

## **SECOND AMENDMENT TO REVOCABLE LICENSE AGREEMENT**

This **Second Amendment to Revocable License Agreement** ("Amendment"), is entered into by and between the **Board of Education of the City of Chicago**, as Licensor ("Licensor"), and **New Cingular Wireless PCS, LLC**, a Delaware limited liability company, as Licensee ("Licensee").

### **RECITALS**

- A. Licensor and Licensee entered into that certain Revocable License Agreement, dated March 24, 2022 (the "Original Agreement") and the First Amendment to Revocable License Agreement, dated November 3, 2022 ("First Amendment" and together with the Original Agreement, the "Agreement"), pursuant to which, Licensor agreed to permit Licensee to maintain certain equipment at the property commonly known as Bateman Elementary School, 4220 N. Richmond Street, Chicago, Illinois 60618 ("Property");
- B. The current term commenced as of May 1, 2022 and expires as of April 30, 2027, and is automatically renewed in increments of five (5) years provided that the Term, comprised of the Initial Term and all Renewal Terms, does not exceed twenty-five (25) years; and
- C. Licensor and Licensee desire to modify the Agreement to provide for the installation of certain equipment at the Property and a corresponding increase in annual payments by Licensee.

### **AGREEMENT**

NOW THEREFORE, for good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Licensor and Licensee agree as follows.

1. **Incorporation of Recitals.** The foregoing recitals are incorporated into this Second Amendment by reference as if fully set forth in the body of this Second Amendment.
2. **Additional Equipment.** As set forth in the Drawings attached as Exhibit "A" to this Second Amendment, Licensee shall: 1) install a new grade level natural gas generator with new wooden fence enclosure; 2) install additional equipment at the rooftop level; 3) paint any equipment, frames, cable trays and conduit visible from the ground to match adjacent masonry; and 4) restore any landscaping to original condition if disturbed (collectively, the "Work"). Any regular exercising of the generator shall occur when school, and before and after hour activities, are not in session. The Work shall be completed,

weather permitting, within ninety (90) days after the full execution of this Second Amendment. The Exhibit "A" attached to this Second Amendment shall amend and supplement the Exhibit "A" attached to the Agreement.

3. Administrative Fee. Licensee shall pay to Licensor a fee in the amount of Five Thousand Dollars (\$5,000.00), in accordance with the terms of Section 5.2 of the Agreement.

4. License Payments. Exhibit "B" to the Original Agreement shall be replaced by Exhibit "B" attached to this Second Amendment.

5. Ethics. No officer, agent, or employee of the Licensor is or shall be employed by the Licensor or has or shall have a financial interest, directly or indirectly, in this Agreement or the compensation to be paid hereunder, except as may be permitted in writing by the Board's Code of Ethics Policy, adopted August 24, 2023 (23-0824-PO2), as amended from time to time, which policy is hereby incorporated by reference into and made a part of this Agreement as if fully set forth herein.

6. Full Force and Effect. Except as specifically modified by the terms of this Second Amendment, all the terms, definitions, covenants, and provisions of the Agreement remain in full force and effect and are not otherwise revised, amended or changed.

7. Conflict. In the event of any conflict between the terms of this Second Amendment and the terms of the Agreement, the terms of this Second Amendment shall control.

8. Whole Agreement. The mutual obligations of the parties as provided herein are the sole consideration for this Second Amendment, and no representations, promises or inducements have been made by the parties other than as appear in this Second Amendment. This Second Amendment may not be amended except in writing signed by both parties.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, Licensor and Licensee have executed this Second Amendment to Revocable License Agreement as of the 16th day of June 2024.

**LICENSOR**

**Board of Education of the City of Chicago**

By: Jianan Shi  
Jianan Shi, President

Date: June 16, 2024 | 8:28:54 PM CDT

Attest: Susan J. Narrajos  
Susan J. Narrajos, Secretary

By: Pedro Martinez  
Pedro Martinez  
Chief Executive Officer

Approved as to Legal Form

DocuSigned by:  
Ruchi Verma  
Ruchi Verma  
General Counsel

Board Report No.: 15-0422-OP1- 185

**LICENSEE**

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

By: AT&T Mobility Corporation

Its: Manager

By: Andrew T. Flowers  
Andrew T. Flowers

Its: Sr Real Estate & Construction Manager

Date: 6/11/2024

**EXHIBIT "A"**

**DRAWINGS**

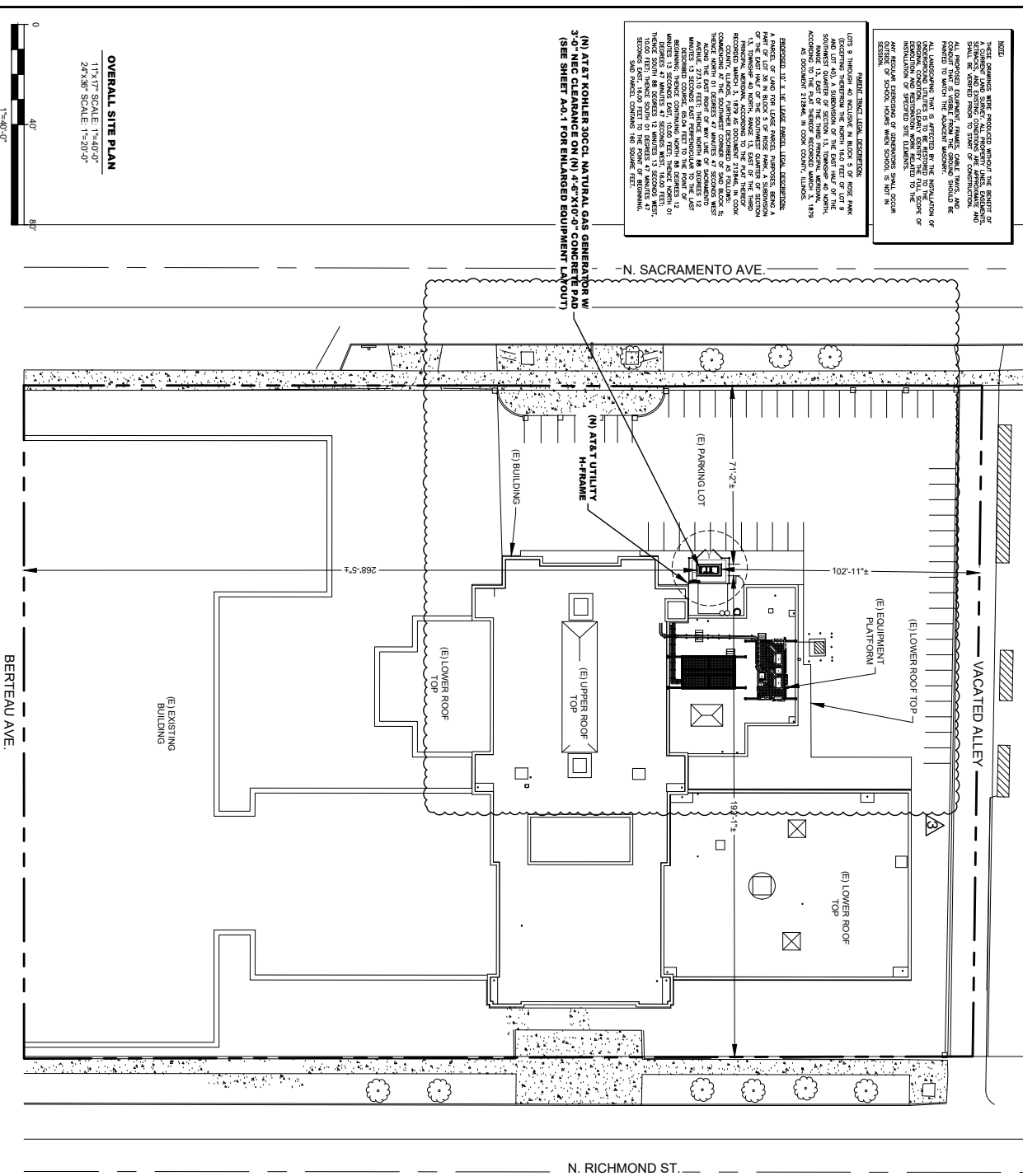




**NOTE:**  
 THESE DRAWINGS ARE PREPARED WITHOUT THE BENEFIT OF FIELD SURVEY. THE EXISTING CONDITIONS OF THE SITE, INCLUDING THE LOCATION OF ALL UTILITIES, ARE SHOWN AS RECORDED AND AS SHOWN ON THE PLANS. THE CLIENT SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL SERVICES PROVIDED AND DOES NOT INCLUDE THE DESIGN OF STRUCTURES OR THE CONSTRUCTION OF ANY STRUCTURE. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROFESSIONAL SERVICES PROVIDED AND DOES NOT INCLUDE THE DESIGN OF STRUCTURES OR THE CONSTRUCTION OF ANY STRUCTURE.

**GENERAL NOTES:**  
 1. ALL DIMENSIONS ARE IN FEET AND INCHES.  
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 4. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
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 6. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 7. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 8. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 9. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.  
 10. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

(N) AT&T KOHLER 300CI NATURAL GAS GENERATOR W/ 3'-0" NEC CLEARANCE ON (N) 4'-6"x10'-0" CONCRETE PAD (SEE SHEET A-0.1 FOR ENLARGED EQUIPMENT LAYOUT)



N. SACRAMENTO AVE.

VACATED ALLEY

(E) LOWER ROOF TOP

(E) EQUIPMENT PLATFORM

(E) LOWER ROOF TOP

(E) LOWER ROOF TOP

(E) UPPER ROOF TOP

(E) BUILDING

(N) AT&T UTILITY H-FRAME

(N) AT&T KOHLER 300CI NATURAL GAS GENERATOR W/ 3'-0" NEC CLEARANCE ON (N) 4'-6"x10'-0" CONCRETE PAD (SEE SHEET A-0.1 FOR ENLARGED EQUIPMENT LAYOUT)

71'-2 1/2'

111'-20 1/2'

102'-1 1/2'

268'-5 1/2'

(E) EXISTING BUILDING

N. RICHMOND ST.

**LICENSED PROFESSIONAL ENGINEER**  
 RAHMAN MOHAMED  
 082-058944  
 OF ILLINOIS  
 02/2024

DATE: 02/2024  
 DESIGNED BY: [Signature]  
 CONSTRUCTION BY: [Signature]  
 CHECKED BY: [Signature]  
 DRAWN BY: [Signature]

**PREPARED FOR:**  
 Mastec Network Solutions  
 1188 BE CARP PARKWAY, SUITE 101  
 ALBANY PARK, ILLINOIS 60422  
 TEL: 708.441.1111  
 FAX: 708.441.1112

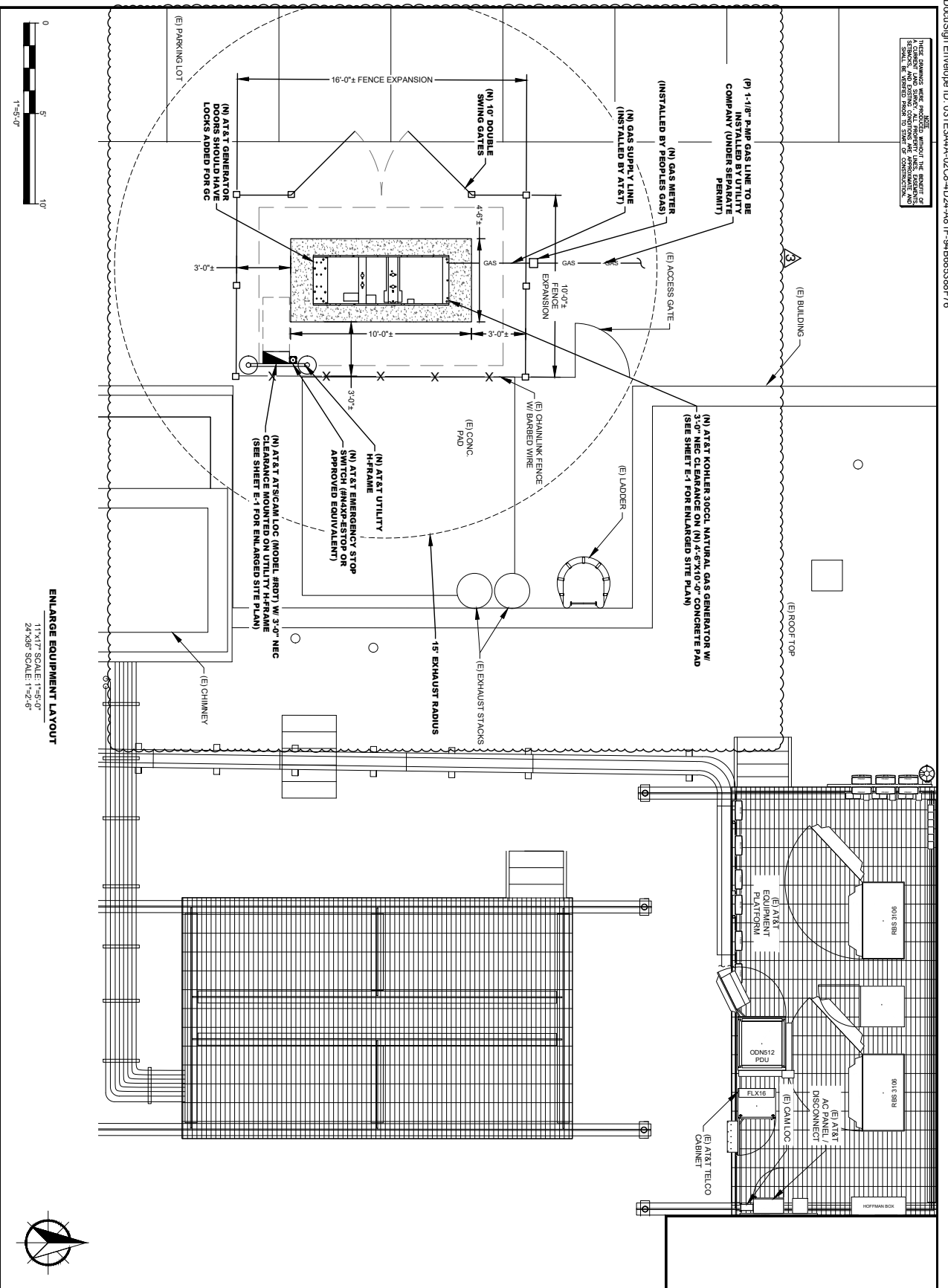
**PREPARED BY:**  
 at&t

**PREPARED BY:**  
 Mastec Network Solutions  
 1188 BE CARP PARKWAY, SUITE 101  
 ALBANY PARK, ILLINOIS 60422  
 TEL: 708.441.1111  
 FAX: 708.441.1112

**SITE NAME:** ALBANY PARK  
**SITE ADDRESS:** 4220 NORTH RICHMOND STREET, CHICAGO, IL 60618  
**TOWER OWNER ID:** N/A

**OVERALL SITE PLAN**  
 SHEET NUMBER  
**A-0**

THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF THEY COMPLY WITH ALL APPLICABLE LAWS, REGULATIONS AND ORDINANCES. I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF ILLINOIS. MY LICENSE NUMBER IS 062-058844. I AM NOT PROVIDING CONTRACT ADMINISTRATION SERVICES. ANY CHANGES SHALL BE IDENTIFIED BY A REVISION TO THESE DRAWINGS.



**at&t**

PREPARED BY:

**Mastec Network Solutions**

1151 BE GARY PARKWAY, SUITE 101  
 FAYETTEVILLE, AR 72704  
 FAX NUMBER: 479-242-2945

SITE NAME: ALBANY PARK

SITE ADDRESS: 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618

TOWER OWNER ID: N/A

DATE: 5/27/2024

DESIGNED BY: RML

CONSTRUCTION: RML

CHECKED BY: CS

APPROVED BY: RML

REPRODUCTION OR CREATING IN THESE DOCUMENTS IS PROHIBITED BY LAW. THESE DOCUMENTS ARE THE PROPERTY OF MASTEC NETWORK SOLUTIONS. ANY CHANGES SHALL BE IDENTIFIED BY A REVISION TO THESE DRAWINGS.

PREPARED FOR:

CONSTRUCTION CONTRACTOR: MASTEC NETWORK SOLUTIONS

**LICENSED PROFESSIONAL ENGINEER**

OF ILLINOIS

062-058844

RAPHAEL MOHAMED

DATE	REVISION	REVISION BY
5/27/2024	1	RML
5/27/2024	2	RML
5/27/2024	3	RML

DRAWN BY: CS

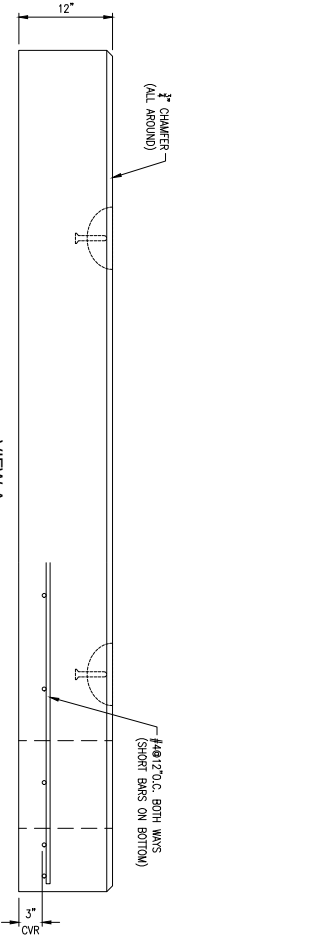
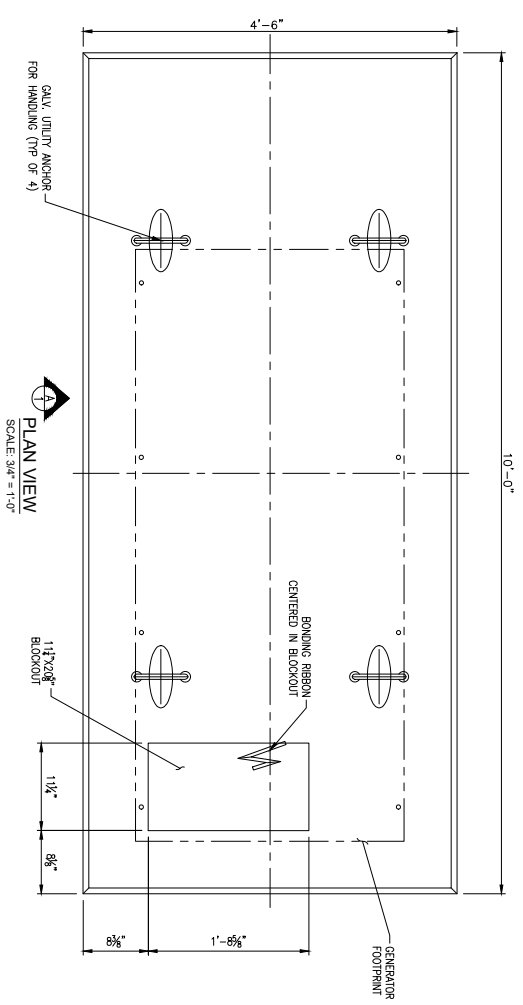
SHEET TITLE: ENLARGE EQUIPMENT LAYOUT

SHEET NUMBER: A-0.1



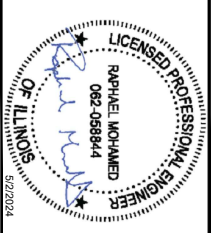
GENERAL NOTES

1. CONCRETE: 28 DAY COMPRESSIVE STRENGTH  $f'_c = 5000$  PSI (345 MPa).
2. REINFORCING: ASTM A-615, GRADE 60.
3. SLAB DESIGNED BY OTHERS PER CONTRACT DRAWING #C-2.
4. SLAB SHALL BE SUPPORTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS (I.E. LEVEL AND COMPACTED BEARING SURFACE).
5. ELECTRICAL SUB-UP COORDINATE SIZE & PLACEMENT W/ MANUFACTURER DRAWINGS.



VIEW A  
SCALE: 3/4" = 1'-0"

SECTION	HEIGHT (ft)	CONCRETE (CY)
12" THK PAD	3.00	0.24



DATE	DESCRIPTION	RE/ISSUED BY
9/20/2023	CONSTRUCTION	RM
4/20/2024	CONSTRUCTION	2 RM
5/22/2024	CONSTRUCTION	3 RM

DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_  
 CS RM

PREPARED FOR: \_\_\_\_\_  
 PREPARED BY: \_\_\_\_\_  
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PREPARED BY: **Mastec Network Solutions**  
 1188 BE CARV PARKWAY, SUITE 101  
 CHICAGO, IL 60632

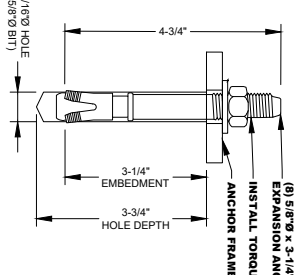
PROJECT NAME: **ALBANY PARK**  
 SITE ADDRESS: 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618  
 TOWER OWNER ID: N/A

SHEET TITLE: **PRECAST GENERATOR PAD DETAILS**  
 SHEET NUMBER: **A-1**

**GENERAL NOTES**

1. CONCRETE SHALL BEACH A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI IN 28 DAYS FOR FOUNDATIONS, SLABS, AND CONDUIT 4-4" CLASS AIR CONCRETE. COMPRESSIVE STRENGTH TEST TO BE PERFORMED ON CONCRETE USED FOR FOUNDATION ONLY. ALL CONCRETE SHALL BE TESTED AT 28 DAYS AFTER CASTING AND TYPE V CEMENT TO RESIST S2 SULFATE CLASSIFICATION.
2. ALL REINFORCING STEEL SHALL BE "A572-50" UNLESS OTHERWISE SPECIFIED.
3. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE ACI 318 DETAILING REINFORCED CONCRETE STRUCTURES (ACI 318).
4. ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES.
5. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH A 3/4" X 45° CHAMFER.
6. FINISHED SLAB TO BE LEVEL ±1/4".
7. FLEXIBLE UTILITY CONNECTIONS SHOULD BE USED AT UNDERGROUND TO GENERATOR INTERACTIONS.
8. INSTALL GENERATOR ANCHORAGE PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.
9. THE ATTACHMENT OF THE GENERATOR TO THE FOUNDATION SLAB AND THE FOUNDATION ITSELF ARE DESIGNED TO RESIST A 3 SEC. GUST WIND SPEED OF 119 MPH (ULTIMATE WIND SPEED).
10. ELECTRICAL STUB-UP AREA WILL BE DETERMINED BY GENERATOR MANUFACTURER.
11. DESIGN FOR EARTHQUAKE RESISTANCE SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IBC AND ASCE 7. DESIGN SHALL BE BASED ON DEAD LOAD 4,709 LBS, LIVE LOAD 2,332 LBS, GROUND MOTION CATEGORY IV, SEISMIC DESIGN CATEGORY D, STRUCTURE RISK CATEGORY IV, SEISMIC DESIGN CATEGORY D, SITE CLASS D, PRESSURE WIND BEARING PRESSURE OF 2,000 PSF, AND EXPOSURE CATEGORY B. DESIGN SHALL BE BASED ON A 10% COEFFICIENT OF FRICTION FOR LATERAL SLIDING RESISTANCE.

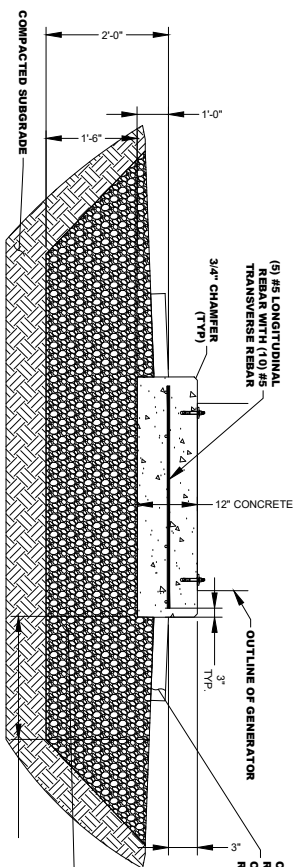
**TYPICAL ANCHOR DETAIL**



(8) 5/8" Ø x 3-1/4" EMBED HILTI KWIK BOLT T22 STAINLESS STEEL. INSTALL TORQUE = 60 FT-LB

SCALE: NONE **3**

**GENERATOR PAD DETAIL - SECTION A-A**

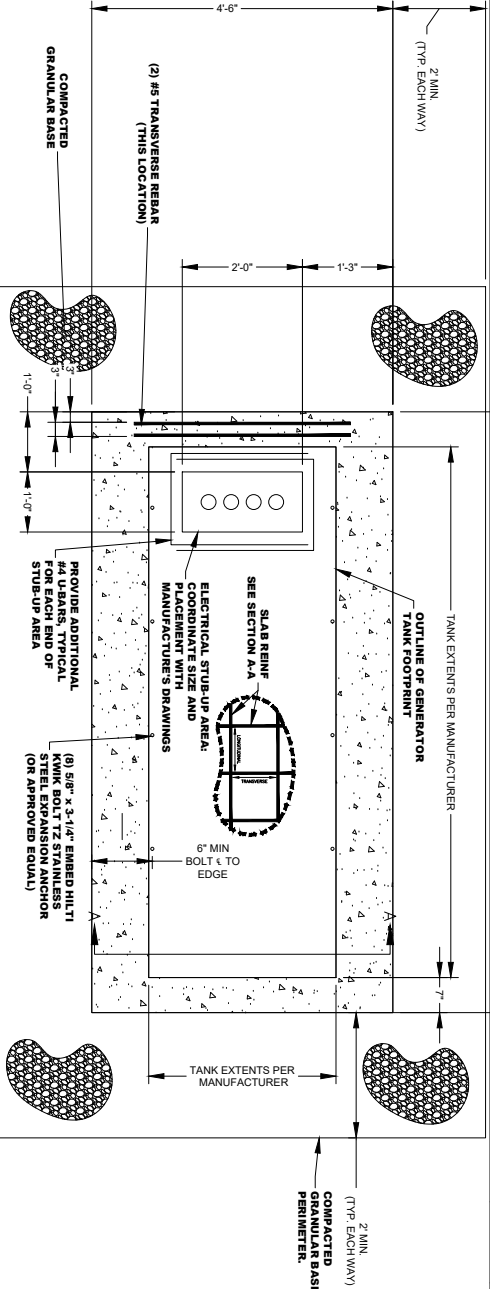


CONTRACTOR TO RESTORE (E) CONDITIONS ON SITE, SLOPE AWAY AS REQUIRED

1'-6" COMPACTED GRANULAR BASE UNDERCUTTED TO A DEPTH OF 2' BENEATH THE PROPOSED PAD IN ALL DIRECTIONS BEYOND THE 2' MIN. (TYP. EACH WAY)

SCALE: NONE **2**

**CAST-IN-PLACE GENERATOR PAD DETAIL**



SCALE: NONE **1**

**LICENSED PROFESSIONAL ENGINEER**  
**OF ILLINOIS**  
**RAHMAN MOHAMED**  
 082-0589844  
 02/2024

DATE	DESCRIPTION	REVISIONS BY
9/26/2023	CONSTRUCTION	RM
4/26/2024	CONSTRUCTION	2 RM
5/22/2024	CONSTRUCTION	3 RM

DRAWN BY: CS  
 CHECKED BY: RM  
 APPROVED BY: RM

**at&t**

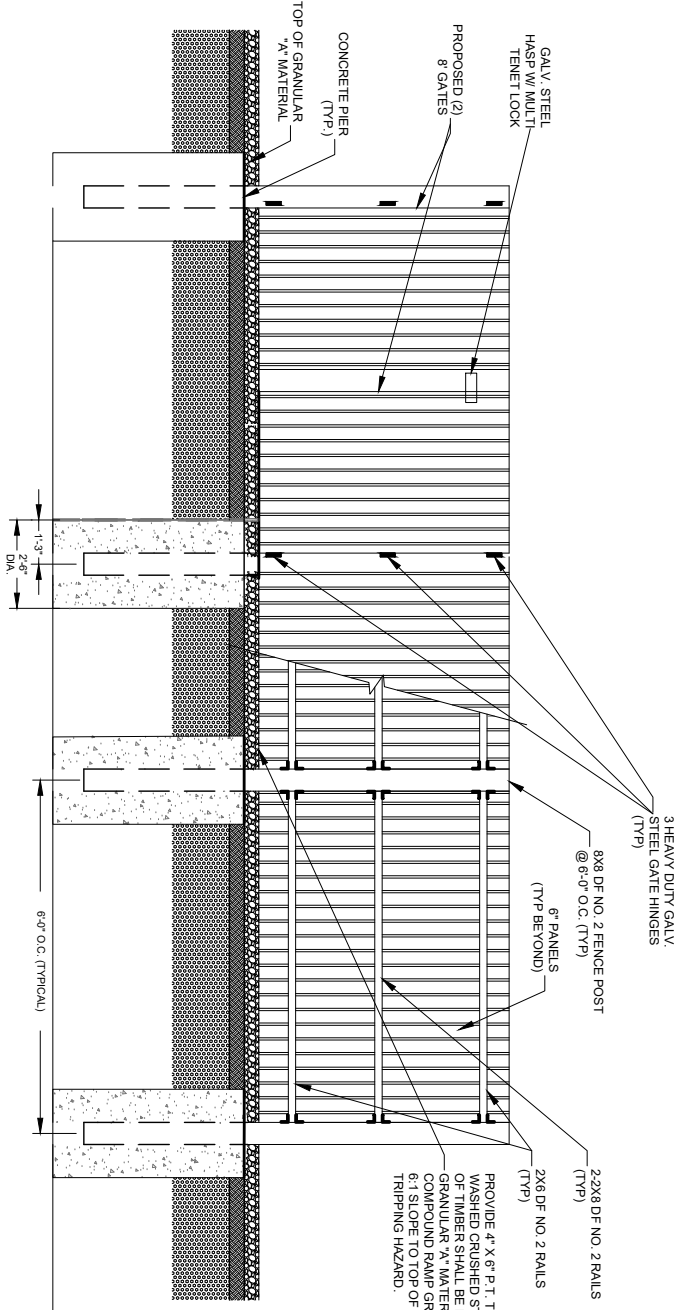
PREPARED FOR:  
 NETWORK SOLUTIONS

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**Mastec Network Solutions**  
 1185 BE CARV PARKWAY, SUITE 101  
 CHICAGO, IL 60632  
 774.282.2845

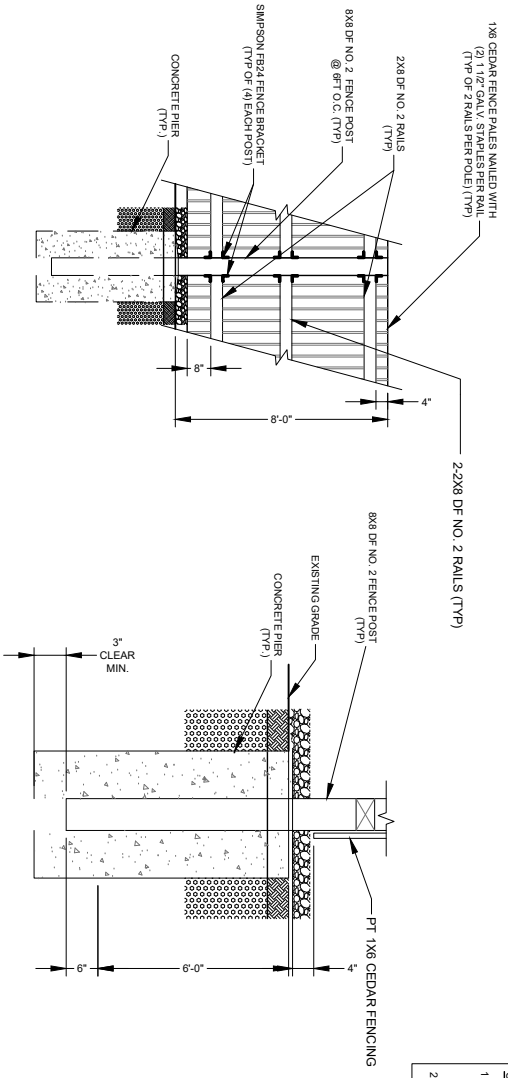
PREPARED BY: **ALBANY PARK**  
 SITE NAME: **ALBANY PARK**  
 SITE ADDRESS: **4220 NORTH RICHMOND STREET CHICAGO, IL 60618**  
 TOWER OWNER ID: **N/A**

SHEET TITLE: **GENERATOR PAD DETAILS**  
 SHEET NUMBER: **A-1.1**



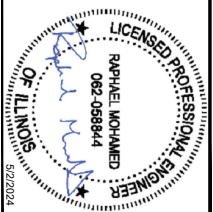
**WOODEN FENCING DETAIL**

SCALE: N.T.S.



- CONTRACTOR NOTES:**
1. ONLY INSTALL WHAT IS REQUIRED FOR THIS SPECIFIC SITE AND THE REST IS FOR INFORMATIONAL PURPOSES.
  2. MATCH THE EXISTING HEIGHT, MATERIALS, AND COLORS AS NEEDED.

PROVIDE 4" X 6" P.T. TIMBER TO RETAIN WASHED CRUSHED STONE IN CONFOUND. TOP OF TIMBER SHALL BE PLACED 6" ABOVE GRANULAR 1/2" MATERIAL. OUTSIDE CONFOUND RAMP GRANULAR 1/2" MATERIAL AT 6:1 SLOPE TO TOP OF TIMBER TO MINIMIZE TRIPPING HAZARD.



DATE	DESCRIPTION	REVISIONS BY
9/26/2023	CONSTRUCTION	RM
4/22/2024	CONSTRUCTION	RM
5/22/2024	CONSTRUCTION	RM

DRAWN BY: AR  
 CHECKED BY: CS  
 APPROVED BY: RM

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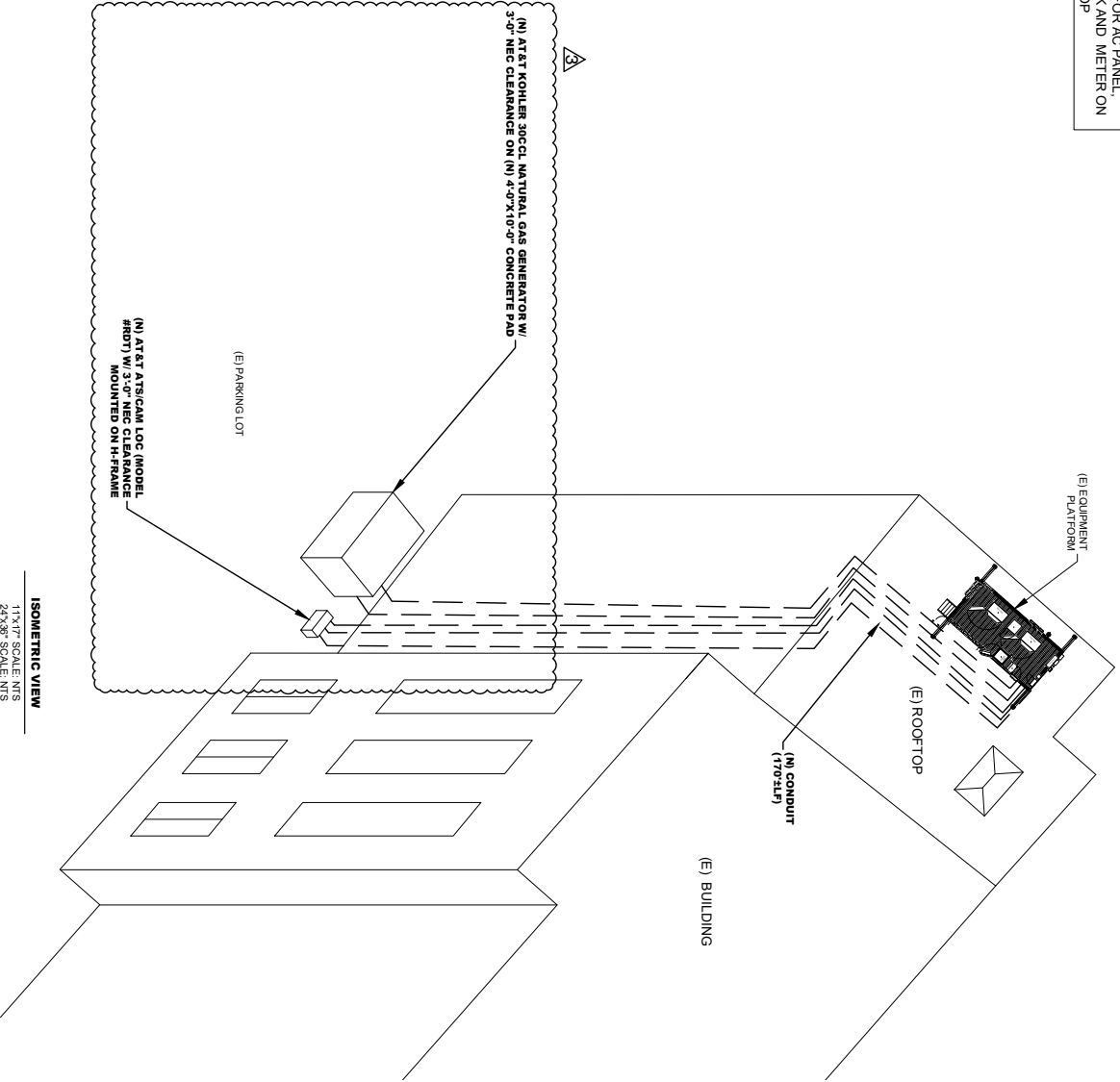


PREPARED BY:  
**Mastec Network Solutions**  
 1188 BE CARP PARKWAY SUITE 101  
 FA NUMBER: 10042845  
 CS

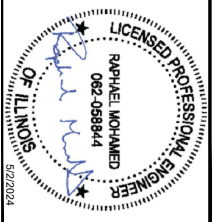
SITE NAME: **ALBANY PARK**  
 SITE ADDRESS: 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618  
 TOWER OWNER ID: N/A

SHEET TITLE: **FENCE DETAILS**  
 SHEET NUMBER: **A-1.2**

NOTE:  
GENERAL CONTRACTOR TO USE  
EXISTING CONDUIT FOR AC PANEL,  
DISCONNECT, 66 BLOCK AND METER ON  
ROOFTOP



ISOMETRIC VIEW  
11X17\"/>



DATE	DESCRIPTION	REVISIONS BY
9/29/2023	CONSTRUCTION	RM
4/26/2024	CONSTRUCTION	RM
5/22/2024	CONSTRUCTION	RM

DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_

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 SOLUTIONS IS PROHIBITED.



PREPARED BY:  
**Mastec**  
 Network Solutions  
 1188 BE CARV PARKWAY, SUITE 101  
 FA, NUMBER: 10042845

SITE NAME: ALBANY PARK  
 SITE ADDRESS: 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618  
 TOWER OWNER ID: N/A

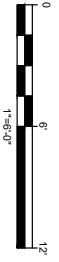
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 SHEET NUMBER: A-1.3



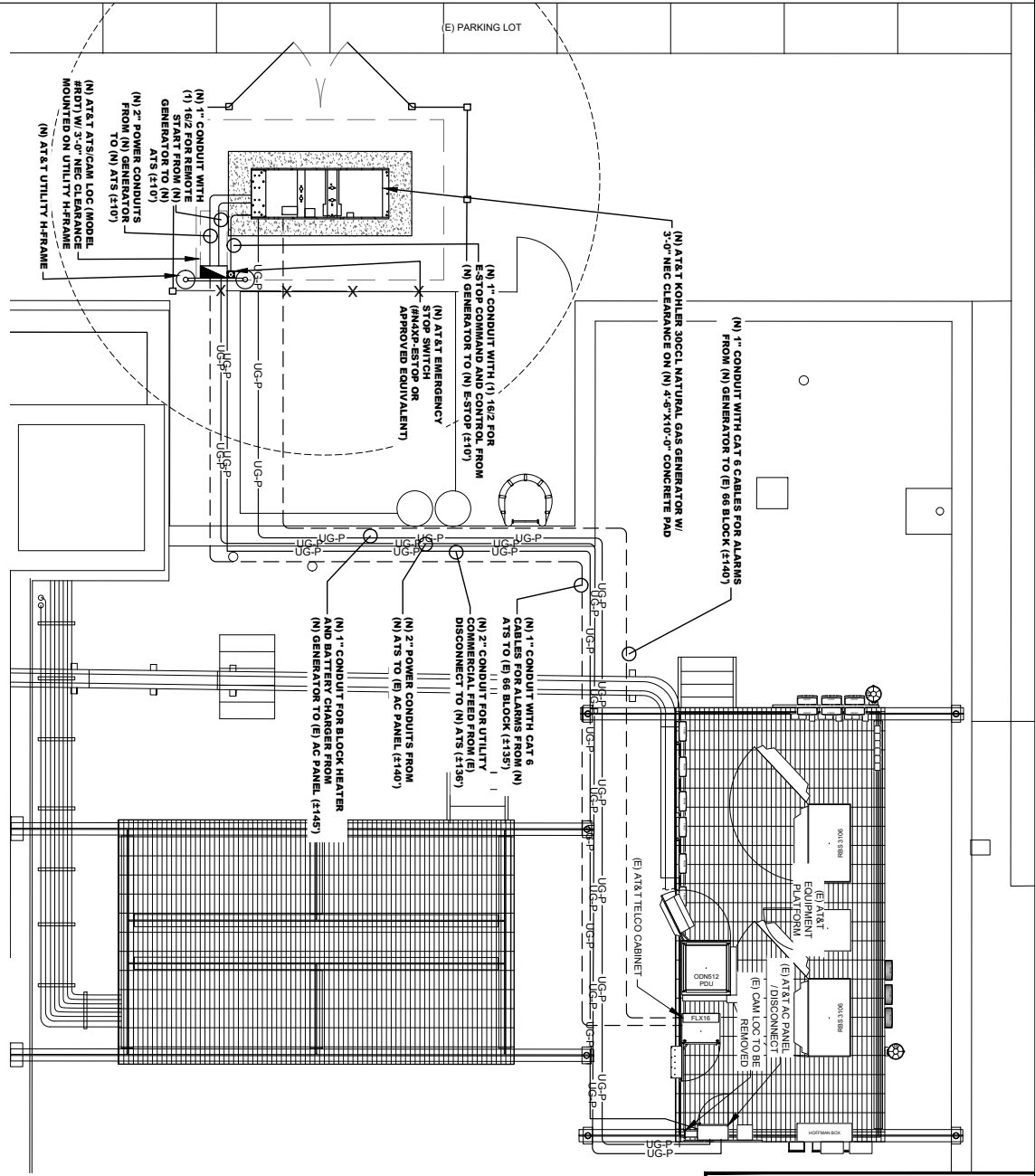
NOTES AND SPECIFICATIONS

1. ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE, AND LOCAL CODES.
2. CONTRACTOR SHALL OBTAIN OWNER/TENANT SPECIFICATIONS AND BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS.
3. CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC UTILITY FOR SERVICE ROUNDOFFS. CONTRACTOR SHALL COORDINATE WITH EIS, AND TELEPHONE UTILITY FOR THE EXACT TELEPHONE REQUIREMENTS AND SERVICE CONNECTIONS.
4. CONTRACTOR SHALL OBTAIN THE CONTRACTOR SHALL CONTACT THE ELECTRIC COMPANY AND OBTAIN IN WRITING THE WORKMAN AVAILABLE PAULT CURRENT AT THE UTILITY SERVICE POINT. CONTRACTOR SHALL OBTAIN IN WRITING THE WORKMAN AVAILABLE PAULT CURRENT AT THE UTILITY SERVICE POINT. CONTRACT BREAKERS, DISCONNECTS, FUSES, AND PANELBOARDS HAVE AVAILABLE PAULT CURRENT IN NO CASE SHALL THE PAULT CURRENT INTERRUPTING RATING BE LESS THAN 10000 AMPS.
5. CONTRACTOR TO PROVIDE 2-200 LB TEST POTENTIUMED PULL CONDUIT. PROVIDE CAPS ON END OF UNUSED CONDUIT.
6. CONTRACTOR TO PROVIDE A REBAR MARKER WITH AT LEAST 2 FEET EXPOSED ABOVE GRADE AND PAINTED BRIGHT ORANGE TO INDICATE LOCATION OF CONDUIT CAPPED BELOW GRADE.
7. PRIOR TO TRENCHING CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR AT CONTRACTOR'S EXPENSE ANY DAMAGE TO EXISTING UTILITIES.
8. CONTRACTOR TO VERIFY EXIST ROUTING OF POWER AND TELCO CONDUIT STUB-UPS ACCORDING TO EQUIPMENT REQUIREMENTS.
9. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE. USE SCHEDULE 80 PVC UNDER ROADS.
10. CONDUIT RUNS SHALL HAVE A CONTINUOUS SLOPE DOWNWARD AND STRAIGHT LINE FROM TO INSULATING CONDUIT TO ACCOMMODATE 2 INCH MINIMUM CLEARANCE ABOVE AND 18 INCH MINIMUM CLEARANCE BELOW.
11. CONDUIT JOINTS AND FITTINGS SHALL BE SEaled WITH A SEAlANT THAT IS DERIVED FOR USE WITH THE CABLE/CONDUCTOR INSULATION, SHIELDING, ETC.
12. THE OWNER SHALL FINISH AND THE CONTRACTOR SHALL INSTALL CONTRACTOR SHALL COORDINATE WITH OWNER/TENANT CONSTRUCTION MANAGER FOR PLACEMENT OF SOWAGE.
13. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE TO THE LANDSCAPING AND TREE CARE BY CONSTRUCTION ACTIVITIES TO BE COMPLETED BY THE CONTRACTOR.
14. CONTRACTOR TO ENSURE A MIN. 3' CLEARANCE IN FRONT OF ELECTRICAL PANELS PER NEC.
15. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL, TESTED BY AN APPROVED THIRD PARTY TESTING AGENCY.

CONDUCTOR	COLOR
A PHASE	BLACK
B PHASE	RED
C PHASE	BLUE
NEUTRAL	WHITE
GROUND	GREEN
A PHASE	BLACK
B PHASE	RED
C PHASE	BLUE
NEUTRAL	WHITE
GROUND	GREEN
A PHASE	BROWN
B PHASE	ORANGE
C PHASE	YELLOW
NEUTRAL	GRAY
GROUND	GREEN
INSULATED	GREEN
NON-INSULATED	RED
TELEPHONE	BLACK



**ELECTRICAL PLAN**  
11"x17" SCALE: 1"=6'-0"  
24"x36" SCALE: 1"=3'-0"



**LICENSED PROFESSIONAL ENGINEER**  
**OF ILLINOIS**  
**RAHMAEL MOHAMED**  
082-0589844

DATE: 9/20/2024  
SUBMITTED: 9/20/2024

DATE	DESCRIPTION	REVISIONS BY
9/20/2024	CONSTRUCTION	RM
4/20/2024	CONSTRUCTION	2 RM
5/22/2024	CONSTRUCTION	3 RM

DRAWN BY: AS  
CHECKED BY: CS  
APPROVED BY: RM

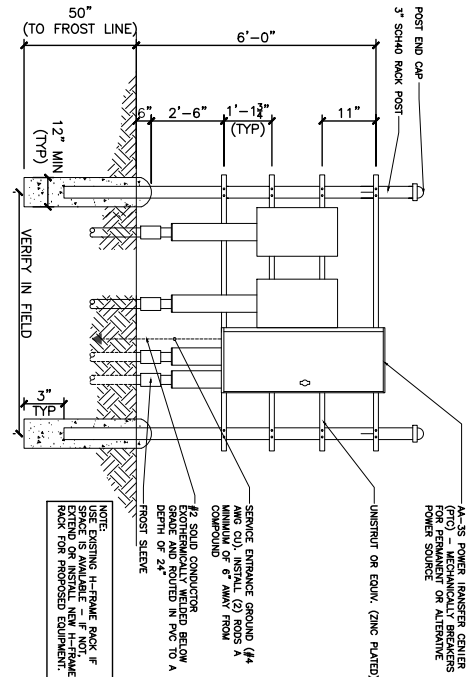
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PREPARED FOR:  
**at&t**

PREPARED BY:  
**at&t**

PREPARED BY:  
**Mastec Network Solutions**  
1185 BE CARP PARKWAY, SUITE 010  
CHICAGO, IL 60638  
TEL: 312.997.5228  
FAX: 312.997.5228

CS  
10042845  
SITE NAME:  
**ALBANY PARK**  
SITE ADDRESS:  
4220 NORTH RICHMOND STREET  
CHICAGO, IL 60618  
TOWER OWNER ID:  
N/A



NOTE: USE EXISTING H-FRAME RACK IF SPACE IS AVAILABLE. IF NOT, PROVIDE H-FRAME RACK FOR PROPOSED EQUIPMENT.

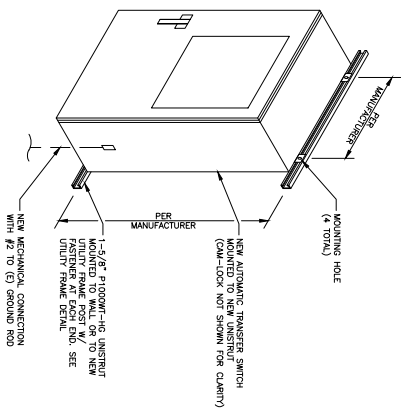
H-FRAME DETAIL

SCALE: NONE 5

UNISTRUT WALL ATTACHMENT:

WALL TYPE	FASTENER	ANCHOR SPACING
CONCRETE	3/8" DIA. LAG SCREW	16"
WOOD STUD	-	8"
CONCRETE BLOCK (HOLLOW)	-	8"
CONCRETE BLOCK (SOLID)	3/8" SIMPSON TITEN HD ANCHOR MINIMUM EMBEDMENT 2'-3/4"	24"

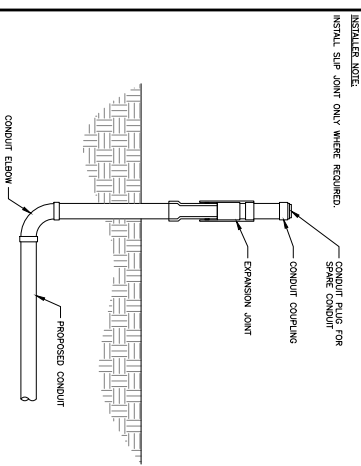
NOTES:  
 1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL.  
 2. GC SHALL USE NON-SINKING CAULK TO WEATHER SEAL ALL FASTENERS TO BE USED FOR EACH CHANNEL.  
 3. MINIMUM (5) CHANNELS TO BE USED FOR EACH CHANNEL.



ATS MOUNTING DETAIL

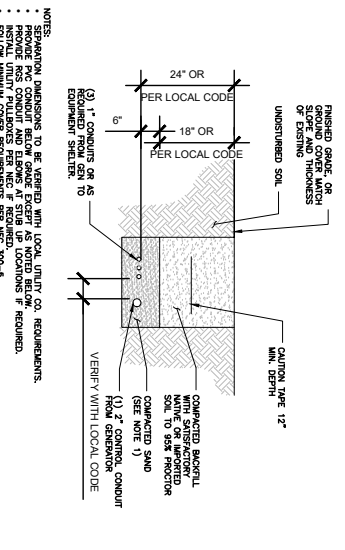
SCALE: NONE 4

NOT USED



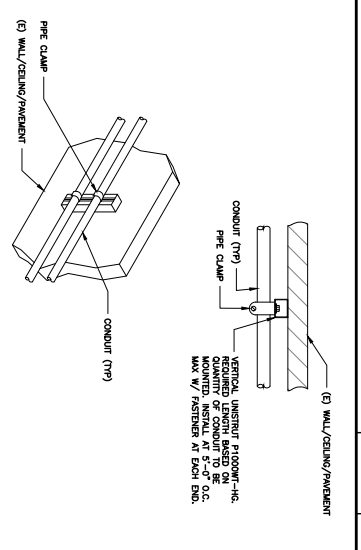
SLIP JOINT DETAIL

SCALE: NONE 3



TRENCH DETAIL

SCALE: NONE 2



CONDUIT WALL MOUNT DETAIL

SCALE: NONE 1

LICENSED PROFESSIONAL ENGINEER OF ILLINOIS  
 RAHMAN MOHAMED  
 082-058944  
 5/22/2024

SUBMITTALS RECEIVED BY:  
 DATE DESIGN REVIEWED BY: 9/26/2023  
 CONSTRUCTION 1 RMI  
 4/22/2024 CONSTRUCTION 2 RMI  
 5/22/2024 CONSTRUCTION 3 RMI  
 DRAWN BY: AR  
 CHECKED BY: CS  
 APPROVED BY: RMI

PREPARED FOR:  
 MASTEC NETWORK SOLUTIONS

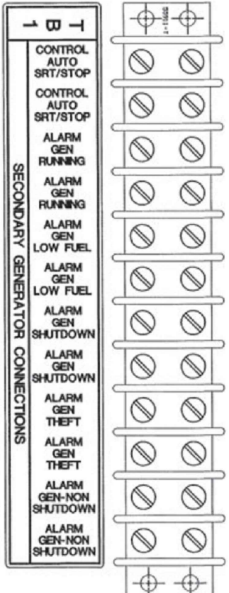
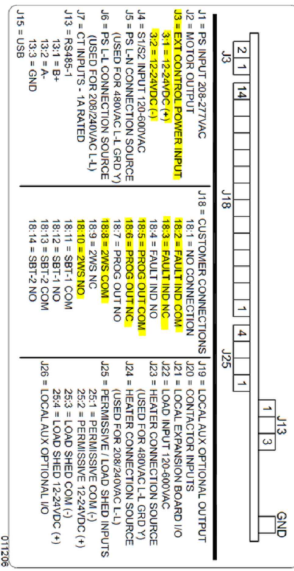
PREPARED BY:  
  
 1185 BE CAR PARKWAY SUITE 01  
 FAYUNWEI  
 10042845

ALBANY PARK  
 SITE NAME:  
 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618  
 TOWER OWNER ID:  
 N/A

SHEET TITLE  
**EQUIPMENT & CONDUIT DETAILS**

SHEET NUMBER  
**E-2**





GENERATOR ALARM IDENTIFICATION CHART	ALARM REQUIREMENTS	AUTOMATIC TRANSFER SWITCH
NAME	GENERATOR RUN	A. CABLE - code
DESCRIPTION	1. GENERATOR RUN	B. COMMERCIAL POWER FAIL (IF REQUIRED) (BLUE WHITE)
FL	1. LOW FUEL	C. TRANSFER SWITCH POSITION (BROWN WHITE)
FL	2. FUEL LEAK COBERTILL	D. CABLE - code
OR	3. GENERATOR RUNNING	E. CABLE - code
FL	4. LOW FUEL	F. COLOR CODE
MAJ	5. MAJOR FAULT	G. GENERATOR RUNNING (ORANGE WHITE)
MAJ	6. MAJOR FAULT	H. GENERATOR RUNNING (ORANGE WHITE)
FL	7. GEN FUEL LEAK TANK WH/STATE	

NOTE: CONTRACTOR TO LABEL WIRING W/P-T-TOUCH OR SIMILAR LABELS. GEN FUEL LEAK TANK WH/STATE (BROWN & WHITE)

1. GENERATOR RUN - ALARM POINT #14 (ORANGE & WHITE)

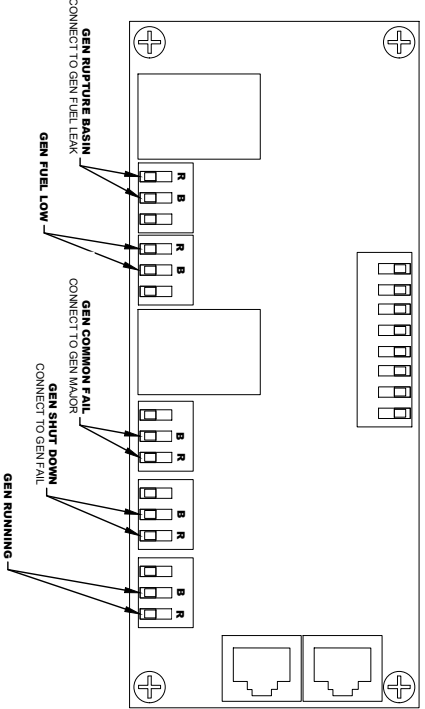
2. GENERATOR RUN - ALARM POINT #15 (ORANGE & WHITE)

3. GENERATOR RUN - ALARM POINT #16 (ORANGE & WHITE)

4. FUEL LEAK - P32 ON (V/O BOARD) (BROWN & WHITE)

**ALARM DETAILS**

SCALE: NONE

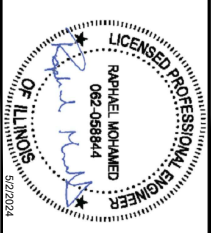


ATS ALARM WIRING

SCALE: NONE

KOHLER GENERATOR ALARM WIRING

SCALE: NONE



DATE	DESCRIPTION	REVISIONS
9/20/2023	CONSTRUCTION	1
4/20/2024	CONSTRUCTION	2
5/22/2024	CONSTRUCTION	3

DRAWN BY: [Signature]

CHECKED BY: [Signature]

APPROVED BY: [Signature]



PREPARED FOR: [Redacted]

1185 BE CARV PARKWAY, SUITE 101  
CHICAGO, IL 60618

PREPARED BY: [Redacted]

100422465

SITE NAME: ALBANY PARK

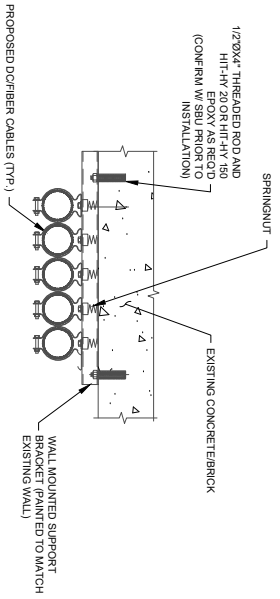
SITE ADDRESS: 4220 NORTH RICHMOND STREET  
CHICAGO, IL 60618

TOWER OWNER ID: N/A

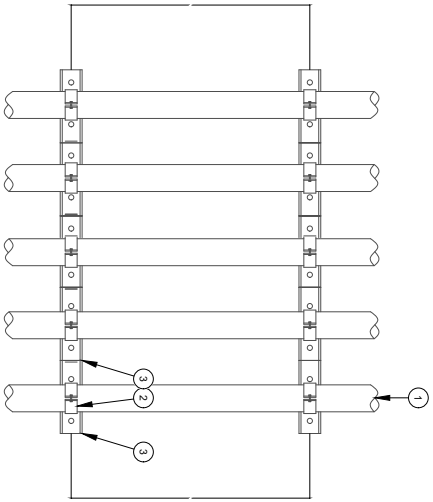
SHEET TITLE: ALARM DETAILS

SHEET NUMBER: E-4



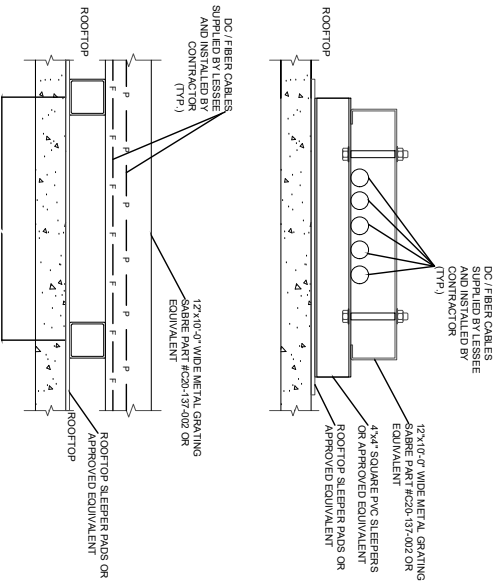


**NOTE:**  
 1. WALL MOUNTED SUPPORT BRACKET SHALL BE MOUNTED TO WALL @ 4\"/>



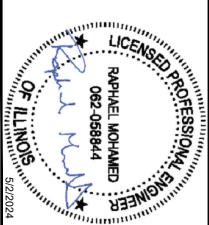
**NATURAL GAS LINE MOUNTING NOTES:**  
 PROPOSED CONDUIT LINE (TYP.)  
 GALVANIZED PIPE CLAMP, SIZE AS REQUIRED  
 WALL MOUNTED SUPPORT BRACKET (B1588 FOR USE W/ COAX, B1586 FOR USE W/ CONDUIT)

**NOTE:**  
 1. PAINT TO MATCH EXISTING BUILDING



CONDUIT DETAILS

SCALE: NONE 1



DATE	DESCRIPTION	REVISION	ISSUED BY
9/20/2023	CONSTRUCTION	1	RM
4/20/2024	CONSTRUCTION	2	RM
5/22/2024	CONSTRUCTION	3	RM
			AT
			CS
			RM

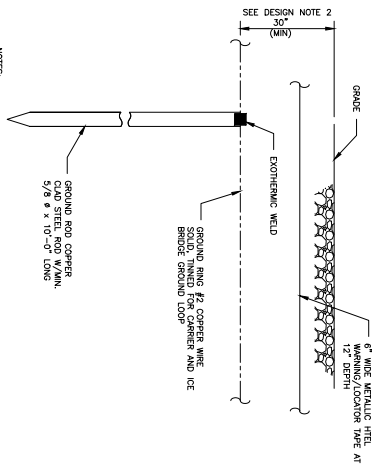
APPROVED BY: \_\_\_\_\_  
 PREPARED FOR: \_\_\_\_\_  
 REPRODUCTION OR CAUSING TO BE REPRODUCED WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.



PREPARED BY: **Mastec Network Solutions**  
 1188 BE CAR PARKWAY, SUITE 101  
 CHICAGO, IL 60632

TA NUMBER: **10042849**  
 SITE NAME: **ALBANY PARK**  
 SITE ADDRESS: **4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618**  
 TOWER OWNER ID: **N/A**

SHEET TITLE: **CONDUIT DETAILS**  
 SHEET NUMBER: **E-5**

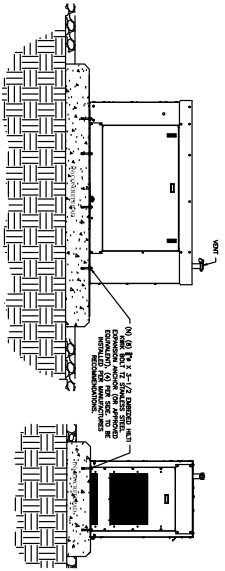


- NOTES:
1. GROUND ROD SHALL BE BROKEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL.
  2. GROUND WIRE SHALL BE MIN. 3/8\"/>

GROUND ROD DETAIL

SCALE: NONE

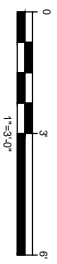
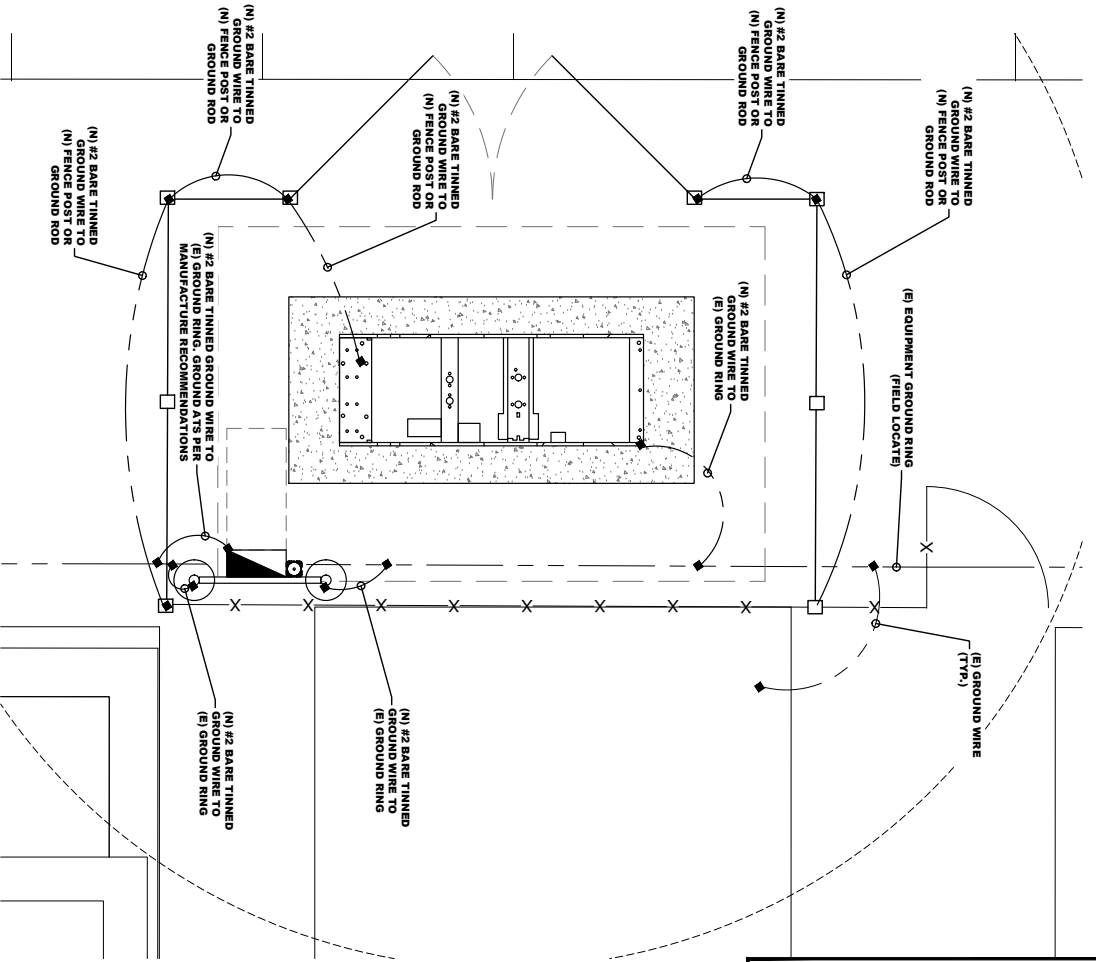
3



GENERATOR DETAIL

SCALE: NONE

2



GROUNDING PLAN  
11'-17\"/>



**LICENSED PROFESSIONAL ENGINEER**  
**OF ILLINOIS**  
**RAPHAEL MOHAMED**  
 082-0589844  
 02/2024

DATE	DESCRIPTION	REVISION
9/20/23	CONSTRUCTION	1
4/20/24	CONSTRUCTION	2
5/22/24	CONSTRUCTION	3

DRAWN BY: AB  
 CHECKED BY: CS  
 APPROVED BY: NI

PREPARED FOR:  
**at&t**

PREPARED BY:  
**Mastec Network Solutions**  
 1185 BE CAR PARKWAY, SUITE 01  
 CANAL STATION  
 FA, NUMBER  
 10042845

SITE NAME:  
**ALBANY PARK**

SITE ADDRESS:  
 4220 NORTH RICHMOND STREET  
 CHICAGO, IL 60618

TOWER OWNER ID:  
 N/A

SHEET TITLE:  
**GROUNDING DETAILS**

SHEET NUMBER:  
**G-1**

### LEGEND

- Light Post
- Utility Pole
- Manhole
- Open Gate Storm Manhole
- Storm Catch Inlet
- Water Valve Vault
- Water Service Valve
- Fire Hydrant
- Gas Meter
- Electric Meter
- Miscellaneous Pedestal
- Miscellaneous Sign
- Underground Storm Line
- Underground Electric Line
- Underground Gas Line
- Underground Communication Line

- Property Line
- Parcel Line
- Building
- Asphalt
- Concrete
- Proposed
- Lease Parcel
- Spot Elevation
- P.O.C. Point of Commencement
- P.O.B. Point of Beginning

### LOCATION MAP

NOT TO SCALE

### SURVEY NOTES

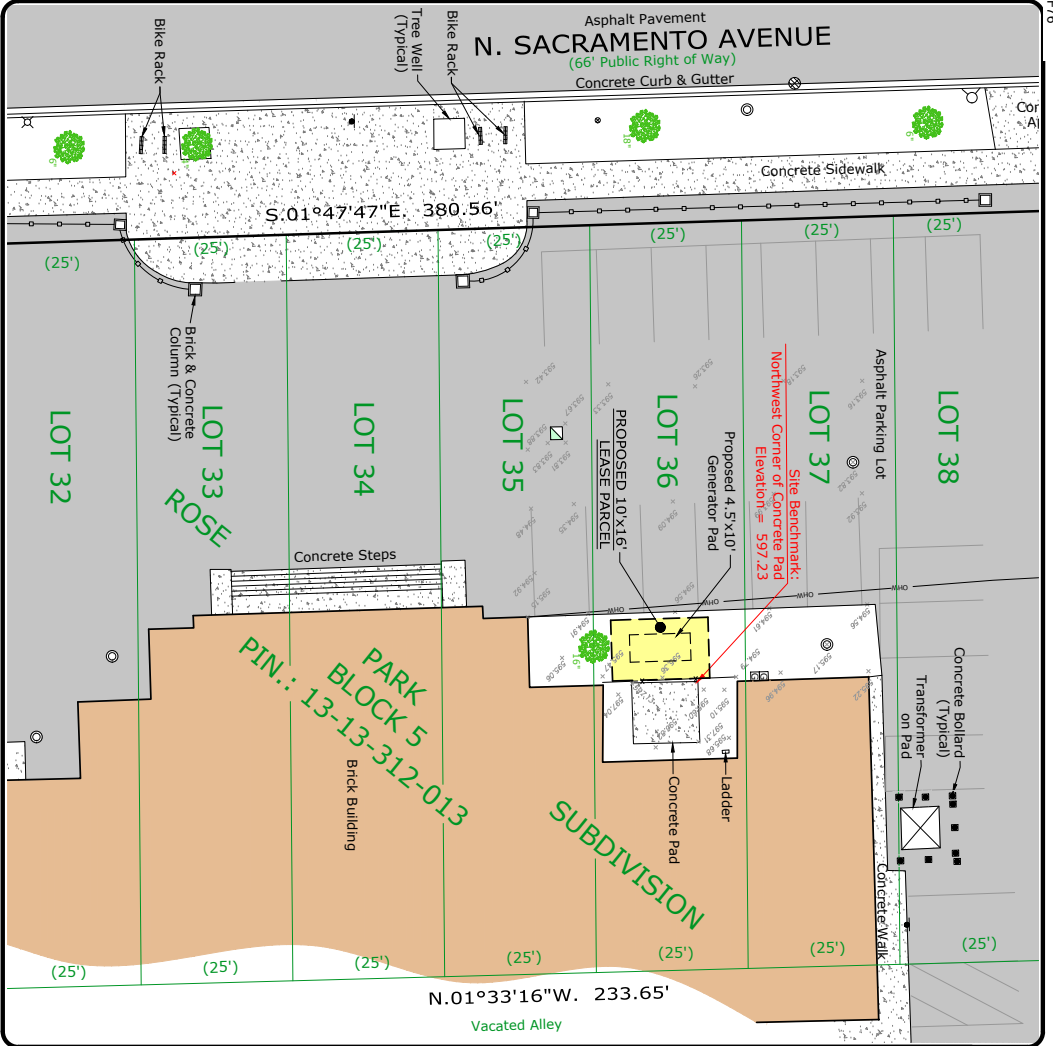
EASEMENTS AND SETBACKS SHOWN HEREON ARE BASED UPON THE RECORDED SUBDIVISION PLAT UNLESS NOTED OTHERWISE.

THE SURVEYOR EXPRESS NO OPINION AS TO THE ACCURACY OF ANY UNDERGROUND UTILITIES WHEN NOT READILY VISIBLE FROM THE SURFACE. IT IS RECOMMENDED THAT THE AND/OR UTILITY COMPANY BE CONTACTED FOR VERIFICATION.

THE PERMANENT PARCEL INDEX NUMBER FOR THE PROPERTY IS 13-13-312-013.

THE FLOOD RATE INSURANCE MAP SHOWS THAT THE AREA FALLING WITHIN ZONE "X" ACCORDING TO COMMUNITY MAP NO. 170074, CITY OF CHICAGO, FOUND ON MAP NUMBER 17031CGM01, COOK COUNTY AND INCORPORATED AREAS, ZONE "X" IS AREA OF MINIMAL FLOOD HAZARD.

**A CURRENT TITLE REPORT WAS NOT FURNISHED TO US FOR THIS PROJECT. THE SURVEYOR CANNOT BE HELD RESPONSIBLE FOR ANY ADDITIONAL EASEMENTS AND/OR SERVITUDES AFFECTING THIS PROPERTY WHICH ARE NOT SHOWN ON THIS SURVEY.**



ADVANCED SURVEYING & MAPPING, INC. Since 1984

ASM Consultants, Inc.  
16 E. WILSON ST - BATAVIA IL 60510  
(630) 879-0200 - [advanced@asmct.com](mailto:advanced@asmct.com)  
Professional Design Firm # 184-006014 expires 4/30/2025  
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### PLAT OF SURVEY OF LEASE PARCEL

PREPARED FOR:

**MasTec**  
Network Solutions  
807 Airport Blvd Ste. 111  
Mortonville, IL 62560

### BASIS OF BEARING

BEARINGS SHOWN HEREON ARE BASED ON ILLINOIS STATE PLANE, EAST ZONE, MDD83 (2011)

MEAN MAGNETIC DECLINATION OBTAINED FROM U.S.G.S. 7 1/2 MINUTE SERIES MAP CHICAGO LOOP QUADRANGLE STATE OF ILLINOIS

SCALE: 1" = 20'

11" x 17" PRINT IS THE FULL SCALE FORMAT OF THIS SURVEY. ANY OTHER SIZE IS AT AN ADJUSTED SCALE.

UTM GRID AND 2019 MAGNETIC NORTH CENTER OF QUAD MAP

### SHEET INDEX

SHEET L-1 : LEASE PARCEL AND TOPOGRAPHIC DETAIL  
SHEET L-2 : LEASE PARCEL AND TOPOGRAPHIC DETAIL  
SHEET L-3 : LEASE PARCEL AND PARENT TRACT DETAIL AND LEGAL DESCRIPTIONS

**BENCHMARK INFO**  
SOURCE BENCHMARK: NGS MONUMENT  
DESIGNATION: -E274  
PID: -ME1956  
STATE / COUNTY: -IL / COOK  
SASS QUAD: CHICAGO LOOP (2018)  
ELEVATION = 605.96 (NAD83) (SOURCE: 79.88 TO CONVERT TO CHICAGO CITY DATUM)

### SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS }  
COUNTY OF KANE } SS

I, CAROL A. SWEET-JOHNSON, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY THAT THE PLAT SHOWN HEREON, BEING COMPLETED IN THE FIELD ON 2/6/2024 IS A CORRECT REPRESENTATION OF A SURVEY PERFORMED AT AND UNDER MY DIRECTION.

THIS SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS FOR A LAND SURVEY AS SET FORTH BY THE ILLINOIS SURVEYING ACT AND ALL DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF.

GIVEN UNDER MY HAND AND SEAL THIS 22nd DAY OF MARCH, A. D. 2024.

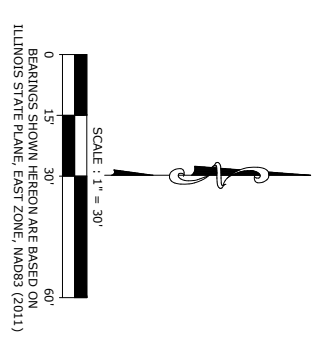
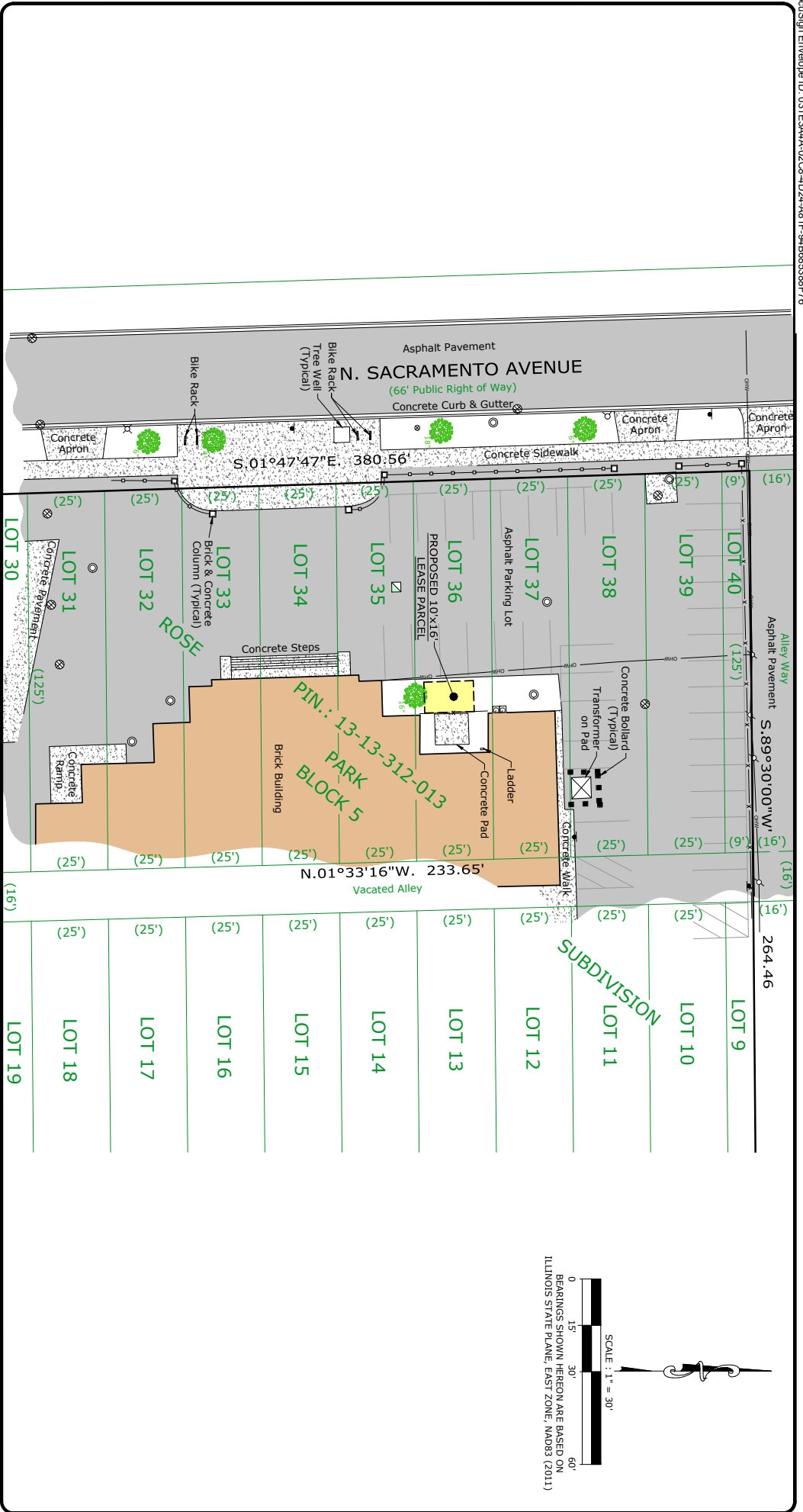
*Carol A. Sweet-Johnson*

NO.	DATE	REVISION
1.	2/6/2024	FIELD SURVEY COMPLETED
2.	2/21/2024	ISSUED PRELIMINARY SURVEY
3.	3/22/2024	FINAL SURVEY COMPLETED

SITE DESIGNATION INFORMATION:

**ALBANY PARK**  
IL0567  
4220 N RICHMOND ST  
CHICAGO, IL 60618  
COOK COUNTY

DRAWN BY: EM  
CHECKED BY: CSJ  
PROJECT NO: 528102  
SHEET 1 OF 3 (L-1)



PREPARED BY:  
**ASM**  
 ASM Consultants, Inc.  
 16 E Wilson St - Batavia IL 60510  
 (630) 879-0200 - advanced@advct.com  
 Professional Design Firm #184-006014 expires 4/30/2025  
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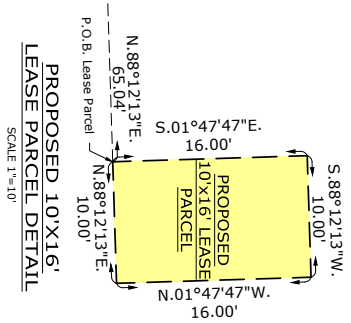
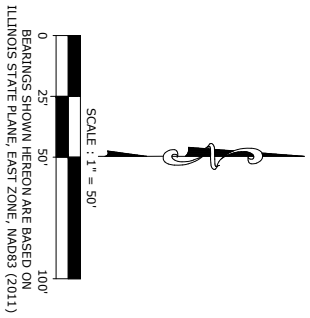
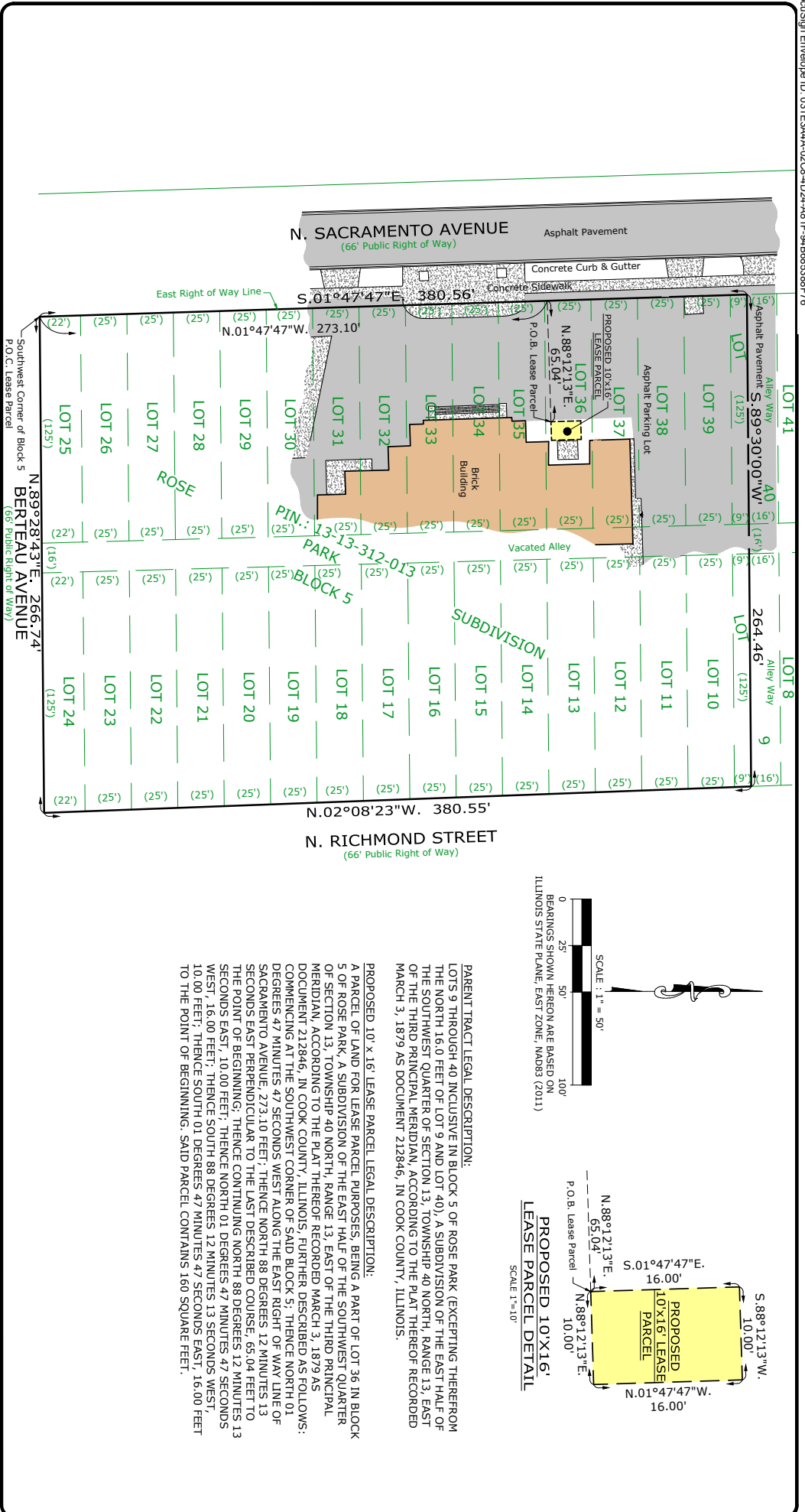
PREPARED FOR:  
  
 at&t

**Mastec**  
 Network Solutions  
 507 Airport Blvd, Ste. 111  
 Knoxville, TN 37960

NO.	DATE	REVISION
1.	2/6/2024	FIELD SURVEY COMPLETED
2.	2/21/2024	ISSUED PRELIMINARY SURVEY
3.	3/22/2024	FINAL SURVEY COMPLETED

SITE DESIGNATION INFORMATION:  
**ALBANY PARK**  
**IL0567**  
 4220 N RICHMOND ST  
 CHICAGO, IL 60618  
 COOK COUNTY

DRAWN BY: EM  
 CHECKED BY: CSJ  
**PROJECT NO.**  
**528102**  
 SHEET  
 2 OF 3  
**L-2**



**PARENT TRACT LEGAL DESCRIPTION:**  
 LOTS 9 THROUGH 40 INCLUSIVE IN BLOCK 5 OF ROSE PARK (EXCEPTING THEREFROM THE NORTH 16.0 FEET OF LOT 9 AND LOT 40), A SUBDIVISION OF THE EAST HALF OF THE SOUTH WEST QUARTER OF SECTION 13, TOWNSHIP 40 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 3, 1879 AS DOCUMENT 212846, IN COOK COUNTY, ILLINOIS.

**PROPOSED 10' X 16' LEASE PARCEL LEGAL DESCRIPTION:**  
 A PARCEL OF LAND FOR LEASE PARCEL PURPOSES, BEING A PART OF LOT 36 IN BLOCK 5 OF ROSE PARK, A SUBDIVISION OF THE EAST HALF OF THE SOUTH WEST QUARTER OF SECTION 13, TOWNSHIP 40 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED MARCH 3, 1879 AS DOCUMENT 212846, IN COOK COUNTY, ILLINOIS, FURTHER DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHWEST CORNER OF SAID BLOCK 5; THENCE NORTH 01 DEGREES 47 MINUTES 47 SECONDS WEST ALONG THE EAST RIGHT OF WAY LINE OF SACRAMENTO AVENUE 273.10 FEET; THENCE NORTH 88 DEGREES 12 MINUTES 13 SECONDS EAST PERPENDICULAR TO THE LAST DESCRIBED COURSE; 65.04 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING NORTH 88 DEGREES 12 MINUTES 13 SECONDS EAST, 10.00 FEET; THENCE NORTH 01 DEGREES 47 MINUTES 47 SECONDS WEST, 16.00 FEET; THENCE SOUTH 88 DEGREES 12 MINUTES 13 SECONDS WEST, 10.00 FEET; THENCE SOUTH 01 DEGREES 47 MINUTES 47 SECONDS EAST, 16.00 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 160 SQUARE FEET.

**ADVANCED SURVEYING & MAPPING**  
 Since 1984  
 16 E Wilson St - Batavia IL 60510  
 (630) 879-0200 - advanced@advct.com  
 Professional Design Firm #184-006014 expires 4/30/2025  
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**ASM CONSULTANTS, INC.**

**at&t Mastec Network Solutions**  
 507 Airport Blvd, Ste 111  
 Knoxville, NC 27569

**PLAT OF SURVEY OF LEASE PARCEL**

NO.	DATE	REVISION
1.	2/16/2024	FIELD SURVEY COMPLETED
2.	2/21/2024	ISSUED PRELIMINARY SURVEY
3.	3/22/2024	FINAL SURVEY COMPLETED

**SITE DESIGNATION INFORMATION:**  
**ALBANY PARK**  
**IL0567**  
**4420 N RICHMOND ST**  
**CHICAGO, IL 60618**  
**COOK COUNTY**

DRAWN BY: EM  
 CHECKED BY: CSJ  
 PROJECT NO: 528102  
 SHEET 3 OF 3  
 L-3

**KOHLER**Model: **30CCL****208- 600 V****Gas****ISO 9001**  
**ISO KOHLER**  
NATIONALLY REGISTERED**EPA-Certified for Stationary  
Emergency Applications****Ratings Range**

Standby:	kW	60 Hz
	kVA	30
		30-38

**The Kohler® Advantage**

- **High Quality Power**  
Kohler generators provide advanced voltage and frequency regulation along with ultra-low levels of harmonic distortion for excellent generator power quality to protect your valuable electronics.
- **Extraordinary Reliability**  
Kohler is known for extraordinary reliability and performance and backs that up with a premium five-year or 2000 hour limited warranty.
- **All-Aluminum Sound Enclosure**  
Durable aluminum sound-attenuating enclosure.

**Generator Set Ratings**

Alternator	Voltage	Ph	Hz	Natural Gas 130° C Rise		LP Gas 130° C Rise	
				kW/kVA	Amps	kW/kVA	Amps
4D8.3	120/208	3	60	30/38	106	30/38	106
	127/220	3	60	30/38	100	30/38	100
	120/240	3	60	30/38	92	30/38	92
	120/240	1	60	30/30	125	30/30	125
	139/240	3	60	30/38	92	30/38	92
	220/380	3	60	30/38	58	30/38	58
	277/480	3	60	30/38	46	30/38	46
	347/600	3	60	30/38	37	30/38	37
4P7BX	120/208	3	60	30/38	106	30/38	106
	127/220	3	60	30/38	100	30/38	100
	120/240	3	60	30/38	92	30/38	92
	120/240	1	60	30/30	125	30/30	125
	139/240	3	60	30/38	92	30/38	92
	220/380	3	60	30/38	58	30/38	58
	277/480	3	60	30/38	46	30/38	46
4E8.3	120/240	1	60	30/30	125	30/30	125
4Q7BX	120/240	1	60	30/30	125	30/30	125

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. *Standby Ratings:* The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

**Standard Features**

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The generator set accepts rated load in one step.
- A five-year/2000 hour limited warranty covers all generator set systems and components. A five-year extended comprehensive limited warranty is also available.
- **Engine Features**
  - Powerful and reliable 2.2 L turbocharged liquid-cooled engine
  - Electronic engine management system.
  - Simple field conversion between natural gas and LPG fuels while maintaining emission certification.
- **Innovative Cooling System**
  - Electronically controlled fan speeds minimize generator set sound signature.
- **Alternator features:**
  - Kohler's wound field excitation system with its unique PowerBoost™ design delivers great voltage response and short-circuit capability.
  - The unique Fast-Response® X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Kohler designed controller for one-source system integration and remote communication. See Controller on page 3.
- **Certifications**
  - The generator set engine is certified by the Environmental Protection Agency (EPA) to conform to the New Source Performance Standard (NSPS) for stationary spark-ignited emissions.
  - UL 2200/cUL listing is available.
  - The generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
  - CSA certification is available.
  - Accepted by the Massachusetts Board of Registration of Plumbers and Gas Fitters.
- Approved for stationary standby applications in locations served by a reliable utility source.

## Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Exciter type	Brushless, Wound-Field
Leads: quantity, type	
4D	12, Reconnectable
4E	4, 110-120/220-240 V
4PX	12, Reconnectable
4QX	4, 110-120/220-240 V
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V      4D8.3 (12 lead)	120
240 V      4E8.3 (4 lead)	74
480 V      4P7BX (12 lead)	180
240 V      4Q7BX (4 lead)	113

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Windings are vacuum-impregnated with epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

## Application Data

### Engine

Engine Specifications	
Manufacturer	Kohler
Engine: model, type	KG2204T, 2.2 L, 4-Cycle Turbocharged
Cylinder arrangement	In-line 4
Displacement, L (cu. in.)	2.2 (134.25)
Bore and stroke, mm (in.)	91 x 86 (3.5 x 3.4)
Compression ratio	10.5:1
Piston speed, m/min. (ft./min.)	340 (1016)
Main bearings: quantity, type	5, plain alloy steel
Rated rpm	1800
Max power at rated RPM, kW (HP)	
LPG	47.8 (64.1)
Natural Gas	47.6 (63.9)
Cylinder head material	Cast Iron
Piston type and material	High Silicon Aluminum
Crankshaft material	Nodular Iron
Valve (exhaust) material	Forged Steel
Governor type	Electronic
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±1.0%
Frequency	Fixed
Air cleaner type, all models	Dry

### Engine Electrical

Engine Electrical System	
Ignition system	Electronic
Battery charging alternator:	
Ground (negative/positive)	Negative
Volts (DC)	14
Ampere rating	90
Starter motor rated voltage (DC)	12
Battery, recommended cold cranking amps (CCA):	
Qty., rating for -18°C (0°F)	One, 630
Battery voltage (DC)	12
Battery group size	24

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust temperature at rated kW, dry exhaust, °C (°F)	610 (1130)
Maximum allowable back pressure, kPa (in. Hg)	7.5 (2.2)

### Fuel

Fuel System	
Fuel type	Natural Gas or LPG
Fuel supply line inlet	1 NPTF
Natural gas fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.2-2.7 (5-11)
LPG vapor withdrawal fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.2-2.7 (5-11)

Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	—
Ethane, % by volume	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propene, % by volume	0.1 max.	5.0 max.
C <sub>4</sub> and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass	25 max.	
Lower heating value, MJ/m <sup>3</sup> (Btu/ft <sup>3</sup> ), min.	33.2 (890)	84.2 (2260)

\* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

## Application Data

### Lubrication

#### Lubricating System

Type	Full Pressure
Oil pan capacity, L (qt.) ‡	4.2 (4.4)
Oil added during oil change (on average), L (qt.) ‡	3.3 (3.5)
Oil pan capacity with filter, L (qt.) ‡	8.5 (9.0)
Oil filter: quantity, type ‡	1, Cartridge
‡ Kohler recommends the use of Kohler Genuine oil and filters.	

### Cooling

#### Radiator System

Ambient temperature, °C (°F)	50 (122)
Engine jacket water capacity, L (gal.)	2.65 (0.7)
Radiator system capacity, including engine, L (gal.)	13.2 (3.5)
Engine jacket water flow, Lpm (gpm)	62 (16.4)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	22.5 (1280)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	qty. 3 @ 406 (16)
Fan power requirements (powered by engine battery charging alternator)	12 VDC, 18 amps each

### Operation Requirements

#### Air Requirements

Radiator-cooled cooling air, m <sup>3</sup> /min. (scfm) ‡	51 (1800)
Combustion air, m <sup>3</sup> /min. (cfm)	1.6 (57)
Air over engine m <sup>3</sup> /min. (cfm)	25 (883)
‡ Air density = 1.20 kg/m <sup>3</sup> (0.075 lbm/ft <sup>3</sup> )	

#### Fuel Consumption ‡

Natural Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby Ratings
100%	11.9 (421)
75%	10.0 (355)
50%	8.2 (289)
25%	6.3 (223)
0%	4.5 (158)

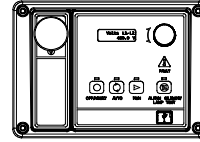
LP Gas, m <sup>3</sup> /hr. (cfh) at % load	Standby Ratings
100%	4.6 (164)
75%	3.7 (131)
50%	2.8 (99)
25%	1.9 (66)
0%	1.0 (34)

‡ Nominal fuel rating: Natural gas, 37 MJ/m<sup>3</sup> (1000 Btu/ft.<sup>3</sup>)  
LP vapor, 93 MJ/m<sup>3</sup> (2500 Btu/ft.<sup>3</sup>)

LP vapor conversion factors:

8.58 ft.<sup>3</sup> = 1 lb.  
0.535 m<sup>3</sup> = 1 kg.  
36.39 ft.<sup>3</sup> = 1 gal.

### Controller



#### APM402 Controller

Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-161 for additional controller features and accessories.

Modbus® is a registered trademark of Schneider Electric.

### Sound Enclosure

- Durable aluminum, sound-attenuating enclosure with quiet operation of 57 dB(A) log average @ 7 m (23 ft.) at no load.
- Internally mounted silencer.
- Fade-, scratch, and corrosion-resistant Kohler® Power Armor™ automotive-grade textured finish.
- Acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.





KOHLER CO., Kohler, Wisconsin 53044 USA  
 Phone 920-457-4441, Fax 920-459-1646  
 For the nearest sales and service outlet in the  
 US and Canada, phone 1-800-544-2444  
 KOHLERPower.com

**Standard Features**

- Alternator Protection
- Aluminum Sound Enclosure with Enclosed Silencer
- Battery Rack and Cables
- Flexible Fuel Line
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Low Fuel Pressure Switch (with NFPA fuel module)
- Oil Drain Extension
- Operation and Installation Literature
- Standard 5-Year Limited Warranty

**Available Options**

**Approvals and Listings**

- CSA Certified
- UL 2200 Listing

**Controller**

- 15-Relay Dry Contact Board
- Communication Products
- Input/Output Module (2 inputs, 5 outputs)
- Lockable Emergency Stop (lockout/tagout)
- Manual Key Switch
- Manual Speed Adjust
- Remote Annunciator Panel
- Remote Emergency Stop
- Run Relay

**Enclosure Accessories**

- Enclosure Doors for 291 kph (181 mph) Wind Load

**Starting Aids\***

- Block Heater, 110- 120 V
- Block Heater, 220- 240 V

**Oil Pan Heater\***

- Oil Pan Heater, 110- 120 V
- Oil Pan Heater, 190- 240 V

\* One block heater or oil pan heater is required for ambient temperatures below 0°C (32°F). At temperatures below - 18°C (0°F) installation of both heaters is required.

**Electrical System**

- Alternator Strip Heater
- Battery
- Battery Charger, 6 Amp
- Battery Charger, 10 Amp w/Alarms
- Battery Heater
- Temperature Compensation for 10 Amp Battery Charger

**Miscellaneous**

- Air Cleaner Restriction Indicator
- Certified Test Report
- Engine Fluids Added
- Maintenance Kit (filters, spark plugs, oil)
- Rated Power Factor Testing

**Literature**

- General Maintenance
- NFPA 110
- Overhaul
- Production

**Warranty**

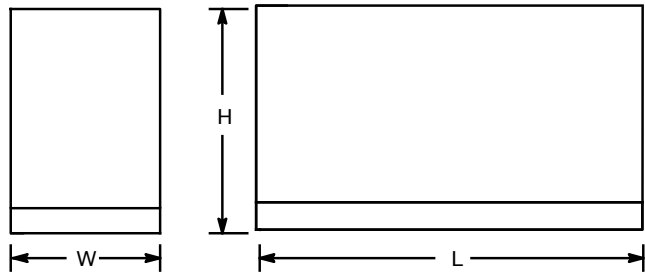
- Extended 5-Year/2000 Hour Comprehensive Limited Warranty

**Other Options**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Dimensions and Weights**

Overall Size, L x W x H, mm (in.): 2280 x 830 x 1182  
 (89.8 x 32.7 x 46.5)  
 Weight, with engine fluids, kg (lb.): 635 (1432)



NOTE: This drawing is provided for reference only and should not be used for planning. Contact your local distributor for more detailed information.

**DISTRIBUTED BY:**

**EXHIBIT "B"**  
**LICENSE PAYMENTS**

TERM	LICENSE PAYMENT
1	
May 1, 2022-April 30, 2023	48,000.00
May 1, 2023-April 30, 2024	49,440.00
May 1, 2024-April 30, 2025	56,923.00
May 1, 2025-April 30, 2026	58,451.00
May 1, 2026-April 30, 2027	60,025.00
2	
May 1, 2027-April 30, 2028	61,645.00
May 1, 2028-April 30, 2029	63,315.00
May 1, 2029-April 30, 2030	65,034.00
May 1, 2030-April 30, 2031	66,805.00
May 1, 2031-April 30, 2032	68,629.00
3	
May 1, 2032-April 30, 2033	70,508.00
May 1, 2033-April 30, 2034	72,443.00
May 1, 2034-April 30, 2035	74,437.00
May 1, 2035-April 30, 2036	76,490.00
May 1, 2036-April 30, 2037	78,604.00
4	
May 1, 2037-April 30, 2038	80,782.00
May 1, 2038-April 30, 2039	83,026.00
May 1, 2039-April 30, 2040	85,337.00
May 1, 2040-April 30, 2041	87,717.00
May 1, 2041-April 30, 2042	90,168.00
5	
May 1, 2042-April 30, 2043	92,692.00
May 1, 2043-April 30, 2044	95,293.00
May 1, 2044-April 30, 2045	97,972.00
May 1, 2045-April 30, 2046	100,731.00
May 1, 2046-April 30, 2047	101,573.00