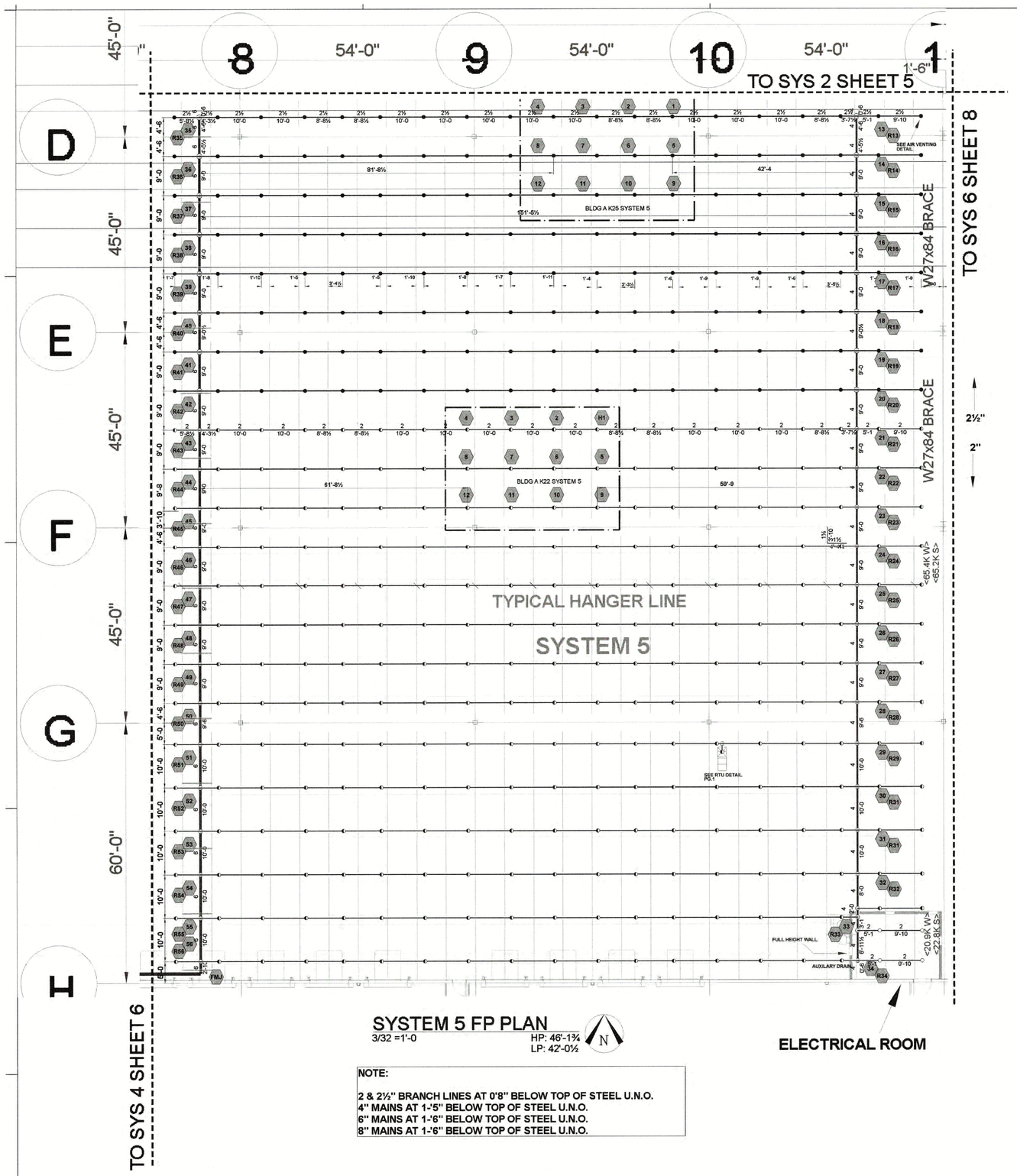


SYSTEM 5 FP PLAN

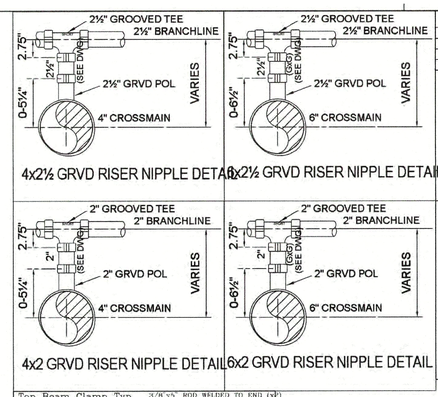
3/32 =1'-0

HP: 46'-1¾
LP: 42'-0½

ELECTRICAL ROOM

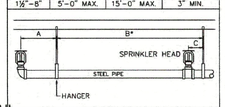
NOTE:

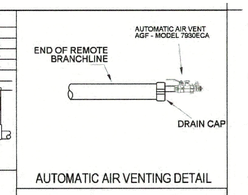
2 & 2½" BRANCH LINES AT 0'8" BELOW TOP OF STEEL U.N.O.
4" MAINS AT 1'-5" BELOW TOP OF STEEL U.N.O.
6" MAINS AT 1'-6" BELOW TOP OF STEEL U.N.O.
8" MAINS AT 1'-6" BELOW TOP OF STEEL U.N.O.



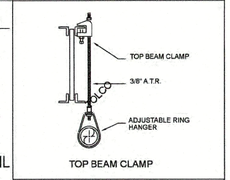
HANGER LOCATION DETAIL

PIPE SIZE	A	B*	C
1"	3'-0" MAX.	12'-0" MAX.	3" MIN.
1¼"	4'-0" MAX.	12'-0" MAX.	3" MIN.
1½"-8"	5'-0" MAX.	15'-0" MAX.	3" MIN.

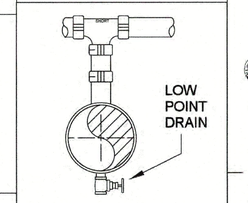




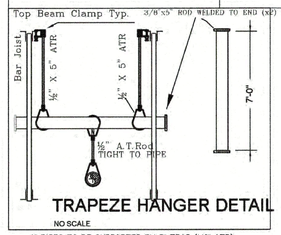
AUTOMATIC AIR VENTING DETAIL



TOP BEAM CLAMP



AUX DRAIN DETAIL



TRAPEZE HANGER DETAIL

NO SCALE

5" PIPES TO BE SUPPORTED BY 3" TRAP (1/2" ATR)

HYDRAULIC - SYSTEM

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

Location	BLDG A K25 SYSTEM 5
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	2141.54 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	117.959 PSI
Building Information	
1. COMMODITY	CLASS 1-4 GROUP A
2. MAXIMUM STORAGE	40 FT

COMMODITY:

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

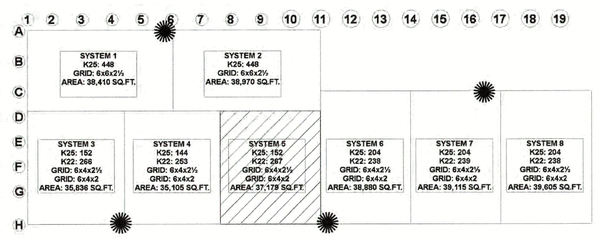
HYDRAULIC - SYSTEM

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

Location	BLDG A K22 SYSTEM 5
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	1818.16 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	121.846 PSI
Building Information	
1. COMMODITY	CLASS 1-4 GROUP A
2. MAXIMUM STORAGE	40 FT

COMMODITY:

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



KEY PLAN

NO SCALE

NOTE:

GARAGE DOORS ARE VERTICAL LIFT AND DO NOT REQUIRE SPRINKLER

SCALE 3/32"=1'-0"

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: 8/23/23

STATE OF NEW YORK · JOSEPH R. FOWLER IV · 087280

STANDARD DRAWING SYMBOLS	
8" FF	DENOTES CENTERLINE OF PIPE ABOVE FINISH FLOOR.
8" TS	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 BELOW THE CEILING.
	DENOTES HANGER
	DENOTES HANGER ROD LENGTH
0'-0"	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 GST-20 STRAIGHT CONCRETE	18	SAMMY SWDR 516 SIDE, HEAVY WEIGHT STEEL

FIRE PROTECTION SPECIFICATIONS

1. DO NOT SCALE DRAWING(S).
2. ALL PIPE AS:GC=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.
6. OWNER SHALL PROVIDE MINIMUM OF 40" F TO
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	GRID MAIN	GRID LINE	MAIN	LINES
Sch 40 A53 (uno)				
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 Fitgs 150#				
Malleable Fitgs 300#				
Cpvc				
Number of Welds				
Cut Lengths		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 Fitgs	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

REVISIONS

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

PENDENT SPRINKLERS SHALL BE INSTALLED PER THE SPACING DICTATED BY APPROPRIATE CODES AND STRUT SHALL BE ALIGNED WITH IN NORMAL FABRICATION TOLERANCES, BUT WILL NOT NECESSARILY BE CENTERED IN GRID NO TILES.

SPRINKLER LEGEND

SYMBOL	QTY.	DESCRIPTION	SIN#	THD.	K=	TEMP
	152	TYCO ESFR-25 BRASS PENDANT	TY9226	1"	25.2	165°
	267	RELIABLE H122 ESFR BRASS PENDANTS	RA1011	1"	22.4	165°
	4	RELIABLE F1FR QR BRASS UPRIGHTS	RA1425	½"	5.6	155°

423 TOTAL SPRINKLERS THIS DRAWING — 3,489 TOTAL SPRINKLERS ON ENTIRE PROJECT

S. A. COMUNALE CO. INC.
FIRE PROTECTION CONTRACTORS
2900 NEWPARK DR BARBERTON, OHIO 44203 330-706-3040 FAX: 330-881-0860
CLEVELAND: 440-884-9325 COLUMBUS: 614-291-7001 CINCINNATI: 513-874-4268
FREMONT: 419-334-3841 PHILADELPHIA, PA: 856-848-4866/OUNGSTOWN: 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

SYSTEM 5 FIRE PROTECTION PLAN

DATE:	SCALE:	DRAWN BY:	JOB #:	DWG #:
8.23.23	AS NOTED	JUSTIN BEOUGHER	50531092	7 OF 9

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-131- BLDG A

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

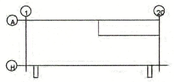
PLUMBING ENGINEER
MCCARTHY ENGINEERING ASSOCIATES, INC.
315 EAST SECOND STREET
BOYERTOWN, PA 19512

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

PROJECT NO.	DRAWN BY
AS286-21 I NY131	KS

SHEET TITLE
SYSTEM 5 FIRE PROTECTION PLAN

SHEET NO.
7 OF 9

PRINTED ARCH E1 30" jb\20222 8-30-13.dwg