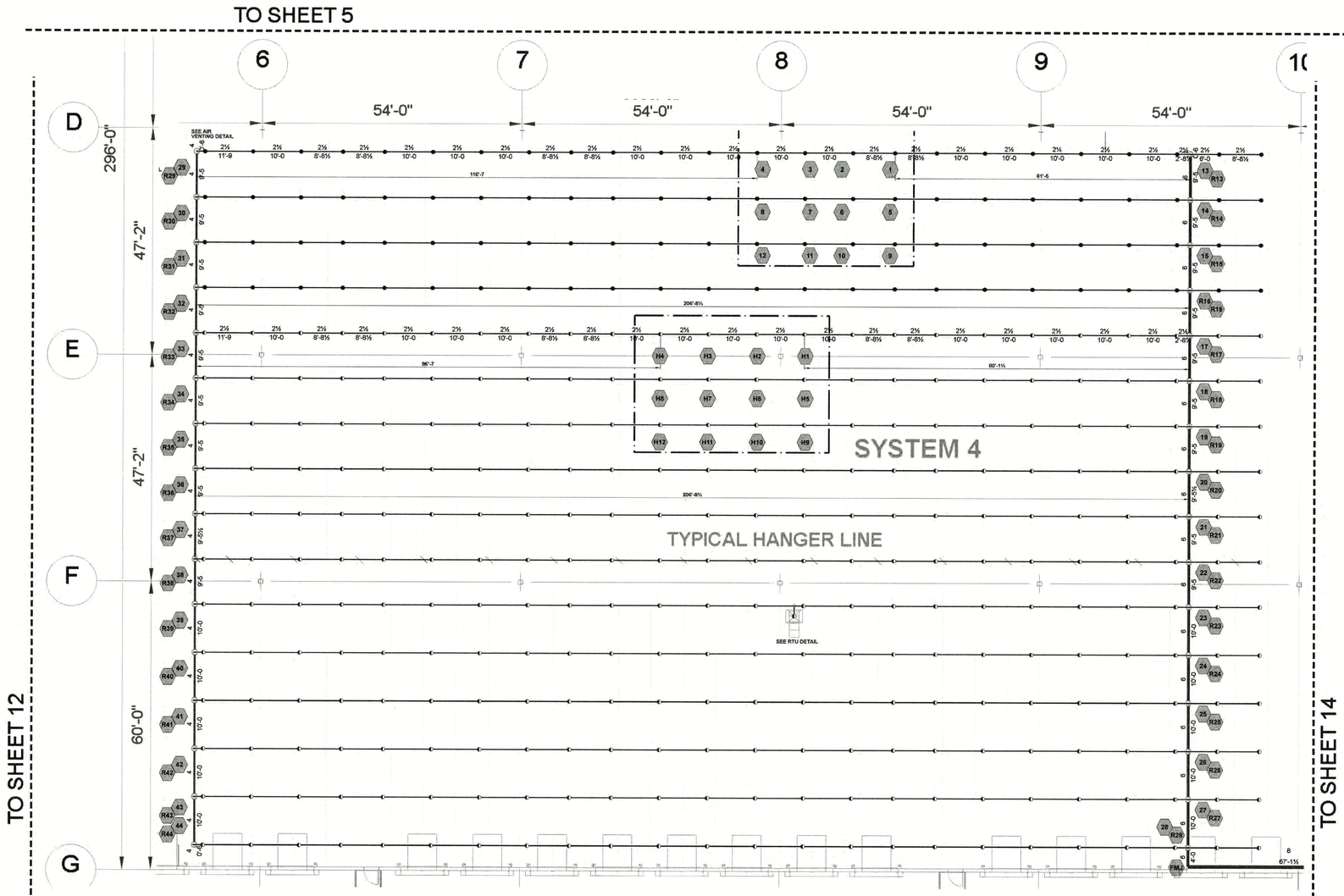


SYSTEM 4 FP PLAN

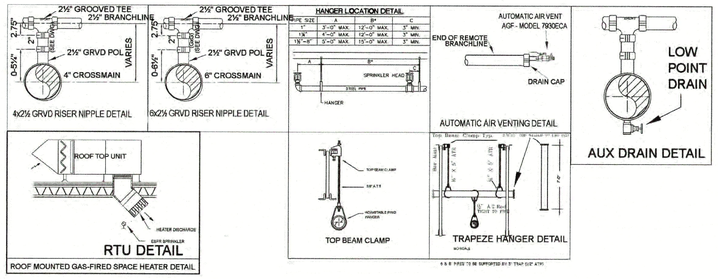
3/32 =1'-0

HP: 45'-6
LP: 42'-2½

N

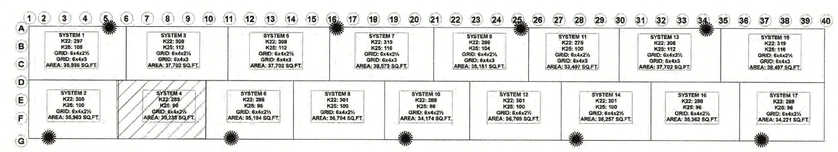
NOTE:

2½" BRANCH LINES AT 0'8" BELOW TOP OF STEEL U.N.O.
4" MAINS AT 1'-7½" BELOW TOP OF STEEL U.N.O.
6" MAINS AT 1'-8½" BELOW TOP OF STEEL U.N.O.
8" MAINS AT 1'-8½" BELOW TOP OF STEEL U.N.O.



NOTE:

GARAGE DOORS ARE VERTICAL LIFT AND DO NOT REQUIRE SPRINKLER



KEY PLAN

NO SCALE

N

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

Location	BLDG B ALT K25 SYSTEM 4
No. of ESFR Sprinklers	12
Basis Of Design	
1. END HEAD PRESSURE	45 PSI
2. SPRINKLER K-FACTOR	25.2
System Demand	
1. GPM DISCHARGE	2140.41 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	118.661 PSI
Building Information	
1. COMMODITY	CLASS 1-4 GROUP A
2. MAXIMUM STORAGE	40 FT

4

COMMODITY:

CLASS 1-4 COMMODITIES AND RACK STORAGE UP TO 40 FT OF GROUP (A) CARTONED UNEXPANDED PLASTICS.

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

Location	BLDG B ALT K22 SYSTEM 4
No. of ESFR Sprinklers	12
Basis Of Design	
1. END HEAD PRESSURE	40 PSI
2. SPRINKLER K-FACTOR	22.4
System Demand	
1. GPM DISCHARGE	1806.74 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	95.861 PSI
Building Information	
1. COMMODITY	CLASS 1-4 GROUP A
2. MAXIMUM STORAGE	40 FT

4

COMMODITY:

CLASS 1-4 COMMODITIES AND RACK STORAGE UP TO 40 FT OF GROUP (A) CARTONED UNEXPANDED PLASTICS.

SEISMIC DESIGN CATEGORY 'B'
SEISMIC BRACING NOT REQUIRED

USE GROUP:	S-1, B
CONSTRUCTION TYPE:	2B
AREA OF WORK:	300,943 SQ.FT.

PROJECT NAME:
LINCOLN EQUITIES

PROJECT LOCATION:
BREWSTER, NY

JOSEPH R. FOWLER IV,
PROFESSIONAL ENGINEER
NY PE LIC.# 087280

SIGNATURE:
DATE SIGNED:

STATE OF NEW YORK · JOSEPH R. FOWLER IV · LICENSED PROFESSIONAL ENGINEER

SCALE 3/32"=1'-0"

STANDARD DRAWING SYMBOLS

2" FP	DENOTES CENTERLINE OF PIPE ABOVE FINISH FLOOR.
2" FB	DENOTES CENTERLINE OF PIPE BELOW TOP OF STEEL.
	DENOTES CENTERLINE OF PIPE BELOW BOTTOM OF JOIST
	DENOTES CENTERLINE OF PIPE BELOW BOTTOM OF BEAM.
	DENOTES CENTERLINE OF PIPE BEHIND THE CEILING
	DENOTES HANGER
	DENOTES HANGER ROD LENGTH
	DENOTES CEILING HEIGHT
	HYDRAULIC CALC. REF. POINT
	GROOVE COUPLING
	GROOVE CHECK VA.
FHC	FIRE HOSE VALVE CABINET
	HYDRAULIC DATA STICKER
	FIRE HOSE VALVE
	FIRE HYDRANT
	ELECTRIC BELL
	RISER
	FLOW SWITCH
	FIRE DEPT. CONN.
	AUXILIARY DRAIN
	PRESSURE GAUGE

TYPICAL HANGER ASSEMBLIES BY NUMBER

01	TOP BEAM CLAMP (TBC)	08A	SAMMY SWC-20 SIDE CONCRETE
01A	WIDE MOUTH TOP BEAM CLAMP	09	SAMMY GST-20 STRAIGHT WOOD
01B	INVERTED TOP BEAM CLAMP	09A	SAMMY SWG-20 SIDE WOOD
01C	INVERTED WIDE MOUTH TBC	10	
01D	TBC w/CLEVIS RING	10B	SAMMY SWDR-516 SIDE STEEL
01R	TBC w/ 8" RETAINING STRAP	11A	EYE SOCKET
01S	TBC w/ 12" RETAINING STRAP	12	
04	ROD, RING	13A	U-HOOK HANGER
04A	ROD, RING, NUTS & WASHER	14	STRUT NUT, ROD & RING
04C	CLEVIS HANGER w/ROD	15	
06	CONCRETE/HILTI DROP IN ANCHOR	16	Z-PURLIN CLAMP
07	HILTI SHOT & STUD	17	SAMMY DSTR.75 STRAIGHT LIGHT WEIGHT STEEL
08	SAMMY CST-20 STRAIGHT CONCRETE	18	SAMMY SWDR-516 SIDE, HEAVY WEIGHT STEEL

FIRE PROTECTION SPECIFICATIONS

1. DO NOT SCALE DRAWING(S).

2. ALL PIPE AS:GO=GROOVED END TO CENTER GG=GROOVED END TO GROOVED END; INDICATES ACTUAL PIPE "CUT" LENGTHS (U.N.O.)

3. DESIGN, INSTALLATION & MATERIALS TO BE PER NFPA #13, 2013

4. HANGERS AND ATTACHMENTS TO BE UL LISTED AND SPACED PER NFPA #13, 2013

5. ALL NEW PIPING SHALL BE HYDROSTATICALLY TESTED AT 225 PSI FOR 2 HOURS W/ NO VISIBLE SIGN OF LEAKAGE.

7. CONTRACTOR SHALL PROVIDE THE OWNER, INSURANCE COMPANY & THE PROPER CITY OFFICIALS WITH COPIES OF THE MATERIAL AND TEST CERTIFICATES.

8. ALL FLOW AND TAMPER SWITCHED SHALL BE SUPERVISED IN ACCORDANCE WITH NFPA 72. THIS WORK TO BE DONE BY OTHERS AND IS NOT PART OF S. A. COMUNALE CONTRACT.

MATERIAL SPECIFICATIONS

Note:1" Pipe is Sch 40 A53 (uno)	GRID	GRID MAIN	LINE MAIN	LINES
Sch 40 A53 Black				
Sch 10 Thinwall	X	X	X	
Sch 7				
Sch 40 Galvanized				
Sch 10 Galvanized				
Weld-O-Lets Thrd				
Weld-O-Lets Grv				
Weld-O-Lets Buff				
Cast Iron Fittings				
Galvanized Fittings				
Malleable Fgs 150#				
Malleable Fgs 300#				
Cpvc				
Number of Welds				
Cut Length	X	X	X	
Center to Center				

SUPPLY THE FOLLOWING	Yes/No
American Made (Domestic)	NO
Smith-Cooper Fittings	NO
Smith-Cooper Couplings	NO
Firelock Fittings	YES
Firelock Couplings	YES
Standard Vic/Central Fgs	NO
Head Wrenches	YES
Spare Head Cabinet	NO
Top Beam Clamps	YES
Concrete Inserts	NO
Sammy Screws	NO
Pipe/Strut/Angle Iron	NO
Can Heads be any brand?	NO
Fit Fittings	NO
Hangers Cut Length	YES
Hangers Center to Center	NO
FM Approved Material Only	NO

PENDENT SPRINKLERS SHALL BE INSTALLED PER THE SPACING DICTATED BY APPROPRIATE CODES AND THEY SHALL BE ALIGNED WITHIN NORMAL FABRICATION TOLERANCES BUT WILL NOT NECESSARILY BE CENTERED IN CEILING TILES.

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	PER GC REVIEW/REVISED LEAD-INS	JB	6.15.22
2	PER LARGER TANK	JB	10.21.22
3	PER GHD REVIEW	JB	11.17.22
4	PER SCH 10 UPGRADE	JB	8.23.23

SPRINKLER LEGEND

SYMBOL	QTY.	DESCRIPTION	SIN#	THD.	K#	TEMP
●	96	TYCO ESFR-25 BRASS PENDANT	TY9226	1"	25.2	165°
◐	289	RELIABLE P22 ESFR BRASS PENDANTS	R601	1"	22.4	165°
○	-	-	-	-	-	-

385 TOTAL SPRINKLERS THIS DRAWING 6,828 TOTAL SPRINKLERS ON ENTIRE PROJECT

S. A. COMUNALE CO. INC.
FIRE PROTECTION CONTRACTORS
2900 NEWPARK DR BARBERTON, OHIO 44203 330-706-3040 FAX: 330-861-0860
CLEVELAND: 440-684-9325 COLUMBUS: 614-291-7001 CINCINNATI: 513-874-4268
FREMONT: 419-334-3941 PHILADELPHIA, PA: 856-845-4669 YOUNGSTOWN: 330-856-4440
MARION 740-383-6789 WASHINGTON, DC 410-768-1931 READING, PA: 610-670-3960

LINCOLN EQUITIES SOUTHEAST
NY312 & PUGSLEY RD, BREWSTER, NY 10509
BUILDING B SYSTEM 4 FIRE PROTECTION PLAN

DATE:	SCALE:	DRAWN BY:	JOB #:	DWG #:
8.23.23	AS NOTED	JUSTIN BECOGHER	50531092	13 OF 20

DESIGNER / BUILDER
ARCO
DESIGN/BUILD INDUSTRIAL
44 SOUTH BROADWAY, SUITE 1003
WHITE PLAINS, NY 10601
P: 914.821.5535 F: 914.306.6010

ADBI | DESIGN SERVICES

Lincoln Equities Group, LLC

PROJECT TITLE
LINCOLN EQUITIES - NY-312- ALT. BLDG B

NY-312 & PUGSLEY RD, SOUTHEAST, NY 10509

ARCHITECT
ADBI / DESIGN SERVICES LLC
44 SOUTH BROADWAY, SUITE 1003
WHITE PLAINS, NY 10601

CIVIL ENGINEER
LANGAN ENGINEERING
300 KIMBALL DRIVE
PARSIPPANY, NJ 07054

STRUCTURAL ENGINEER
SMITH/ ROBERTS AND ASSOCIATES, INC.
6501 BLUFF RD
INDIANAPOLIS, INDIANA 46217

MECHANICAL ENGINEER
NATIONAL DESIGN/ BUILD SERVICES
11840 BORMAN DRIVE
ST. LOUIS, MO 63146

ELECTRICAL ENGINEER
FXB ENGINEERING
5 CHRISTY DRIVE, SUITE 307
CHADDS FORD, PA 19317

PLUMBING ENGINEER
MCCARTHY ENGINEERING ASSOCIATES, INC.
315 EAST SECOND STREET
BOYERTOWN, PA 19512

FIRE PROTECTION ENGINEER
S A COMUNALE CO. INC.
2900 NEWPARK DRIVE
BARBERTON, OH 44203

SEAL

JOSEPH V. DIGIORGIO | NY: 042948

KEY PLAN

TRUE NORTH PROJECT NORTH

SUBMITTALS

NO.	DATE	DESCRIPTION
0	02.18.2022	ISSUE FOR PERMIT

PROJECT NO.	DRAWN BY
AS286-21 I NY131	JB

SHEET TITLE
BUILDING B SYSTEM 4 FIRE PROTECTION PLAN

SHEET NO.
13 OF 20

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