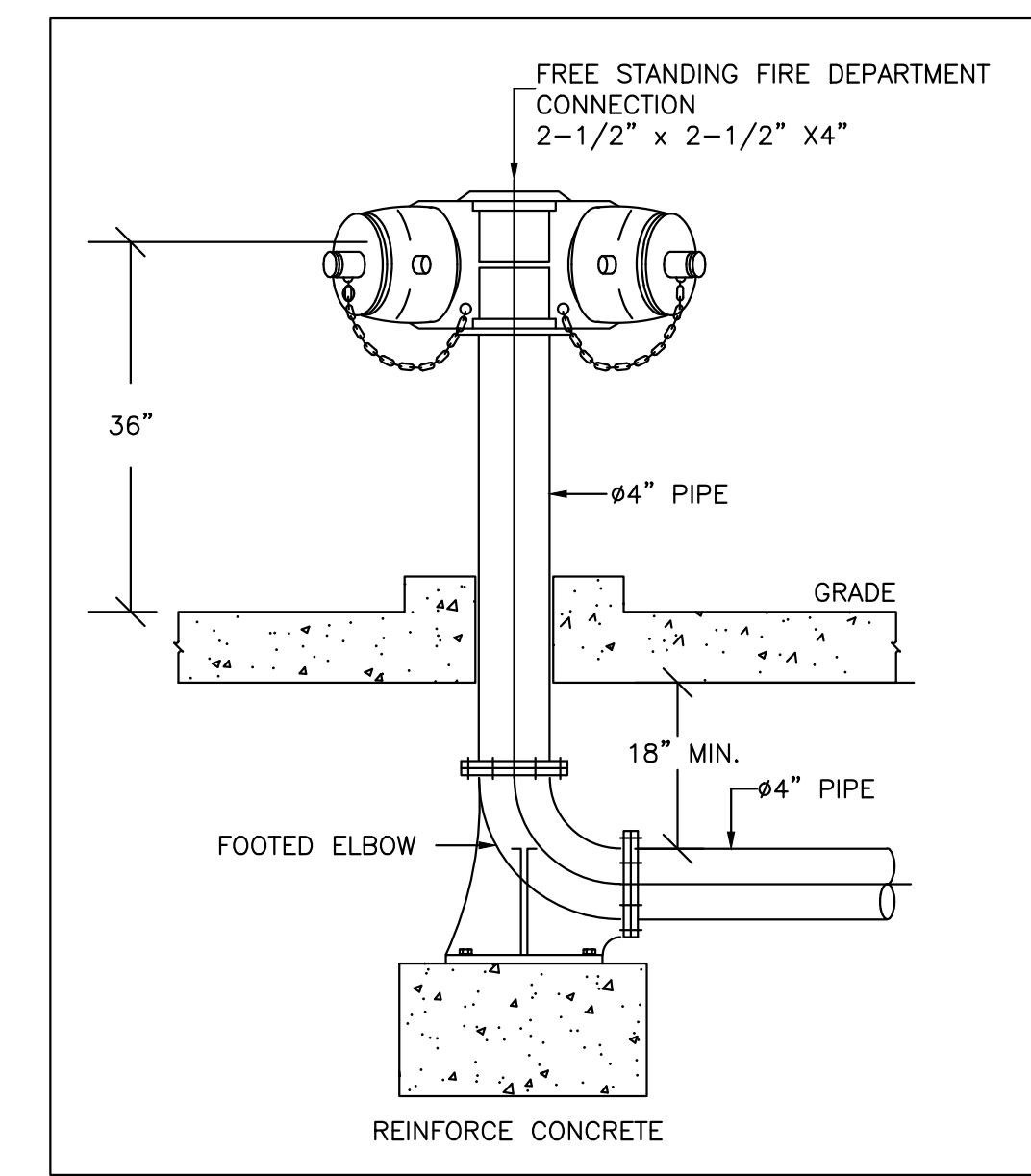




1 SPRINKLER OVERALL PLAN
SCALE: 1/64" = 1'-0"



2 FIRE DEPARTMENT CONNECTION DETAIL
NTS

SPRINKLER LEGEND:

- 1 FIRE DEPARTMENT SPRINKLER CONNECTION 2 1/2"x2 1/2"x4", 36" AFF. MAINTAIN MINIMUM 10' EXPOSURE CLEARANCE BETWEEN FIRE DEPARTMENT CONNECTION & THE BESS CABINET BODY. MAINTAIN MINIMUM 3" CONNECTION CLEARANCE ON FRONT SIDE OF FIRE DEPARTMENT CONNECTION. (PROVIDE SOLID BRONZE MATERIAL FOR FIRE DEPARTMENT CONNECTION). REFER KEY PLAN ON SHEET SP-001 FOR EXACT LOCATION.
- 2 NEW 4" DRY SPRINKLER PIPE RUNNING UNDER GROUND. COORDINATE PIPING LAYOUT W/ SOLAR CONSULTANT & OTHER TRADES.
- 3 COORDINATE SPRINKLER LOCATION & PIPING W/ EQUIPMENT CONTRACTOR.
- 4 COORDINATE WITH CABINET MANUFACTURER AND GC FOR SPRINKLER PIPING SUPPORT FROM THE CABINET. PROVIDE ADD ALTERNATE FOR ANY ADDITIONAL PIPING SUPPORTS IF REQUIRED.
- 5 SPRINKLER PIPING AND SPRINKLER HEAD BY CABINET MANUFACTURER. COORDINATE PIPING CONNECTION WITH CABINET MANUFACTURER.
- 6 2" DRAIN PIPE W/ MANUAL DRAIN CONTROL VALVE INSTALL VERTICALLY (SEE SPRINKLER RISER DIAGRAM FOR DETAILS). COORDINATE LOCATION W/ GENERAL CONTRACTOR/OWNER.

NO.	DATE	ISSUE DESCRIPTION

NY ENGINEERS
NEARBY ENGINEERS
 382 NE 191ST STREET SUITE
 49674, MIAMI, FL 33179
 PH-914.257.3455
 WWW.NY-ENGINEERS.COM

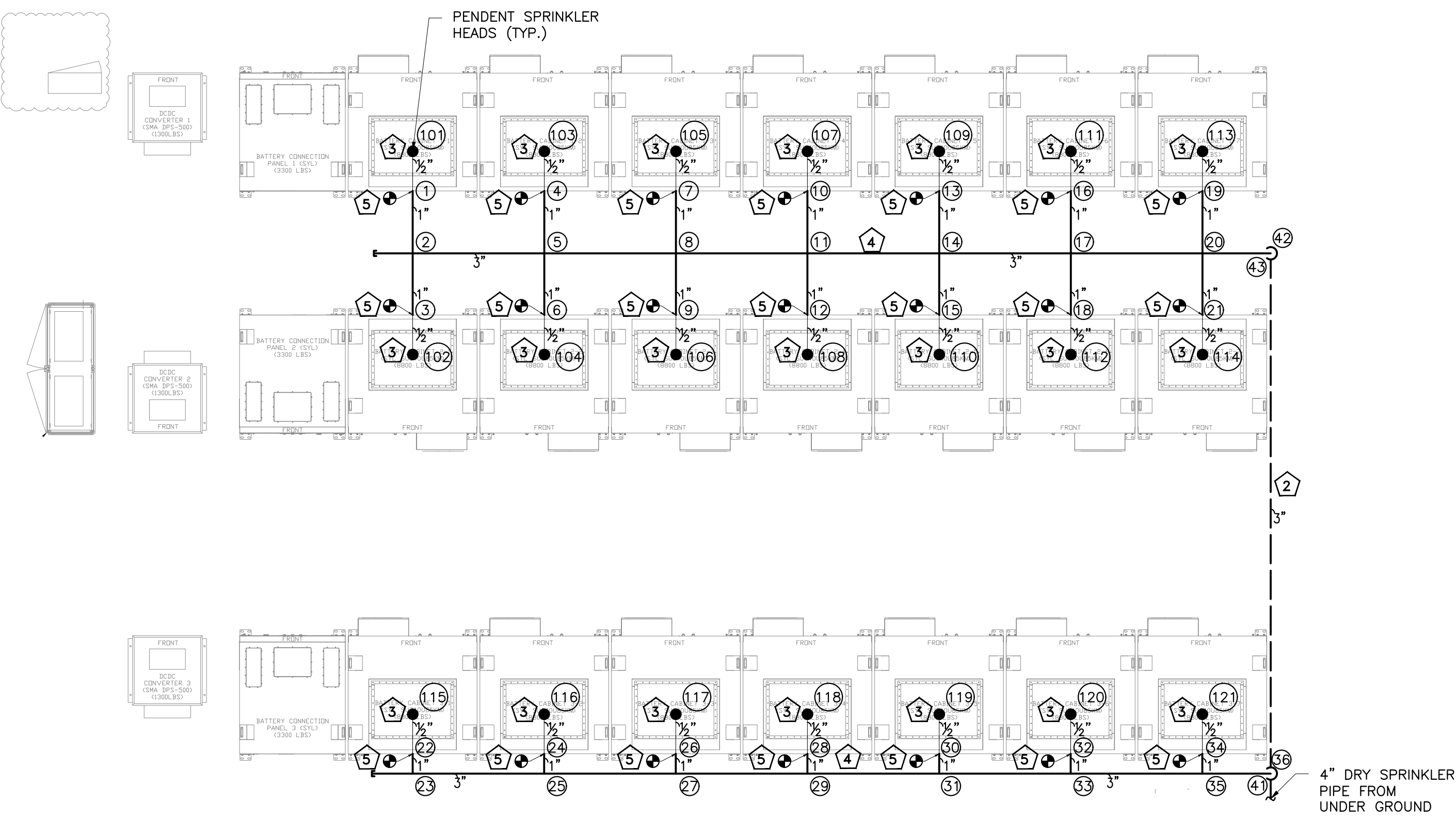
PROJECT NAME

PHYSICAL LOCATION

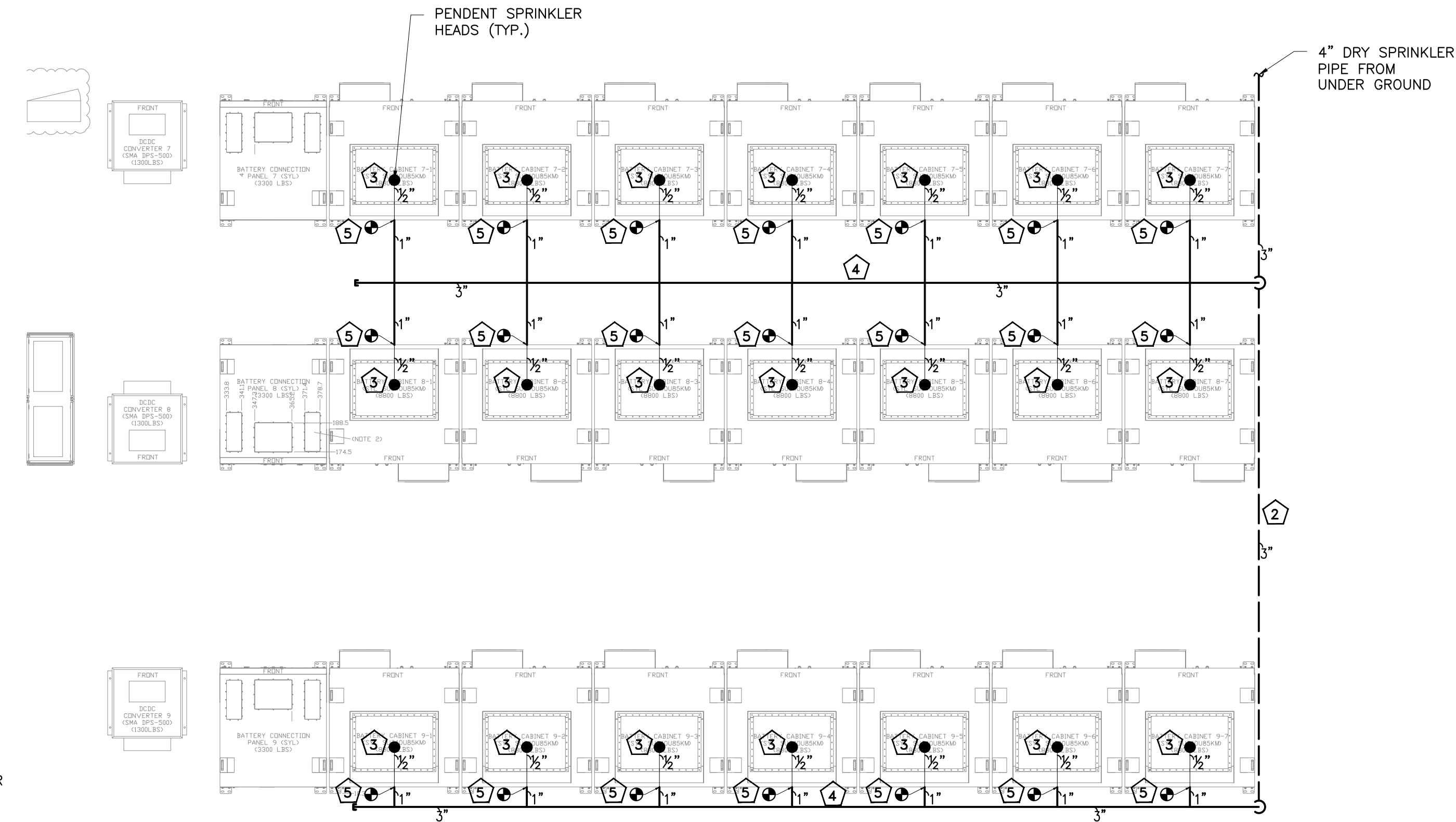
DRAWING TITLE
SPRINKLER OVERALL PLAN

GRAPHIC SCALE

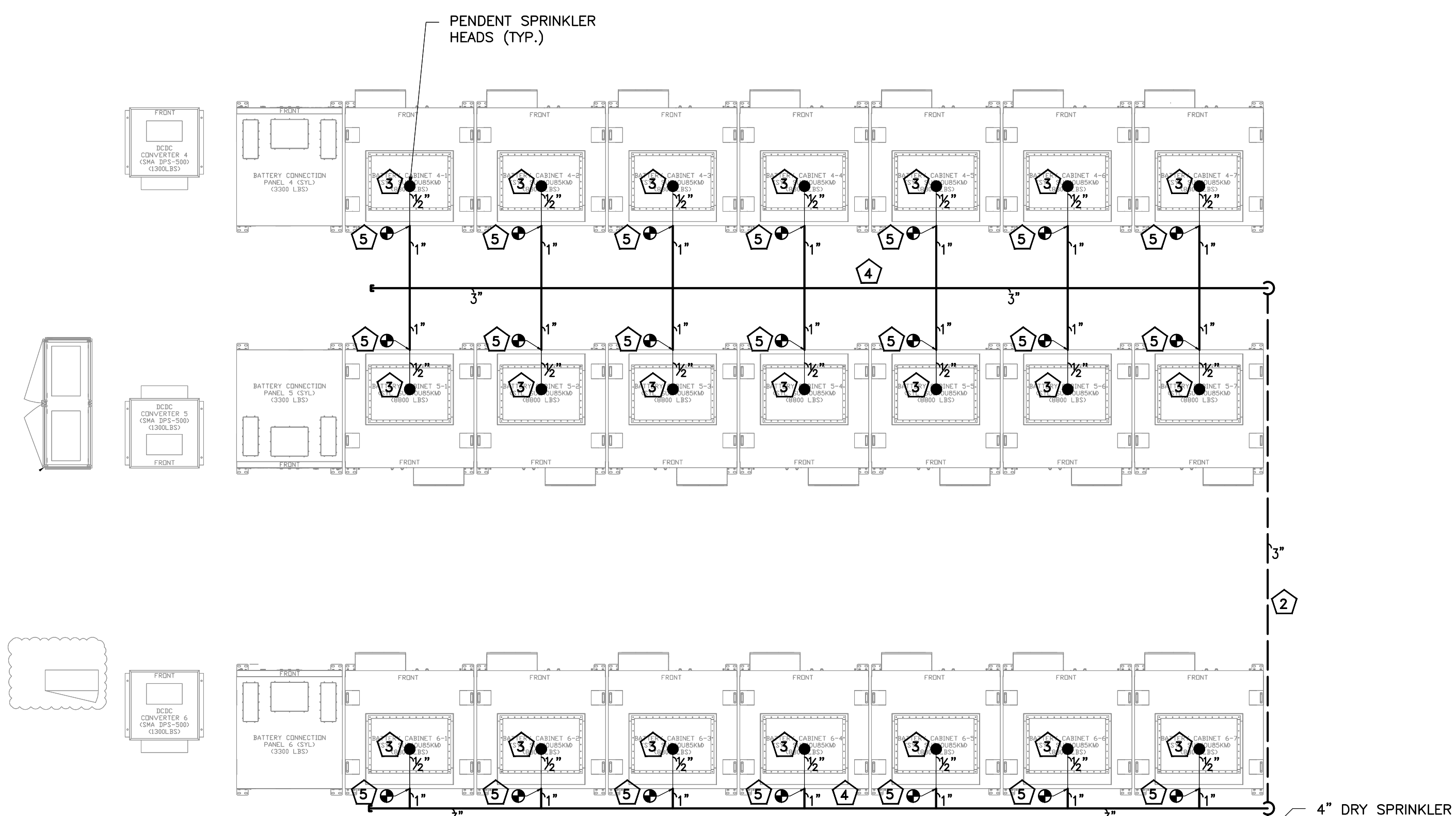
SEAL	PROJECT NO.	-
	SCALE	AS NOTED
	DRAWN BY	NYE
	CHECKED BY	NYE
	DATE	12/14/2023
	SHEET NUMBER	SP-101.00



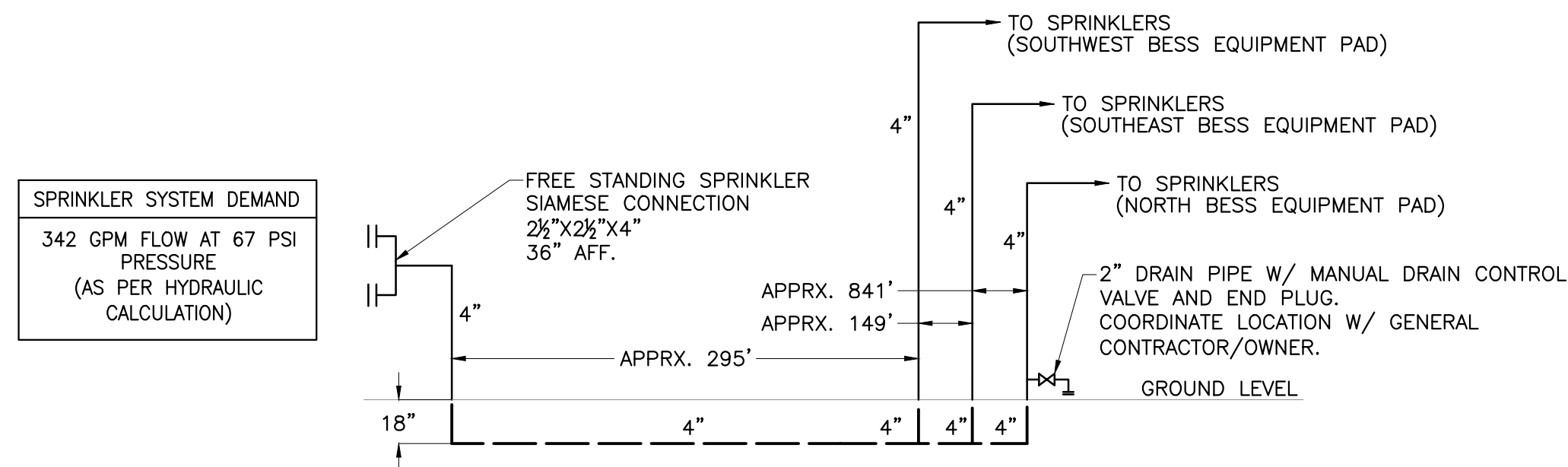
1 NORTH EQUIPMENT - DETAILED SPRINKLER PLAN
SCALE: 1/4" = 1'-0"



2 SOUTHWEST EQUIPMENT - DETAILED SPRINKLER PLAN
SCALE: 1/4" = 1'-0"



3 SOUTHEAST EQUIPMENT - DETAILED SPRINKLER PLAN
SCALE: 1/4" = 1'-0"



4 SPRINKLER RISER DIAGRAM
SCALE: NTS

HAZARD CLASSIFICATION AND DESIGN DENSITY:
AREA : BATTERY CABINET

OCCUPANCY: EXTRA HAZARDS-1
MINIMUM DESIGN DENSITY: 0.30 GPM/SQ. FT.

- SPRINKLER LEGEND:**
- ① FIRE DEPARTMENT SPRINKLER CONNECTION $2\frac{1}{2}$ "x $2\frac{1}{2}$ "x4", 36" AFF. MAINTAIN MINIMUM 10' EXPOSURE CLEARANCE BETWEEN FIRE DEPARTMENT CONNECTION & THE BESS CABINET BODY. MAINTAIN MINIMUM 3" CONNECTION CLEARANCE ON FRONT SIDE OF FIRE DEPARTMENT CONNECTION. (PROVIDE SOLID BRONZE MATERIAL FOR FIRE DEPARTMENT CONNECTION). REFER KEY PLAN ON SHEET SP-001 FOR EXACT LOCATION.
 - ② NEW DRY SPRINKLER PIPE RUNNING BELOW GROUND. COORDINATE PIPING LAYOUT W/ SOLAR CONSULTANT & OTHER TRADES.
 - ③ COORDINATE SPRINKLER LOCATION & PIPING W/ EQUIPMENT CONTRACTOR.
 - ④ COORDINATE WITH CABINET MANUFACTURER AND GC FOR SPRINKLER PIPING SUPPORT FROM THE CABINET. PROVIDE ADD ALTERNATE FOR ANY ADDITIONAL PIPING SUPPORTS IF REQUIRED.
 - ⑤ SPRINKLER PIPING AND SPRINKLER HEAD BY CABINET MANUFACTURER. COORDINATE PIPING CONNECTION WITH CABINET MANUFACTURER.
 - ⑥ 2" DRAIN PIPE W/ MANUAL DRAIN CONTROL VALVE INSTALL VERTICALLY (SEE SPRINKLER RISER DIAGRAM FOR DETAILS). COORDINATE LOCATION W/ GENERAL CONTRACTOR/OWNER.

NO.	DATE	ISSUE DESCRIPTION

NY ENGINEERS
NEARBY ENGINEERS
382 NE 191ST STREET SUITE
49674, MIAMI, FL 33179
PH-914.257.3455
WWW.NY-ENGINEERS.COM

PROJECT NAME

PHYSICAL LOCATION

DRAWING TITLE

**DETAILED SPRINKLER PLAN AND
SPRINKLER RISER DIAGRAM**

GRAPHIC SCALE

SEAL

PROJECT NO.	-
SCALE	AS NOTED
DRAWN BY	NYE
CHECKED BY	NYE
DATE	12/14/2023
SHEET NUMBER	SP-102.00

Fire Sprinkler Reports

Prepared By:

NY ENGINEERS

12/14/2023

General Project Data Report

General Data

Project Title:	Project File Name:
Designed By:	Date:
Code Reference:	Approving Agency:
Client Name:	Phone:
Address:	City, State Zip Code:
Company Name:	Representative:
Company Address:	City And State:
Phone:	
Building Name:	Building Owner:
Contact at Building:	Phone at Building:
Address Of Building:	City, State Zip Code:

Project Data

Description Of Hazard:	Ex. Haz. Gp. 1	Sprinkler System Type:	Dry
Design Area Of Water Application:	1450 ft ²	Maximum Area Per Sprinkler:	50 ft ²
Default Sprinkler K-Factor:	5.60 K	Default Pipe Material:	SCHED 40 WET STEEL
Inside Hose Stream Allowance:	0.00 gpm	Outside Hose Stream Allowance:	0.00 gpm
In Rack Sprinkler Allowance:	0.00 gpm		

Sprinkler Specifications

Make:	TYCO	Model:	TY325
Size:	0.50	Temperature Rating:	155 F

Water Supply Test Data

Source Of Information:		Date Of Test:	
Test Hydrant ID:			
Hydrant Elevation:	0 ft	Static Pressure:	0.00 psi
Test Flow Rate:	0.00 gpm	Test Residual Pressure:	0.00 psi
Calculated System Flow Rate:	341.54 gpm	Calculated Inflow Residual Pressure:	66.78 psi

Calculation Project Data

Calculation Mode:	Demand		
HMD Minimum Residual Pressure:	7.00 psi	Minimum Desired Flow Density:	0.30 gpm/ft ²
Number Of Active Nodes:	63		
Number Of Active Pipes:	62	Number Of Inactive Pipes:	0
Number Of Active Sprinklers:	21	Number Of Inactive Sprinklers:	0

Fire Sprinkler Input Data

Node Input Data

Node No.	Node Description Branch Description	Area Group Branch Dia. (in)	Sprinkler KFactor (K) Branch Len. (ft)	Pressure Estimate (psi) Branch Stnd Fittings	Node Elev (ft) Branch Non- Stnd Fittings (ft)	Non-Sprinkler Flow (gpm) Branch Sprk KFactor (K)
1	No Discharge ----	---- 0.000	N/A 0.0	10.04 ----	9.00 0.0	0.00 0.00
2	No Discharge ----	---- 0.000	N/A 0.0	10.24 ----	9.00 0.0	0.00 0.00
3	No Discharge ----	---- 0.000	N/A 0.0	9.67 ----	9.00 0.0	0.00 0.00
4	No Discharge ----	---- 0.000	N/A 0.0	10.07 ----	9.00 0.0	0.00 0.00
5	No Discharge ----	---- 0.000	N/A 0.0	10.27 ----	9.00 0.0	0.00 0.00
6	No Discharge ----	---- 0.000	N/A 0.0	9.69 ----	9.00 0.0	0.00 0.00
7	No Discharge ----	---- 0.000	N/A 0.0	10.18 ----	9.00 0.0	0.00 0.00
8	No Discharge ----	---- 0.000	N/A 0.0	10.38 ----	9.00 0.0	0.00 0.00
9	No Discharge ----	---- 0.000	N/A 0.0	9.80 ----	9.00 0.0	0.00 0.00
10	No Discharge ----	---- 0.000	N/A 0.0	10.41 ----	9.00 0.0	0.00 0.00
11	No Discharge ----	---- 0.000	N/A 0.0	10.61 ----	9.00 0.0	0.00 0.00
12	No Discharge ----	---- 0.000	N/A 0.0	10.02 ----	9.00 0.0	0.00 0.00
13	No Discharge ----	---- 0.000	N/A 0.0	10.80 ----	9.00 0.0	0.00 0.00
14	No Discharge ----	---- 0.000	N/A 0.0	11.01 ----	9.00 0.0	0.00 0.00
15	No Discharge ----	---- 0.000	N/A 0.0	10.40 ----	9.00 0.0	0.00 0.00
16	No Discharge ----	---- 0.000	N/A 0.0	11.40 ----	9.00 0.0	0.00 0.00
17	No Discharge ----	---- 0.000	N/A 0.0	11.62 ----	9.00 0.0	0.00 0.00
18	No Discharge ----	---- 0.000	N/A 0.0	10.98 ----	9.00 0.0	0.00 0.00

Fire Sprinkler Input Data

Node Input Data (cont'd)

Node No.	Node Description Branch Description	Area Group Branch Dia. (in)	Sprinkler KFactor (K) Branch Len. (ft)	Pressure Estimate (psi) Branch Stnd Fittings	Node Elev (ft) Branch Non- Stnd Fittings (ft)	Non-Sprinkler Flow (gpm) Branch Sprk KFactor (K)
19	No Discharge ----	---- 0.000	N/A 0.0	12.26 ----	9.00 0.0	0.00 0.00
20	No Discharge ----	---- 0.000	N/A 0.0	12.50 ----	9.00 0.0	0.00 0.00
21	No Discharge ----	---- 0.000	N/A 0.0	11.81 ----	9.00 0.0	0.00 0.00
22	No Discharge ----	---- 0.000	N/A 0.0	12.67 ----	9.00 0.0	0.00 0.00
23	No Discharge ----	---- 0.000	N/A 0.0	12.77 ----	9.00 0.0	0.00 0.00
24	No Discharge ----	---- 0.000	N/A 0.0	12.68 ----	9.00 0.0	0.00 0.00
25	No Discharge ----	---- 0.000	N/A 0.0	12.78 ----	9.00 0.0	0.00 0.00
26	No Discharge ----	---- 0.000	N/A 0.0	12.72 ----	9.00 0.0	0.00 0.00
27	No Discharge ----	---- 0.000	N/A 0.0	12.82 ----	9.00 0.0	0.00 0.00
28	No Discharge ----	---- 0.000	N/A 0.0	12.80 ----	9.00 0.0	0.00 0.00
29	No Discharge ----	---- 0.000	N/A 0.0	12.90 ----	9.00 0.0	0.00 0.00
30	No Discharge ----	---- 0.000	N/A 0.0	12.94 ----	9.00 0.0	0.00 0.00
31	No Discharge ----	---- 0.000	N/A 0.0	13.05 ----	9.00 0.0	0.00 0.00
32	No Discharge ----	---- 0.000	N/A 0.0	13.16 ----	9.00 0.0	0.00 0.00
33	No Discharge ----	---- 0.000	N/A 0.0	13.26 ----	9.00 0.0	0.00 0.00
34	No Discharge ----	---- 0.000	N/A 0.0	13.46 ----	9.00 0.0	0.00 0.00
35	No Discharge ----	---- 0.000	N/A 0.0	13.57 ----	9.00 0.0	0.00 0.00
36	No Discharge ----	---- 0.000	N/A 0.0	18.80 ----	-2.00 0.0	0.00 0.00
38	No Discharge ----	---- 0.000	N/A 0.0	67.85 ----	-2.00 0.0	0.00 0.00

Fire Sprinkler Input Data

Node Input Data (cont'd)

Node No.	Node Description Branch Description	Area Group Branch Dia. (in)	Sprinkler KFactor (K) Branch Len. (ft)	Pressure Estimate (psi) Branch Stnd Fittings	Node Elev (ft) Branch Non- Stnd Fittings (ft)	Non-Sprinkler Flow (gpm) Branch Sprk KFactor (K)
39	No Discharge ----	---- 0.000	N/A 0.0	66.41 ----	2.50 0.0	0.00 0.00
40	No Discharge ----	---- 0.000	N/A 0.0	66.78 ----	2.50 0.0	0.00 0.00
41	No Discharge ----	---- 0.000	N/A 0.0	13.93 ----	9.00 0.0	0.00 0.00
42	No Discharge ----	---- 0.000	N/A 0.0	18.47 ----	-2.00 0.0	0.00 0.00
43	No Discharge ----	---- 0.000	N/A 0.0	13.55 ----	9.00 0.0	0.00 0.00
101	Sprinkler ----	---- 0.000	5.60 0.0	7.45 ----	8.00 0.0	0.00 0.00
102	Sprinkler ----	---- 0.000	5.60 0.0	7.17 ----	8.00 0.0	0.00 0.00
103	Sprinkler ----	---- 0.000	5.60 0.0	7.47 ----	8.00 0.0	0.00 0.00
104	Sprinkler ----	---- 0.000	5.60 0.0	7.20 ----	8.00 0.0	0.00 0.00
105	Sprinkler ----	---- 0.000	5.60 0.0	7.55 ----	8.00 0.0	0.00 0.00
106	Sprinkler ----	---- 0.000	5.60 0.0	7.27 ----	8.00 0.0	0.00 0.00
107	Sprinkler ----	---- 0.000	5.60 0.0	7.71 ----	8.00 0.0	0.00 0.00
108	Sprinkler ----	---- 0.000	5.60 0.0	7.43 ----	8.00 0.0	0.00 0.00
109	Sprinkler ----	---- 0.000	5.60 0.0	8.00 ----	8.00 0.0	0.00 0.00
110	Sprinkler ----	---- 0.000	5.60 0.0	7.71 ----	8.00 0.0	0.00 0.00
111	Sprinkler ----	---- 0.000	5.60 0.0	8.44 ----	8.00 0.0	0.00 0.00
112	Sprinkler ----	---- 0.000	5.60 0.0	8.13 ----	8.00 0.0	0.00 0.00
113	Sprinkler ----	---- 0.000	5.60 0.0	9.06 ----	8.00 0.0	0.00 0.00

Fire Sprinkler Input Data

Node Input Data (cont'd)

Node No.	Node Description Branch Description	Area Group Branch Dia. (in)	Sprinkler KFactor (K) Branch Len. (ft)	Pressure Estimate (psi) Branch Stnd Fittings	Node Elev (ft) Branch Non- Stnd Fittings (ft)	Non-Sprinkler Flow (gpm) Branch Sprk KFactor (K)
114	Sprinkler ----	---- 0.000	5.60 0.0	8.73 ----	8.00 0.0	0.00 0.00
115	Sprinkler ----	---- 0.000	5.60 0.0	9.64 ----	8.00 0.0	0.00 0.00
116	Sprinkler ----	---- 0.000	5.60 0.0	9.65 ----	8.00 0.0	0.00 0.00
117	Sprinkler ----	---- 0.000	5.60 0.0	9.36 ----	9.00 0.0	0.00 0.00
118	Sprinkler ----	---- 0.000	5.60 0.0	9.74 ----	8.00 0.0	0.00 0.00
119	Sprinkler ----	---- 0.000	5.60 0.0	9.85 ----	8.00 0.0	0.00 0.00
120	Sprinkler ----	---- 0.000	5.60 0.0	10.01 ----	8.00 0.0	0.00 0.00
121	Sprinkler ----	---- 0.000	5.60 0.0	10.24 ----	8.00 0.0	0.00 0.00

Fire Sprinkler Input Data

Pipe Input Data

Beg. Node	End. Node	Pipe Description	Nominal Diameter (inch)	Type Group	Fitting Data	Nominal Length (feet)	Fitting Length (feet)	Total Length (feet)	CFactor (gpm/inch-psi)
101	1	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
1	2	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
2	3	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
2	5	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
102	3	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
103	4	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
4	5	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
5	6	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
5	8	SCHED 40 WET STEEL	3.000	0	T	5.20	15.00	20.20	120
104	6	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
105	7	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
7	8	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
8	11	SCHED 40 WET STEEL	3.000	0	T	5.20	15.00	20.20	120
8	9	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
106	9	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
107	10	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
10	11	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
11	14	SCHED 40 WET STEEL	3.000	0	T	5.20	15.00	20.20	120
12	11	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
108	12	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
109	13	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
13	14	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
14	17	SCHED 40 WET STEEL	3.000	0	T	5.20	15.00	20.20	120
15	14	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
110	15	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
111	16	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
16	17	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
17	20	SCHED 40 WET STEEL	3.000	0	T	5.20	15.00	20.20	120

Fire Sprinkler Input Data

Pipe Input Data (cont'd)

Beg. Node	End. Node	Pipe Description	Nominal Diameter (inch)	Type Group	Fitting Data	Nominal Length (feet)	Fitting Length (feet)	Total Length (feet)	CFactor (gpm/inch-psi)
18	17	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
112	18	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
113	19	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
19	20	SCHED 40 WET STEEL	1.000	0		2.50	0.00	2.50	120
20	43	SCHED 40 WET STEEL	3.000	0	T	3.00	15.00	18.00	120
21	20	SCHED 40 WET STEEL	1.000	0	T	2.50	5.00	7.50	120
114	21	SCHED 40 WET STEEL	0.500	0	E	2.00	1.00	3.00	120
22	23	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
115	22	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
23	25	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
116	24	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
24	25	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
25	27	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
26	27	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
117	26	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
27	29	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
118	28	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
28	29	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
29	31	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
119	30	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
30	31	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
31	33	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
32	33	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
120	32	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
33	35	SCHED 40 WET STEEL	3.000	0	T	5.30	15.00	20.30	120
121	34	SCHED 40 WET STEEL	0.500	0	E	1.70	1.00	2.70	120
34	35	SCHED 40 WET STEEL	1.000	0		1.00	0.00	1.00	120
35	41	SCHED 40 WET STEEL	3.000	0	T	3.00	15.00	18.00	120
41	36	SCHED 40 WET STEEL	4.000	0	E	10.00	10.00	20.00	120

Fire Sprinkler Input Data

Pipe Input Data (cont'd)

Beg. Node	End. Node	Pipe Description	Nominal Diameter (inch)	Type Group	Fitting Data	Nominal Length (feet)	Fitting Length (feet)	Total Length (feet)	CFactor (gpm/inch-psi)
42	36	SCHED 40 WET STEEL	4.000	0		21.00	0.00	21.00	120
36	38	SCHED 40 WET STEEL	4.000	0	7E	1312.00	70.00	1382.00	120
38	39	SCHED 40 WET STEEL	4.000	0	E	4.50	10.00	14.50	120
39	40	SCHED 40 WET STEEL	4.000	0	E	0.50	10.00	10.50	120
42	43	SCHED 40 WET STEEL	4.000	0		10.00	0.00	10.00	120

Fire Sprinkler Output Data

Overall Node Groupings Output Data

Pipe Segment Beg. Node	End. Node	Pipe Type Group	Pipe Flow Rate (gpm)	Sprinkler Flow At Beg. Node (gpm)	Non-Sprinkler Flow Out (+) (gpm)	In (-) (gpm)	Beg. Node Residual Pressure (psi)	Imbalance Flow At Beg. Node (gpm)
1	101	0	0.00	0.00	0.00	0.00	10.04	
1	2	0	0.00					
2	1	0	0.00	0.00	0.00	0.00	10.24	
2	3	0	0.00					
2	5	0	0.00					
3	2	0	0.00	0.00	0.00	0.00	9.67	
3	102	0	0.00					
4	103	0	0.00	0.00	0.00	0.00	10.07	
4	5	0	0.00					
5	2	0	0.00	0.00	0.00	0.00	10.27	
5	4	0	0.00					
5	6	0	0.00					
5	8	0	0.00					
6	5	0	0.00	0.00	0.00	0.00	9.69	
6	104	0	0.00					
7	105	0	0.00	0.00	0.00	0.00	10.18	
7	8	0	0.00					
8	5	0	0.00	0.00	0.00	0.00	10.38	
8	7	0	0.00					
8	11	0	0.00					
8	9	0	0.00					
9	8	0	0.00	0.00	0.00	0.00	9.80	
9	106	0	0.00					
10	107	0	0.00	0.00	0.00	0.00	10.41	
10	11	0	0.00					
11	8	0	0.00	0.00	0.00	0.00	10.61	
11	10	0	0.00					
11	14	0	0.00					
11	12	0	0.00					
12	11	0	0.00	0.00	0.00	0.00	10.02	
12	108	0	0.00					
13	109	0	0.00	0.00	0.00	0.00	10.80	
13	14	0	0.00					
14	11	0	0.00	0.00	0.00	0.00	11.01	
14	13	0	0.00					
14	17	0	0.00					
14	15	0	0.00					
15	14	0	0.00	0.00	0.00	0.00	10.40	
15	110	0	0.00					
16	111	0	0.00	0.00	0.00	0.00	11.40	
16	17	0	0.00					

Fire Sprinkler Output Data

Overall Node Groupings Output Data (cont'd)

Pipe Segment Beg. Node	End. Node	Pipe Type Group	Pipe Flow Rate (gpm)	Sprinkler Flow At Beg. Node (gpm)	Non-Sprinkler Flow Out (+) (gpm)	In (-) (gpm)	Beg. Node Residual Pressure (psi)	Imbalance Flow At Beg. Node (gpm)
17	14	0	0.00	0.00	0.00	0.00	11.62	
17	16	0	0.00					
17	20	0	0.00					
17	18	0	0.00					
18	17	0	0.00	0.00	0.00	0.00	10.98	
18	112	0	0.00					
19	113	0	0.00	0.00	0.00	0.00	12.26	
19	20	0	0.00					
20	17	0	0.00	0.00	0.00	0.00	12.50	
20	19	0	0.00					
20	43	0	0.00					
20	21	0	0.00					
21	20	0	0.00	0.00	0.00	0.00	11.81	
21	114	0	0.00					
22	23	0	0.00	0.00	0.00	0.00	12.67	
22	115	0	0.00					
23	22	0	0.00	0.00	0.00	0.00	12.77	
23	25	0	0.00					
24	116	0	0.00	0.00	0.00	0.00	12.68	
24	25	0	0.00					
25	23	0	0.00	0.00	0.00	0.00	12.78	
25	24	0	0.00					
25	27	0	0.00					
26	27	0	0.00	0.00	0.00	0.00	12.72	
26	117	0	0.00					
27	25	0	0.00	0.00	0.00	0.00	12.82	
27	26	0	0.00					
27	29	0	0.00					
28	118	0	0.00	0.00	0.00	0.00	12.80	
28	29	0	0.00					
29	27	0	0.00	0.00	0.00	0.00	12.90	
29	28	0	0.00					
29	31	0	0.00					
30	119	0	0.00	0.00	0.00	0.00	12.94	
30	31	0	0.00					
31	29	0	0.00	0.00	0.00	0.00	13.05	
31	30	0	0.00					
31	33	0	0.00					
32	33	0	0.00	0.00	0.00	0.00	13.16	
32	120	0	0.00					

Fire Sprinkler Output Data

Overall Node Groupings Output Data (cont'd)

Pipe Segment Beg. Node	End. Node	Pipe Type Group	Pipe Flow Rate (gpm)	Sprinkler Flow At Beg. Node (gpm)	Non-Sprinkler Flow Out (+) (gpm)	In (-) (gpm)	Beg. Node Residual Pressure (psi)	Imbalance Flow At Beg. Node (gpm)
33	31	0	0.00	0.00	0.00	0.00	13.26	
33	32	0	0.00					
33	35	0	0.00					
34	121	0	0.00	0.00	0.00	0.00	13.46	
34	35	0	0.00					
35	33	0	0.00	0.00	0.00	0.00	13.57	
35	34	0	0.00					
35	41	0	0.00					
36	41	0	0.00	0.00	0.00	0.00	18.80	
36	42	0	0.00					
36	38	0	0.00					
38	36	0	0.00	0.00	0.00	0.00	67.85	
38	39	0	0.00					
39	38	0	0.00	0.00	0.00	0.00	66.41	
39	40	0	0.00					
40	39	0	0.00	0.00	0.00	0.00	66.78	
41	35	0	0.00	0.00	0.00	0.00	13.93	
41	36	0	0.00					
42	36	0	0.00	0.00	0.00	0.00	18.47	
42	43	0	0.00					
43	20	0	0.00	0.00	0.00	0.00	13.55	
43	42	0	0.00					
101	1	0	0.00	15.28	0.00	0.00	7.45	0.00100
102	3	0	0.00	15.00	0.00	0.00	7.17	0.00103
103	4	0	0.00	15.30	0.00	0.00	7.47	0.00100
104	6	0	0.00	15.02	0.00	0.00	7.20	0.00091
105	7	0	0.00	15.39	0.00	0.00	7.55	0.00102
106	9	0	0.00	15.10	0.00	0.00	7.27	0.00093
107	10	0	0.00	15.55	0.00	0.00	7.71	0.00107
108	12	0	0.00	15.27	0.00	0.00	7.43	0.00097
109	13	0	0.00	15.84	0.00	0.00	8.00	0.00116
110	15	0	0.00	15.55	0.00	0.00	7.71	0.00105
111	16	0	0.00	16.27	0.00	0.00	8.44	0.00129
112	18	0	0.00	15.97	0.00	0.00	8.13	0.00118
113	19	0	0.00	16.86	0.00	0.00	9.06	0.00148

Fire Sprinkler Output Data

Overall Node Groupings Output Data (cont'd)

Pipe Segment Beg. Node	End. Node	Pipe Type Group	Pipe Flow Rate (gpm)	Sprinkler Flow At Beg. Node (gpm)	Non-Sprinkler Flow Out (+) (gpm)	In (-) (gpm)	Beg. Node Residual Pressure (psi)	Imbalance Flow At Beg. Node (gpm)
114	21	0	0.00	16.55	0.00	0.00	8.73	0.00135
115	22	0	0.00	17.39	0.00	0.00	9.64	0.00159
116	24	0	0.00	17.40	0.00	0.00	9.65	0.00159
117	26	0	0.00	17.13	0.00	0.00	9.36	0.00163
118	28	0	0.00	17.48	0.00	0.00	9.74	0.00163
119	30	0	0.00	17.58	0.00	0.00	9.85	0.00168
120	32	0	0.00	17.72	0.00	0.00	10.01	0.00175
121	34	0	0.00	17.92	0.00	0.00	10.24	0.00186

Fire Sprinkler Output Data

Overall Pipe Output Data

Beg. End. Node	Nodal KFactor (K)	Elevation (feet)	Spk/Hose Discharge (gpm)	Residual Pressure (psi)	Nom. Dia. Inside Dia. C-Value	q (gpm) Q (gpm) Velocity (fps)	F. L./ft (psi/ft) Fittings Type-Grp	Pipe-Len. Fit-Len. Tot-Len. (ft)	PF-(psi) PE-(psi) PT-(psi)
101	5.60	8.00	15.28	7.45	0.50	0.00	1.00871	2.00	3.026
1	0.00	9.00	0.00	10.04	0.622	15.28	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.14	0	3.00	2.593
1	0.00	9.00	0.00	10.04	1.00	0.00	0.07913	2.50	0.198
2	0.00	9.00	0.00	10.24	1.049	15.28	----	0.00	0.000
	SCHED 40 WET STEEL				120	5.67	0	2.50	0.198
2	0.00	9.00	0.00	10.24	1.00	0.00	0.07645	2.50	0.573
3	0.00	9.00	0.00	9.67	1.049	15.00	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.57	0	7.50	0.573
102	5.60	8.00	15.00	7.17	0.50	0.00	0.97447	2.00	2.923
3	0.00	9.00	0.00	9.67	0.622	15.00	E	1.00	-0.433
	SCHED 40 WET STEEL				120	15.84	0	3.00	2.490
103	5.60	8.00	15.30	7.47	0.50	0.00	1.01145	2.00	3.034
4	0.00	9.00	0.00	10.07	0.622	15.30	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.16	0	3.00	2.601
2	0.00	9.00	0.00	10.24	3.00	0.00	0.00151	5.30	0.031
5	0.00	9.00	0.00	10.27	3.068	30.28	T	15.00	0.000
	SCHED 40 WET STEEL				120	1.31	0	20.30	0.031
4	0.00	9.00	0.00	10.07	1.00	0.00	0.07935	2.50	0.198
5	0.00	9.00	0.00	10.27	1.049	15.30	----	0.00	0.000
	SCHED 40 WET STEEL				120	5.68	0	2.50	0.198
5	0.00	9.00	0.00	10.27	1.00	0.00	0.07665	2.50	0.575
6	0.00	9.00	0.00	9.69	1.049	15.02	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.58	0	7.50	0.575
104	5.60	8.00	15.02	7.20	0.50	0.00	0.97714	2.00	2.931
6	0.00	9.00	0.00	9.69	0.622	15.02	E	1.00	-0.433
	SCHED 40 WET STEEL				120	15.86	0	3.00	2.498
105	5.60	8.00	15.39	7.55	0.50	0.00	1.02128	2.00	3.064
7	0.00	9.00	0.00	10.18	0.622	15.38	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.24	0	3.00	2.631
5	0.00	9.00	0.00	10.27	3.00	0.00	0.00544	5.20	0.110
8	0.00	9.00	0.00	10.38	3.068	60.61	T	15.00	0.000
	SCHED 40 WET STEEL				120	2.63	0	20.20	0.110
7	0.00	9.00	0.00	10.18	1.00	0.00	0.08012	2.50	0.200
8	0.00	9.00	0.00	10.38	1.049	15.38	----	0.00	0.000
	SCHED 40 WET STEEL				120	5.71	0	2.50	0.200
8	0.00	9.00	0.00	10.38	1.00	0.00	0.07740	2.50	0.581
9	0.00	9.00	0.00	9.80	1.049	15.10	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.61	0	7.50	0.581

Fire Sprinkler Output Data

Overall Pipe Output Data (cont'd)

Beg. End. Node	Nodal KFactor (K)	Elevation (feet)	Spk/Hose Discharge (gpm)	Residual Pressure (psi)	Nom. Dia. Inside Dia. C-Value	q (gpm) Q (gpm) Velocity (fps)	F. L./ft (psi/ft) Fittings Type-Grp	Pipe-Len. Fit-Len. Tot-Len. (ft)	PF-(psi) PE-(psi) PT-(psi)
106	5.60	8.00	15.10	7.27	0.50	0.00	0.98665	2.00	2.960
9	0.00	9.00	0.00	9.80	0.622	15.10	E	1.00	-0.433
	SCHED 40 WET STEEL				120	15.94	0	3.00	2.527
107	5.60	8.00	15.55	7.71	0.50	0.00	1.04214	2.00	3.126
10	0.00	9.00	0.00	10.41	0.622	15.55	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.42	0	3.00	2.693
8	0.00	9.00	0.00	10.38	3.00	0.00	0.01156	5.20	0.234
11	0.00	9.00	0.00	10.61	3.068	91.09	T	15.00	0.000
	SCHED 40 WET STEEL				120	3.95	0	20.20	0.234
10	0.00	9.00	0.00	10.41	1.00	0.00	0.08175	2.50	0.204
11	0.00	9.00	0.00	10.61	1.049	15.55	----	0.00	0.000
	SCHED 40 WET STEEL				120	5.77	0	2.50	0.204
12	0.00	9.00	0.00	10.02	1.00	0.00	0.07898	2.50	0.592
11	0.00	9.00	0.00	10.61	1.049	15.27	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.67	0	7.50	0.592
108	5.60	8.00	15.27	7.43	0.50	0.00	1.00684	2.00	3.021
12	0.00	9.00	0.00	10.02	0.622	15.27	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.12	0	3.00	2.588
109	5.60	8.00	15.84	8.00	0.50	0.00	1.07785	2.00	3.234
13	0.00	9.00	0.00	10.80	0.622	15.84	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.72	0	3.00	2.801
11	0.00	9.00	0.00	10.61	3.00	0.00	0.01982	5.20	0.400
14	0.00	9.00	0.00	11.01	3.068	121.91	T	15.00	0.000
	SCHED 40 WET STEEL				120	5.29	0	20.20	0.400
13	0.00	9.00	0.00	10.80	1.00	0.00	0.08456	2.50	0.211
14	0.00	9.00	0.00	11.01	1.049	15.84	----	0.00	0.000
	SCHED 40 WET STEEL				120	5.88	0	2.50	0.211
15	0.00	9.00	0.00	10.40	1.00	0.00	0.08170	2.50	0.613
14	0.00	9.00	0.00	11.01	1.049	15.55	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.77	0	7.50	0.613
110	5.60	8.00	15.55	7.71	0.50	0.00	1.04142	2.00	3.124
15	0.00	9.00	0.00	10.40	0.622	15.55	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.42	0	3.00	2.691
111	5.60	8.00	16.27	8.44	0.50	0.00	1.13228	2.00	3.397
16	0.00	9.00	0.00	11.40	0.622	16.27	E	1.00	-0.433
	SCHED 40 WET STEEL				120	17.18	0	3.00	2.964
14	0.00	9.00	0.00	11.01	3.00	0.00	0.03028	5.20	0.612
17	0.00	9.00	0.00	11.62	3.068	153.30	T	15.00	0.000
	SCHED 40 WET STEEL				120	6.65	0	20.20	0.612

Fire Sprinkler Output Data

Overall Pipe Output Data (cont'd)

Beg. End. Node	Nodal KFactor (K)	Elevation (feet)	Spk/Hose Discharge (gpm)	Residual Pressure (psi)	Nom. Dia. Inside Dia. C-Value	q (gpm) Q (gpm) Velocity (fps)	F. L./ft (psi/ft) Fittings Type-Grp	Pipe-Len. Fit-Len. Tot-Len. (ft)	PF-(psi) PE-(psi) PT-(psi)
16	0.00	9.00	0.00	11.40	1.00	0.00	0.08883	2.50	0.222
17	0.00	9.00	0.00	11.62	1.049	16.27	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.04	0	2.50	0.222
18	0.00	9.00	0.00	10.98	1.00	0.00	0.08583	2.50	0.644
17	0.00	9.00	0.00	11.62	1.049	15.97	T	5.00	0.000
	SCHED 40 WET STEEL				120	5.93	0	7.50	0.644
112	5.60	8.00	15.97	8.13	0.50	0.00	1.09411	2.00	3.282
18	0.00	9.00	0.00	10.98	0.622	15.97	E	1.00	-0.433
	SCHED 40 WET STEEL				120	16.86	0	3.00	2.849
113	5.60	8.00	16.86	9.06	0.50	0.00	1.20950	2.00	3.628
19	0.00	9.00	0.00	12.26	0.622	16.86	E	1.00	-0.433
	SCHED 40 WET STEEL				120	17.80	0	3.00	3.195
17	0.00	9.00	0.00	11.62	3.00	0.00	0.04311	5.20	0.871
20	0.00	9.00	0.00	12.50	3.068	185.53	T	15.00	0.000
	SCHED 40 WET STEEL				120	8.05	0	20.20	0.871
19	0.00	9.00	0.00	12.26	1.00	0.00	0.09488	2.50	0.237
20	0.00	9.00	0.00	12.50	1.049	16.86	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.26	0	2.50	0.237
21	0.00	9.00	0.00	11.81	1.00	0.00	0.09170	2.50	0.688
20	0.00	9.00	0.00	12.50	1.049	16.55	T	5.00	0.000
	SCHED 40 WET STEEL				120	6.14	0	7.50	0.688
114	5.60	8.00	16.55	8.73	0.50	0.00	1.16888	2.00	3.507
21	0.00	9.00	0.00	11.81	0.622	16.55	E	1.00	-0.433
	SCHED 40 WET STEEL				120	17.47	0	3.00	3.074
115	5.60	8.00	17.39	9.64	0.50	0.00	1.28116	1.70	3.459
22	0.00	9.00	0.00	12.67	0.622	17.39	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.36	0	2.70	3.026
22	0.00	9.00	0.00	12.67	1.00	0.00	0.10050	1.00	0.101
23	0.00	9.00	0.00	12.77	1.049	17.39	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.46	0	1.00	0.101
116	5.60	8.00	17.40	9.65	0.50	0.00	1.28217	1.70	3.462
24	0.00	9.00	0.00	12.68	0.622	17.40	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.37	0	2.70	3.029
23	0.00	9.00	0.00	12.77	3.00	0.00	0.00054	5.30	0.011
25	0.00	9.00	0.00	12.78	3.068	17.39	T	15.00	0.000
	SCHED 40 WET STEEL				120	0.75	0	20.30	0.011
24	0.00	9.00	0.00	12.68	1.00	0.00	0.10058	1.00	0.101
25	0.00	9.00	0.00	12.78	1.049	17.40	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.46	0	1.00	0.101

Fire Sprinkler Output Data

Overall Pipe Output Data (cont'd)

Beg. End. Node	Nodal KFactor (K)	Elevation (feet)	Spk/Hose Discharge (gpm)	Residual Pressure (psi)	Nom. Dia. Inside Dia. C-Value	q (gpm) Q (gpm) Velocity (fps)	F. L./ft (psi/ft) Fittings Type-Grp	Pipe-Len. Fit-Len. Tot-Len. (ft)	PF-(psi) PE-(psi) PT-(psi)
117	5.60	9.00	17.13	9.36	0.50	0.00	1.24609	1.70	3.364
26	0.00	9.00	0.00	12.72	0.622	17.13	E	1.00	0.000
	SCHED 40 WET STEEL				120	18.09	0	2.70	3.364
25	0.00	9.00	0.00	12.78	3.00	0.00	0.00195	5.30	0.040
27	0.00	9.00	0.00	12.82	3.068	34.79	T	15.00	0.000
	SCHED 40 WET STEEL				120	1.51	0	20.30	0.040
26	0.00	9.00	0.00	12.72	1.00	0.00	0.09775	1.00	0.098
27	0.00	9.00	0.00	12.82	1.049	17.13	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.36	0	1.00	0.098
118	5.60	8.00	17.48	9.74	0.50	0.00	1.29338	1.70	3.492
28	0.00	9.00	0.00	12.80	0.622	17.48	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.46	0	2.70	3.059
27	0.00	9.00	0.00	12.82	3.00	0.00	0.00409	5.30	0.083
29	0.00	9.00	0.00	12.90	3.068	51.92	T	15.00	0.000
	SCHED 40 WET STEEL				120	2.25	0	20.30	0.083
28	0.00	9.00	0.00	12.80	1.00	0.00	0.10146	1.00	0.101
29	0.00	9.00	0.00	12.90	1.049	17.48	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.49	0	1.00	0.101
119	5.60	8.00	17.58	9.85	0.50	0.00	1.30636	1.70	3.527
30	0.00	9.00	0.00	12.94	0.622	17.57	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.56	0	2.70	3.094
29	0.00	9.00	0.00	12.90	3.00	0.00	0.00699	5.30	0.142
31	0.00	9.00	0.00	13.05	3.068	69.40	T	15.00	0.000
	SCHED 40 WET STEEL				120	3.01	0	20.30	0.142
30	0.00	9.00	0.00	12.94	1.00	0.00	0.10248	1.00	0.102
31	0.00	9.00	0.00	13.05	1.049	17.57	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.52	0	1.00	0.102
120	5.60	8.00	17.72	10.01	0.50	0.00	1.32605	1.70	3.580
32	0.00	9.00	0.00	13.16	0.622	17.72	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.71	0	2.70	3.147
31	0.00	9.00	0.00	13.05	3.00	0.00	0.01061	5.30	0.215
33	0.00	9.00	0.00	13.26	3.068	86.97	T	15.00	0.000
	SCHED 40 WET STEEL				120	3.77	0	20.30	0.215
32	0.00	9.00	0.00	13.16	1.00	0.00	0.10403	1.00	0.104
33	0.00	9.00	0.00	13.26	1.049	17.72	----	0.00	0.000
	SCHED 40 WET STEEL				120	6.58	0	1.00	0.104
121	5.60	8.00	17.92	10.24	0.50	0.00	1.35378	1.70	3.655
34	0.00	9.00	0.00	13.46	0.622	17.92	E	1.00	-0.433
	SCHED 40 WET STEEL				120	18.92	0	2.70	3.222

Fire Sprinkler Output Data

Overall Pipe Output Data (cont'd)

Beg. End. Node	Nodal KFactor (K)	Elevation (feet)	Spk/Hose Discharge (gpm)	Residual Pressure (psi)	Nom. Dia. Inside Dia. C-Value	q (gpm) Q (gpm) Velocity (fps)	F. L./ft (psi/ft) Fittings Type-Grp	Pipe-Len. Fit-Len. Tot-Len. (ft)	PF-(psi) PE-(psi) PT-(psi)
33	0.00	9.00	0.00	13.26	3.00	0.00	0.01495	5.30	0.304
35	0.00	9.00	0.00	13.57	3.068	104.69	T	15.00	0.000
SCHED 40 WET STEEL					120	4.54	0	20.30	0.304
34	0.00	9.00	0.00	13.46	1.00	0.00	0.10620	1.00	0.106
35	0.00	9.00	0.00	13.57	1.049	17.92	----	0.00	0.000
SCHED 40 WET STEEL					120	6.65	0	1.00	0.106
41	0.00	9.00	0.00	13.93	4.00	0.00	0.00533	10.00	0.107
36	0.00	-2.00	0.00	18.80	4.026	122.60	E	10.00	4.763
SCHED 40 WET STEEL					120	3.09	0	20.00	4.870
42	0.00	-2.00	0.00	18.47	4.00	0.00	0.01559	21.00	0.327
36	0.00	-2.00	0.00	18.80	4.026	218.94	----	0.00	0.000
SCHED 40 WET STEEL					120	5.52	0	21.00	0.327
36	0.00	-2.00	0.00	18.80	4.00	0.00	0.03549	1312.00	49.050
38	0.00	-2.00	0.00	67.85	4.026	341.54	7E	70.00	0.000
SCHED 40 WET STEEL					120	8.61	0	1382.00	49.050
38	0.00	-2.00	0.00	67.85	4.00	0.00	0.03549	4.50	0.515
39	0.00	2.50	0.00	66.41	4.026	341.54	E	10.00	-1.949
SCHED 40 WET STEEL					120	8.61	0	14.50	-1.434
39	0.00	2.50	0.00	66.41	4.00	0.00	0.03549	0.50	0.373
40	0.00	2.50	0.00	66.78	4.026	341.54	E	10.00	0.000
SCHED 40 WET STEEL					120	8.61	0	10.50	0.373
35	0.00	9.00	0.00	13.57	3.00	0.00	0.02003	3.00	0.361
41	0.00	9.00	0.00	13.93	3.068	122.60	T	15.00	0.000
SCHED 40 WET STEEL					120	5.32	0	18.00	0.361
42	0.00	-2.00	0.00	18.47	4.00	0.00	0.01559	10.00	0.156
43	0.00	9.00	0.00	13.55	4.026	218.94	----	0.00	4.763
SCHED 40 WET STEEL					120	5.52	0	10.00	4.919
20	0.00	9.00	0.00	12.50	3.00	0.00	0.05856	3.00	1.054
43	0.00	9.00	0.00	13.55	3.068	218.94	T	15.00	0.000
SCHED 40 WET STEEL					120	9.50	0	18.00	1.054

Fire Sprinkler Output Data

Overall Sprinkler Output Data

Flowing Sprinkler Node No.	Area Group Code	Sprinkler KFactor (K)	Sprinkler Elevation (feet)	Residual Pressure (psi)	Flowing Area (ft ²)	Flowing Density (gpm/ft ²)	Sprinkler Discharge (gpm)
101		5.60	8.00	7.45	50.00	0.306	15.28
Sub Totals For Non-Group					50.00	0.306	15.28
102		5.60	8.00	7.17	50.00	0.300	15.00
Sub Totals For Non-Group					50.00	0.300	15.00
103		5.60	8.00	7.47	50.00	0.306	15.30
Sub Totals For Non-Group					50.00	0.306	15.30
104		5.60	8.00	7.20	50.00	0.300	15.02
Sub Totals For Non-Group					50.00	0.300	15.02
105		5.60	8.00	7.55	50.00	0.308	15.39
Sub Totals For Non-Group					50.00	0.308	15.39
106		5.60	8.00	7.27	50.00	0.302	15.10
Sub Totals For Non-Group					50.00	0.302	15.10
107		5.60	8.00	7.71	50.00	0.311	15.55
Sub Totals For Non-Group					50.00	0.311	15.55
108		5.60	8.00	7.43	50.00	0.305	15.27
Sub Totals For Non-Group					50.00	0.305	15.27
109		5.60	8.00	8.00	50.00	0.317	15.84
Sub Totals For Non-Group					50.00	0.317	15.84
110		5.60	8.00	7.71	50.00	0.311	15.55
Sub Totals For Non-Group					50.00	0.311	15.55
111		5.60	8.00	8.44	50.00	0.325	16.27
Sub Totals For Non-Group					50.00	0.325	16.27
112		5.60	8.00	8.13	50.00	0.319	15.97
Sub Totals For Non-Group					50.00	0.319	15.97
113		5.60	8.00	9.06	50.00	0.337	16.86
Sub Totals For Non-Group					50.00	0.337	16.86
114		5.60	8.00	8.73	50.00	0.331	16.55
Sub Totals For Non-Group					50.00	0.331	16.55
115		5.60	8.00	9.64	50.00	0.348	17.39
Sub Totals For Non-Group					50.00	0.348	17.39
116		5.60	8.00	9.65	50.00	0.348	17.40
Sub Totals For Non-Group					50.00	0.348	17.40
117		5.60	9.00	9.36	50.00	0.343	17.13
Sub Totals For Non-Group					50.00	0.343	17.13
118		5.60	8.00	9.74	50.00	0.350	17.48
Sub Totals For Non-Group					50.00	0.350	17.48
119		5.60	8.00	9.85	50.00	0.352	17.58
Sub Totals For Non-Group					50.00	0.352	17.58

Fire Sprinkler Output Data

Overall Sprinkler Output Data (cont'd)

Flowing Sprinkler Node No.	Area Group Code	Sprinkler KFactor (K)	Sprinkler Elevation (feet)	Residual Pressure (psi)	Flowing Area (ft ²)	Flowing Density (gpm/ft ²)	Sprinkler Discharge (gpm)
120		5.60	8.00	10.01	50.00	0.354	17.72
Sub Totals For Non-Group					50.00	0.354	17.72
121		5.60	8.00	10.24	50.00	0.358	17.92
Sub Totals For Non-Group					50.00	0.358	17.92
Totals For All Groups					1050.00	0.325	341.56

Fire Sprinkler Output Summary

Hydraulically Most Demanding Sprinkler Node

HMD Sprinkler Node Number:	102
HMD Actual Residual Pressure:	7.17 psi
HMD Actual GPM:	15.00 gpm

Sprinkler Summary

Sprinkler System Type:	Dry
Specified Area Of Application:	1450.00 ft ²
Adjusted Area Of Application:	1885.00 ft ²
Minimum Desired Density:	0.300 gpm/ft ²
Application Average Density:	0.236 gpm/ft ²
Application Adjusted Density (not required by NFPA 13):	0.181 gpm/ft ²
Application Average Area Per Sprinkler:	69.05 ft ²
Adjusted Area Per Sprinkler (not required by NFPA 13):	89.76 ft ²
Sprinkler Flow:	341.56 gpm
Average Sprinkler Flow:	16.26 gpm

Flow Velocity And Imbalance Summary

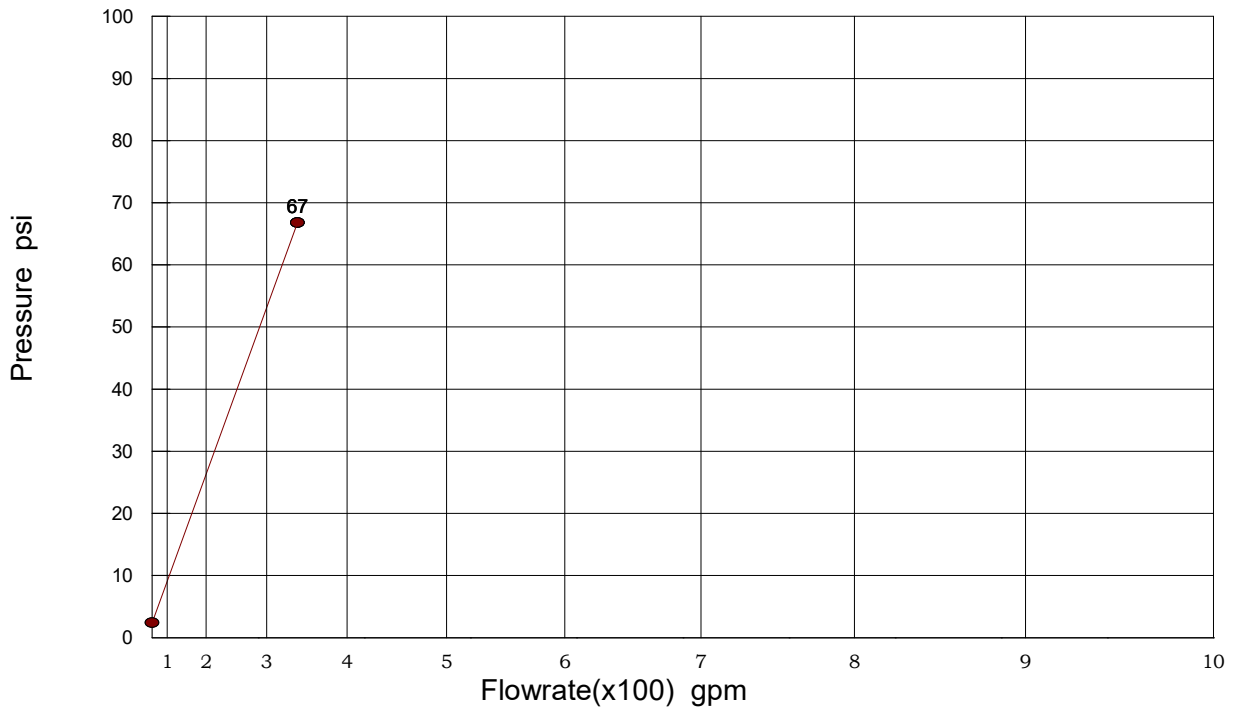
Maximum Flow Velocity (In Pipe 0 - 0)	0.00 ft/sec
Maximum Velocity Pressure (In Pipe 0 - 0)	0.00 psi
Allowable Maximum Nodal Pressure Imbalance:	0.0100 psi
Actual Maximum Nodal Pressure Imbalance:	0.0080 psi
Actual Average Nodal Pressure Imbalance:	0.0007 psi
Actual Maximum Nodal Flow Imbalance:	0.0019 gpm
Actual Average Nodal Flow Imbalance:	0.0004 gpm

Overall Network Summary

Number Of Unique Pipe Sections:	62
Number Of Flowing Sprinklers:	21
Pipe System Water Volume:	927.11 gal
Sprinkler Flow:	341.56 gpm
Non-Sprinkler Flow:	0.00 gpm
Minimum Required Residual Pressure At System Inflow Node:	66.78 psi
Demand Flow At System Inflow Node:	341.54 gpm

Fire Sprinkler Output Data

Hydraulic Supply/Demand Graph



Demand Curve Data

Calculated Residual Pressure: 66.78 psi

Calculated Flow Rate: 341.54 gpm

Pressure Required For First Sprinkler Downstream From Inflow Node To Flow: 2.38 psi