEW CONCRETE PAD, INSTALL NEW AUTOMATIC TRANSFER SWITCH (ATS) ON AT&T SHELTER EXTERIOR, INTEGRATE EXISTING ALARM AND ELECTRICAL CONNECTIONS WITH NEW EQUIPMENT, ADD NEW FENCE WITH SWING GATE AROUND GENERATOR TO MATCH EXISTING FENCE TYPES AND COLOR.
 UTILITY INFORMATION: THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURE ABOVE GROUND INCLUDING EXISTING UTILITY LOCATIONS AND DEPTHS. THE CONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY STAYS OR NOT SHOWN ON NOTIFICATION SERVICES BEFORE BEGING OR COMMENSAL WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND ENGINEER AT THE CONTRACTORS EXPENSE.
 GENERAL SITE INFORMATION:
 (1) FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.
 (2) HANDICAP ACCESS IS NOT REQUIRED.
 (3) FACILITY HAS NO PLUMBING OR PAVING.
 (4) NO SPRINKLING WILL BE REQUIRED FOR THIS SITE.

APPROVALS

AT&T CONSTRUCTION MANAGER	DATE
GENERAL DYNAMICS CONSTR. MGR	DATE
PROPERTY OWNER	DATE
SITE ACQUISITION	DATE
CONTRACTOR	DATE
CONTRACTOR	DATE

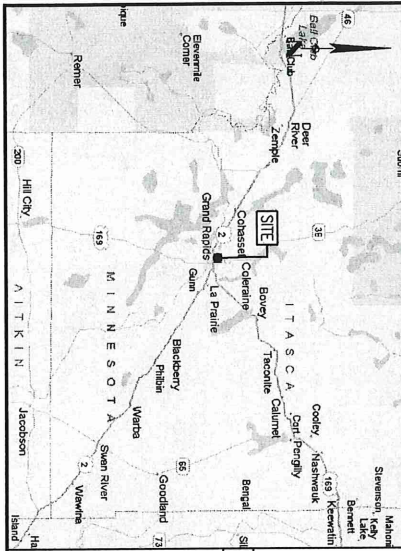
SHEET INDEX

SHEET NO.	DESCRIPTION	REV. NO.
T-1	TITLE SHEET	1
SP-1	GENERAL NOTES	1
A-1	SITE PLAN	1
E-1	FOUNDATION DETAILS	1
D-1	WIRING DIAGRAM	1
O-1	PANEL AND PENETRATION DETAILS	1
O-2	ATS, CONDUIT, TRENCH AND GROUND ROD DETAILS	1
G-1	GENERATOR DETAILS	1
G-2	GENERATOR DETAILS	1
G-3	GENERATOR DETAILS	1
G-4	GENERATOR DETAILS	1

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CD	3/5/21	ABB
1	REVISION ADDITION	4/22/22	MOB

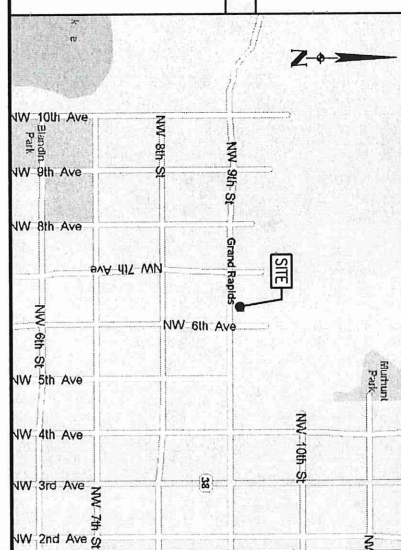
AREA MAP



PROJECT TEAM

MARKET LEAD: ROBERT BERGMAN
 ENGINEER: BENCHMARK SERVICES, INC.
 GARY VAN WINKLE
 PO BOX 318 NORTH MAIN STREET
 HAININGBURG, MN 55742
 TEL: 612.953.3049
 WWW.BENCHMARKSERVICESINC.BZ
 DRIVING DIRECTIONS:
 TOWER COORDINATES
 LATITUDE: 47.24186111 LONGITUDE: -93.539
 OPENING DIRECTIONS:
 FROM THE US2/135 INTERCHANGE SOUTHWEST OF DULUTH, MN:
 1. HEAD WEST ON US2 W / HIGHWAY 2
 2. TOMMARS BLEEDER, 13.4 MI
 3. TURN LEFT TO STAY ON US2 W / HIGHWAY 2, 62.4 MI
 4. TURN RIGHT ONTO NE 8TH AVE, 0.4 MI
 5. KEEP STRAIGHT TO STAY ON US2 W / NW 4TH ST, 0.5 MI
 6. TURN RIGHT ONTO NW 7TH AVE, 0.4 MI
 7. TURN RIGHT ONTO NW 9TH ST, 200 FT
 8. ARRIVE AT SITE
 4. TURN LEFT ONTO US-169 S / NE 4TH ST, 0.6 MI

VICINITY MAP



NOTES TO CONTRACTOR:

1. THE GENERAL CONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE STARTING WORK. ALL DISCREPANCIES SHALL BE RESOLVED 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 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL CODES. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
3. THE CONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE NEARLY FULLY QUALIFIED TO PERFORM THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE WORK.
4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND STRUCTURES 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 CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD HARMLESS THE OWNER, ARCHITECT, ENGINEER, AND ALL OTHERS, ON ALLEGE, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
5. THE GROUNDING SHALL COMPLY WITH AT&T MOBILITY WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CHEMICAL LATEST VERSION, WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT, THEY SHALL GOVERN.
6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION. IF FEA LIGHTING AND MARKING IS PRESENT ON SITE AND IS COVERED BY ELECTRICAL SERVICE THAT IS TO BE INTERRUPTED, IT IS THE CONTRACTOR'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 CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
10. CONSTRUCTION SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SURFACE AND PERSON CONTROL SHALL BE MAINTAINED ON PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
12. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COVERING THE COST OF ALL REQUIRED PERMITS, INSPECTORS, CERTIFICATES, ETC.
13. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET MANAGER UPON COMPLETION OF THE PROJECT.
14. RECORD PHOTOS: INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE VERIFYIFICATION.
15. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
17. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
18. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL NOTIFY GENERAL DRAWINGS WHENEVER SERVICES OF ANY DISCREPANCIES PRIOR TO OPENING MATERIAL OR CELEBRATING WITH CONSTRUCTION.
19. 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 CONTRACTOR AT HIS OWN EXPENSE.
20. ALL SUITABLE MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID EXCEPT TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATION APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

GENERAL NOTES:

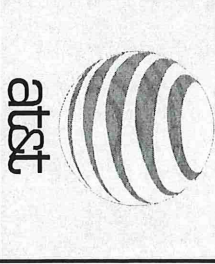
1. THE PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY.
2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
3. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
4. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
5. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
6. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
7. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTOR SHALL NOTIFY AT&T OF ANY DISCREPANCIES PRIOR TO OPENING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES:

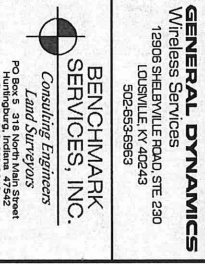
1. GENERAL
 1. COORDINATE LOCATION AND PROPER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T MOBILITY AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION.
 2. CONDITIONAL LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE PROPERTY REPRESENTATIVE. AT&T MOBILITY AND UTILITY COMPANIES, ROUTING OF CONDUITS MAY 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 UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT CABLES AND WIRING ELSE IS NECESSARY SHALL BE PROVIDED BY CONTRACTOR AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES IF PROVIDED BY CONTRACTOR SHALL NOT BE OBTAINED OR REMOVED FROM THE PROJECT WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER. 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 MOBILITY REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED. IN REGARDS 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 DIAGNOSTIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DENIED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND PROXIMITY REQUIREMENTS GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T MOBILITY 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. EIA ELECTRICAL INSTANTIATION
 - D. IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
 - E. IEEE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
 - F. NFPA NATIONAL BOARD OF FIRE UNDERWRITERS
 - G. NESC NATIONAL ELECTRICAL SAFETY CODE
 - H. NECA NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION
 - I. NETA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 - J. UL (UNDERWRITERS LABORATORY)
10. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM TO ALL APPLICABLE CODES AND REGULATIONS. THE CONTRACTOR SHALL VERIFY ALL MATERIALS LISTED ON THE DRAWINGS ARE FOR INFORMATION ONLY AND READY 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 MATERIAL TO INSTALL EQUIPMENT FURNISHED BY AT&T MOBILITY OR ITS SUPPLIER. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN WORKING INSTALLATION SHALL BE INCLUDED.
11. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING IN WRITING AT&T MOBILITY REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR PERSONAL PERFORMANCE WORK. UNLESS DIRECTED OTHERWISE.
12. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN REPROTECTED.

WIRING CONDUIT

1. PROVIDE 1/2" RIGID AND UNION JOINTS WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (90 DEGREE TOTAL BEND) IN ANY CONDUIT RUN.
 2. ALL POWER AND CONTROL UNIDIRECTIONAL WIRING SHALL BE TYPE THHN/THWN 90°C RATED 75 DEGREE CELSIUS, UNLESS NOTED OTHERWISE.
 3. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 344-10. NO RIGHT ANGLE BENDS OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE RADIUS SHALL BE USED ON CONDUITS 2" OR LARGER.
 4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
 5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE. ALL POWER CONDUITS SHALL CONTAIN A GROUND WIRE.
 6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
 7. CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
 8. INSTALL PULL STRING IN ALL CONDUIT.
 9. FOR ROOMS, HALLS AND BUILDINGS, CONDUITS NEAR BUILDING AND OUTDOOR SHALL BE FIRST UNLESS OTHERWISE NOTED. FOR RAW AND STIFFS AND OUTDOORS PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
 10. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATION FROM ANY MECHANICAL GAS PIPING.
 11. ALL WIRING ROUTED IN PLenum TO BE PLenum RATED OR IN METALLIC FLEX (UL) CONDUIT.
 12. INSPECTION WINDOWS ARE REQUIRED ON ALL INDOOR LULS.
- EQUIPMENT**
1. EQUIPMENT PARTS CONNECTED TO EXISTING PANELS, DISCS, ETC. SHALL MATCH THE CHARACTERISTICS (V, C, A) OF THAT EQUIPMENT.
 2. 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 PARTS AND TO BE BONDING TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND OIL. CONNECTIONS TO VARIOUS METALS SHALL BE MADE TO NOT CAUSE GALVANIC OR CORROSION REACTION. ALSO SHALL BE REPAIRED WITH GOOD GALVANIC SPRAY FOLLOWING BONDING.
 3. ANY METALLIC ITEM WITHIN OR GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
 4. EXTERIOR ARCADE GRATE GROUND CONNECTIONS SHALL BE FURNISHED WITH A FERROUS ANODE COATING OF ANTI-CORROSION 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 LOCATION INDICATED ON THE PLANS ACCORDING TO ACTUAL EQUIPMENT EXISTING OR SHOWING LOCATION ON SITE AS AVAILABLE.
 7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDING AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE AND THE CURRENT EDITION OF GROUNDING TITLES SHALL BE INSTALLED AT ALL BUILDINGS EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.
 8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED #12 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- INSPECTION/OCCUPANCY**
1. INCLUDE TIME/DATE STAMPED PHOTOS WITH TAPE MEASURE VERIFICATION FOR ALL BUDED CONDUIT.
 2. 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.
 3. CONTRACTOR SHALL SUPPLY OCCUPANCY ATTESTING TO THE COMPLETE GROUND SYSTEMS RESPECTIVELY (MAX 5 DAYS).
 4. AN ELECTRICAL INSPECTOR SHALL BE MADE BY AN INSPECTING AGENCY APPROVED BY AT&T MOBILITY REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL.
 5. CONTRACTOR SHALL HAVE AT&T AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT IT LISTING FOR THAT EQUIPMENT IS NOT VOID.



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Louisville, KY 40202
Phone: (502) 653-3446

REV.	DESCRIPTION	DATE	BY
0	100% CD	9/5/21	ABR
1	PRICE ADJUSTION	4/22/22	MCB



RALPH M. WALLE
LICENSED PROFESSIONAL ENGINEER
45348

GRAND RAPIDS DT
FA#: 10125043
UID: 95022

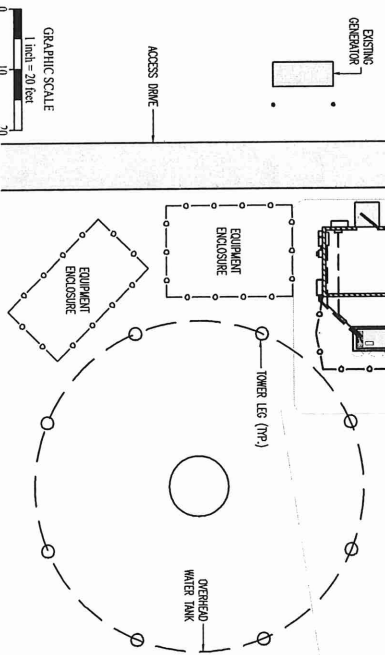
936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744

GENERAL UPGRADE

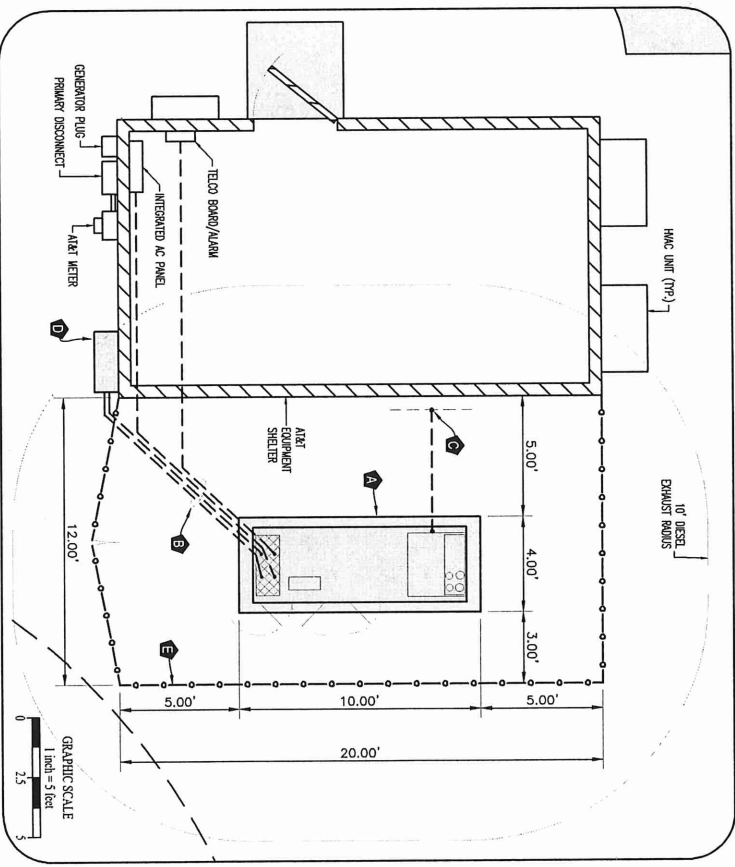
GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL PLANS & SPECIFICATIONS & CONDITIONS ON THE JOB SITE SHALL UNDERSTAND ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR REVISIONS TO THE SHEET MAKE.

SHEET NO. **SP-1** REVISION NUMBER **1**

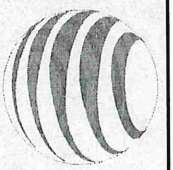


- CONSTRUCTION LEGEND**
- A. INSTALL GENERAC 30KW DIESEL GENERATOR (W/ EXHAUST EXTENSION) PER MANUFACTURER'S SPECIFICATIONS.
 - B. PROPOSED AT&T UNDERGROUND ELECTRICAL SERVICE & CONTROLS FROM GENERATOR TO EQUIPMENT INSIDE SHELTER. SEE SHEET E-1. LOCATE EXISTING UTILITIES & GROUND RING.
 - C. 1 - #2 AWG BARE TINNED GROUND WIRE TO EXISTING UNDERGROUND ELECTRICAL SERVICE FROM GENERATOR TO EQUIPMENT INSIDE SHELTER. SEE SHEET D-1.
 - D. INSTALL AUTOMATIC TRANSFER SWITCH (ATS) ON AT&T SHELTER EXTERIOR.
 - E. NEW 6" BOARD SHADOW BOX FENCE WITH SWING GATE. NEW FENCE TO MATCH EXISTING FENCE TYPES AND COLOR.



SCOPE OF WORK NOTES

- GENERAL:**
- VERIFY LOCATION OF ALL EQUIPMENT ON SITE.
 - NEW GENERAC 30KW DIESEL GENERATOR (W/ EXHAUST EXTENSION) PROVIDED BY GENERAL CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR.
 - NEW CONCRETE PAD PROVIDED AND INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED). SEE S-1.
 - NEW AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL CONTRACTOR AND INSTALLED BY CONTRACTOR (AS REQUIRED).
 - CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
- GROUNDING:**
- NEW EXTERIOR CONNECTION FROM EXISTING GROUND RING TO NEW EXHAUST CONNECTION AT GENERATOR.
 - CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 16'-0" APART.
- H-FRAME:**
- PROVIDE NEW H-FRAME IF REQUIRED. MATCH EXISTING H-FRAME MATERIAL FOR CONSTRUCTION OF NEW H-FRAME.
 - USE ALL GALVANIZED COMPONENTS, WHITE PLASTIC CAPS ON UN-STRUTS, SUPPORTS BELOW ROST 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 OF THE FORM.
- CONCRETE:**
- CONTRACTOR SHALL VERIFY ALL SIZES & BEARING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL UNDERWRITE BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
- INSTALL:**
- INSTALL PULL STRINGS IN EACH CONDUIT.
 - (1) NEW 2" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1.
 - (1) NEW 1" CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR HEATER/CHARGER CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1.
 - CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE CONDUITS FOR START CIRCUIT AND ALARM CABLING.
 - AFTER INTERCEPTING MAIN POWER FEED BEHIND PRIMARY DISCONNECT, ROUTE MAIN POWER FEED TO NEW ATS, THEN INTERGATE NEW ATS INTO MAIN AT&T POWER SOURCE. SEE SHEET E-1.
 - CONNECT NEW ATS TO TELCO/ALARM BOARD. SEE SHEET E-1.

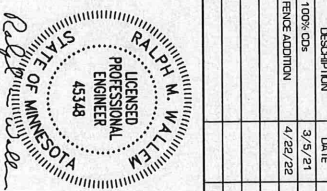


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DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	FENCE ADDITION	4/28/22	MOB



GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
GENERATOR UPGRADE

SITE PLAN

SHEETING:

SHEETING	REVISION NUMBER
A-1	1

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DRAWING REVISIONS

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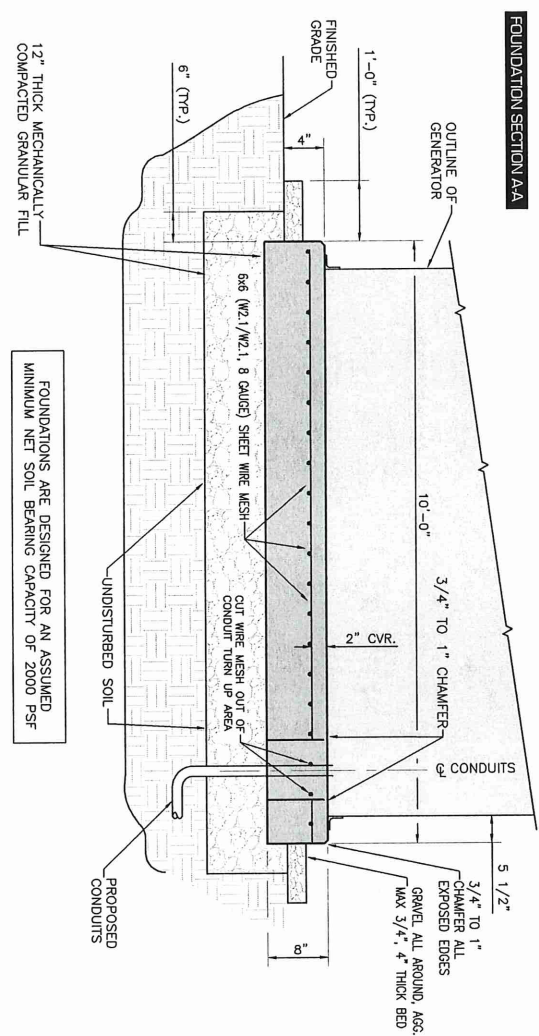
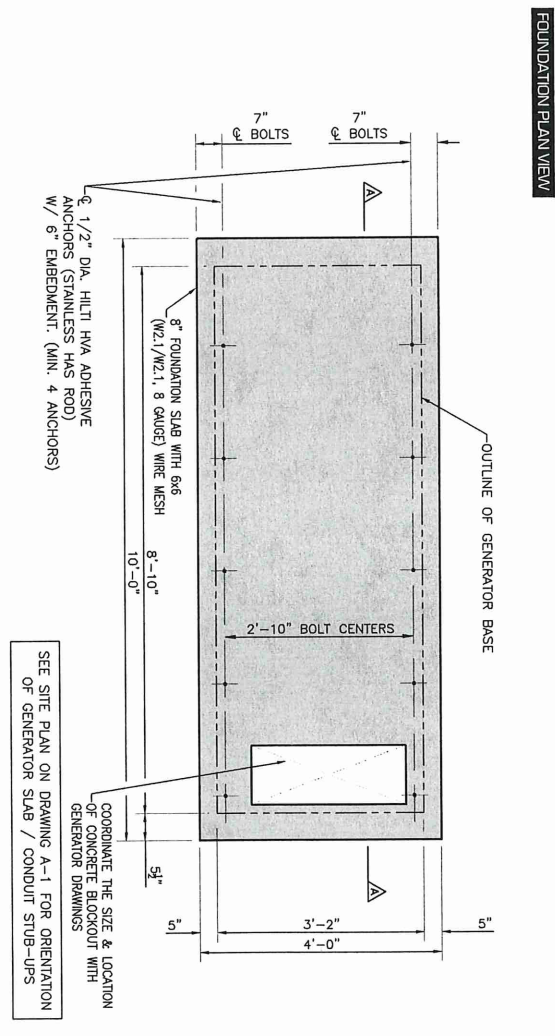
FOUNDATION DETAILS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME: **FOUNDATION DETAILS**

SHEET NO: S-1

REVISION NUMBER: 1



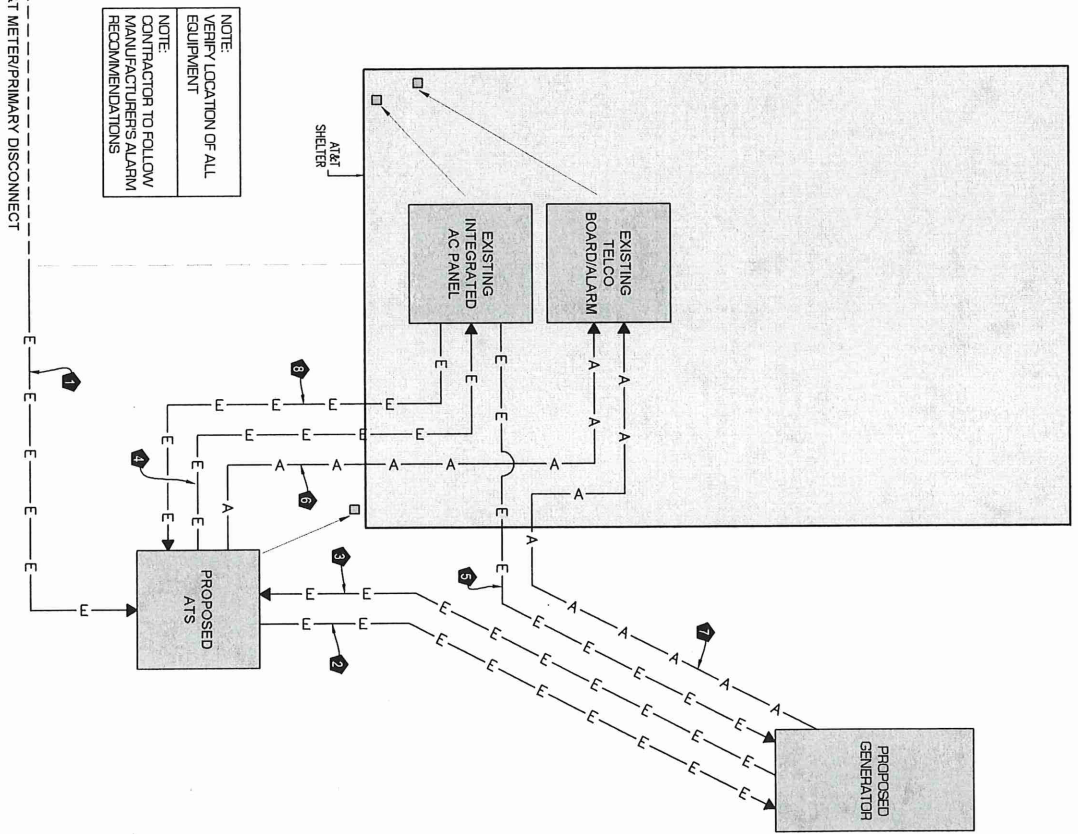
- STRUCTURAL GENERAL NOTES**
- GENERAL CONDITIONS
 - DESIGN AND CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
 - IT IS THE EXPRESS INTENT OF THE PROVISIONS IN THIS PROJECT THAT THE CONTRACTOR SHALL SECURE THE SIGNATURE OF THE ENGINEER IN CHARGE OF THE RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THE WORK. THE ENGINEER, ARCHITECT, CONSTRUCTION MANAGER, THE OWNER, AND THEIR AGENTS FROM ANY LIABILITY WHATSOEVER AND HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MANNER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCHEMATIC ACT IN CONNECTION WITH THE WORK.
 - DO NOT SCALE DRAWINGS. DURING DIMENSIONS PER MANUFACTURER DRAWINGS
 - VERIFY ALL EQUIPMENT DISTRIBUTED LINE LOADS FOR DESIGN AND ANALYSIS OF THE FOUNDATION. THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
 - CONCRETE MEET OR EXCEED THE FOLLOWING CODES AND STANDARDS:
 - DESIGN: ACI 318-11
 - CONSTRUCTION: ACI 307
 - DEMURRING: CFSI MANUAL OF STANDARD PRACTICE
 - MIN. STEEL: ASTM C 94, READY MIX CONCRETE
 - AIR ENTRAINMENT: ACI 318 AND ASTM C-260
 - AGGREGATE: ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)
 - CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM.
 - PROVIDE AIR ENTRAINED CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EXHHAUST OR WEATHER.
 - MAXIMUM AGGREGATE SIZE: 3/4"
 - DO NOT USE IN ADVERTISE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS OILY OR CALCIUM CHLORIDE REMAINING. STEEL SHALL BE AS SHOWN ON PLAN.
 - MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
 - FOUNDATION AND EXCAVATION NOTES
 - SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.
 - ALL ORGANIC AND / OR OTHER UNSATURABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION AND SLAB SUBGRADE AND BACKFILL AREAS, AND THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL (COMPACTED) TO 95 PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557). SPEEDY MEASURES TO PREVENT ANY WATER FROM PENETRATING FROM FOUNDATION FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.
 - DOUBLE WALL FUEL TANK BASE SPECIFICATION**
 - UL 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION
 - FUEL TANK BASE CONSTRUCTION:
 - BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE AND COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION AND USE OF STATIONARY COMBUSTIBLE ENGINE AND GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS, NFPA 110.
 - ANCHORS MINIMUM (4) @ 3/8" FOR GUN-SET MOUNTING.
 - SOIL BASE TANK DESIGN: FUEL TANK SHALL BE CONSTRUCTED WITH CONCRETE SUBGRADE. ALL FUEL TANKS SHALL BE LEAK-CHECKED TO ENSURE INTERIOY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS.
 - FUEL FILL - 5 GALLON SPILL CONTAINMENT WITH ALARM
 - 40% REMAINING FOR ALARM
 - 20% REMAINING FOR SHUT-DOWN
 - FACTORY PRE-SET AT 95% FILL FOR ALARM
 - FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM 110% OF THE TANK OVER RUPTURE. FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

DIAGRAM CIRCUIT SCHEDULE

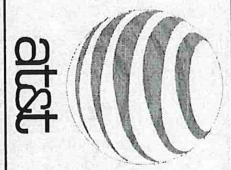
NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	METER/PRIMARY DISCONNECT	PROPOSED ATS	(3) 3/0	(1) #4	2"	POWER FEED
2	PROPOSED ATS	PROPOSED GENERATOR	(2) #14	(1) #14	1"	START CIRCUIT
3	PROPOSED GENERATOR	PROPOSED ATS	(3) #1	(1) #4	2"	POWER FEED
4	PROPOSED ATS	EXISTING INTEGRATED AC PANEL	(3) 3/0	(1) #4	2"	POWER FEED
5	EXISTING INTEGRATED AC PANEL	PROPOSED GENERATOR	(2) #12 (2) #12	(1) #12 (1) #12	1"	2-20 AMP CIRCUITS FOR (1) GENERATOR BLOCK HEATER & (2) BATTERY HEATER/CHARGER
6	PROPOSED ATS	EXISTING TELCO BOARD/ALARM	4-PAR 24 AWG	N/A	1"	ALARM CABLES FROM ATS. PROVIDE 10' OF SLACK CABLE. FINAL PUNCH DOWN IS BY A-RAT TECH. LABEL ALL WIRES. INSULATION FOR ALARM WIRES MUST BE REMOVED AT ALL POINTS. ALL WIRE CONNECTIONS MUST BE MADE AT THE RACK. LABEL ALL CONNECTIONS WITH CONDUCTORS.
7	PROPOSED GENERATOR	EXISTING TELCO BOARD/ALARM	12-PAR 24 AWG	N/A	1"	ALARM CABLES FROM ATS. PROVIDE 10' OF SLACK CABLE. FINAL PUNCH DOWN IS BY A-RAT TECH. LABEL ALL WIRES. INSULATION FOR ALARM WIRES MUST BE REMOVED AT ALL POINTS. ALL WIRE CONNECTIONS MUST BE MADE AT THE RACK. LABEL ALL CONNECTIONS WITH CONDUCTORS.
8	EXISTING AC PANEL	PROPOSED ATS	(2) #12	(1) #12	1"	20 AMP CIRCUIT FOR ATS POWER

1 PROPOSED WIRING DIAGRAM
SCALE: NONE

FROM AT&T METER/PRIMARY DISCONNECT



NOTE: VERIFY LOCATION OF ALL EQUIPMENT
NOTE: CONTRACTOR TO FOLLOW MANUFACTURER'S ALARM RECOMMENDATIONS

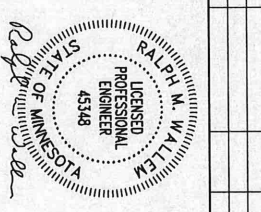


GENERAL DYNAMICS
Wireless Services
12908 SHELBYVILLE ROAD, STE 230
LOUISVILLE, KY 40243
502.653.9563

BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
P.O. Box 5, 318 North Main Street
Louisville, KY 40202
Phone: (502) 582-3046

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	PERCE ADDITION	4/22/22	MA3



GRAND RAPIDS DT
FA#: 10125043
USID: 95022
936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744
GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL DIMS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE DESIGNER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
SHEET NAME

WIRING DETAILS
SHEET NO: E-1
REVISION NUMBER: 1

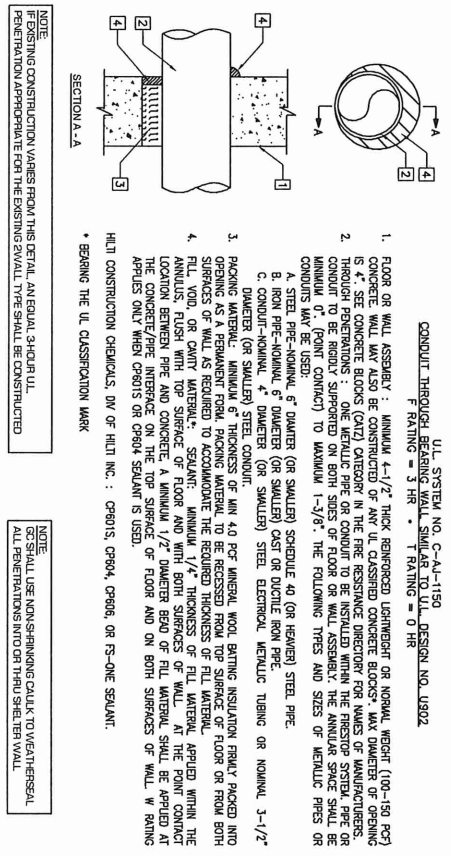
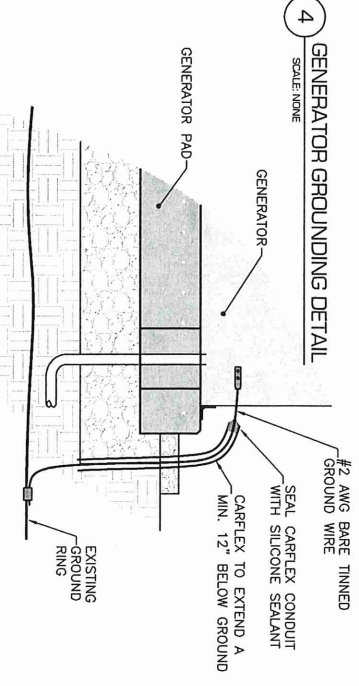
VOLTAGE	240 VOLTS	MANUFACTURER	NOT SPECIFIED
HAND BREAKER	200 AMP	PHASE	SINGLE
ENCLOSURE TYPE	SHELTER	BUS RATING	200 AMPS
ENCLOSURE TYPE	NEWM AIR	NEUTRAL BAR	YES
PANEL STATUS	EXISTING	NEUTRAL TO GROUND BOND	YES

CT	LOAD DESCRIPTION	BREAKER AMPS	BREAKER POLES	BREAKER STATUS	BREAKER STATUS	BREAKER POLES	BREAKER AMPS	LOAD DESCRIPTION	CT
1	RECIPIER	30	2	ON	ON	2	60	RMCC	4
2	RECIPIER	30	2	ON	ON	2	60	RMCC	6
3	RECIPIER	30	2	ON	ON	2	60	RMCC	8
4	RECIPIER	30	2	ON	ON	2	60	RMCC	10
5	RECIPIER	30	2	ON	ON	2	60	RMCC	12
6	RECIPIER	30	2	ON	ON	2	60	RMCC	14
7	RECIPIER	30	2	ON	ON	2	60	RMCC	16
8	RECIPIER	30	2	ON	ON	2	60	RMCC	18
9	RECIPIER	30	2	ON	ON	2	60	RMCC	20
10	RECIPIER	30	2	ON	ON	2	60	RMCC	22
11	RECIPIER	30	2	ON	ON	2	60	RMCC	24
12	RECIPIER	30	2	ON	ON	2	60	RMCC	26
13	RECIPIER	30	2	ON	ON	2	60	RMCC	28
14	RECIPIER	30	2	ON	ON	2	60	RMCC	30
15	RECIPIER	30	2	ON	ON	2	60	RMCC	32
16	RECIPIER	30	2	ON	ON	2	60	RMCC	34
17	RECIPIER	30	2	ON	ON	2	60	RMCC	36
18	RECIPIER	30	2	ON	ON	2	60	RMCC	38
19	RECIPIER	30	2	ON	ON	2	60	RMCC	40
20	RECIPIER	30	2	ON	ON	2	60	RMCC	42
21	RECIPIER	30	2	ON	ON	2	60	RMCC	44
22	RECIPIER	30	2	ON	ON	2	60	RMCC	46
23	RECIPIER	30	2	ON	ON	2	60	RMCC	48
24	RECIPIER	30	2	ON	ON	2	60	RMCC	50
25	RECIPIER	30	2	ON	ON	2	60	RMCC	52
26	RECIPIER	30	2	ON	ON	2	60	RMCC	54
27	RECIPIER	30	2	ON	ON	2	60	RMCC	56
28	RECIPIER	30	2	ON	ON	2	60	RMCC	58
29	RECIPIER	30	2	ON	ON	2	60	RMCC	60
30	RECIPIER	30	2	ON	ON	2	60	RMCC	62
31	RECIPIER	30	2	ON	ON	2	60	RMCC	64
32	RECIPIER	30	2	ON	ON	2	60	RMCC	66
33	RECIPIER	30	2	ON	ON	2	60	RMCC	68
34	RECIPIER	30	2	ON	ON	2	60	RMCC	70
35	RECIPIER	30	2	ON	ON	2	60	RMCC	72
36	RECIPIER	30	2	ON	ON	2	60	RMCC	74
37	RECIPIER	30	2	ON	ON	2	60	RMCC	76
38	RECIPIER	30	2	ON	ON	2	60	RMCC	78
39	RECIPIER	30	2	ON	ON	2	60	RMCC	80
40	RECIPIER	30	2	ON	ON	2	60	RMCC	82
41	RECIPIER	30	2	ON	ON	2	60	RMCC	84
42	RECIPIER	30	2	ON	ON	2	60	RMCC	86

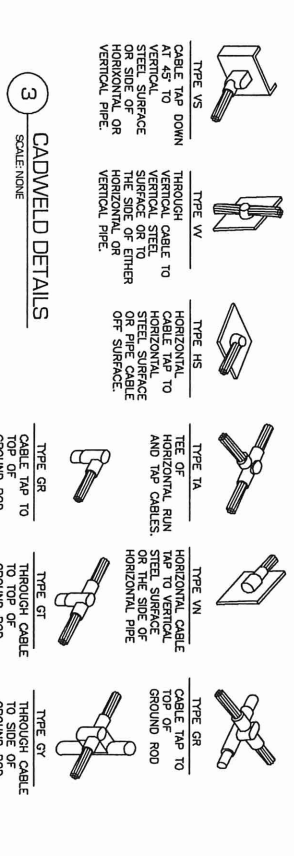
NOTE
CONTRACTOR TO LABEL WIRES WITH PROTECTION ON SIMILAR LEVELS (MIN. 1" ABSOLUTE) NO PENETRATION LEVELS

NOTE
CONTRACTOR TO UTILIZE NEXT AVAILABLE IN SERIAL SIZE ELECTRICAL PROTECTION FOR GENERATOR BATTERY CHARGER BATTERY CHARGER AND BATTERY BATTERY

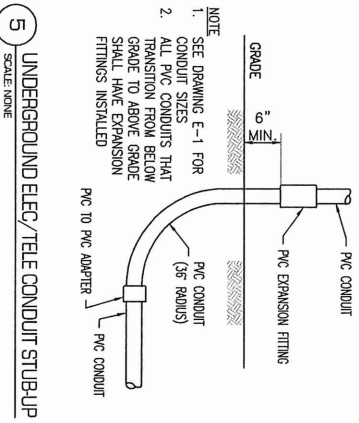
1 EXISTING PANELS
SCALE: NONE



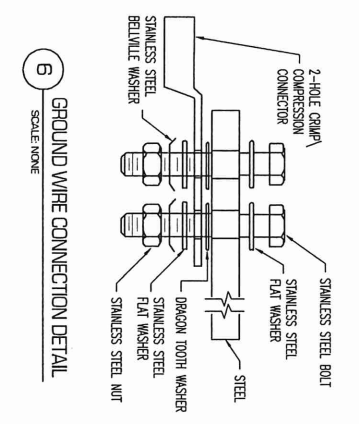
2 OUTER WALL PENETRATION DETAIL (IF APPLICABLE)
SCALE: NONE



3 CADWELD DETAILS
SCALE: NONE



5 UNDERGROUND ELEC./TELE CONDUIT STUBUP
SCALE: NONE



6 GROUND WIRE CONNECTION DETAIL
SCALE: NONE

GENERAL DYNAMICS
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12806 SHELVILLE ROAD, STE 230
LOUISVILLE, KY 40243
502-655-6963

BENCHMARK SERVICES, INC.
Consulting Engineers
Land Surveyors
P.O. Box 5, 318 North Main Street
Hillsboro, KY 40325
Phone: (612) 655-3442

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/5/21	ABB
1	PRICE ADJUSTMENT	4/22/22	MOB

RALPH M. WALLUM
LICENSED PROFESSIONAL ENGINEER
45348

GRAND RAPIDS DT
FA#: 10125043
USD: 95022
936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744
GENERATOR UPGRADE

PANEL & PENETRATION DETAILS

SHEET NO: D-1
REVISION NUMBER: 1

SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



SD030 | 2.2L | 30 kW INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary Emergency



CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Oil Filter
- Critical Sump (Open Set Only)
- Radial Shim Stand
- Level 1 Fan and Bar Grates (Open Set Only)

FUEL SYSTEM

- 18" Fuel Filter
- 18" Fuel Filter
- 18" Fuel Filter

ELECTRICAL SYSTEM

- 104 UL Listed Battery Charger
- Emergency Stop
- Emergency Stop

ALTERNATOR SYSTEM

- Automatic Voltage Regulation
- 100% Self-Excitation
- 100% Self-Excitation

GENERATOR SET

- Emergency Stop
- Emergency Stop
- Emergency Stop

ENGINEERED OPTIONS

- Emergency Stop
- Emergency Stop
- Emergency Stop

ALTERNATOR SYSTEM

- Emergency Stop
- Emergency Stop
- Emergency Stop

GENERATOR SET

- Emergency Stop
- Emergency Stop
- Emergency Stop

FUEL TANKS

- Emergency Stop
- Emergency Stop
- Emergency Stop

CONTROL SYSTEM

- Emergency Stop
- Emergency Stop
- Emergency Stop

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General	Model	SD030
Rated Power	30 kW	
Rated Voltage	240V	
Rated Frequency	60 Hz	
Rated Efficiency	94%	
Rated Power Factor	0.8	
Rated Speed	1800 RPM	
Rated Torque	150 Nm	
Rated Current	75 A	
Rated Voltage	240V	
Rated Frequency	60 Hz	
Rated Efficiency	94%	
Rated Power Factor	0.8	
Rated Speed	1800 RPM	
Rated Torque	150 Nm	
Rated Current	75 A	

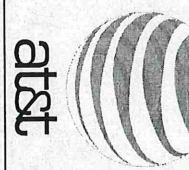
ALTERNATOR SPECIFICATIONS

Rated Power	30 kW
Rated Voltage	240V
Rated Frequency	60 Hz
Rated Efficiency	94%
Rated Power Factor	0.8
Rated Speed	1800 RPM
Rated Torque	150 Nm
Rated Current	75 A
Rated Voltage	240V
Rated Frequency	60 Hz
Rated Efficiency	94%
Rated Power Factor	0.8
Rated Speed	1800 RPM
Rated Torque	150 Nm
Rated Current	75 A

GENERATOR SET

Rated Power	30 kW
Rated Voltage	240V
Rated Frequency	60 Hz
Rated Efficiency	94%
Rated Power Factor	0.8
Rated Speed	1800 RPM
Rated Torque	150 Nm
Rated Current	75 A
Rated Voltage	240V
Rated Frequency	60 Hz
Rated Efficiency	94%
Rated Power Factor	0.8
Rated Speed	1800 RPM
Rated Torque	150 Nm
Rated Current	75 A

GENERATOR MANUFACTURER
DETAIL - FOR REFERENCE ONLY

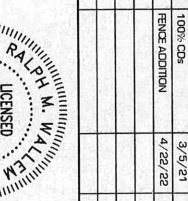


GENERAL DYNAMICS
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12908 SHEPPARD ROAD, STE 230
LOUISVILLE, KY 40243
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BENCHMARK SERVICES, INC.
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Land Surveyors
P.O. Box 5, 318 North King Street
Louisville, KY 40202
Phone: (502) 985-3949

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CD	3/2/21	ABB
1	FENCE ADDITION	4/22/22	MSB



GRAND RAPIDS DT
FA#: 10125043
USID: 95022

936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744

GENERATOR UPGRADE

OPERATOR SHALL NOTIFY ALL STATE & COUNTY AGENCIES AND APPROPRIATE LOCAL AGENCIES OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SHEET NAME
GENERATOR DETAILS

SHEET NO. **G-1**

REVISION NUMBER **1**

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency



OPERATING DATA

POWER RATINGS

Generator Rating	30 kW	30 kVA
Rated Power (kW)	30	36
Rated Power (kVA)	36	36
Prime Power (kW)	30	36
Prime Power (kVA)	36	36
Standby Power (kW)	30	36
Standby Power (kVA)	36	36

MOTOR STARTING CAPACITIES (kVA)

Generator Rating	30 kW	30 kVA
Motor Starting Capacity (kVA)	20	24
Motor Starting Capacity (kW)	16	19
Motor Starting Capacity (kVA)	20	24
Motor Starting Capacity (kW)	16	19

FUEL CONSUMPTION RATES*

Generator Rating	30 kW	30 kVA
Rated Power (kW)	30	36
Rated Power (kVA)	36	36
Prime Power (kW)	30	36
Prime Power (kVA)	36	36
Standby Power (kW)	30	36
Standby Power (kVA)	36	36

COOLING

Generator Rating	30 kW	30 kVA
Rated Power (kW)	30	36
Rated Power (kVA)	36	36
Prime Power (kW)	30	36
Prime Power (kVA)	36	36
Standby Power (kW)	30	36
Standby Power (kVA)	36	36

CONSTRUCTION AIR REQUIREMENTS

Generator Rating	30 kW	30 kVA
Rated Power (kW)	30	36
Rated Power (kVA)	36	36
Prime Power (kW)	30	36
Prime Power (kVA)	36	36
Standby Power (kW)	30	36
Standby Power (kVA)	36	36

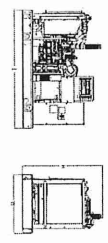
*Based on "Sea Level" or elevation up to 1000 feet and standard ambient conditions.
 Ambient temperature 20°C (68°F), relative humidity 50%, wind speed 1 m/s (2 mph).
 Fuel: Ultra Low Sulfur Diesel (ULSD) 15.85 lbs/gal (0.701 kg/l).
 Note: Operating requirements under standard conditions. Under other conditions, please contact a General Systems branch office for additional details. All performance ratings are based on ISO 8528-1, ISO 3006, and ISO 8528-2 standards.
 Standby - See Bulletin 0187/0202SS
 Prime - See Bulletin 0187/0202SS

SD030 SPEC SHEET

SD030 | 2.2L | 30 kW
INDUSTRIAL DIESEL GENERATOR SET
 EPA Certified Stationary Emergency

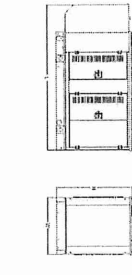


DIMENSIONS AND WEIGHTS*



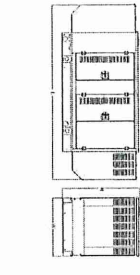
Dimension	Value	Unit
Overall Length	54.0	inches
Overall Width	27.0	inches
Overall Height	30.0	inches
Weight (Net)	1400	lb
Weight (Gross)	1500	lb

WEATHER PROTECTED ENCLOSURE



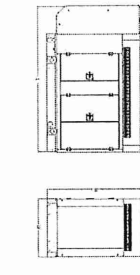
Dimension	Value	Unit
Overall Length	54.0	inches
Overall Width	27.0	inches
Overall Height	30.0	inches
Weight (Net)	1400	lb
Weight (Gross)	1500	lb

LEVEL 1 ACOUSTIC ENCLOSURE



Dimension	Value	Unit
Overall Length	54.0	inches
Overall Width	27.0	inches
Overall Height	30.0	inches
Weight (Net)	1400	lb
Weight (Gross)	1500	lb

LEVEL 2 ACOUSTIC ENCLOSURE



Dimension	Value	Unit
Overall Length	54.0	inches
Overall Width	27.0	inches
Overall Height	30.0	inches
Weight (Net)	1400	lb
Weight (Gross)	1500	lb

SD030 SPEC SHEET

**GENERATOR MANUFACTURER
 DETAIL - FOR REFERENCE ONLY**

GENERATOR UPGRADE
 GRAND RAPIDS DT
 FA#: 10125043
 USID: 950222

GENERAL DYNAMICS
 12806 SHEPHERD ROAD, STE 500
 LOUISVILLE, KY 40243
 502-655-9983

atst

BENCHMARK SERVICES, INC.
 Consulting Engineers
 Land Surveyors
 PO Box 5, 318 North Main Street
 Louisville, KY 40202
 Phone: (502) 582-2442

DRAWING REVISIONS

NO.	DESCRIPTION	DATE	BY
0	100% CDS	3/9/21	ABB
1	PRICE ADJUSTMENT	4/22/22	MJB

RALPH M. WALEM
 LICENSED PROFESSIONAL ENGINEER
 45348

GENERAL DYNAMICS
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744

GENERATOR UPGRADE
 GRAND RAPIDS DT
 FA#: 10125043
 USID: 950222

**GENERATOR MANUFACTURER
 DETAIL - FOR REFERENCE ONLY**

GENERATOR UPGRADE
 GRAND RAPIDS DT
 FA#: 10125043
 USID: 950222

**TTS Series
Switches**

**200 Amps
600 VAC**

**GENERAC | INDUSTRIAL
POWER**

**TAS200
200A Automatic Transfer Switch**

TAS200

TAS200

1 of 3

2 of 3

The Generac TAS200 Automatic Transfer Switch

- Flexibility for multiple application installations
- Multiple generator support with 3 source panel
- Designed with a 6 inch touch screen controller for improved user interface
- Camlock functionality for mobile generator sources

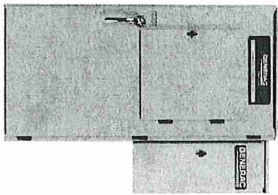


Image used for reference purposes only.

Features

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

Optional Features

- EXTENDED WARRANTY
- THREE-PHASE VOLTAGE CONFIGURATIONS

Codes and Standards

Generac products are designed to the following standards:

- UL1008
UL501
CSA C22.2 No. 173
- UL1008
UL501
NEC 700, 701 and 702
- UL1008
UL501
NEC 700, 701 and 702



NEMA 3R

Application and Engineering Data

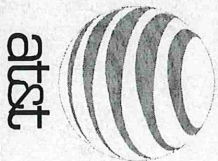
Cabinet Specifications	24"W x 12"D x 48"H
Dimensions	210 lbs.
Weight	Single Chamber with Main Door
	SK41
Construction	UL Type 1/NEMA 3R Panel Pneumatic Coast Brake for Corrosion Resistance C-ULIS Load - Automatic Transfer Switch Stainless Steel Hardware 3-Point Latching System with Red-Handle Handles NMI
Mounting Options	H-Frame Pre-wired alarm terminal strip
Insulated	

Electrical Specifications	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Voltage/Phase/Type	Edson 200 amp Utility Breaker
Breaker	Edson 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Break
Protective Device Complies Rating (MVA) Amp	350kVCL - 4-6 MNS
Input Breaker	350kVCL - 4-6 MNS
Output to Site	Delson D10M4-1274-L012
Generator Approver/Connector	Generac Run Alarm Generac FRI - Shutdown Alarm Generac FRI - Non Shutdown Alarm Low Fuel Alarm Generator Thermal Alarm AC Utility Fail Alarm
Alarm Terminal Board	

Camlock Component	Shipped loose for multiple installation options
Dimensions	5"W x 9.4"D x 24.25"H
	Single-Phase: Black U1, Red U2, White-Neutral, Green-Ground
	3-Phase: Black U1, Red U2, Blue U3, White-Neutral, Green-Ground
	Uses 4 CH E1016 Main Connectors
	Mating Connector - CH E1016 Female



GENERAC ATS MANUFACTURER
DETAIL - FOR REFERENCE ONLY



GENERAL DYNAMICS
Wireless Services
12905 SHELLYVILLE ROAD, STE 230
LOUISVILLE, KY 40243
502-653-68563

**BENCHMARK
SERVICES, INC.**

Consulting Engineers
Land Surveyors
P.O. Box 5, 313 North Main Street
Louisville, KY 40202
Phone: (502) 653-3442

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% CDS	3/24/21	ARB
1	PRICE ADJUSTMENT	4/22/22	MCB



GRAND RAPIDS DT
FA#: 10125043
USID: 95022
936 NORTHWEST 6TH STREET
GRAND RAPIDS, MN 55744
GENERATOR UPGRADE

GENERAC ATS DETAILS

SHEET NO: **G-3** DRAWING NUMBER: **1**

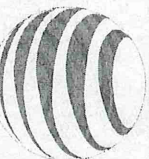
CONTRACTOR SHALL VERIFY ALL PANS & DESIGN PARAMETERS
ARE CORRECT AND AS SHOWN. THE CONTRACTOR SHALL VERIFY
THE LOCATION IN WRITING OF ANY DISCREPANCIES BEFORE
PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

GENERAC INDUSTRIAL POWER

TTS Control Systems

TAS200

3 of 3



GENERAL DYNAMICS
 Wireless Services
 12906 SHELBYVILLE ROAD, STE 230
 LOUISVILLE, KY 40243
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 P.O. Box 5, 315 North Main Street
 Louisville, KY 40202
 Phone: (502) 685-3242

DRAWING REVISIONS

REV.	DESCRIPTION	DATE	BY
0	100% IDS	3/3/21	ABB
1	PRICE ADJUSTION	4/22/22	MOB

RALPH M. W. L.L.C.M.
 LICENSED PROFESSIONAL ENGINEER
 45348
 STATE OF MINNESOTA
Ralph M. W. L.L.C.M.

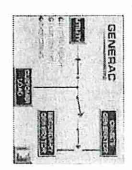
GRAND RAPIDS DT
 FA#: 10125043
 USID: 95022
 936 NORTHWEST 6TH STREET
 GRAND RAPIDS, MN 55744
 GENERATOR UPGRADE

CONTRACTOR SHALL VERIFY ALL PANS & DIMING DIMENSIONS
 THE DIMENSIONS IN WORKING OF ANY DIMENSIONS BEFORE
 PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
 SHEET NAME:

GENERAC ATS DETAILS

SHEET NO: **G-4**
 REVISION NUMBER: **1**

Touch Screen Interface



INDICATORS AND BUTTONS

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

DETAILS SCREEN

<p>System Settings:</p> <ul style="list-style-type: none"> System Voltage/Phases: <ul style="list-style-type: none"> 120/240V single phase (standard) 120/240V three phase (optional) 120/240V three phase (optional) Utility Fail Monitor: <ul style="list-style-type: none"> Under Voltage: 75-95% of nominal voltage Over Voltage: 105%-125% of nominal voltage Pickup (Inrushless): fixed at 5 volts Delay time: 0-60s Utility Interrupt Delay: 0-60s Return to Utility Timer: 1-30 minutes Transfer: <ul style="list-style-type: none"> In-Phase, or Time-Delay-Neutral at 0.0-10.0s in 1 second increments 	<p>Exercise Settings:</p> <ul style="list-style-type: none"> Time of day Day of week Exercise: <ul style="list-style-type: none"> Exercise with/without load Exercise once every 1, 2, or 4 weeks. Exercise time-of-day Exercise day of week Exercise duration: 15-30 minutes
<p>Engine Settings:</p> <ul style="list-style-type: none"> Engine Warm-up timer: 0-20 minutes Generator Load Accept: <ul style="list-style-type: none"> Time-Delay Neutral at 0.0-10.0s in 1 second increments Voltage: 65-95% of nominal Frequency: 65-95% of nominal Engine Minimum Run Time: 5-30 minutes Engine Cool-down timer: 0-20 minutes 	<p>Screen Settings:</p> <ul style="list-style-type: none"> Brightness & Contrast button Screen Calibration button Startup/Screen screen <p>Diagnoses:</p> <ul style="list-style-type: none"> Digital I/O bits status Voltage A/D readings <p>Minute Diagram:</p> <ul style="list-style-type: none"> System Ready Transfer switch position Utility available Standby/Auto switch position Maintenance/Auto switch position Generator source TS position TSS status

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GENERAC ATS MANUFACTURER
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