APPENDIX C.24 CASE 10-T-0139 SITE PLANS AND CONSTRUCTION DRAWINGS ZONING PACKAGE ASTORIA HVDC CONVERTER STATION SEGMENT 22

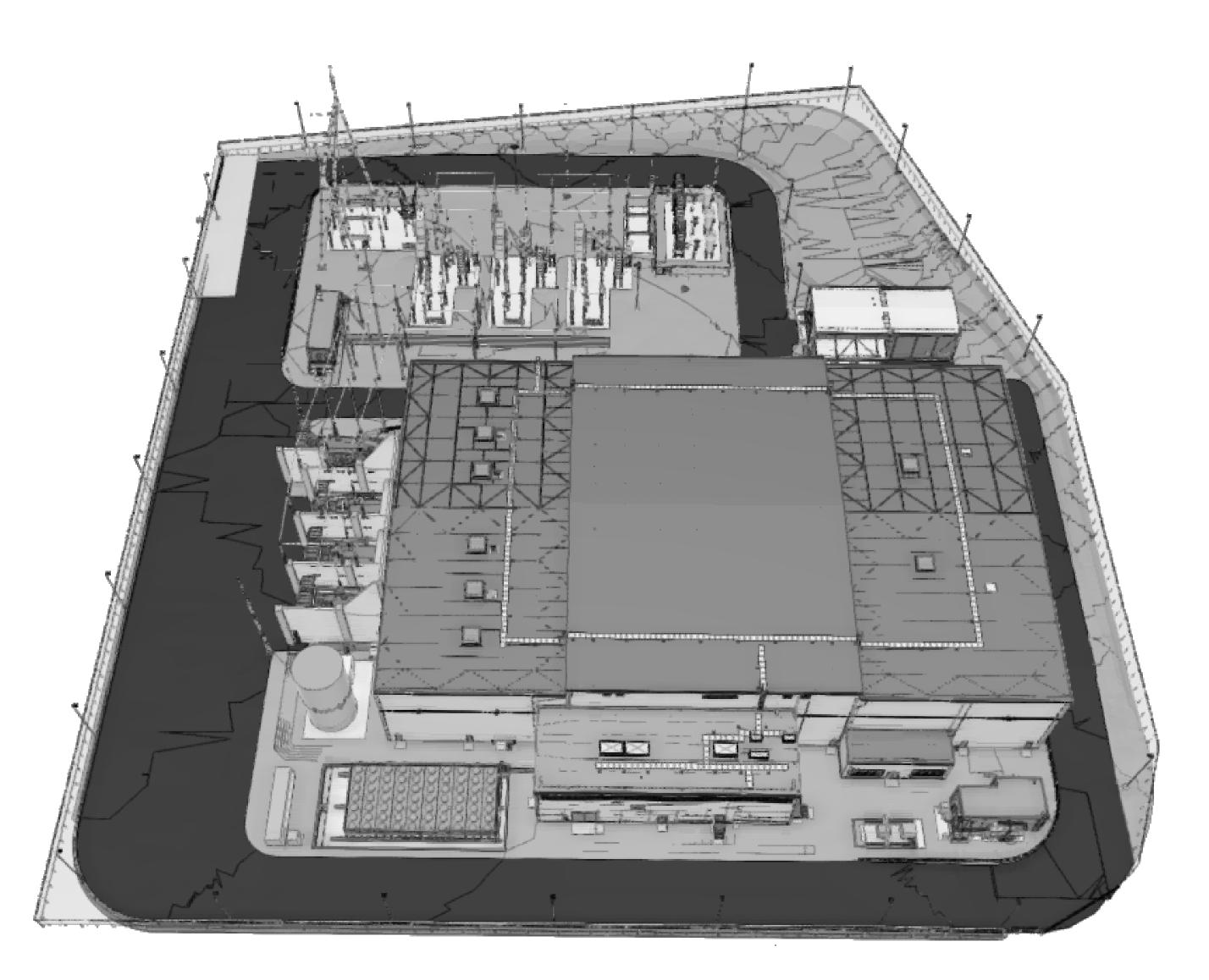
ASTORIA HVDC CONVERTER STATION CONVERTER AND SERVICE BUILDING ZONING PACKAGE

SCOPE OF WORK

THE ZONING SCOPE FOR THE ASTORIA CONVERTER STATION INCLUDES THE AREAS BELOW: 1. CONVERTER BUILDING

2. SERVICE BUILDING

3. HVAC ROOM



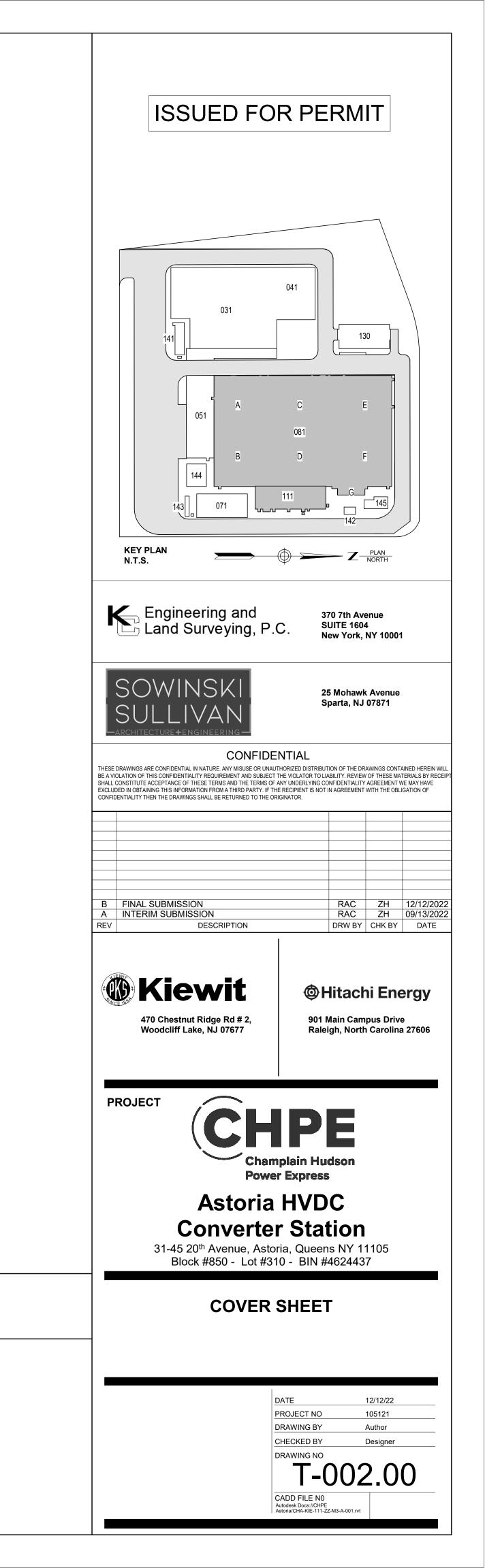


FLOOD ZONE DESIGN CERTIFICATION:

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.



BUILDING DATA - CONVERTER BUILDING & SERVICE BUILDING

PROJECT TITLE:	CHPE ASTORIA HVDC CONVERTER STATION
ADDRESS:	31-45 20TH AVENUE
BOROUGH:	QUEENS
STORIES:	2 STORIES ABOVE GRADE, 0 STORIES BELOW GRADE
CONSTRUCTION CLASS:	IIB
OCCUPANCY GROUP:	F-1 (MODERATE HAZARD) (ELECTRICAL GENERATION PLANT)
HEIGHT LIMITATIONS:	NONE (BC 2002)
AREA LIMITATIONS:	NONE (BC 2002)
BUILDING HEIGHT:	69'-0"
SCOPE OF PROJECT:	CONSTRUCTION OF A NEW ELECTRICAL CONVERTER STATION TO CONVERT HIGH VOLTAGE ELECTRICITY FROM DC TO AC, CONSISTING OF A ONE-STORY CONVERTER BUILDING ATTACHED TO A 2-STORY SERVICE BUILDING

ZONING INFORMATION - CONVERTER & SERVICE BUILDING

BLOCK:	850
LOT:	310
LOT AREA:	341,093 SF
ZONING DISTRICT:	M3-1
ZONING MAP:	6D
SEISMIC ZONE:	2A
OCCUPANCY CLASSIFICATION:	F-1
USE GROUP:	18B

BUILDING HEIGHT & AREA LIMITATIONS

CHAPTER 5: GENERAL BUILDING HEIGHT AND AREA LIMITATIONS, 503 SPECIAL INDUSTRIAL OCCUPANCIES, 503.1.1. BUILDINGS AND STRUCTURES OF TYPE II AND II CONSTRUCTION DESIGNED TO HOUSE SPECIAL INDUSTRIAL PROCESSES THAT REQUIRE LARGE AREAS AND UNUSUAL BUILDING HEIGHTS TO ACCOMODATE CRANEWAYS OR SPECIAL MACHINERY AND EQUIPMENT, INCLUDING AMONG OTHERS...THE PRODUCTION AND DISTRIBUTION OF ELECTRIC, GAS OR STEAM POWER, SHALL BE EXEMPT FROM THE BUILDING HEIGHT, NUMBER OF STORIES AND BUILDING AREA LIMITATIONS SPECIIED IN SECTIONS 504 AND 506.

MEZZANINES WITHIN SUCH BUILDINGS OR STRUCTURES SHALL COMPLY WITH SECTION 505.2. DOCUMENTS AND PLANS DESCRIBING THE SPECIAL INDUSTRIAL PROCESSES SHALL BE SUBMITTED TO THE COMMISSIONER FOR APPROVAL.

CLASSIFIED AS CATEGORY "IIB" (TABLE 504.3 NYC BUILDING CODE 2022) CONVERTER FACILITY (INCLUDES CONVERTER AND SERVICE BUILDINGS) IS NOT REQUIRED TO MEET CODE REQUIREMENTS FOR FLOOR AREA REQUIREMENTS, DUE TO THIS BEING A BUILDING DESIGNED TO HOUSE SPECIAL INDUSTRIAL PROCESSES.

TABLE 504.3 ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE

OCCUPANCY CLASSIFICATIONS, TYPE IIB ALLOWABLE HEIGHT: UNLIMITED CONSTRUCTION, PARITALLY SPRINKLERED: ALOWABLE AREA: UNLIMITED NOT REQUIRED TO MEET REQUIREMENTS FOR BULDING HEIGHT FLOOR AREA REQUIREMENTS, DUE TO THIS BEING A BUILDING DESIGNED TO HOUSE SPECIAL INDUSTRIAL PROCESSES.

BUILDING CODES

BUILDING:	NEW YORK CITY BUILDING CODE, (NYCBC) 2022
ENERGY:	NEW YORK CITY ENERGY CONSERVATION CODE (NYCECC) 2020
FIRE:	NEW YORK CITY FIRE CODE, (NYCFC) 2014
MECHANICAL:	NEW YORK CITY MECHANICAL CODE (NYCMC) 2022
PLUMBING:	NEW YORK CITY PLUMBING CODE (NYCMC) 2022
ELECTRICAL:	NEW YORK CITY ELECTRICAL CODE (NYCEC) 2011
ELECTRICAL: ACCESSIBILITY:	NEW YORK CITY ELECTRICAL CODE (NYCEC) 2011 NEW YORK CITY BUILDING CODE (NYCBC) 2022, CHAPTER 11 ICC A117.1, 2009

OTHER STANDARDS AND REGULATIONS

AMERICANS WITH DISABILITIES ACT (ADA) ADA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION OSHA: NYC ZONING **RESOLUTION:**

WITHIN FIRE DISTRICT PER 2022 NYCBC APPENDIX D, FIGURE D106.1 (2)

NYCEC C402.5.7

EXCEPTION 2:

DOORS NOT INTENDED TO BE USED BY THE PUBLIC, SUCH AS DOORS TO MECHANICAL OR ELECTRICAL ROOMS, OR INTENDED SOLELY FOR EMPLOYEE USE. NFPA 850: RECOMMENDED PRACTICE FOR FIRE PROTECTION FOR ELECTRIC

GENERATING PLANTS AND HIGH VOLTAGE DIRECT CURRENT CONVERTER STATIONS.

USE GROUP CLASSIFICATION - CONVERTER & SERVICE BLDG.

CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION

THE FOLLOWING USES AND OCCUPANCY GROUPS ARE LOCATED IN THIS SITE:

FACTORY AND INSUSTRIAL: GROUP F-1 (MODERATE HAZARD) ELECTRICAL GENERATION PLANT

CONVERTER STATION (INCLUDES REACTOR HALL, VALVE HALL ROOMS 1 & 2, AND DC HALL AND SERVICE BUILDING)

FLOOR AREA CALCULATIONS - CONVERTER & SERVICE BUILDING

BUILDING/ROOM	AREA (GSF)
<u>CONVERTER BLDG.</u> REACTOR HALL A103 VALVE HALL 1 A101 VALVE HALL 2 A102 DC HALL A104 VENTILATION ROOM FOR DC A105	21,245 SF 15,669 SF 15,395 SF 23,302 SF 861 SF
TOTAL GSF:	76,472 SF
BUILDING/ROOM	AREA (GSF)
SERVICE BLDG. FIRST FLOOR MCC ROOM B116 VALVE COOLING ROOM B115 UMD BATTERY B114 CLEANING ROOM B113 RESTROOM B112 BREAK ROOM B111 LOCKER ROOM B110 OPERATER ROOM B109 ENTRANCE ROOM B109 ENTRANCE ROOM B108 CONTROL & PROTECTION ROOM 1 B107 CORRIDOR B106 I/O ROOM B105 CONTROL & PROTECTION ROOM 2 B104 BATTERY ROOM B B103 AUXILIARY ROOM B102 BATTERY ROOM A B101	424 SF 1,455 SF 182 SF 25 SF 48 SF 185 SF 118 SF 237 SF 237 SF 237 SF 237 SF 282 SF 614 SF 281 SF 709 SF 278 SF
<u>SECOND FLOOR</u> TELECOM ROOM B205 STORAGE ROOM B204 CORRIDOR B203 CLIMATE ROOM 1 B202 CLEAN AGENT ROOM B201	254 SF 289 SF 750 SF 3,999 SF 255 SF
TOTAL GSF:	11,079 SF

OCCUPANCY - CONVERTER & SERVICE BUILDING

DESIGN OCCUPANT LOAD PER TABLE 1004.1.3

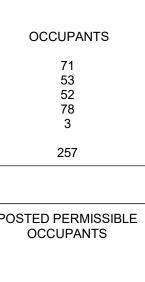
BUILDING/ROOM	MAX FLOOR AREA PER OCCUPANT
CONVERTER BLDG.	
REACTOR HALL A103	300 SF
VALVE HALL 1 A101	300 SF
VALVE HALL 2 A102	300 SF
DC HALL A104	300 SF
VENTILATION ROOM FOR DC A105	300 SF
TOTAL OCCUPANTS	

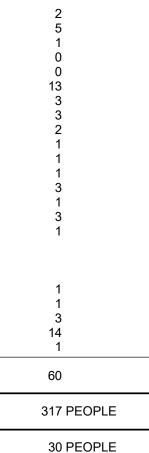
BUILDING/ROOM	MAX FLOOR AREA PER OCCUPANT	PC
SERVICE BLDG.	PER OCCUPANT	
FIRST FLOOR MCC ROOM B116 VALVE COOLING ROOM B115 UMD BATTERY B114 CLEANING ROOM B113 RESTROOM B112 BREAK ROOM B111 LOCKER ROOM B110 OPERATER ROOM B109 ENTRANCE ROOM B109 ENTRANCE ROOM B109 ENTRANCE ROOM B108 CONTROL & PROTECTION RW CORRIDOR B106 I/O ROOM B105 CONTROL & PROTECTION RW BATTERY ROOM B B103 AUXILIARY ROOM B102 BATTERY ROOM A B101	300 SF N/A N/A 15 NET 50 SF 100 SF 300 SF 300 SF 300 SF 300 SF 300 SF	
SECOND FLOOR		
TELECOM RM B205 STORAGE ROOM B204 CORRIDOR B203 CLIMATE ROOM B202 CLEAN AGENT ROOM B201	300 SF 300 SF 300 SF 300 SF 300 SF	

TOTAL OCCUPANTS:

TOTAL OCCUPANT LOAD (CONVERTER & SERVICE BUILDING):

TOTAL PROPOSED ACTUAL OCCUPANT LOAD:





CONSTRUCTION CLASSIFICATION & FIRE PROTECTION

<u>CHAPTER 6: TYPES OF CONSTRUCTION</u> TABLE 601, FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)	
TYPE IIB CONSTRUCTION (CONVERTER BUILDING)	
PRIMARY STRUCTURAL: WITH ROOF SUPPORTS FIRE-RESISTANCE RATINGS OF PRIMARY STRUCTURAL FRAME AND BEARING WALLS ARE PERMITTED TO BE REDUCED BY 1 HOUR WHERE SUPPORTING ROOF ONLY.	0 HR
BEARING WALLS, EXTERIOR WALLS, AND INTERIOR WALLS: WITH ROOF SUPPORTS FIRE-RESISTANCE RATINGS OF PRIMARY STRUCTURAL FRAME AND BEARING WALLS ARE PERMITTED TO BE REDUCED BY 1 HOUR WHERE SUPPORTING ROOF ONLY.	0 HR
NONBEARING WALLS AND PARTITIONS EXTERIOR:	SEE TABLE 602
NONBEARING WALLS AND PARTITIONS INTERIOR:	0 HR
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS:	0 HR
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS:	0 HR
TABLE 602, FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE	
FIRE SEPARATION DISTANCE < 5 FEET (TYPE IIB CONSTRUCTION) OCCUPANCY GROUP F-1:	2 HR
FIRE SEPARATION DISTANCE 5 < X <10 (TYPE IIB CONSTRUCTION) OCCUPANCY GROUP F-1:	1 HR
FIRE SEPARATION DISTANCE 10 <x<30 (type="" construction)<br="" iib="">OCCUPANCY GROUP F-1:</x<30>	1 HR
FIRE SEPARATION DISTANCE X>30 (TYPE IIB CONSTRUCTION) OCCUPANCY GROUP F-1:	0 HR
CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES 705.5 FIRE-RESISTANCE RATINGS	

105.5 FIRE-RESISTANCE RATINGS EXTERIOR WALLS SHALL BE FIRE-RESISTIVE-RATED IN ACCORDANCE WITH TABLES 601 AND 602 AND APPENDIX D WHERE APPLICABLE. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE OF GREATER THAN 10 FEET SHALL BE RATED FOR EXPOSURE TO FIRE FROM THE INSIDE. THE REQUIRED FIRE-RESISTANCE RATING OF EXTERIOR WALLS WITH A FIRE SEPARATION OF LESS THAN OR EQUAL TO 10 FEET SHALL BE RATED FOR EXPOSURE TO FIRE FROM BOTH SIDES.

INTERIOR FINISHES

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	CHAPTER 8 - INTERIOR FINISHES								
	<u>803.1.1 INTERIOR WALL AND CEILING FINISH MATERIALS.</u> INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE TESTED AND CLASSIFIED IN ACCORDANCE WITH ASTM E 84 OR UL 723. SUCH INTERIOR FINISH MATERIALS SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE-DEVELOPED INDEXES.								
	CLASS	S A = FLAME SPREA	D INDEX 0-25; SMOKE DE		DEX 0-450.				
	CLASS	B = FLAME SPREA	D INDEX 26-75; SMOKE D	EVELOPED IN	IDEX 0-450.				
	CLASS	S C = FLAME SPREA	D INDEX 76-200; SMOKE	DEVELOPED I	NDEX 0-450.				
	EXCEPTION: MATERIALS TESTED IN ACCORDANCE WITH SECTION 803.1.2 NOT TO BE CLASSIFIED IN ACCORDANCE WITH SECTION 803.1.1.								
	TABLE 803.11 INTERIOR WALL AND CEIING FINISH REQUIREMENTS BY OCCUPANCY								
	SPRINKLERED NONSPRINKLERED								
G	ROUP	INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS AND EXIT PASSAGEWAYS	CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND EXIT ACCESS RAMPS	ROOM AND ENCLOSED SPACES	INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS AND EXIT PASSAGEWAYS	CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND EXIT ACCESS RAMPS	ROOM AND ENCLOSED SPACES		

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STRUCTURAL DESIGN CHAPTER 16

CHAPTER 16: OCCUPANCY/RISK CLASS CLASSIFIED AS CATEGORY "IV" (TABLE
1604.5.2. IMPORTANCE FACTOR
1613.3.5 - SEISMIC DESIGN CATEGORY

DESIGN CRITERIA

 CODE

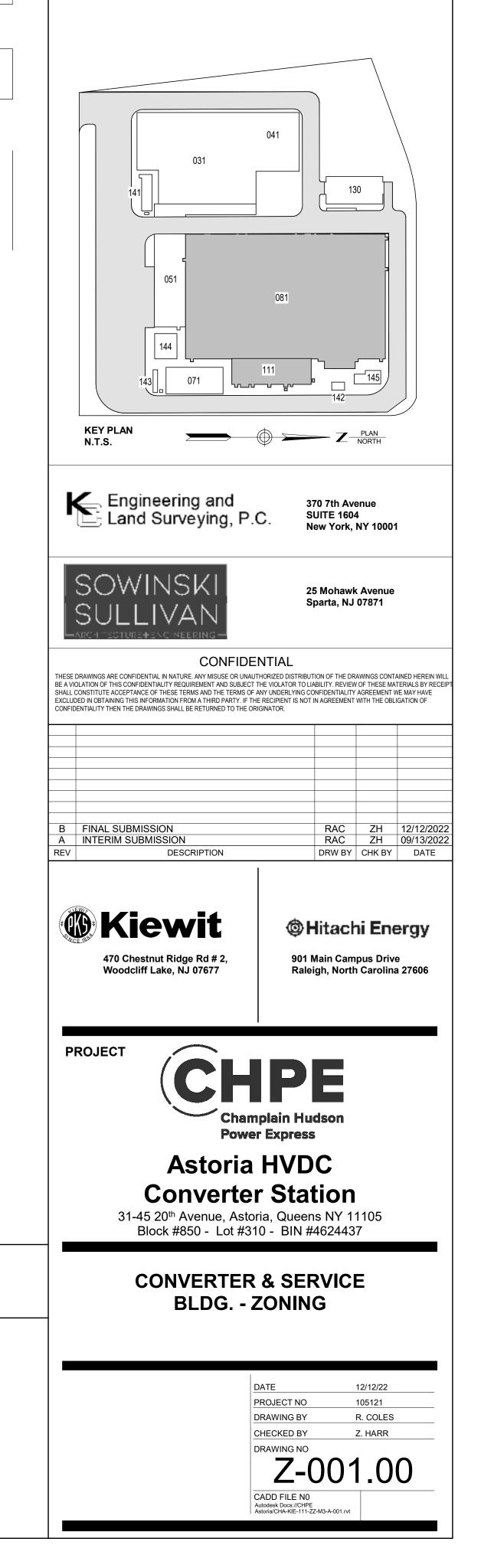
 ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK CITY
 BUILDING CODE, 2022.

ITEMS UNDER SEPARATE APPLICATION:

- PILE PLAN FOR CONVERTER BUILDING
- PILE PLAN FOR SERVICE BUILDING
- EARTH WORK / SITE PAVEMENT PLAN
- RETAINING WALL

CLASSIFICATION ABLE 1604.5 NYC BUILDING CODE 2022)

ISSUED FOR PERMIT



EL.	ROO	M	AREA	OCCUF	. EG	RESS RE	QUIRED				
	-		(SF)			STAIR (0.3" PP) OTHER (0.).2" PER PERSON)			
1ST	POSITIVE VA	LVE HALL	21,245	5 71	N	I/A 15	' REQUIRI	ED CLEAR W	/IDTH EXIT [DOORS	
	NEGATIVE VA	ALVE HALL	15,669	9 53	N	I/A	11" REQU	IRED CLEAF	IRED CLEAR WIDTH EXIT DOORS		
1ST	VALVE RM	2 HALL	15,395	5 52	N	I/A 11	" REQUIRE	ED CLEAR W	/IDTH EXIT [DOORS	
1ST	DC HA	ALL	23,302	2 78	N	I/A 16	" REQUIR	ED CLEAR V	VIDTH EXIT I	DOORS	
1ST	HVAC R	OOM	861	3	N	N/A 1" REQUIRED CLEAR WIDTH EXIT DOOR			DOORS		
SERV	ICE BUILDIN	G - FIRST	FLOOR	2							
ROO	NA			AREA	OCCUP.	EGRES	S REQUIR				
ROO	IVI			(SF)	OCCOP.	STAIR			0.2" PER PE	RSON)	
MCC	ROOM B116			424 SF	2	(0.3" PF N/A	')				
			15 4								
	BATTERY B1			1,455 SF	5	N/A					
				182 SF	1	N/A		-	CLEAR EXI	TDOORS	
				25 SF	N/A	N/A		N/A			
	TROOM B112			48 SF	N/A	N/A					
				185 SF	13	N/A					
	KER ROOM B			118 SF	3	N/A	_ _ _ - · -				
				237 SF	3		D CLEAR				
			B107	372 SF	2	N/A					
	. & PROTECT RIDOR B106	IUIN KIVI 1	107	237 SF	1		D CLEAR				
				85 SF	1	1" REQ	D CLEAR				
I/O ROOM B105		D404	282 SF	1	1" REQ'D CLEAR		1" REQ'D CLEAR EXIT DOORS				
CNTL & PROTECTION RM 2 B104		B104	614 SF	3			1" REQ'D CLEAR EXIT DOORS 1" REQ'D CLEAR EXIT DOORS				
BATTERY ROOM B B103 AUXILIARY ROOM B102			281 SF	1				1" REQ'D CLEAR EXIT DOORS			
				709 SF	3		D CLEAR				
	ERY ROOM			278 SF	1	1" REQ	D CLEAR	1" REQ'D (CLEAR EXIT	DOORS	
SERV	ICE BUILDIN	G - SECON		OR							
ROO	M			AREA (SF)	OCCUP.	EGRE	SS REQU	1	2" PER PER	SON)	
						(0.3" PP)		OTHER (0.2" PER PERSON)			
TELE	COM RM B20)5		254 SF	1	1 1" REQ'D CLEAR		1" REQ'D CLEAR EXIT DOORS			
STOF	RAGE ROOM	B204		289 SF	1	1" REQ	D CLEAR	1" REQ'D (CLEAR EXIT	DOORS	
COR	RIDOR B203			750 SF	3	1" REQ'D CLEAR 1" REQ'D CLEAR EXIT DC		DOORS			
CLIM	ATE ROOM E	3202		3,999 SF	14	4" REQ	D CLEAR	3" REQ'D (3" REQ'D CLEAR EXIST DOORS		
CLEA	N AGENT RO	DOM B201		255 SF	2	1" REQ	D CLEAR	1" REQ'D (CLEAR EXIT	DOORS	
NP = a. [SI: 1 FOOT = NOT PERMI BUILDINGS E WITH SECTIC SPRINKLER \$	TTED QUIPPED DN 903.3.1.	THROL .1 OR 9	03.3.1.2.	SEE SECT	TION 903	FOR OCC	UPANCES V	VHERE AUT		
	LUMBING ABLE 403.			_				-	KTURES	1	
CLAS	SIFICATION	OCCUP.	D	ESCRIPTI	ON	W.C.	LAV.	SHOWERS	DRINKING FOUNTAIN	OTHER	
	TORY AND DUSTRIAL	F	OC ENG FABRIC OR P	TURES IN WHICH CUPANTS ARE AGED IN WORK ATING, ASSEMBLY ROCESSING OF CT OR MATERIALS			1 PER 100	SEE SECTION 411	1 PER 400	1 SERVICE SINK	
		ing fixtui L actual During Pe	res Pf Empl(Eriodi	ROVIDED DYEES:		W.C.	LAV.	SHOWERS 0	DRINKING FOUNTAIN	OTHER 1 SERVICE	
PERIODS) SINK											
403.2 WHEF EXCE EMPL	C 2022 SEPARATE F RE PLUMBIN PTION 3: IN S OYEE USE A BE REQUIRE	G FIXTURE STRUCTUF RE PROVI	ES ARE RES OF IDED IN	R TENANT	SPACES	WHERE	REQUIRE	D TOILET FA , SEPARATE	CILITES FO	R ONLY	

411.1 APPROVAL:

EMERGENCY SHOWERS AND EYEWASH STATIONS SHALL CONFORM TO ISEA Z358.1.

411.2 WASTE CONNECTION. WASTE CONNECTIONS SHALL NOT BE REQUIRED FOR EMERGENCY SHOWERS AND EYEWASH STATIONS.

NYCBC 2022

PLUMBING FIXTURES SHALL BE PROVIDED FOR THE TYPE OF OCCUPANCY AND IN THE MINIMUM NUMBER SHOWN ON TABLE 403.1. TYPES OF OCCUPANCIES NOT SHOWN IN TABLE 403.1 SHALL BE CONSIDERED INDIVIDUALLY BY THE COMMISSIONER

1004.1.3.1 MODIFICATIONS:

403.1 MINIMUM NUMBER OF FIXTURES:

WHERE THE ACTUAL NUMBER OF OCCUPANTS OF ANY SPACE WILL BE SIGNIFICANTLY LOWER LISTED ON TALBE 1004.1.3, THE COMMISSIONER MAY ESTABLISH A LOWER BASIS FOR THE DETERMINATION OF THE NUMBER OF OCCUPANTS.

1004.1.3.2 UNLISTED FUNCTIONS:

WHERE DATA REGARDING THE SQUARE FOOT AREA PER PERSON FOR A FUNCTION IS NOT LISTED IN TABLE 1004.1.3, THE OCCUPANT LOAD SHALL BE ESTABLISHED BY A REGISTERED DESIGN PROFESSIONAL, SUBJECT TO THE APPROVAL FO THE COMMISSIONER.

INSULATION REQUIREMENTS

NYCEC, 2022C TABLE C402.1.3 & TABLE C402.4 CLASSIFIED AS CLIMATE ZONE "4 EXCEPT MARINE" "ALL OTHER":

INSULATION ENTIRELY ABOVE ROOF DECK:

WALLS, METAL FRAMED - ABOVE GRADE:

WALLS, BELOW GRADE WALL - BELOW GRADE:

UNHEATED SLABS - SLAB-ON-GRADE FLOORS:

NONSWINGING - OPAQUE DOORS:

OPAQUE SWINGING DOORS:

ENTRANCE DOORS:

ALLOWABLE TRAVEL DISTANCES

SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY, TABLE 1006.2.1

OCCUPANCY		MAXIMUM COMMON PATH OF EGRESS TR WITHOUT SPRINKLER SYSTEM (FEET) OCCUPANT LOAD		RAVEL DISTANCE (FEET)		
	LOAD OF SPACE					
				WITH SPRINKLER SYSTEM (FEET)		
		OL<30	OL>30			
F	49	75	75	¹⁰⁰ a		
S	29	100	75	100 a		
FOR SI: 1 FC	FOR SI: 1 FOOT = 304.8 MM.					

NP = NOT PERMITTED

WITH SECTION 903.3.1.1 OR 903.3.1.2. SEE SECTION 903 FOR OCCUPANCES WHERE AUTOMATIC SPRINKLER SYSTEMS ARE PERMITTED IN ACCORDANCE WITH SECTION 903.3.1.2.

EXIT ACCESS TRAVEL DISTANCE, TABLE 1017.2

	•	
OCCUPANCY WITHOUT SPRINKLER SYSTEM		WITH SPRINKLER SYSTEM
F-1 150		200 b
S-2	200	250 C

FLOOR AREA RATIO CALCULATIONS

GROSS FLOOR AREA:	87,551 SF
LOT AREA:	341,093 SF
FLOOR AREA RATIO:	87,551 / 341,093 = 0.26

EGRESS CAPACITY

1005.3.1 STAIRWAYS. THE CAPACITY, IN INCHES, OF MEANS OF EGRESS STAIR THE OCCUPANT LOAD SERVED BY SUCH STAIRWAYS BY INCH PER OCCUPANT.

1005.3.2 OTHER EGRESS COMPONENTS THE CAPCITY, IN INCHES, OF MEANS OF EGRESS COMPONENETS OTHER THAN STAIRWAYS SHALL BE CALCULATED BY MULTIPYING THE OCCUPANT LOAD SERVED BY SUCH COMPONENT BY A MEANS OF EGRESS CAPACITY FACTOR OF 0.2 INCH PER OCCUPAN

SINGLE LEAF DOOR TYPICAL UNLESS NOTED OTHER

EGRESS CAPACITY 3'-0" DOOR = 32" BETWEEN FACE OF DOOR AND THE S

DOUBLE LEAF DOOR TYPICAL UNLESS NOTED OTHER
EGRESS CAPACITY 6'-0" DOOR = 68" BETWEEN FACE OF DOOR AND THE S

GROSS FLOOR AREA

FIRST FLOOR AREA	=	(350'-8") X (218'-7") + (132'-3") X (44'-7
SECOND FLOOR AREA	=	(132'-3") X (44'-7")
TOTAL FLOOR AREA	=	83,551.26 SQ. FT. + 5,896.14 SQ. FT.

MINIMUM REQUIRED	PROVIDED
R-33CI	
R-13 + R-8.5 Cl	
R-7.5 CI	R-25.27
R-15 FOR 24" BELOW	
R-4.75	

U-0.77

BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE

RWAYS SHLL BE CALCULATED BY MULTIPLYING A MEANS OF EGRESS CAPACITY FACTOR OF 0.3	
ONENETS OTHER THAN STAIRWAYS SHALL BE	

IT.	
WISE	
ТОР	32" / .2 = 160 PEOPLE
WISE	
STOP	68" / .2 = 340 PEOPLE

3") X (44'-7") + (18'-2") X (55'-4")	= 83,551.26 SQ. FT.
	= 5,896.14 SQ. FT.

= 89,447.40

BUILDING DEPARTMENT NOTES

1. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE NEW YORK CITY BUILDING CODE 2022

2. ALL REFERENCES TO THE BUILDING CODE AND BUILDING DEPARTMENT SHALL BE CONSTRUED TO MEAN THE RULES AND REGULATIONS OF THE BUILDING DEPARTMENT FOR THE CITY OF NEW YORK.

3. THE CONTRACTOR SHALL TAKE ALL THE NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE PUBLIC AND SURROUNDING PROPERTY PER CHAPTER 33.

4. THE SAFETY OF PERSONS EMPLOYED IN CONSTRUCTION OPERATIONS. THIS INCLUDES BUT IS NOT LIMITED TO THE PROVISIONS FOR SAFETY BARRICADES AT ALL OPENINGS, EXISTING, NEW, OR TEMPORARY.

5. BUILDING DEPARTMENT AND PAY ALL FEES REQUIRED BY CITY AGENCIES.

6. ALL MATERIALS, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION, AND SERVICE EQUIPMENT SHALL HAVE BEEN ACCEPTED FOR USE UNDER THE PRESCRIBED TEST METHODS BY THE NEW YORK CITY BUILDING CODE.

7. PARTITIONS AND FURRING SHALL COMPLY WITH SECTION 2210 AND CHAPTER 25 OF THE NEW YORK CITY BUILDING CODE.

8. INTERIOR FINISHES AND SUSPENDED CEILINGS SHALL COMPLY WITH CHAPTER 8 OF THE NEW YORK CITY BUILDING CODE.

9. ALL PROPOSED WORK SHALL COMPLY WITH APPENDIX F FOR RODENT PROOFING. ALL OPENINGS INCLUDING BUT NOT LIMITED TO ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, AND CONDUITS, SHALL BE PROTECTED BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, METAL PLATES, OR SCREENING DESIGNED TO PREVENT THE PASSAGE OF RODENTS. OPENINGS FOR DOORS, WINDOWS, AND VENTS SHALL BE AS PROVIDED FOR IN SECTIONS F102.3, F102.4, F102.5 RESPECTIVELY.

10. FIRE TREATED WOOD SHALL COMPLY WITH SECTION 2303.2 OF THE NEW YORK CITY BUILDING CODE.

11. MECHANICAL APPLIANCES, EQUIPMENT AND SYSTEMS SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NEW YORK CITY MECHANICAL CODE. ALL INTERIOR ROOMS TO MECHANICALLY VENTILATE PER THE NEW YORK CITY MECHANICAL CODE.

12. LIGHTING AND POWER INSTALLATION SHALL CONFORM TO THE NEW YORK CITY ELECTRICAL CODE AND ANY PERTINENT REGULATIONS OF THE NEW YORK CITY DEPARTMENT OF WATER SUPPLY, ENVIRONMENTAL PROTECTION, GAS, AND ELECTRICAL SUPPLY.

13. FIRE DIVISIONS SHALL BE CONTINUOUS THOROUGH CONCEALED SPACES IN FLOOR AND ROOF CONSTRUCTION PER CHAPTER 7. OPENINGS IN AND PENETRATIONS THROUGH FIRE SEPARATIONS/DIVISIONS SHALL COMPLY WITH SECTION 712.

14. OPENING PROTECTIVES INCLUDING FRAMES, CLOSURES, AND HARDWARE SHALL COMPLY WITH SECTION 715. ALL OPENINGS PROTECTIVES SHALL BE LABELED BY AN APPROVED TESTING AGENCY.

_____C_____ `___

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POSITIVE VALVE

HALL

A101

98' - 8"

-

REACTOR HALL

A103

RATINGS.

350' - 8"

143' - 11"

16. DUCTS, PIPES AND CONDUITS PASSING THORUGH RATED CONSTRUCTION SHALL HAVE SPACES NOT EXCEEDING 1/2" PACKED WITH MINERAL WOOL AND SHALL BE CLOSED OFF WITH CLOSE FITTING METAL ESCHUTHEONS OR PLATES. THE AGGREGATE AREA OF SUCH PENETRATIONS IS NOT TO EXCEED 25 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL OR FLOOR AREA UNLESS PROVIDED WITH AN OPENING PROTECTIONDEVICE.

17. PER SECTION 1205.3 AVERAGE ILLUMINATION OF AT LEAST 10 FOOT CANDLES MEASURED 30" ABOVE THE FLOOR SHALL BE MAINTAINED CONTINUOUSLY DURING OCCUPANCY IN ALL ROOMS AND SPACES. PER 1006.1 MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 2 FOOT-CANDLES AT THE FLOOR LEVEL. EXIT LIGHTING SHALL BE FROM CIRCUITS THAT ARE SEPARATE FROM OTHER CIRCUITS TAKEN AHEAD OF THE MAIN SWITCH.

18. EXIT DOORS SHALL BE READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES FROM THE SIDE WHICH EGRESS IS MADE.

19. ALL PROPOSED WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF ICC A117.1 AND CHAPTER 11 OF THE NEW YORK CITY BUILDING CODE FOR ACCESSIBILITY.

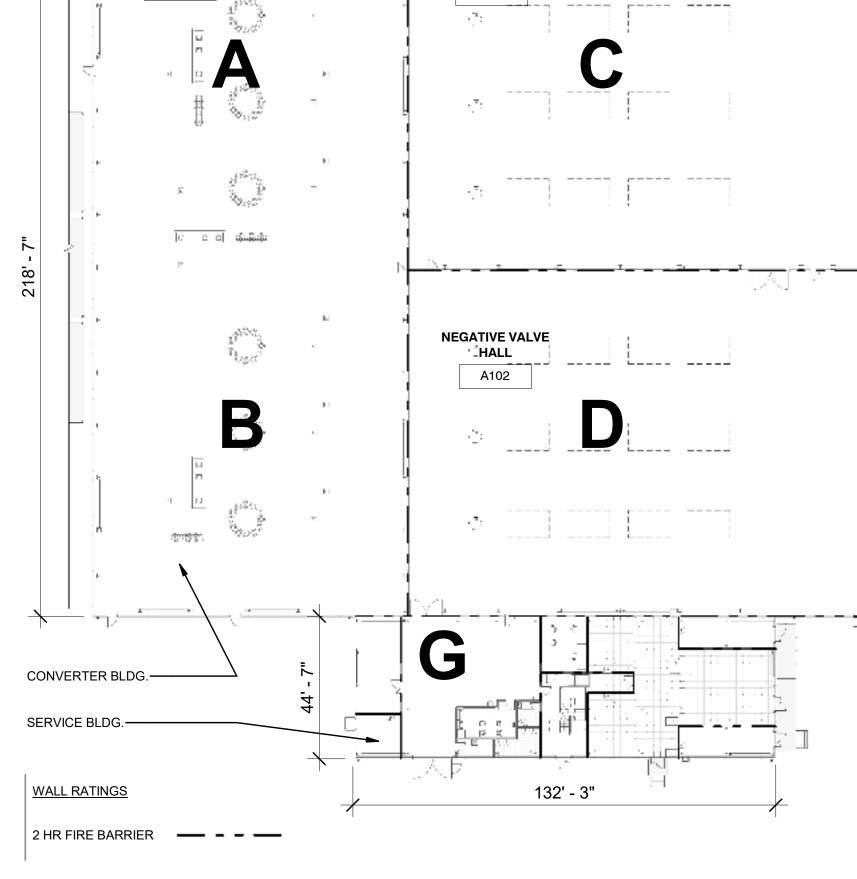
20. ALL PROPOSED WORK SHALL COMPLY WITH APPLICABLE PROVISIONS OF NEW YORK CITY ENERGY CONSERVATION CODE. SEE EN-100 FOR EXTERIOR ENVELOPE COMPLIANCE REQUIREMENTS AND EN-101 FOR MECHANICAL AND LIGHTING COMPLIANCE REQUIREMENTS.

21. CONTRACTOR TO COMPLETE ALL SPECIAL AND PROGRESS INSPECTIONS AS WELL AS ENERGY CODE COMPLIANCE INSPECTIONS PER FORMS TR-1 AND TR-8 AND AS LISTED ON THE COVER SHEET. PROGRESS INSPECTION REFERENCE STANDARDS AND CITATIONS SHALL CONFORM TO THE REQUIREMENTS OF 2010 NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE. CHAPTER 5 AS REFLECTED IN THE ENERGY CODE COMPLIANCE CERTIFICATES ON EN-100.00 AND EN-101.00.

22. IN ACCORDANCE WITH ARTICLE 116 OF TITLE 28 AND SECTION 109, CONSTRUCTION SHALL BE SCHEDULED TO ALLOW REQUIRED PROGRESS INSPECTIONS TO TAKE PLACE. ROOFS, CEILINGS, EXTERIOR WALLS, INTERIOR WALLS, FLOORS, FOUNDATIONS, BASEMENTS, AND ANY OTHER CONSTRUCTION SHALL NOT BE COVERED OR ENCLOSED UNTIL REQUIRED PROGRESS INSPECTIONS ARE COMPLETED OR THE PROGRESS INSPECTOR INDICATES THAT SUCH COVERING OR ENCLOSURE MAY PROCEED, AT EACH STAGE OF CONSTRUCTION. AS APPLICABLE.

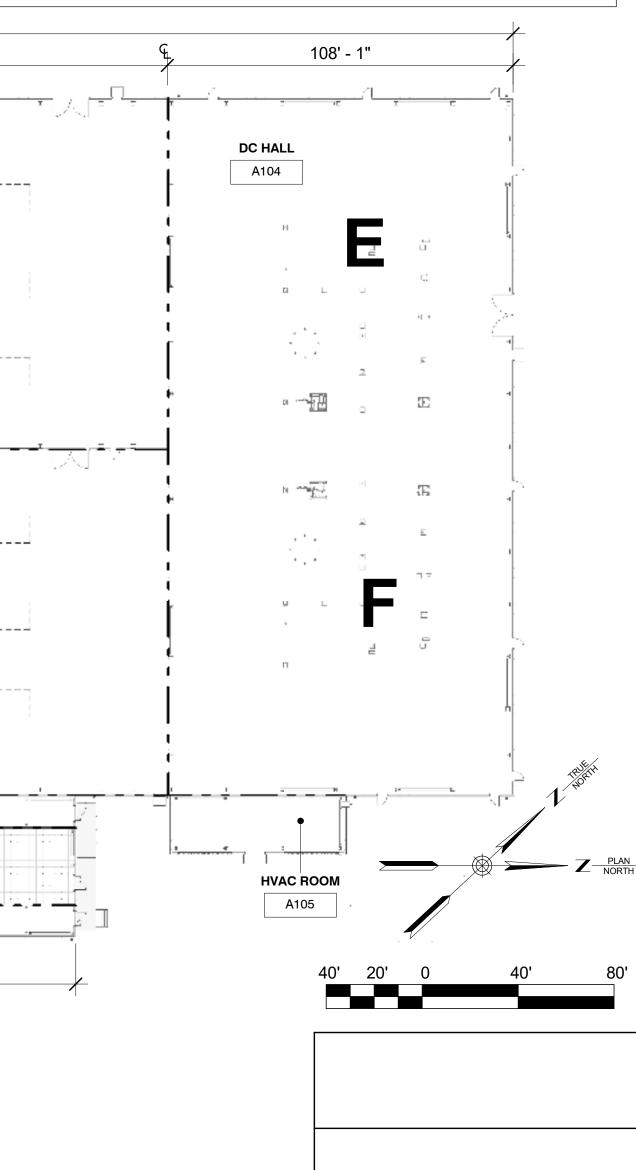
23. IN ACCORDANCE WITH SECTIONS 109.9 AND ECC 104.2.3 WHERE AN INSPECTION OR TEST FAILS, THE CONSTRUCTION SHALL BE CORRECTED AND MUST BE MADE AVAILABLE FOR REINSPECTION AND/OR RETESTING BY THE PROGRESS INSPECTOR UNTIL IT COMPLIES.

24. THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO DOB 24-48 HOURS PRIOR TO COMMENCEMENT OF EARTHWORK AS PER BC 3304.3.1

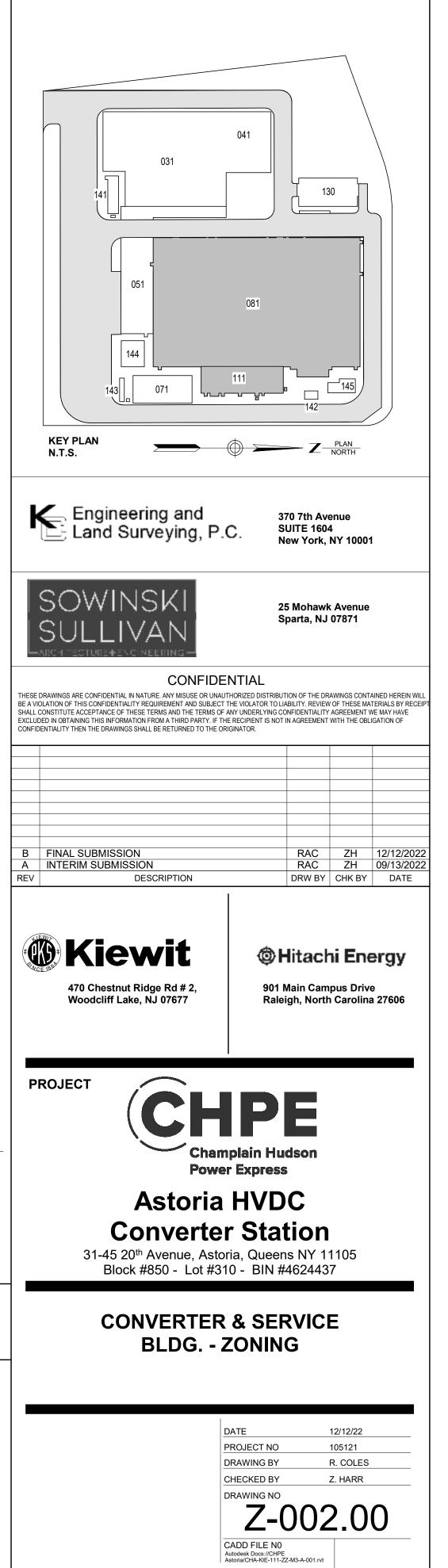


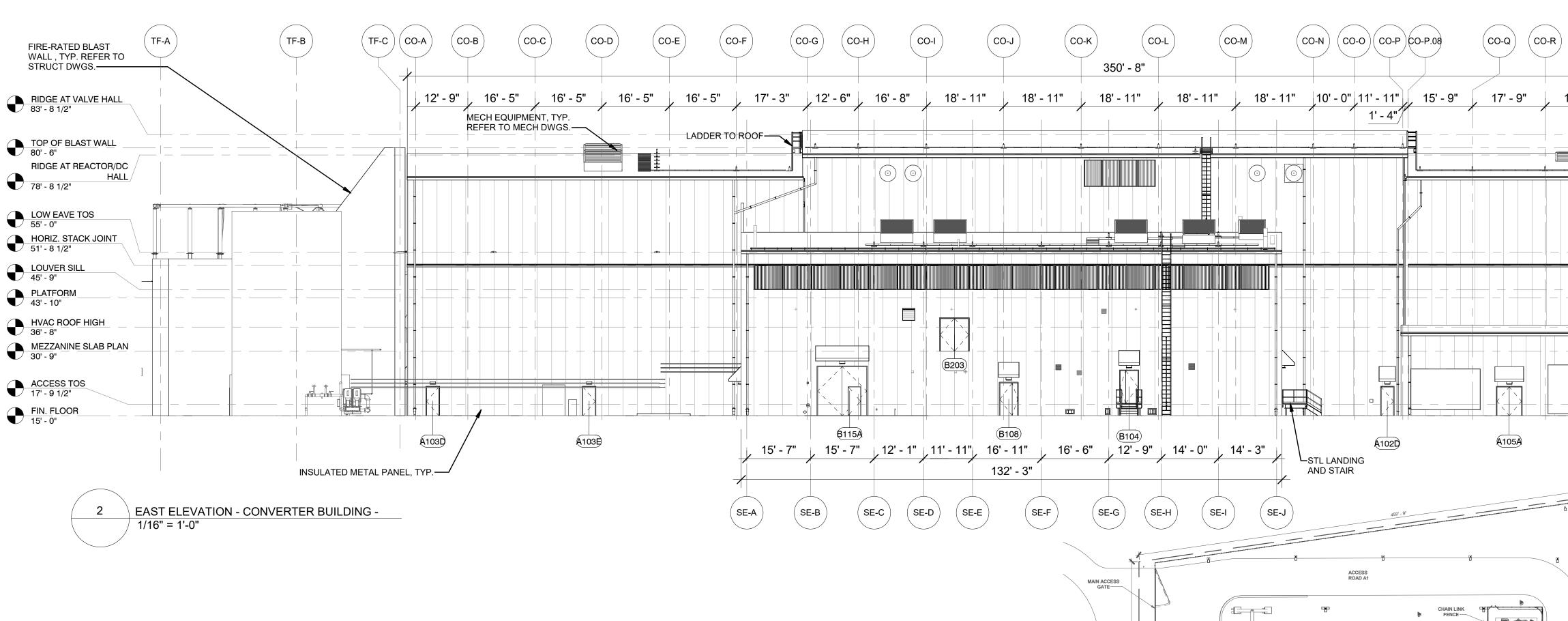
2 OVERALL CONVERTER AND SERVICE BUILDING FLOOR PLAN A-212.00 / 1" = 30'-0"

15. CONDUIT IN FIRE RATED PARTITIONS IS NOT TO EXCEED 3/4" DIAMETER, OPENINGS IN WALLS, PARTITIONS, OR FLOORS FOR PIPE SLEEVES, ELECTRICAL DEVICES, ETC. SHALL BE PACKED, SEALED OR LINED AS REQUIRED IN ORDER TO MAINTAIN THE REQUIRED FIRE AND UL



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42-10 USE PERMITTED AS OF RIGHT

DESCRIPTION	EXISTING USE GROUP	PROPOSED USE GROUP	COMPLIES
ELECTRIC POWER PLANT N/A		18B	YES

PERFORMANCE STANDARD OF M3 DISTRICTS TO BE COMPLIED WITH IN ALL RESPECTS.

THE PROPOSED DEVELOPMENT IS LOCATED WITHIN A WATERFRONT BLOCK AREA.

SEC: 62-30 SPECIAL BULK REGULATIONS

SEC: 62-32 MAXIMUM FLOOR AREA RATIO AND LOT COVERAGE ON WATERFRONT BLOCKS

SEC: 62-326 BUILDINGS IN MANUFACTURING DISTRICTS

IN MANUFACTURING DISTRICT FOR ANY BUILDING ON ZONING LOT ON A WATERFRONT BLOCK, THE MAX. F.A.R. SHALL BE IN ACCORDANCE WITH THE APPLICABLE DISTRIC REGULATIONS.

SEC: 62-41 REQUIREMENTS FOR WATERFRONT PUBLIC ACCESS

SEC: 62-42 REQUIREMENTS FOR VISUAL CORRIDORS

NOTE: SECTIONS 62-41 & 62-42 PROVIDE EXEMPTIONS FOR COMPLIANCE FOR DEVELOPMENTS IN MANUFACTURING DISTRICTS COMPIRSED PREDOMINANTLY OF USES IN GROUPS 16, 17, OR 18.

43-12 MAX FLOOR AREA RATIO

DISTRICT	MAX. F.A.R.	EXISTING F.A.R.	PROPOSED F.A.R.	COMPLIES
М3	2.0	N/A	0.26	YES

SEC: 62-33 SPECIAL YARD REGULATION ON WATERFRONT BLOCKS

YARD REGULATION FOR ZONING LOTS SHALL BE GOVERNED BY THE PROVISIONS IN THE SECTION. FOR DEVELOPMENTS CONTAINING WD USED OR, IN C8 OR MANUFACTURING DISTRICTS, DEVELOPMENTS COMPRISED PREDOMINANTLY OF USES IN USE GROUPS 16,17, OR 18, OR FOR DEVELOPMENTS ON ZONING LOTS THAT ARE NOT WATERFRONT ZONING LTOS, YARDS SHALL BE PROVIDED IN ACCORDANCE WITH THE APPLICABLE DISTRICT REGULATIONS.

43-20 YARD REGULATIONS

SECTION	YARD	MIN. REQ.	PROPOSED	COMPLIES
43-26	EAST SIDE 0 FT OR 8 FT IF PROVIDED		61 FEET	YES
	WEST SIDE	0 FT OR 8 FT IF PROVIDED	166 FEET	YES
43-26	REAR	20 FT.	250 FEET	YES

SEC: 62-34 HEIGHT & SET BACK REGULATIONS ON WATERFRONT BLOCKS

HEIGHT AND SETBACK REGULATIONS FOR ZONING LOTS WITHIN WATERFRONT BLOCKS SHALL BE GOVERNED BY THE PROVISIONS OF THIS SECTION. HOWEVER, AIRPORTS, HELIPORTS, SEAPLANE BASES AND, IN C8 OR MANUFACTURING DISTRICS, DEVELOPMENTS COMPRISED PREDOMINATNLY OF WD (WATER DEPENDENT) USES OR USES IN USE GROUP 16, 17, OR 18 SHALL BE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION.

43-40 HEIGHT AND SET BACK REGULATIONS

INITIAL SETBACK	MIN.	PROPOSED	COMPLIES
NARROW STREET	20 FEET	N/A PROPOSED BUILDING IS BEYOND THE INITIAL SET BACK	YES
WIDE SIDE	15 FEET	N/A PROPOSED BUILDING IS BEYOND THE INITIAL SET BACK	YES
HEIGHT OF FRONT WALL WITHIN INITIAL SET BACK	60 FEET OR 4 STORIES, WHICHEVER IS LESS	BUILDING IS 69 FEET TO TALLEST POINT, BUT ONLY 2 STORIES TOTAL	YES
SKY EXPOSURE PLANE (HEIGHT ABOVE STREET LINE)	60 FEET	SEE SKY EXPOSURE PLANE DIAGRAM	YES
NARROW STREET	2.7 TO 1	SEE SKY EXPOSURE PLANE DIAGRAM	YES
WIDE STREET	5.6 TO 1	SEE SKY EXPOSURE PLANE DIAGRAM	N/A

43-20 REQURED ACCESSORY OFF-STREET PARKING SPACES FOR MANUFACTURING, COMMERICAL OR COMMUNITY FACILITIES

TYPE OF USE	PARKING SPACES REQUIRED	DISTRICTS	COMPLIES
STORAGE OR MISCELLANEOUS USES. USES IN: B) USE GROUP 17A, 17D, 18B, OR 18C	1 PER 2,000 S.F. OF FLOOR AREA, OR 1 PER 3 EMPLOYEES, WHICHEVER WILL REQUIRE A LESSER NUMBER OF SPACES	M1-1, M1-2, M1-2, M21, M2-2, M3-1	YES - MAX. ACTUAL EMPLOYEE COUNT IS ANTICIPATED TO BE 6 EMPLOYEES, 3 SHIFTS PER DAY. DURING PLANNED OUTAGES, A MAX. OF 26 EMPLOYEES IS EXPECTED. (20) PARKING SPOTS ARE PROPOSED. BASED ON THIS TABLE, ONLY 9 PARKING SPOTS ARE REQUIRED.

44-231 EXCEPTIONS TO APPLICATION OF WAIVER PROVISIONS

M1, M2, M3 IN ALL DISRICTS, AS INDICATED, THE WAIVER PROVISIONS OF SECTION 44-23 SHALL NOT APPLY TO THE FOLLOWING TYPES OF USES:

PÁRKING REQUIREMENT CATEGORY G IN USE GROUP 16.

2.7 FEET VERTICAL **DISTANCE TO 1 FOOT** HORIZONTAL DISTANCE SLOPE

HEIGHT ABOVE STREET LINE

> SKY EXPOSURE 4 1" = 60'-0"

(B) STORAGE OR MISCELLANEOUS USES IN USE GROUP 17A, 17C, 17D, 18B, OR 18C, OR IN

