

APPENDIX C.17
CASE 10-T-0139
SITE PLANS AND CONSTRUCTION DRAWINGS
FIRE PROTECTION DRAWINGS – CLEAN AGENT FIRE
EXTINGUISHING
ASTORIA HVDC CONVERTER STATION
SEGMENT 22

ASTORIA HVDC CONVERTER STATION

FIRE PROTECTION SYSTEMS: CLEAN AGENT FIRE EXTINGUISHING

SHEET LIST - F	
SHEET	SHEET NAME
F-001.00	COVER SHEET
F-002.00	OVERALL SITE PLAN
F-003.00	CLEAN AGENT GENERAL NOTES AND CALCULATIONS
F-101.00	SERVICE BUILDING - CLEAN AGENT ALARM AND RELEASING PLAN
F-102.00	SERVICE BUILDING - CLEAN AGENT SUPPRESSION SYSTEM HATCH PLAN
F-103.00	RELAY ENCLOSURE - CLEAN AGENT SUPPRESSION SYSTEM HATCH PLAN
F-401.00	SERVICE BUILDING - ENLARGED CLEAN AGENT ALARM AND RELEASING PLAN

SCOPE OF WORK

THE FIRE PROTECTION SYSTEMS SCOPE OF WORK INCLUDES CLEAN AGENT FIRE EXTINGUISHING SYSTEMS IN THE FOLLOWING AREAS AS SUBJECT TO THE REQUIREMENTS AND PERFORMANCE CRITERIA PROVIDED IN THE FIRE PROTECTION DESIGN BASIS DOCUMENT.

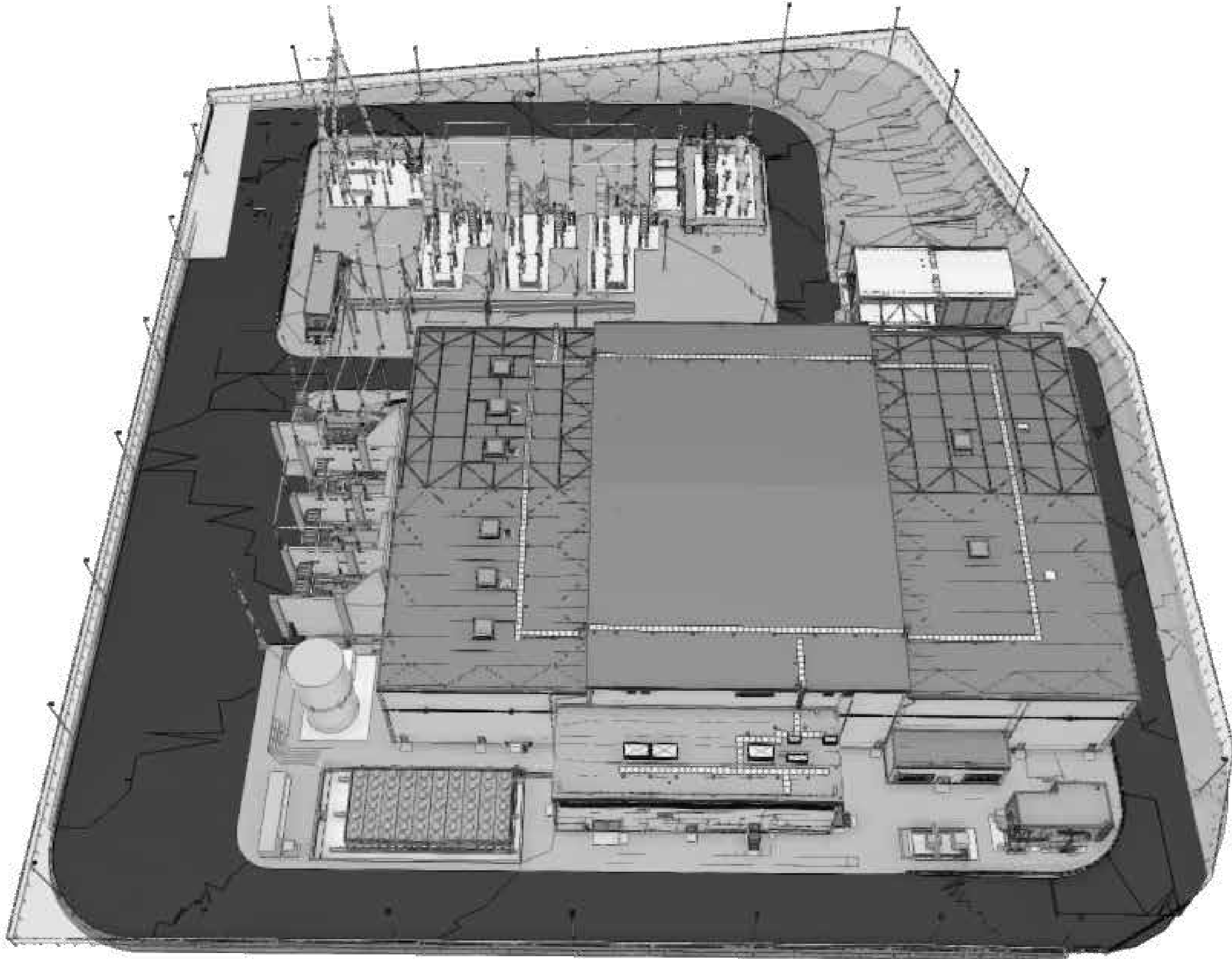
1. SERVICE BUILDING
2. RELAY ENCLOSURE

FLOOD ZONE DESIGN CERTIFICATION:

THE EXISTING PROPERTY IS IN THE SPECIAL FLOOD HAZARD AREA (SFHA), ZONE AE PER EFFECTIVE 2015 FLOOD INSURANCE RATE MAP(FIRM). THIS IS TO CONFIRM THAT THE PROPOSED INSTALLATION IS IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN APPENDIX Q OF THE NYC BUILDING CODE.

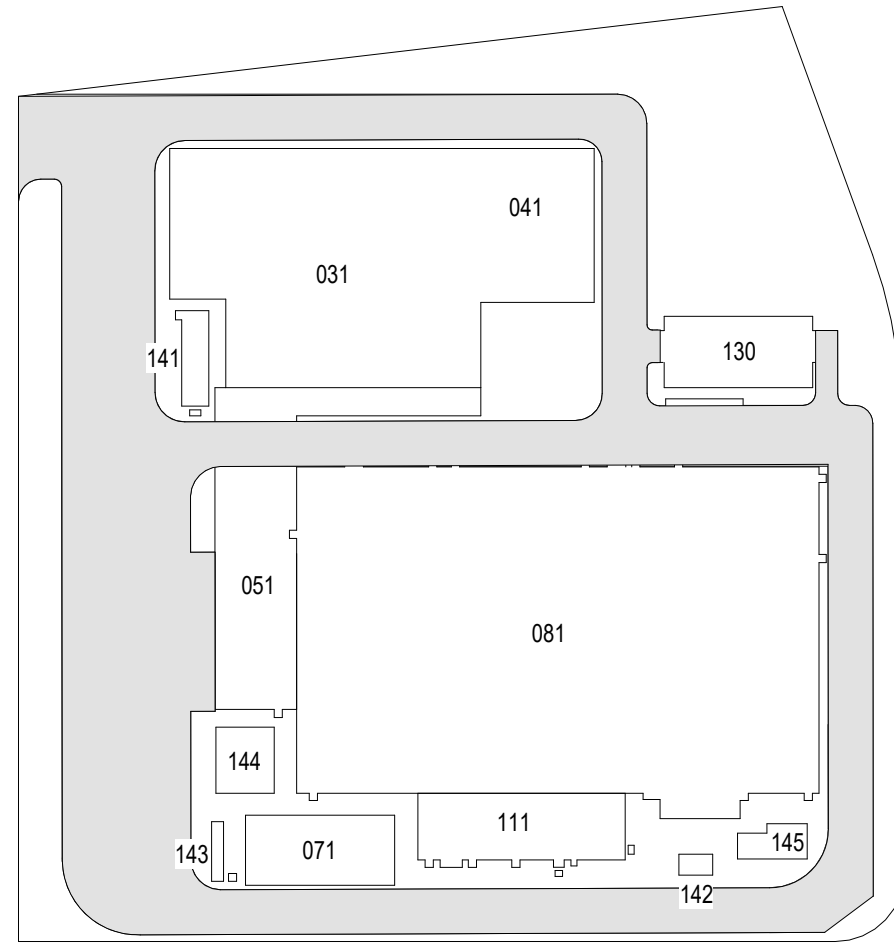
NYC ENERGY CODE COMPLIANCE:

STATEMENT: TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CODE. PROPOSED WORK MEETS THE GUIDELINES AND INSTRUCTIONS OUTLINED IN THE 2020 NYC ECC CHAPTER 4.



1 OVERALL SITE VIEW
F-001.00 N.T.S.

ISSUED FOR PERMIT



KEY PLAN
N.T.S.



Poole Fire Protection
19910 W. 161st Street
Olathe, KS 66062

19910 W. 161st STREET
OLATHE, KS. 66062



25 Mohawk Avenue
Sparta, NJ 07871

CONFIDENTIAL

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B	FINAL SUBMISSION	SAB	AWP	12/12/2022
A	INTERIM SUBMISSION	SAB	AWP	09/13/2022
REV	DESCRIPTION	DRW BY	CHK BY	DATE



Kiewit

470 Chestnut Ridge Rd # 2,
Woodcliff Lake, NJ 07677

Hitachi Energy

901 Main Campus Drive
Raleigh, North Carolina 27606

PROJECT



Astoria HVDC Converter Station

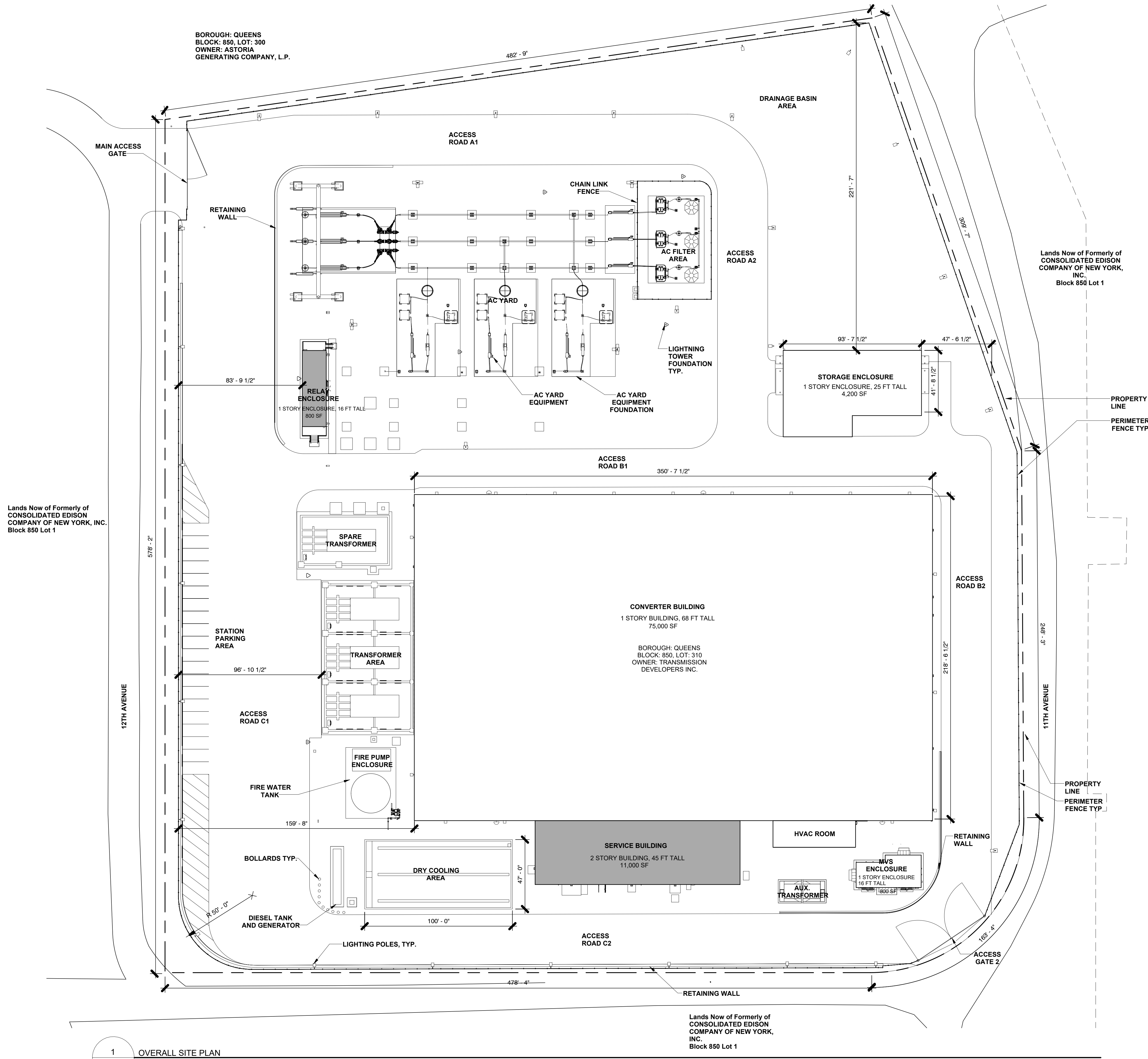
31-45 20th Avenue, Astoria, Queens NY 11105
Block #850 - Lot #310 - BIN #4624437

COVER SHEET



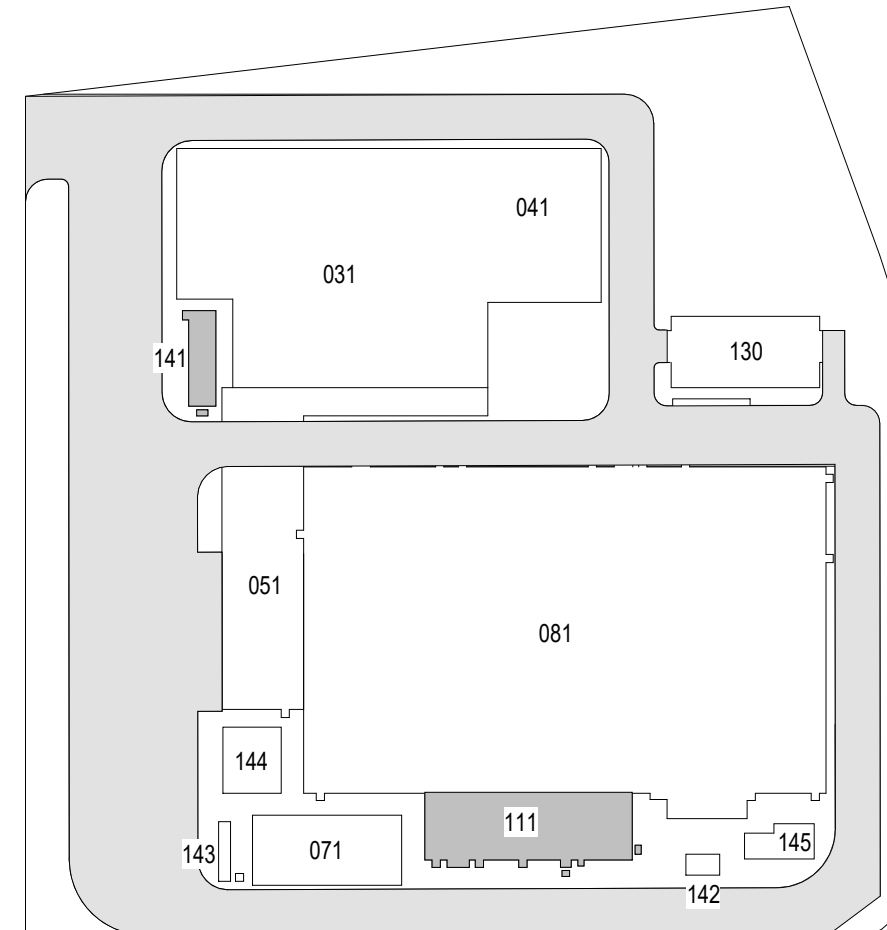
DATE	12/12/2022
PROJECT NO	105121
DRAWING BY	S. BRINKMEYER
CHECKED BY	A. POOLE
DRAWING NO	F-001.00
CADD FILE NO	102980
1 of 7	

12/20/2022 4:19:33 PM



1
F-002.00
OVERALL SITE PLAN
1/32" = 1'-0"

ISSUED FOR PERMIT



KEY PLAN
N.T.S.



Poole Fire Protection
19910 161st Street
Olathe, KS 66062
913.678.0000 FAX 913.678.0001

19910 W. 161st STREET
OLATHE, KS. 66062



25 Mohawk Avenue
Sparta, NJ 07871

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Hitachi Energy

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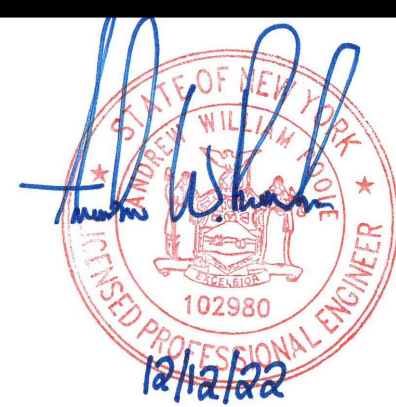
PROJECT

CHPE
Champlain Hudson
Power Express

**Astoria HVDC
Converter Station**

31-45 20th Avenue, Astoria, Queens NY 11105
Block #850 - Lot #310 - BIN #4624437

OVERALL SITE PLAN



DATE 12/12/2022
PROJECT NO 105121
DRAWING BY S. BRINKMEYER
CHECKED BY A. POOLE
DRAWING NO
F-002.00
CADD FILE NO
AstoriaHVDC-CHPE
AstoriaCHPE-111-00-M3-FP-001.rvt
2 of 7

CALCULATIONS AND SYSTEM DESIGN ARE BASED ON F-K-5-1-12.
THE SYSTEMS ARE DESIGNED TO EXTINGUISH A SINGLE FIRE.
THE SYSTEMS ARE DESIGNED FOR TOTAL FLOODING.
HAZARD CLASSIFICATION: CLASS C
MINIMUM DESIGN CONCENTRATION: 4.725% (NFPA 2001, TABLE A.5.4.2.2(b))
MINIMUM ANTICIPATED TEMPERATURE: 70F
ELEVATION: APPROX. 31 FT.
EQUIVALENT ALTITUDE: 0 FT.
(C) AGENT REQUIRED AT 70F: 0.04289 LBS/FT3 (NFPA 2001, TABLE A.5.5.1(a))
(A) ATMOSPHERIC CORRECTION FACTOR: 1.00

PROTECTED SPACE: **MCC ROOM (B116)**
RAISED FLOOR: NONE
LENGTH(L): 14.1 FT.
WIDTH(W): 30.05 FT.
HEIGHT(H): 15.25 FT.
(V) SPACE VOLUME
V=(L)(W)(H)
V=6462 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(6462)(0.04289)(1.00)
W=278 LBS
TOTAL AGENT DESIGN QUANTITY: 278 LBS.

PROTECTED SPACE: **COMM ROOM (B205)**
RAISED FLOOR: NONE
LENGTH(L): 21.48 FT.
WIDTH(W): 11.82 FT.
HEIGHT(H): 10.00 FT.
(V) SPACE VOLUME
V=(L)(W)(H)
V=2539 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(2539)(0.04289)(1.00)
W=105 LBS
TOTAL AGENT DESIGN QUANTITY: 105 LBS.

PROTECTED SPACE: **CONTROL AND PROTECTION ROOM 1 (B107)**
RAISED FLOOR: YES
ABOVE RAISED FLOOR:
LENGTH(L): 14.09 FT.
WIDTH(W): 16.79 FT.
HEIGHT(H): 12.4583 FT.
(V) ABOVE RAISED FLOOR VOLUME
V=(L)(W)(H)
V=2948 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(2948)(0.04289)(1.00)
W=127 LBS
REQUIRED AGENT DESIGN QUANTITY: 127 LBS.

PROTECTED SPACE: **CONTROL AND PROTECTION ROOM 2 (B104)**
RAISED FLOOR: YES
ABOVE RAISED FLOOR:
LENGTH(L): 14.09 FT.
WIDTH(W): 16.79 FT.
HEIGHT(H): 12.4583 FT.
(V) ABOVE RAISED FLOOR VOLUME
V=(L)(W)(H)
V=2948 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(2948)(0.04289)(1.00)
W=127 LBS
REQUIRED AGENT DESIGN QUANTITY: 127 LBS.

PROTECTED SPACE: **RELAY ROOM**
RAISED FLOOR: YES
ABOVE RAISED FLOOR:
LENGTH(L): 50.25 FT.
WIDTH(W): 15 FT.
HEIGHT(H): 11.5 FT.
(V) BELOW RAISED FLOOR VOLUME
V=(L)(W)(H)
V=8668 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(8668)(0.04289)(1.00)
W=372 LBS
REQUIRED AGENT DESIGN QUANTITY: 372 LBS.

BELOW RAISED FLOOR:
LENGTH(L): 50.25 FT.
WIDTH(W): 15 FT.
HEIGHT(H): 2.7917 FT.
(V) BELOW RAISED FLOOR VOLUME
V=(L)(W)(H)
V=2104.244 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(1964)(0.04289)(1.00)
W=85 LBS
REQUIRED AGENT DESIGN QUANTITY: 85 LBS.
TOTAL AGENT DESIGN QUANTITY: 372 LBS+ 85 LBS = 457 LBS.

PROTECTED SPACE: **AUXILIARY ROOM (B102)**
RAISED FLOOR: YES
ABOVE RAISED FLOOR:
LENGTH(L): 29.65 FT.
WIDTH(W): 23.93 FT.
HEIGHT(H): 12.4583 FT.
(V) ABOVE RAISED FLOOR VOLUME
V=(L)(W)(H)
V=8840 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(8840)(0.04289)(1.00)
W=380 LBS
REQUIRED AGENT DESIGN QUANTITY: 380 LBS.













BELOW RAISED FLOOR:
LENGTH(L): 29.65 FT.
WIDTH(W): 23.93 FT.
HEIGHT(H): 2.7917 FT.
(V) BELOW RAISED FLOOR VOLUME
V=(L)(W)(H)
V=1981 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(1981)(0.04289)(1.00)
W=85 LBS
REQUIRED AGENT DESIGN QUANTITY: 85 LBS.
TOTAL AGENT DESIGN QUANTITY: 380 LBS + 85 LBS = 465 LBS.

PROTECTED SPACE: **IO ROOM (B105)**
RAISED FLOOR: YES
ABOVE RAISED FLOOR:
LENGTH(L): 14.1 FT.
WIDTH(W): 19.97 FT.
HEIGHT(H): 12.4583 FT.
(V) ABOVE RAISED FLOOR VOLUME
V=(L)(W)(H)
V=3508 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(3508)(0.04289)(1.00)
W=151 LBS
REQUIRED AGENT DESIGN QUANTITY: 151 LBS.

BELOW RAISED FLOOR:
LENGTH(L): 14.1 FT.
WIDTH(W): 19.97 FT.
HEIGHT(H): 2.7917 FT.
(V) BELOW RAISED FLOOR VOLUME
V=(L)(W)(H)
V=787 CU.FT.
(W) TOTAL DESIGN QUANTITY:
W=(V)(C)(A)
W=(787)(0.04289)(1.00)
W=34 LBS
REQUIRED AGENT DESIGN QUANTITY: 34 LBS.
TOTAL AGENT DESIGN QUANTITY: 151 LBS+ 34 LBS = 185 LBS.

CLEAN AGENT SUPPRESSION
GENERAL NOTES

- GENERAL
A. THE CLEAN AGENT SYSTEM SHALL BE MONITORED AND CONTROLLED BY THE SERVICE BUILDING FIRE ALARM/RELEASING PANEL AND ASSOCIATED SMOKE DETECTION. SEE FA-SERIES FIRE ALARM DRAWINGS INCLUDED IN SEPARATE PERMIT SUBMITTAL.
B. FINAL PIPE ROUTING AND NOZZLE LOCATION TO BE DETERMINED BY AGENT MANUFACTURER QUALIFIED DESIGNER/INSTALLER.
C. CLEAN AGENT SYSTEMS ARE PROVIDED IN THE SELECT LOCATIONS INDICATED ON THE PLANS TO PROTECT SENSITIVE ELECTRICAL EQUIPMENT IN ADDITION TO AUTOMATIC SPRINKLER PROTECTION REQUIRED BY THE NYC BUILDING CODE. ALL SYSTEMS ARE TOTAL-FLOODING PER THE NYC FIRE CODE.
D. THE CLEAN AGENT SYSTEM SHALL MEET THE APPLICATION, INSTALLATION, PERFORMANCE REQUIREMENTS IN ACCORDANCE WITH NFPA 2001 (2015), THE NYC BUILDING CODE (2022), NYC FIRE CODE (2022) AND LOCAL AMENDMENTS. PER CONTRACT REQUIREMENTS, WHERE THE 2022 EDITION OF NFPA 2001 HAS MORE STRINGENT REQUIREMENTS, THE 2022 EDITION SHALL BE FOLLOWED. IN ADDITION, ANY SPECIALLY LISTED MATERIALS OR DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THEIR LISTING.
E. LOCATION AND INSTALLATION OF PIPE SUPPORTS SHALL MEET THE REQUIREMENTS OF NFPA 2001 AND THE MANUFACTURERS INSTRUCTIONS. CONTRACTOR TO PROVIDE GROUNDING DETAIL ON SHOP DRAWING SUBMITTALS.
F. APPLICABLE UL CONSTRUCTION DETAILS SHALL BE USED WHERE RATED ASSEMBLIES ARE PENETRATED BY CLEAN AGENT SYSTEM PIPING.
H. ALL ELECTRICAL EQUIPMENT AND METALLIC COMPONENTS SHALL BE BONDED AND GROUNDED ACCORDING TO NEW YORK CITY ELECTRICAL CODE ARTICLE 250, HITACHI GROUNDING GUIDELINES, SPECIFICATIONS, AND DETAILS.
2. NOTIFICATION
A. PROVIDE A SEPARATE AUDIBLE/VISUAL NOTIFICATION APPLIANCE. THE NOTIFICATION DEVICE MUST UTILIZE A FACEPLATE WHICH INDICATES "AGENT".
B. CLEAN AGENT NOTIFICATION DEVICES MUST ACTIVATE INDEPENDENTLY FROM GENERAL FIRE ALARM NOTIFICATION DEVICES. UPON CLEAN AGENT PRE-DISCHARGE OR DISCHARGE EVENT, THE GENERAL FIRE ALARM NOTIFICATION DEVICES MUST BE DEACTIVATED. UNDER NO CIRCUMSTANCES WILL A FIRE ALARM NOTIFICATION APPLIANCE AND A CLEAN AGENT NOTIFICATION APPLIANCE BE ACTIVE AT THE SAME TIME.
3. STORAGE CYLINDERS
A. CYLINDERS ARE LOCATED IN A DEDICATED AREA OUTSIDE OF THE PROTECTED SPACE.
B. CYLINDERS MUST BE LOCATED AND MOUNTED WHERE THEY WILL NOT BE ACCIDENTALLY DAMAGED OR MOVED. INSTALL SUITABLE PROTECTION TO PREVENT THE CYLINDERS FROM DAMAGE OR MOVEMENT.
C. POSITION THE CYLINDERS IN THE DESIGNATED LOCATION AND SECURE THEM IN PLACE WITH CYLINDER STRAPS AND ATTACHING HARDWARE AS RECOMMENDED BY THE MANUFACTURER.
4. DISCHARGE NOZZLES
A. NOZZLE PLACEMENT MUST BE SUCH THAT THE DESIGN CONCENTRATION WILL BE ESTABLISHED IN ALL PARTS OF THE HAZARD INCLUDING BELOW RAISED FLOORS.
B. NOZZLES MUST BE MOUNTED PERPENDICULAR TO THE CEILING AND ORIENTED WITH THE ORIFICES RADIATING SYMMETRICALLY OUTWARD FROM THE PIPE NETWORK.
C. NOZZLES MUST BE INSTALLED SO THAT THE ORIFICES ARE LOCATED AT DISTANCES BELOW THE CEILING AND AWAY FROM WALLS ACCORDING TO MANUFACTURERS RECOMMENDATIONS.
D. NOZZLES MUST BE LOCATED ACCORDING TO MANUFACTURERS RECOMMENDED CLEARANCE FROM WALLS AND/OR SIGNIFICANT OBSTRUCTIONS TO ALLOW FLUID DISCHARGE TO FULLY ATOMIZE.
5. PROTECTED SPACE
A. WHERE PROVIDED, THE PROTECTED SPACE SHALL INCLUDE AREAS BELOW RAISED FLOORS AND ABOVE SUSPENDED CEILINGS.
B. UNCLOSEABLE OPENING MUST BE KEPT TO A MINIMUM.
C. ANY OPENINGS IN THE WALLS, CEILING, AND FLOOR MUST BE PERMANENTLY SEALED OR PROVIDED WITH AUTOMATIC CLOSURE. SEE ARCHITECTURAL SPECIFICATIONS INCLUDED IN SEPARATE PERMIT SUBMITTAL FOR SEALING REQUIREMENTS AND MATERIALS.
D. IF CONFINEMENT OF AGENT IS NOT PRACTICABLE, PROTECTION MUST BE EXTENDED TO INCLUDE THE ADJACENT AREAS.
E. FORCED-AIR VENTILATING SYSTEMS, EXCLUDING SELF-CONTAINED AIR-RECIRCULATION SYSTEMS, MUST BE SHUT DOWN OR CLOSED AUTOMATICALLY. THE PROTECTED SPACE MUST HAVE THE STRUCTURAL STRENGTH AND INTEGRITY NECESSARY TO CONTAIN THE AGENT DISCHARGE. IF THE DEVELOPED PRESSURES PRESENT A THREAT TO THE STRUCTURAL STRENGTH OF THE ENCLOSURE, VENTING MUST BE PROVIDED TO PREVENT EXCESSIVE PRESSURES AND AGENT QUANTITIES INCREASED TO ACCOUNT FOR VENTING.
6. PIPE AND FITTINGS
A. BLACK STEEL OR GALVANIZED STEEL PIPE MUST BE EITHER ASTM A-53 SEAMLESS OR ELECTRIC RESISTANCE WELDED, GRADE A OR B, OR ASTM A-106, GRADE A, B, OR C.
B. ASTM B-120 AND ORDINARY CAST IRON PIPE MUST NOT BE USED.
C. FITTINGS MUST CONFORM TO THE REQUIREMENTS OF NFPA 2001.
D. CLASS 150 AND CAST IRON FITTINGS MUST NOT BE USED.
E. CLASS 300 MALLEABLE OR DUCTILE IRON FITTINGS IN SIZES 3-INCH AND SMALLER, OR 1000 LB. DUCTILE IRON OR FORGED STEEL FITTINGS IN SIZES GREATER THAN 3-INCH ARE TO BE USED.
F. CLASS 300 FLANGED JOINTS ARE ACCEPTABLE FOR USE IN ALL SIZES.
G. GASKETS FOR FLANGED FITTINGS MUST BE PER MANUFACTURER'S RECOMMENDATIONS.
H. ALL GROOVED COUPLINGS AND FITTINGS MUST BE UL LISTED AND/OR FM APPROVED AND HAVE A MINIMUM RATED WORKING PRESSURE EQUAL TO OR GREATER THAN THE MINIMUM PIPING DESIGN PRESSURE.
I. CONCENTRIC BELL REDUCERS ARE THE ONLY MEANS FOR REDUCING PIPE SIZE.
J. PIPE SIZE REDUCTIONS MAY BE MADE AFTER A TEE OR AFTER A UNION.
K. WHERE REDUCERS ARE USED AT TEES, THE REDUCERS MUST BE DOWNSTREAM OF EACH TEE.
L. REDUCTIONS MADE AFTER A UNION ARE ALLOWABLE ONLY IF THE NEXT CHANGE IN DIRECTION (TEE SPLIT) IS LOCATED A MINIMUM OF 10 NOMINAL PIPE DIAMETERS DOWNSTREAM OF THE CONCENTRIC BELL REDUCER.
M. PIPING MUST BE SECURELY BRACED TO ACCOUNT FOR DISCHARGE REACTION FORCES AND THERMAL EXPANSION/CONTRACTION. CARE MUST BE TAKEN TO ENSURE THE PIPING IS NOT SUBJECTED TO VIBRATION, MECHANICAL OR CHEMICAL DAMAGE.
N. ALL PIPE HANGERS MUST BE UL LISTED, CONFORM TO GENERAL INDUSTRY STANDARDS FOR PIPE HANGERS, AND CONFORM TO ANSI B-31.1. REFER TO ANSI B-31.1 FOR ADDITIONAL BRACING REQUIREMENTS.
O. SEISMIC DESIGN CATEGORY "C"; REFER TO STRUCTURAL DRAWINGS INCLUDED IN SEPARATE PERMIT SUBMITTAL FOR ADDITIONAL INFORMATION.

CLEAN AGENT LEGEND	
CA 	CLEAN AGENT STORAGE CONTAINER
CA 	CLEAN AGENT MANUAL RELEASE STATION
CA 	CLEAN AGENT ABORT STATION
AIM 	ADDRESSABLE INPUT MODULE
AOM 	ADDRESSABLE OUTPUT MODULE
CAR 	CLEAN AGENT ELECTRIC RELEASE ACTUATOR
PS 	PRESSURE SWITCH
MD 	MAINTENANCE DISCONNECT SWITCH
	AGENT DISCHARGE BEACON
	HORN - WALL MOUNT
	STROBE - WALL MOUNT
	HORN/STROBE - WALL MOUNT
SYMBOL MODIFIERS	
ncd	CANDELA RATING
nW	WATT TAP
CA	CLEAN AGENT

RATED WALL LEGEND

 2 HOUR FIRE BARRIER

NOTE: RATED WALLS ARE REFERENCED FROM ARCHITECTURAL PLANS INCLUDED IN SEPARATE PERMIT SUBMITTAL.

ISSUED FOR PERMIT

 **Poole Fire Protection**
19910 W. 161st STREET
OLATHE, KS. 66062

 **SOWINSKI SULLIVAN**
ARCHITECTURE+ENGINEERING
25 Mohawk Avenue
Sparta, NJ 07871

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A	INTERIM SUBMISSION	SAB	AWP	09/13/2022
REV	DESCRIPTION	DRW BY	CHK BY	DATE

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 **Hitachi Energy**
901 Main Campus Drive
Raleigh, North Carolina 27606

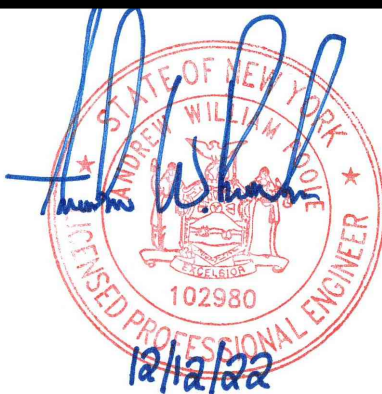
PROJECT

CHPE
Champlain Hudson
Power Express

**Astoria HVDC
Converter Station**

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Block #850 - Lot #310 - BIN #4624437

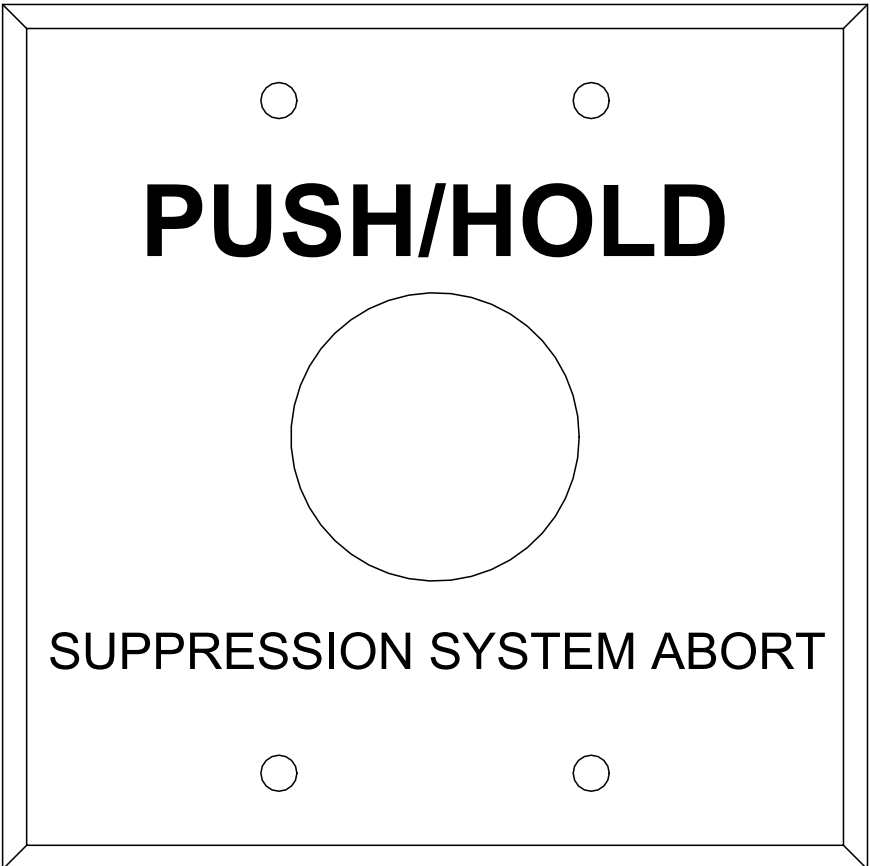
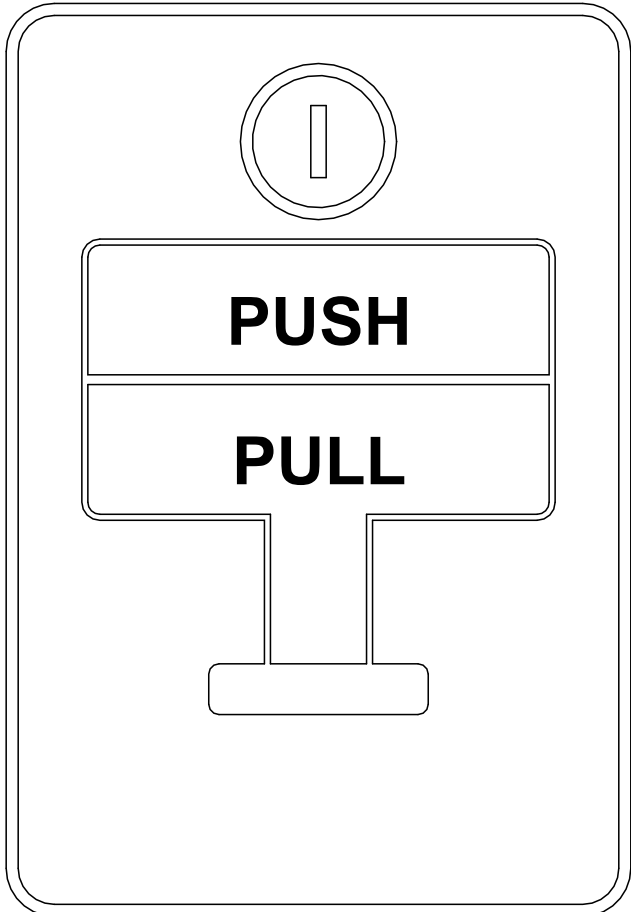
**CLEAN AGENT GENERAL
NOTES AND
CALCULATIONS**



DATE 12/12/2022
PROJECT NO 105121
DRAWING BY S. BRINKMEYER
CHECKED BY A. POOLE
DRAWING NO
F-003.00
CADD FILE NO
AstoriaCHPE-111-00-M3-FP-001.rvt
3 of 7

**FIRE
SUPPRESSION
MANUAL
RELEASE**

**FIRE
SUPPRESSION
ABORT
PUSH BUTTON
AND HOLD**



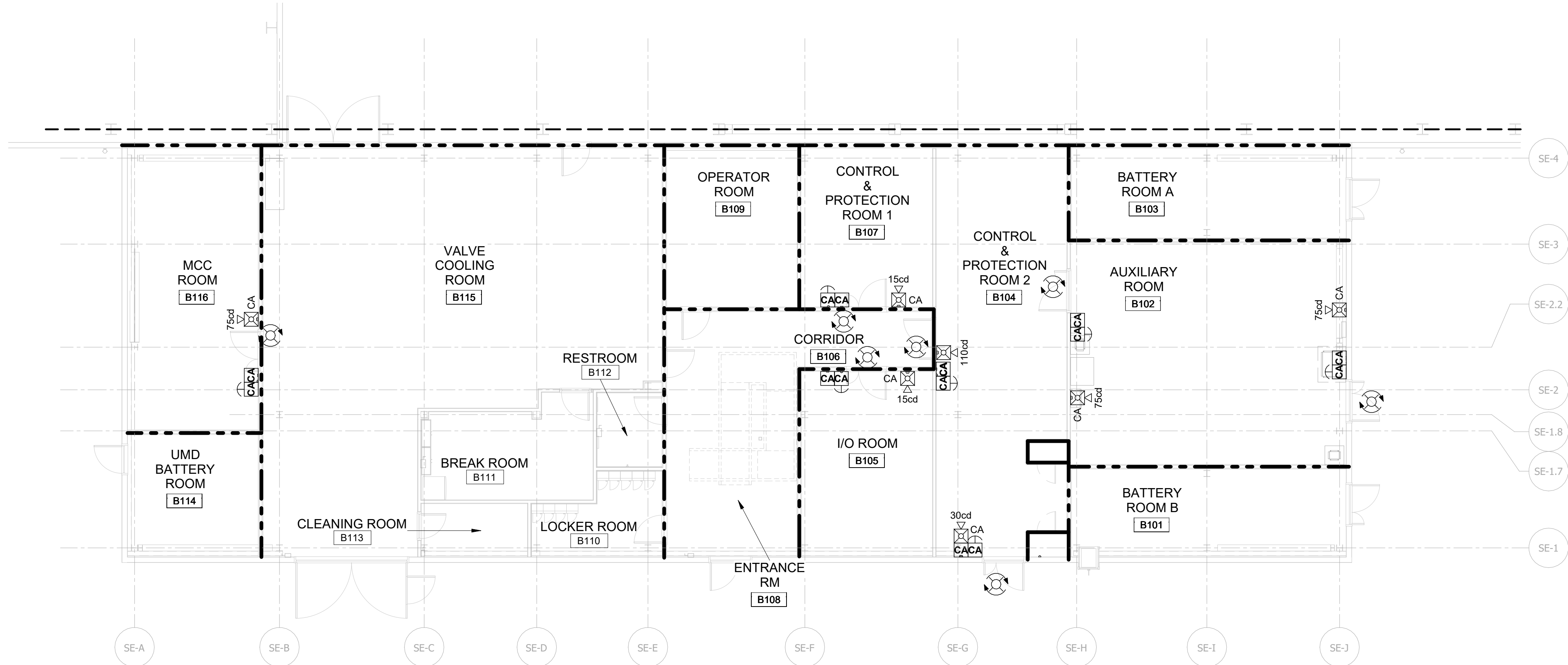
**FIRE SUPPRESSION SYSTEM
DISCHARGE LIGHT**

WHEN LIGHT IS FLASHING DO NOT
ENTER. NOVEC 1230 SYSTEM HAS
DISCHARGED

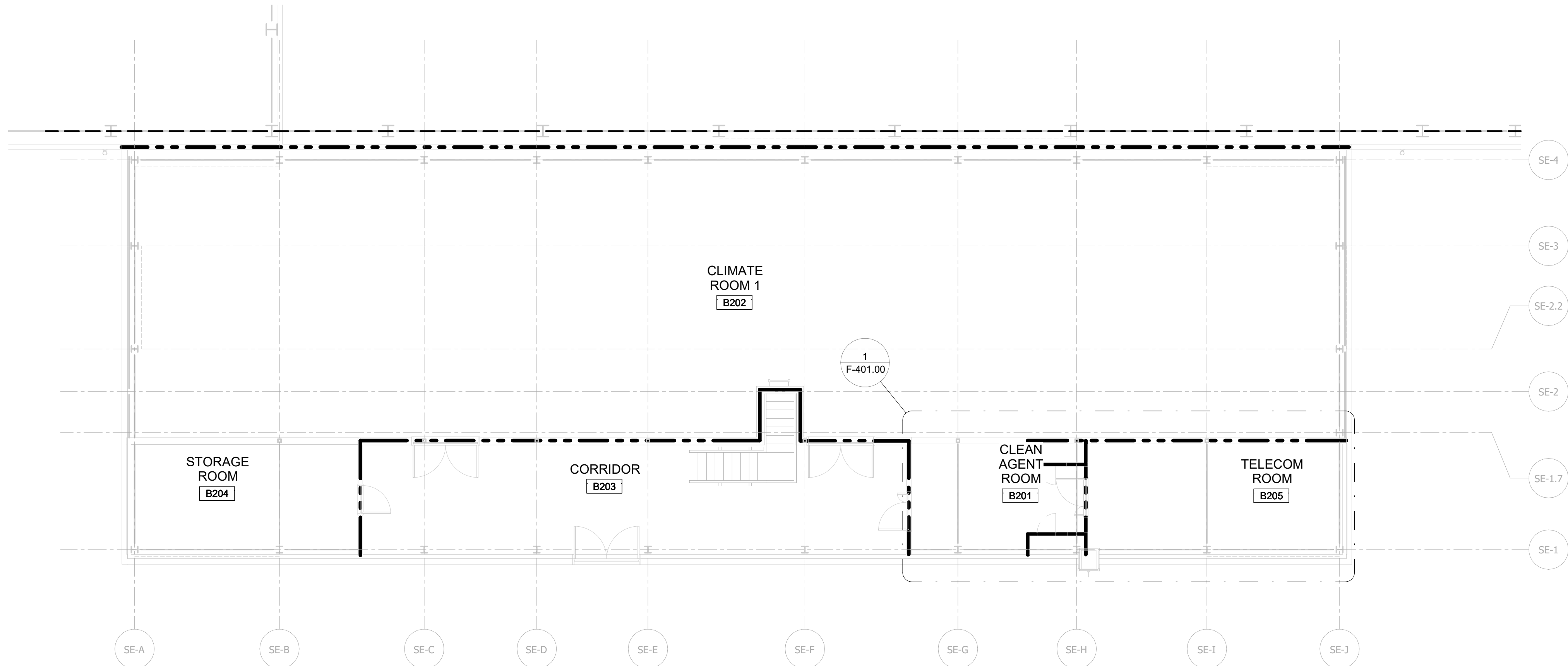
**FIRE SUPPRESSION SYSTEM
MAINTENANCE SWITCH**

TO OPERATE TURN KEY TROUBLE WILL
OCCUR AT PANEL NOVEC 1230 SYSTEM
RELEASE CIRCUIT WILL BE DISABLED

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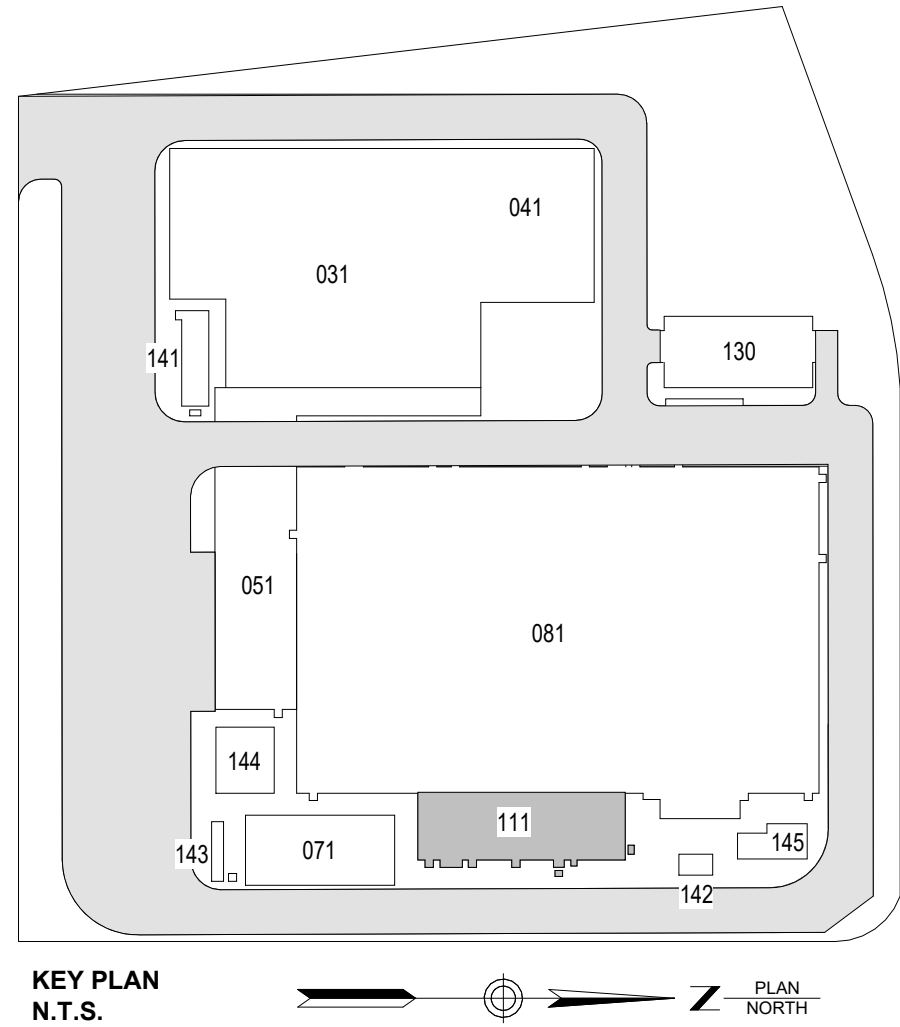
1
F-101.00
CLEAN AGENT ALARM AND RELEASING PLAN - FIRST FLOOR
1/8" = 1'-0"



2
F-101.00
CLEAN AGENT ALARM AND RELEASING PLAN - SECOND FLOOR
1/8" = 1'-0"

RATED WALL LEGEND	
	2 HOUR FIRE BARRIER
NOTE: RATED WALLS ARE REFERENCED FROM ARCHITECTURAL PLANS. INCLUDED IN SEPARATE PERMIT SUBMITTAL.	

ISSUED FOR PERMIT



Pooler Fire Protection
19910 W. 161st STREET
OLATHE, KS. 66062

SOWINSKI SULLIVAN
ARCHITECTURE+ENGINEERING
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REV	DESCRIPTION	DRW BY	CHK BY	DATE
B	FINAL SUBMISSION	SAB	AWP	12/12/2022
A	INTERIM SUBMISSION	SAB	AWP	09/13/2022

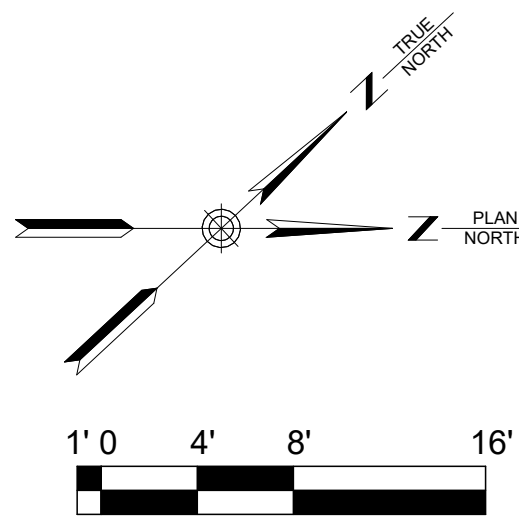
Kiewit
470 Chestnut Ridge Rd # 2,
Woodcliff Lake, NJ 07677

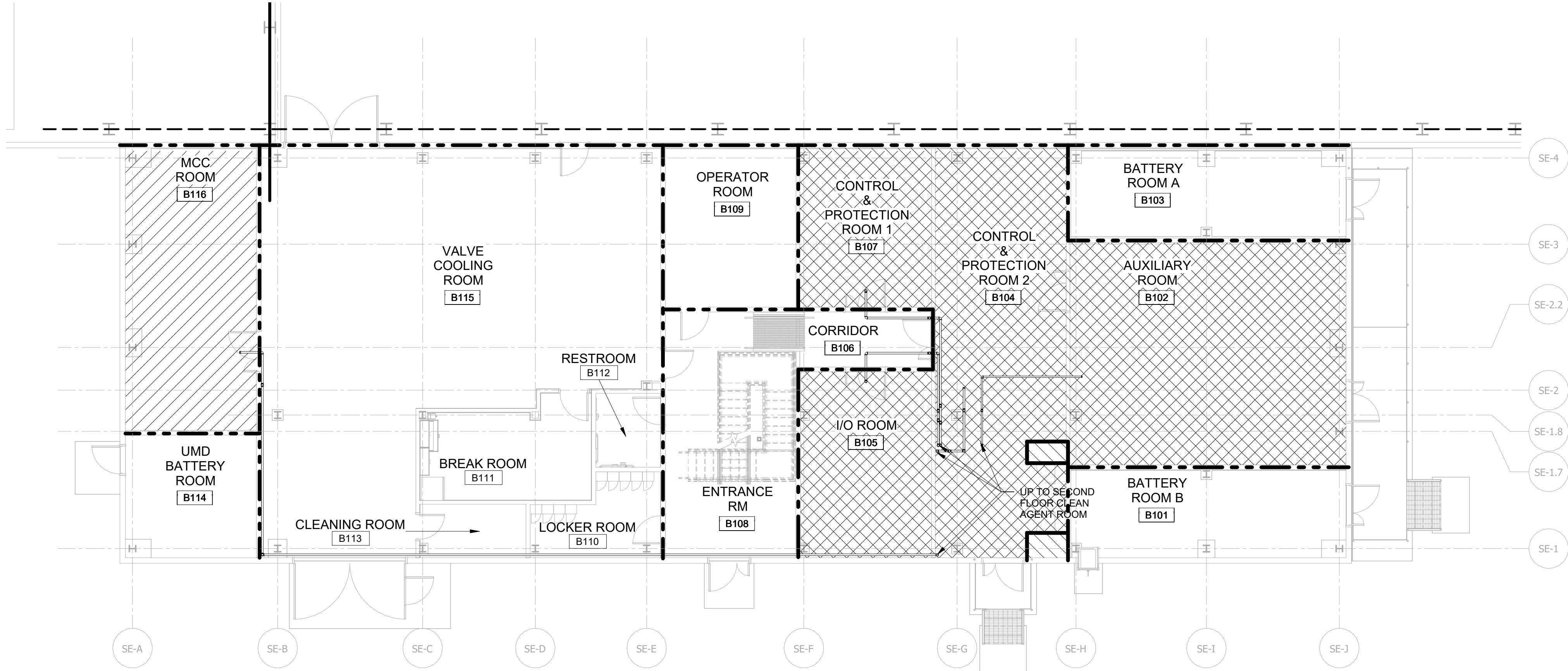
Hitachi Energy
901 Main Campus Drive
Raleigh, North Carolina 27606

PROJECT
CHPE
Champlain Hudson
Power Express
**Astoria HVDC
Converter Station**
31-45 20th Avenue, Astoria, Queens NY 11105
Block #850 - Lot #310 - BIN #4624437

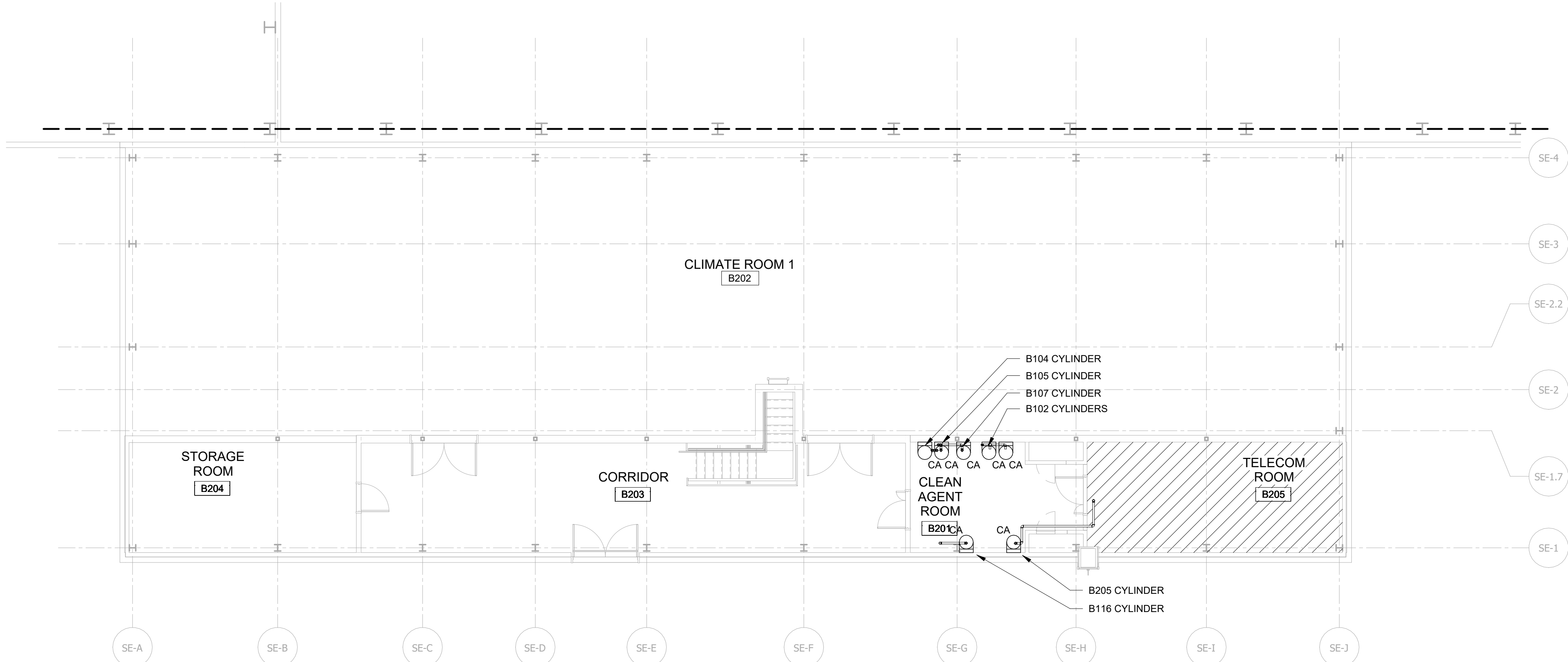
SERVICE BUILDING -
CLEAN AGENT ALARM
AND RELEASING PLAN

DATE 12/12/2022
PROJECT NO. 105121
DRAWING BY S. BRINKMEYER
CHECKED BY A. POOLE
DRAWING NO. **F-101.00**
CADD FILE NO. AstoriaCHPE-111-00-M3-FP-001.rvt
4 of 7





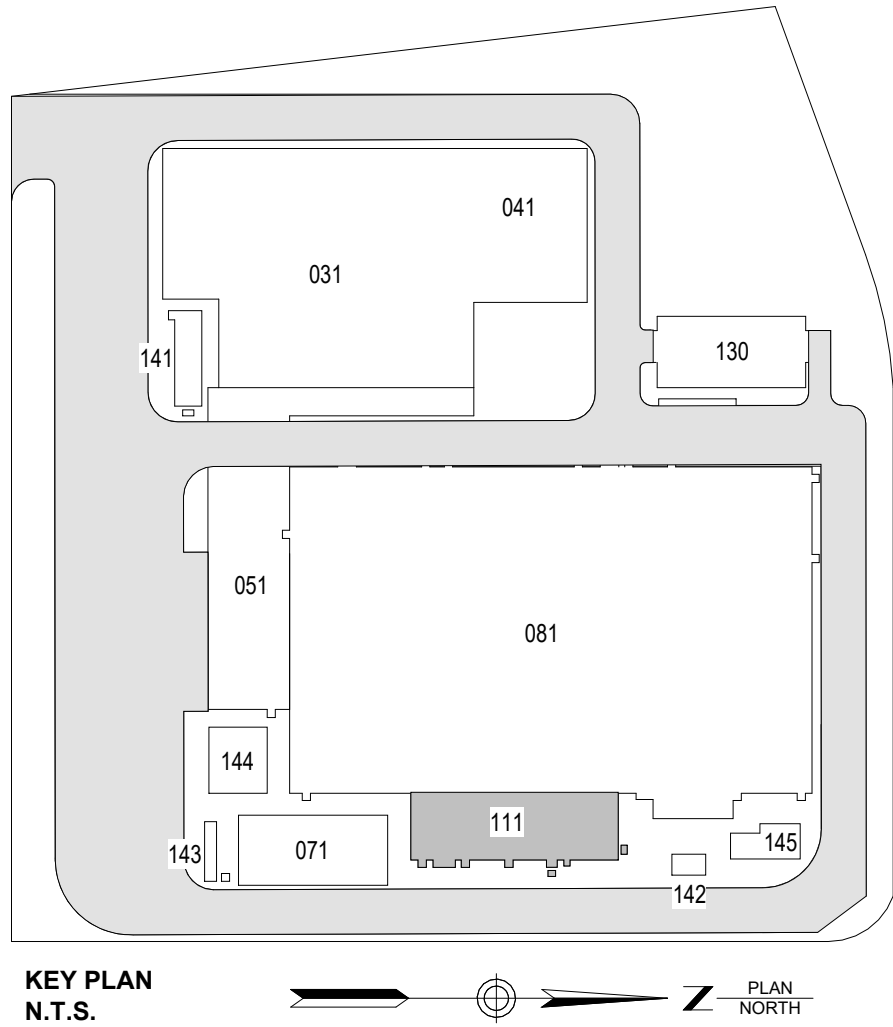
1 CLEAN AGENT SUPPRESSION PLAN - FIRST FLOOR
F-102.00 1/8" = 1'-0"



2 CLEAN AGENT SUPPRESSION PLAN - SECOND FLOOR
F-102.00 1/8" = 1'-0"

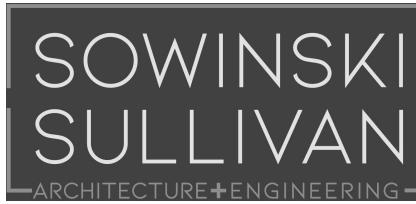
RATED WALL LEGEND	
	2 HOUR FIRE BARRIER
NOTE: RATED WALLS ARE REFERENCED FROM ARCHITECTURAL PLANS. INCLUDED IN SEPARATE PERMIT SUBMITTAL.	
CLEAN AGENT HATCH LEGEND	
	NOVEC 1230 - TOTAL FLOODING, NO RAISED FLOOR
	NOVEC 1230 - TOTAL FLOODING INCLUDING BELOW RAISED FLOOR

ISSUED FOR PERMIT



Poole Fire Protection
19910 West 161st Street
Olathe, KS 66062
TEL: 913-251-0000 FAX: 913-251-0001

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Hitachi Energy
901 Main Campus Drive
Raleigh, North Carolina 27606

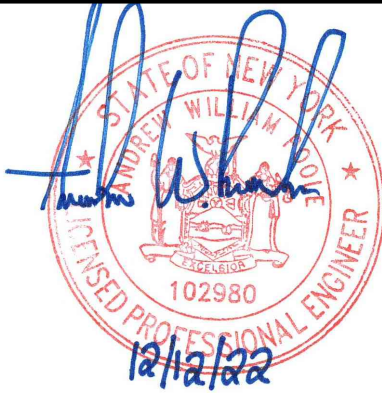
PROJECT

CHPE
Champlain Hudson
Power Express

**Astoria HVDC
Converter Station**

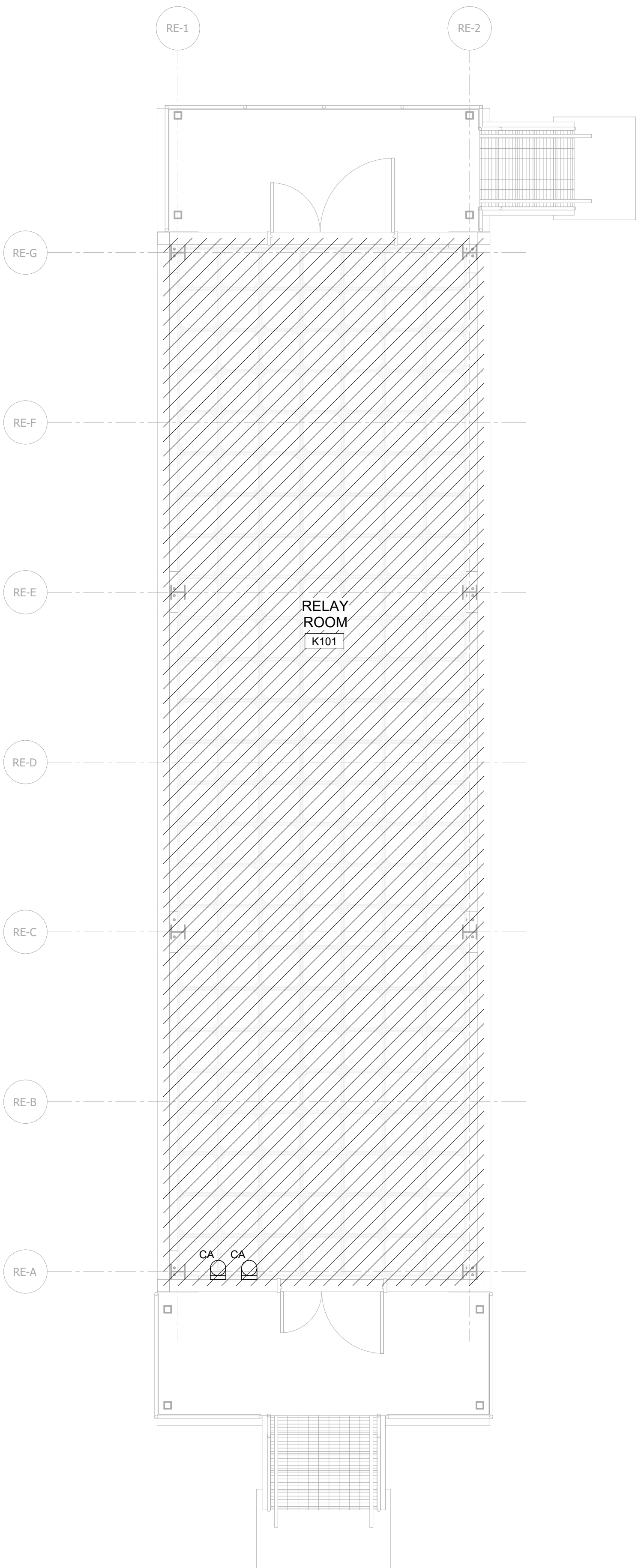
31-45 20th Avenue, Astoria, Queens NY 11105
Block #850 - Lot #310 - BIN #4624437

**SERVICE BUILDING -
CLEAN AGENT
SUPPRESSION SYSTEM
HATCH PLAN**

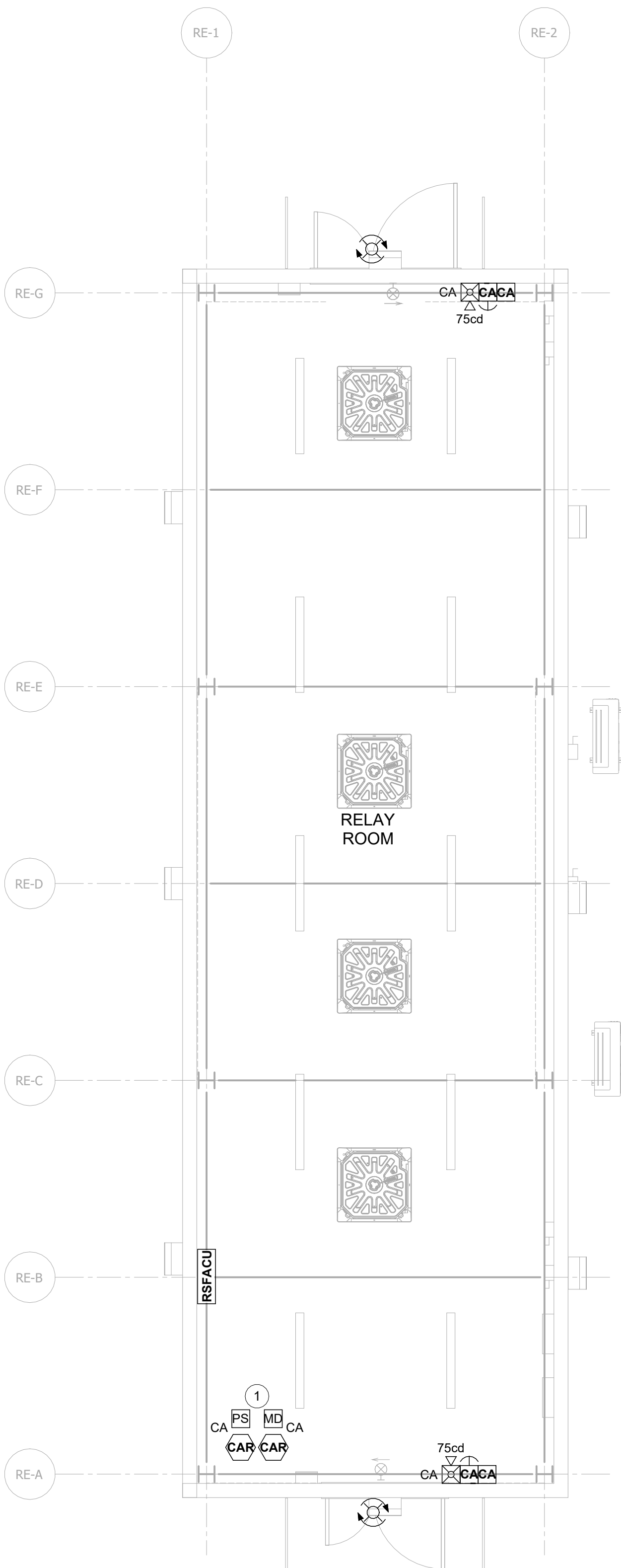


DATE 12/12/2022
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DRAWING NO
F-102.00
CADD FILE NO
AstoriaHVDC-CHPE
AstoriaCHPE-111-00-M3-FP-001.rvt
5 of 7

12/20/2022 4:17:51 PM



1 CLEAN AGENT SUPPRESSION SYSTEM HATCH PLAN
F-103.00 1/4" = 1'-0"



2 CLEAN AGENT ALARM AND RELEASING PLAN
F-103.00 1/4" = 1'-0"

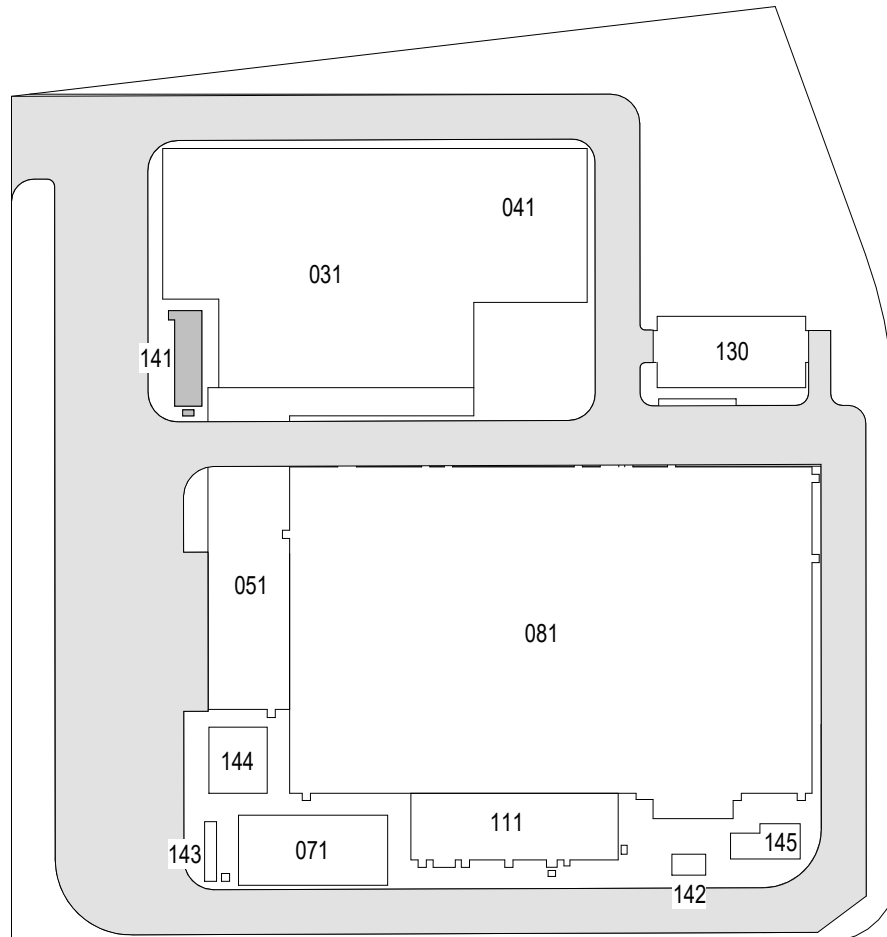
FIRE SUPPRESSION LEGEND

NOVEC 1230 - TOTAL FLOOD
INCLUDING BELOW RAISED FLOOR

KEYNOTES

- 1 CLEAN AGENT MAINTENANCE DISCONNECTS, RELEASE ACTUATORS, AND PRESSURE SWITCHES SHALL BE CONTROLLED/MONITORED BY THE FIRE ALARM/RELEASING PANEL WITHIN OPERATOR ROOM B100. SEE FIRE ALARM PLANS INCLUDED IN SEPARATE SUBMITTAL.

ISSUED FOR PERMIT



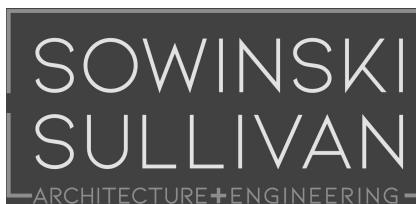
KEY PLAN
N.T.S.

PLAN
NORTH



Poole Fire Protection
19910 W. 161st STREET
Olathe, KS 66062
913.678.0000 FAX 913.678.0001

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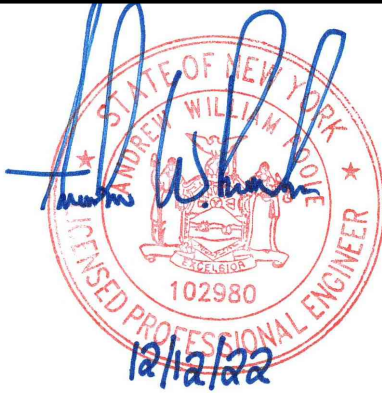
PROJECT

CHPE
Champlain Hudson
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**Astoria HVDC
Converter Station**

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Block #850 - Lot #310 - BIN #4624437

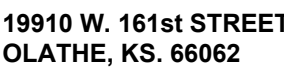
**RELAY ENCLOSURE -
CLEAN AGENT
SUPPRESSION SYSTEM
HATCH PLAN**



DATE 12/12/2022
PROJECT NO 105121
DRAWING BY S. BRINKMEYER
CHECKED BY A. POOLE
DRAWING NO
F-103.00
CADD FILE NO
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6 of 7

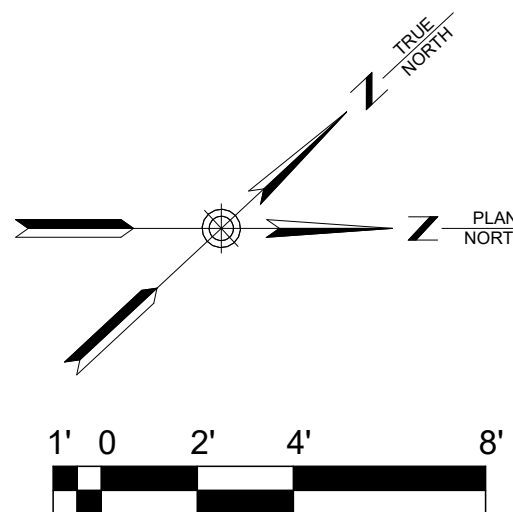


1 CLEAN AGENT MAINTENANCE DISCONNECTS, RELEASE ACTUATORS, AND PRESSURE SWITCHES SHALL BE CONTROLLED/MONITORED BY THE FIRE ALARM/RELEASING PANEL WITHIN OPERATOR ROOM B109. SEE FIRE ALARM PLANS INCLUDED IN SEPARATE SUBMITTAL.



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