

TOWNSHIP OF BRICK



CONSTRUCTION PERMIT APPLICATION

SEP 28 REC'D

BUILDING

I. IDENTIFICATION

1. Proposed Work at: BRICK BLVD. + CEDAR BRIDGE AVE. Bldg. "A"

2. Owner Name: CEDAR BRIDGE ASSOC Tel. ()

Address: 510 S. BURNETT MILL RD

3. Principal Contractor: Tel. ()

Address: RACE ASS.

Lic. No. or Builder Reg. No. Federal Emp. No. (609)-978-8897

4. Architect or Engineer: Tel. ()

Address: MIKE DATZ

5. Responsible Person in Charge of Work: MIKE DATZ Tel. (201) 920-3645

II. PROPOSED WORK

A. TYPE OF WORK	B. CATEGORIES OF WORK	D. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?																
1. ☐ Minor Work (Single Trade) 2. ☐ Small Job (\$5,000 and no Prior Approvals) <i>Complete only II.B., III and IV.A. and Page 2</i> 3. ☒ New Building 4. ☐ Addition 5. ☐ Alteration 6. ☐ Repair, Replacement 7. ☐ Demolition 8. ☒ Other: <u>FIRE SUPPRESSION</u>	<table border="1"> <thead> <tr> <th>Permit/Category</th> <th>Estimated</th> </tr> </thead> <tbody> <tr> <td>1. ☐ Building/Structural</td> <td>\$</td> </tr> <tr> <td>2. ☐ Plumbing</td> <td></td> </tr> <tr> <td>3. ☐ Electrical</td> <td></td> </tr> <tr> <td>4. ☒ Fire Protection</td> <td></td> </tr> <tr> <td>5. ☐ Other</td> <td></td> </tr> <tr> <td>6. ☐ Other</td> <td></td> </tr> <tr> <td colspan="2">TOTAL COST \$ <u>70,000.00</u></td> </tr> </tbody> </table>	Permit/Category	Estimated	1. ☐ Building/Structural	\$	2. ☐ Plumbing		3. ☐ Electrical		4. ☒ Fire Protection		5. ☐ Other		6. ☐ Other		TOTAL COST \$ <u>70,000.00</u>		1. ☐ Elevators/Dumbwaiters 2. ☐ High-Pressure Boilers 3. ☐ Refrigeration Systems 4. ☐ Pressure Vessels 5. ☐ Hazardous Uses/Places of Assembly 6. ☐ Cross-connections/Backflow Preventors 7. ☐ Sprinklers 8. ☐ Smoke Control Systems in Open Wells
Permit/Category	Estimated																	
1. ☐ Building/Structural	\$																	
2. ☐ Plumbing																		
3. ☐ Electrical																		
4. ☒ Fire Protection																		
5. ☐ Other																		
6. ☐ Other																		
TOTAL COST \$ <u>70,000.00</u>																		
C. DO YOU WANT: 1. ☐ Partial Releases 2. ☐ Prototype Processing																		

III. DESCRIPTION OF BUILDING USE (USE GROUPS)

A. RESIDENTIAL	B. NON-RESIDENTIAL
1. ☐ Hotels (R-1) 2. ☐ Multi-Family (R-2) HMD Reg. No.: 3. ☐ Two Family (R-3b) 4. ☐ One-Family (R-3a)	5. ☐ Theatres with Stage (A-1-A) 6. ☐ Movie Theatres (A-1-B) 7. ☐ Night Clubs (A-2) 8. ☐ Restaurants, Libraries, Museums (A-3) 9. ☐ Religious Assembly (A-4) 10. ☐ Outdoor Assembly (A-5) 11. ☒ Business (B) 12. ☐ Educational (E) 13. ☐ Moderate-Hazard Factory (F-1) 14. ☐ Low-Hazard Factory (F-2) 15. ☐ High-Hazard (H)
If new construction, enter no. of dwelling units: If other than new construction, enter no. of dwelling units: Before Construction: After Construction: Net Gain (or loss):	16. ☐ Institutional Detention Center (I-1) 17. ☐ Hospitals, Infirmarys (I-2) 18. ☐ Group Homes (I-3) 19. ☐ Mercantile (M) 20. ☐ Moderate-Hazard Warehouse (S-1) 21. ☐ Low-Hazard Warehouse (S-2) 22. ☐ Temporary, Misc. (U) 23. ☐ Other

State Specific Use: _____

If Change in Use Group, Indicate Former: _____

IV. BUILDING CHARACTERISTICS

A. OWNERSHIP	B. HEATING FUEL	C. TYPE OF SEWAGE DISPOSAL	D. TYPE OF WATER SUPPLY	E. BUILDING CHARACTERISTICS																								
1. ☐ Private (Individual, Corp., Non-profit Inst., Etc.) 2. ☐ Public (State, County or Local Govt.)	<table border="1"> <thead> <tr> <th>Principal</th> <th>Secondary</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>3. ☐</td> <td>☐</td> <td>Gas</td> </tr> <tr> <td>4. ☐</td> <td>☐</td> <td>Oil</td> </tr> <tr> <td>5. ☐</td> <td>☐</td> <td>Electric</td> </tr> <tr> <td>6. ☐</td> <td>☐</td> <td>Solid (Wood, Coal, Etc.)</td> </tr> <tr> <td>7. ☐</td> <td>☐</td> <td>Propane</td> </tr> <tr> <td>8. ☐</td> <td>☐</td> <td>Solar</td> </tr> <tr> <td>9. ☐</td> <td>☐</td> <td>Other</td> </tr> </tbody> </table>	Principal	Secondary	Type	3. ☐	☐	Gas	4. ☐	☐	Oil	5. ☐	☐	Electric	6. ☐	☐	Solid (Wood, Coal, Etc.)	7. ☐	☐	Propane	8. ☐	☐	Solar	9. ☐	☐	Other	10. ☐ Public or Private Company 11. ☐ Private (Septic Tank, Etc.)	12. ☐ Public or Private Company 13. ☐ Private (Well, Etc.)	14. No. of Stories _____ 15. Height of Structure _____ Ft. 16. Area—Largest Floor _____ Sq. Ft. 17. Bldg. Area—All Fls. _____ Sq. Ft. 18. Volume of Structure _____ Cu. Ft. 19. Total Land Area Disturbed _____ Sq. Ft.
Principal	Secondary	Type																										
3. ☐	☐	Gas																										
4. ☐	☐	Oil																										
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9. ☐	☐	Other																										

LDS BR 10309637

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION

I hereby certify that I am the owner of the property listed on Page 1. This dwelling is to be occupied by myself and is not to be used for any purpose, other than single family residential use.

- A. ☐ I further certify that I prepared the plans submitted. This statement is made in accordance with the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)vii.
- B. ☐ I further certify that I will perform the work below.
- B1. ☐ Building B2. ☐ Electrical B3. ☐ Plumbing
- C. ☐ I further certify that a new home will be constructed on this property, for my use and occupancy. I attest that all design, construction, plumbing, or electrical work will be done by me or by subcontractors under my supervision, in accordance with all applicable laws; and further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.A.C. 46:3B-1 et. seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.
- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

SIGNATURE _____

DATE _____

II. AGENT SECTION

I hereby certify that the work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☐ Check if contractor.

AGENT NAME

Michael F. Datz Pace Assoc. TEL. () _____

ADDRESS _____

SIGNATURE _____

PERMIT CONTROL

I. PLAN REVIEW STATUS

Updated at time of receipt of drawings and when plans are approved.

- ☐ PARTIAL RELEASES
☐ PROTOTYPE PLAN - FILE LOCATION AND NO. _____

Plan Review Required	Type of Work	Plans Received By Date Receiver	Approval Date	Reviewer	Comments
☒	BUILDING	9/29/87 JC.			
	Footings/Foundations				
	Framing				
	Architectural				
	Other _____				
☐	PLUMBING				
☐	ELECTRICAL				
☒	FIRE PROTECTION		9/12/87	KE	
☐	OTHER _____				

II. PERMIT/INSPECTION STATUS

Updated at time of permit and after final approvals.

Issue Date	Category	Revisions	Final Inspection	Comments
_____	ALL CONSTRUCTION			
_____	BUILDING			
_____	Footings/Foundations			
_____	Framing			
_____	Architectural			
_____	Other _____			
_____	PLUMBING			
_____	ELECTRICAL			
1/	FIRE PROTECTION		1-7-88	JC
_____	OTHER _____			

III. CERTIFICATES ISSUED

CERTIFICATES TO BE ISSUED:	Date Issued
☐ Temporary Certificate of Occupancy	_____
Date Expired _____	
☐ Temporary Certificate of Occupancy	_____
Date Expired _____	
☐ Certificate of Occupancy	_____
No. _____	
☐ Certificate of Continued Occupancy	_____
No. _____	
☐ Certificate of Approval	_____
No. _____	
☐ None	

IV. ON-GOING INSPECTIONS

On-going Inspections Required (See Page 1, II.D.)	Date Posted to Log and Tickler
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

V. FEE SUMMARY

Initial fee collection recorded in A; all others in section B.

A. COLLECTED AT TIME OF CONSTRUCTION PERMIT ISSUANCE

	AMOUNT
BUILDING	\$ _____
PLUMBING	_____
ELECTRICAL	_____
FIRE PROTECTION	215.00
OTHER _____	_____
SUBTOTAL	\$ 215.00
- LESS: 20% of subtotal (when plan review performed by state agency).	
D.C.A. TRAINING FEE .0006 x _____	20.00
CERTIFICATE OF OCCUPANCY	_____
OTHER _____	_____
OTHER _____	_____
TOTAL COLLECTED WHEN PERMIT ISSUED	\$ 235.00
DATE _____	Collected By _____

B. COLLECTED AFTER CONSTRUCTION PERMIT ISSUANCE

	Date	Collected By	AMOUNT
CERTIFICATE OF OCCUPANCY	_____	_____	_____
OTHER	_____	_____	_____
OTHER	_____	_____	_____
- LESS: Refunds _____			
TOTAL COLLECTED AFTER PERMIT ISSUED			\$ _____

C. TOTAL CONSTRUCTION FEES COLLECTED

	AMOUNT
COLLECTED WITH PERMIT (VA)	\$ _____
COLLECTED AFTER PERMIT (VB)	_____
TOTAL	\$ _____



FIRE SUBCODE



PERMIT NO	1446
DATE ISSUED	2-7-88
REVISION DATE	
Block	469
Subdivision	12

IDENTIFICATION

APPLICANT - Complete unshaded areas only	When changing contractors, notify this office
Owner <u>Cedar Bridge Assoc.</u>	Contractor <u>TRI-STATE Fire Protection</u>
Address <u>510 S. BUELT MILL RD</u>	Address <u>Box 97 RD #3</u>
<u>Loehlees N.J. 08043</u>	<u>Sewell N.J. 08080</u>
Tel. (609) <u>354-0945</u>	Tel. (609) <u>589-9370</u>
Work Site Address <u>Beick Blvd. &</u>	Lic. No. _____
<u>Cedar Bridge Ave</u>	Federal Emp. No. _____

CERTIFICATION IN LIEU OF OATH: (Complete for Minor Work and Small Job Only)
I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.
<u>M. J. Pace</u> AGENT SIGNATURE

B. TECHNICAL SITE DATA

B1. SPRINKLERS		B3. ALARM	
TYPE: ☒ Wet ☐ Dry ☐ Other _____	FEE _____	TYPE: ☐ Manual ☒ Automatic	FEE _____
Area Sprinkled: ☒ Full ☐ Partial (specify in comments)		Supervision Type: ☒ Local ☐ Central	
No. of Heads: _____ No. of Spare Heads: _____		☐ Valves Supervised - Method: _____ Size: _____	
Water Supply - Source: _____		Estimated Cost of Work: \$ _____	
FD Connection Location: _____		B4. STAND PIPES	
Estimated Cost of Work: \$ _____	\$ 200.00	Pipe Size: _____ Pump Size: _____	
		Water Source: _____ Size: _____	
		FD Connection Location: _____	
		Hose Station: ☐ Yes ☐ No	
		Estimated Cost of Work: \$ _____	
B2. SPECIAL SUPPRESSION SYSTEMS		B5. OTHER	
TYPE: ☐ Dry Chemical ☐ CO2			
☐ Halon ☐ Foam			
Other _____			
Manual Pull: ☐ Yes ☐ No			
Locations: _____			
Estimated Cost of Work: \$ _____	\$ _____		

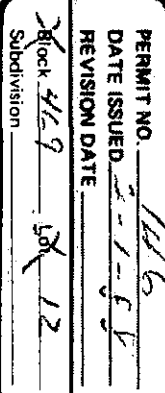
C. FIRE PROTECTION CHARACTERISTICS

USE GROUP _____	Present _____	Proposed _____
Heating Systems - Location: _____		
Type: ☐ Gas ☐ Oil ☐ Electrical	☐ Solar	☐ Other _____
Fuel Storage Tank - Location: _____	Fuel Type: _____	Capacity: _____
Total Estimated Cost of Fire Protection Work: \$ _____		

D. COMMENTS

☐ Partial Releases	☐ Prototype Processing
---	---

Minimum Fire Protection Fee (If Applicable)	Subtotal
Total Fire Protection Fee (Greater of Minimum or Subtotal)	
\$ 200.00	
\$ 15.00	
\$ 215.00	



When changing contractors, notify this office

Contractor T. C. - 573722

Address Box 17 RD# 2

General A.I. 18080

Tel. (415) 559-1371

Lic. No. _____

Federal Emp. No. _____

PERMIT NO. 146
DATE ISSUED 2-1-58
REVISION DATE _____
Block 469 Section 12
Subdivision _____

CERTIFICATION IN LIEU OF OATH:
(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

M. A. H. H. T. Co.
AGENT SIGNATURE

B1. SPRINKLERS

Area Sprinkled: ☒ Full ☐ Partial (specify in comments)

☐ Valves Supervised — Method: _____

FD Connection Location: _____

Estimated Cost of Work: \$ _____

B2. SPECIAL SUPPRESSION SYSTEMS

☐ Hylon ☐ Foam

☐ Other _____

Manual Pull: ☐ Yes ☐ No

Locations: _____

Estimated Cost of Work: \$ _____ **\$**

C. FIRE PROTECTION CHARACTERISTICS

USE GROUP _____ Present _____ Proposed _____

Heating Systems - Location: _____

Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar ☐ Other _____

Fuel Storage Tank - Location: _____ Fuel Type: _____ Capacity: _____

Total Estimated Cost of Fire Protection Work: \$

D. COMMENTS

☐ Partial Releases ☐ Prototype Processing

B3. ALARM

TYPE: ☐ Manual ☒ Automatic

Supervision Type: ☒ Local ☐ Central

Estimated Cost of Work : \$ _____

B4. STAND PIPES

Pipe Size: _____ Pump Size: _____

Water Source: _____ **Size:** _____

FD Connection Location: _____

Estimated Cost of Work: \$ _____

B5. OTHER

Sprinkles, 8 Test
Test Sheet all.

Subtotal

Minimum Fire Protection Fee (If Applicable)

**Total Fire Protection Fee (Greater of Minimum
or Subtotal)**

PLAN REVIEW AND INSPECTION - FIRE

DATE

JOB CONDITION/COMMENTS

1-7-88

JOB CONDITION/COMMENTS

Build good Sprinkler Test at 200 PSI for
one hour. I complied with Code. It's

[illegible]

JOB SUMMARY

☐ No Plans Required☒ Plan Review Approved

Date: 9-29-87

Approved By: Le Kenech

INSPECTIONS FINAL

☒	CO
☐	CCO
☐	CA

Date: 1-4-80

Inspected By: AC

INSPECTIONS

Type

Failure Date

Approval Date

☒ Fire Suppression Test

☐ Fire Alarm Test

☐ Smoke Test

TCO

☐ Other☐ Other☐ Other☐ Other[illegible]

TRI-STATE FIRE PROTECTION, INC.
R. D. #3, BOX 97, SEWELL,
HUFFVILLE, NJ 08080

HYDRAULIC CALCULATIONS

FOR

TOWNE HALL SHOPPES
BRICK TOWNSHIP SHOPPING CENTER
BRICK TWP., N.J.

FILE NUMBER: 8739C
06-30-1987

RECEIVED
CONSTRUCTION DEPT.

SEP 24 1987

PACE ASSOCIATES, INC.

-DESIGN DATA-

OCCUPANCY CLASSIFICATION:	ORD. HAZARD GROUP II
DENSITY:	.19 gpm/sq. ft.
AREA OF APPLICATION:	1500 sq. ft.
COVERAGE PER SPRINKLER:	130 sq. ft.
NUMBER OF SPRINKLERS CALCULATED:	14 heads
TOTAL SPRINKLER WATER FLOW REQUIRED:	565 gpm
TOTAL WATER REQUIRED (including hose):	565 gpm
FLOW & PRESSURE (at base of riser):	565 gpm @ 53.9 psi
SPRINKLER ORIFICE SIZE:	1/2 inch
NAME OF CONTRACTOR:	TRI-STATE FIRE PROTECTION INC.
NAME OF DESIGNER:	RALPH J. MULLIGAN (609-589-9370)
AUTHORITY HAVING JURISDICTION:	ISO - MT. LAUREL, N.J.

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Page 1

Date: 06-30-1987

BRICK

JOB TITLE: BRICK

WATER SUPPLY DATA

SOURCE NODE TAG	STATIC PRESS. (PSI)	RESID. PRESS. (PSI)	FLOW @ (GPM)	AVAIL. PRESS. @ (PSI)	TOTAL DEMAND (GPM)	REQ'D PRESS. (PSI)
32	60.0	52.0	2000.0	59.2	565.0	53.9

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	565.0 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	250.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	315.0 GPM

NODE ANALYSIS DATA

NODE TAG	ELEVATION (FT)	NODE TYPE	PRESSURE (PSI)	DISCHARGE (GPM)
1	10.5	- - - -	33.3	- - -
2	10.0	K= 5.60	15.7	22.2
3	10.0	K= 5.60	15.3	21.9
4	10.0	K= 5.60	15.2	21.8
5	10.0	K= 5.60	15.3	21.9
6	10.0	K= 5.60	15.7	22.2
7	10.5	- - - -	21.2	- - -
8	10.5	- - - -	33.5	- - -
9	10.0	K= 5.60	15.8	22.2
10	10.0	K= 5.60	15.4	21.9
11	10.0	K= 5.60	15.3	21.9
12	10.0	K= 5.60	15.3	21.9
13	10.0	K= 5.60	15.7	22.2
14	10.5	- - - -	21.3	- - -
15	10.5	- - - -	33.9	- - -
16	10.0	K= 5.60	18.1	23.8
17	10.0	K= 5.60	17.8	23.6
18	10.0	K= 5.60	17.8	23.6
19	10.0	K= 5.60	18.0	23.7
20	10.5	- - - -	21.7	- - -
21	10.5	- - - -	34.7	- - -
22	10.5	- - - -	22.4	- - -
23	10.5	- - - -	35.8	- - -
24	10.5	- - - -	22.8	- - -
25	10.5	- - - -	37.4	- - -
26	10.5	- - - -	23.1	- - -
27	10.5	- - - -	39.6	- - -
28	10.5	- - - -	23.1	- - -
29	10.5	- - - -	43.2	- - -
30	10.5	- - - -	45.6	- - -
31	-4.0	- - - -	53.6	- - -
32	-4.0	SOURCE	53.9	315.0

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Page 2

JOB TITLE: BRICK

PIPE DATA

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	DIA (IN)	LENGTH	PRESS.
	NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	(FT)	SUM.
							F.L. / FT		(PSI)
Pipe: 1									
1		10.5	0.0	33.3	0.0	55.7	1.610	PL 160.0	PF 17.9
2		10.0	5.6	15.7	22.2	8.8	120	FL 6.0	PE 0.2
							0.108	TL 166.0	PV 0.5
Pipe: 2									
2		10.0	5.6	15.7	22.2	33.5	1.610	PL 10.0	PF 0.4
3		10.0	5.6	15.3	21.9	5.3	120	FL 0.0	PE 0.0
							0.042	TL 10.0	PV 0.2
Pipe: 3									
3		10.0	5.6	15.3	21.9	11.6	1.610	PL 10.0	PF 0.1
4		10.0	5.6	15.2	21.8	1.8	120	FL 0.0	PE 0.0
							0.006	TL 10.0	PV 0.0
Pipe: 4									
4		10.0	5.6	15.2	21.8	-10.2	1.610	PL 10.0	PF 0.0
5		10.0	5.6	15.3	21.9	1.6	120	FL 0.0	PE 0.0
							0.005	TL 10.0	PV 0.0
Pipe: 5									
5		10.0	5.6	15.3	21.9	-32.1	1.610	PL 10.0	PF 0.4
6		10.0	5.6	15.7	22.2	5.1	120	FL 0.0	PE 0.0
							0.039	TL 10.0	PV 0.2
Pipe: 6									
6		10.0	5.6	15.7	22.2	-54.2	1.610	PL 50.0	PF 5.7
7		10.5	0.0	21.2	0.0	8.5	120	FL 6.0	PE 0.2
							0.102	TL 56.0	PV 0.5
Pipe: 7									
8		10.5	0.0	33.5	0.0	55.7	2.635	PL 11.5	PF 0.1
1		10.5	0.0	33.3	0.0	3.3	120	FL 0.0	PE 0.0
							0.010	TL 11.5	PV 0.1
Pipe: 8									
8		10.5	0.0	33.5	0.0	55.8	1.610	PL 160.0	PF 17.9
9		10.0	5.6	15.8	22.2	8.8	120	FL 6.0	PE 0.2
							0.108	TL 166.0	PV 0.5
Pipe: 9									
9		10.0	5.6	15.8	22.2	33.6	1.610	PL 10.0	PF 0.4
10		10.0	5.6	15.4	21.9	5.3	120	FL 0.0	PE 0.0
							0.042	TL 10.0	PV 0.2
Pipe: 10									
10		10.0	5.6	15.4	21.9	11.6	1.610	PL 10.0	PF 0.1
11		10.0	5.6	15.3	21.9	1.8	120	FL 0.0	PE 0.0
							0.006	TL 10.0	PV 0.0
Pipe: 11									
11		10.0	5.6	15.3	21.9	-10.3	1.610	PL 10.0	PF 0.0
12		10.0	5.6	15.3	21.9	1.6	120	FL 0.0	PE 0.0
							0.005	TL 10.0	PV 0.0
Pipe: 12									
12		10.0	5.6	15.3	21.9	-32.2	1.610	PL 10.0	PF 0.4
13		10.0	5.6	15.7	22.2	5.1	120	FL 0.0	PE 0.0
							0.039	TL 10.0	PV 0.2
Pipe: 13									
13		10.0	5.6	15.7	22.2	-54.4	1.610	PL 50.0	PF 5.8
							120	FL 6.0	PE 0.2

JOB TITLE: BRICK

PIPE DATA (cont'd)

PIPE TAG		ELEV. (FT)	NOZ. (K)	PT (PSI)	DISC. (GPM)	Q(GPM)	DIA(IN)	LENGTH	PRESS.		
END NODES	VEL(FPS)					HW(C)	(FT)	SUM. (PSI)			
						F.L./FT					
Pipe: 14						54.2	2.635	PL	11.5	PF	0.1
14		10.5	0.0	21.3	0.0	3.2	120	FL	0.0	PE	0.0
7		10.5	0.0	21.2	0.0	.	0.009	TL	11.5	PV	0.1
Pipe: 15						111.5	2.635	PL	11.5	PF	0.4
15		10.5	0.0	33.9	0.0	6.6	120	FL	0.0	PE	0.0
8		10.5	0.0	33.5	0.0		0.035	TL	11.5	PV	0.3
Pipe: 16						50.8	1.610	PL	170.0	PF	16.0
15		10.5	0.0	33.9	0.0	8.0	120	FL	6.0	PE	0.2
16		10.0	5.6	18.1	23.8		0.091	TL	176.0	PV	0.4
Pipe: 17						27.0	1.610	PL	10.0	PF	0.3
16		10.0	5.6	18.1	23.8	4.3	120	FL	0.0	PE	0.0
17		10.0	5.6	17.8	23.6		0.028	TL	10.0	PV	0.1
Pipe: 18						3.4	1.610	PL	10.0	PF	0.0
17		10.0	5.6	17.8	23.6	0.5	120	FL	0.0	PE	0.0
18		10.0	5.6	17.8	23.6		0.001	TL	10.0	PV	0.0
Pipe: 19						-20.3	1.610	PL	10.0	PF	0.2
18		10.0	5.6	17.8	23.6	3.2	120	FL	0.0	PE	0.0
19		10.0	5.6	18.0	23.7		0.017	TL	10.0	PV	0.1
Pipe: 20						-44.0	1.610	PL	50.0	PF	3.9
19		10.0	5.6	18.0	23.7	6.9	120	FL	6.0	PE	0.2
20		10.5	0.0	21.7	0.0		0.070	TL	56.0	PV	0.3
Pipe: 21						108.7	2.635	PL	11.5	PF	0.4
20		10.5	0.0	21.7	0.0	6.4	120	FL	0.0	PE	0.0
14		10.5	0.0	21.3	0.0		0.034	TL	11.5	PV	0.3
Pipe: 22						162.4	2.635	PL	11.5	PF	0.8
21		10.5	0.0	34.7	0.0	9.6	120	FL	0.0	PE	0.0
15		10.5	0.0	33.9	0.0		0.071	TL	11.5	PV	0.6
Pipe: 23						35.6	1.610	PL	250.0	PF	12.3
21		10.5	0.0	34.7	0.0	5.6	120	FL	12.0	PE	0.0
22		10.5	0.0	22.4	0.0		0.047	TL	262.0	PV	0.2
Pipe: 24						152.7	2.635	PL	11.5	PF	0.7
22		10.5	0.0	22.4	0.0	9.0	120	FL	0.0	PE	0.0
20		10.5	0.0	21.7	0.0		0.063	TL	11.5	PV	0.5
Pipe: 25						197.9	2.635	PL	11.5	PF	1.2
23		10.5	0.0	35.8	0.0	11.6	120	FL	0.0	PE	0.0
21		10.5	0.0	34.7	0.0		0.102	TL	11.5	PV	0.9
Pipe: 26						36.7	1.610	PL	250.0	PF	13.0
23		10.5	0.0	35.8	0.0	5.8	120	FL	12.0	PE	0.0

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

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JOB TITLE: BRICK

PIPE DATA (cont'd)

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q (GPM)	DIA (IN)	LENGTH	PRESS.
NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	F.L. / FT	(FT)	SUM. (PSI)
Pipe: 27						117.1	2.635	PL 11.5	PF 0.4
24	10.5	0.0	22.8	0.0	6.9	120	FL	0.0	PE 0.0
22	10.5	0.0	22.4	0.0		0.039	TL	11.5	PV 0.3
Pipe: 28						234.6	2.635	PL 11.5	PF 1.6
25	10.5	0.0	37.4	0.0	13.8	120	FL	0.0	PE 0.0
23	10.5	0.0	35.8	0.0		0.140	TL	11.5	PV 1.3
Pipe: 29						38.8	1.610	PL 250.0	PF 14.4
25	10.5	0.0	37.4	0.0	6.1	120	FL	12.0	PE 0.0
26	10.5	0.0	23.1	0.0		0.055	TL	262.0	PV 0.3
Pipe: 30						80.4	2.635	PL 11.5	PF 0.2
26	10.5	0.0	23.1	0.0	4.7	120	FL	0.0	PE 0.0
24	10.5	0.0	22.8	0.0		0.019	TL	11.5	PV 0.2
Pipe: 31						273.4	2.635	PL 11.5	PF 2.1
27	10.5	0.0	39.6	0.0	16.1	120	FL	0.0	PE 0.0
25	10.5	0.0	37.4	0.0		0.185	TL	11.5	PV 1.7
Pipe: 32						41.7	1.610	PL 250.0	PF 16.5
27	10.5	0.0	39.6	0.0	6.6	120	FL	12.0	PE 0.0
28	10.5	0.0	23.1	0.0		0.063	TL	262.0	PV 0.3
Pipe: 33						41.7	2.635	PL 11.5	PF 0.1
28	10.5	0.0	23.1	0.0	2.5	120	FL	0.0	PE 0.0
26	10.5	0.0	23.1	0.0		0.006	TL	11.5	PV 0.0
Pipe: 34						315.1	2.635	PL 5.0	PF 3.6
29	10.5	0.0	43.2	0.0	18.5	120	FL	10.0	PE 0.0
27	10.5	0.0	39.6	0.0		0.241	TL	15.0	PV 2.3
Pipe: 35						315.1	2.635	PL 5.0	PF 2.4
30	10.5	0.0	45.6	0.0	18.5	120	FL	5.0	PE 0.0
29	10.5	0.0	43.2	0.0		0.241	TL	10.0	PV 2.3
Pipe: 36						315.1	4.026	PL 5.0	PF 1.7
31	-4.0	0.0	53.6	0.0	7.9	120	FL	50.0	PE 6.3
30	10.5	0.0	45.6	0.0		0.031	TL	55.0	PV 0.4
Pipe: 37						315.0	6.010	PL 100.0	PF 0.3
32	-4.0	SRCE	53.9	(N/A)	3.6	140	FL	6.0	PE 0.0
31	-4.0	0.0	53.6	0.0		0.003	TL	106.0	PV 0.1

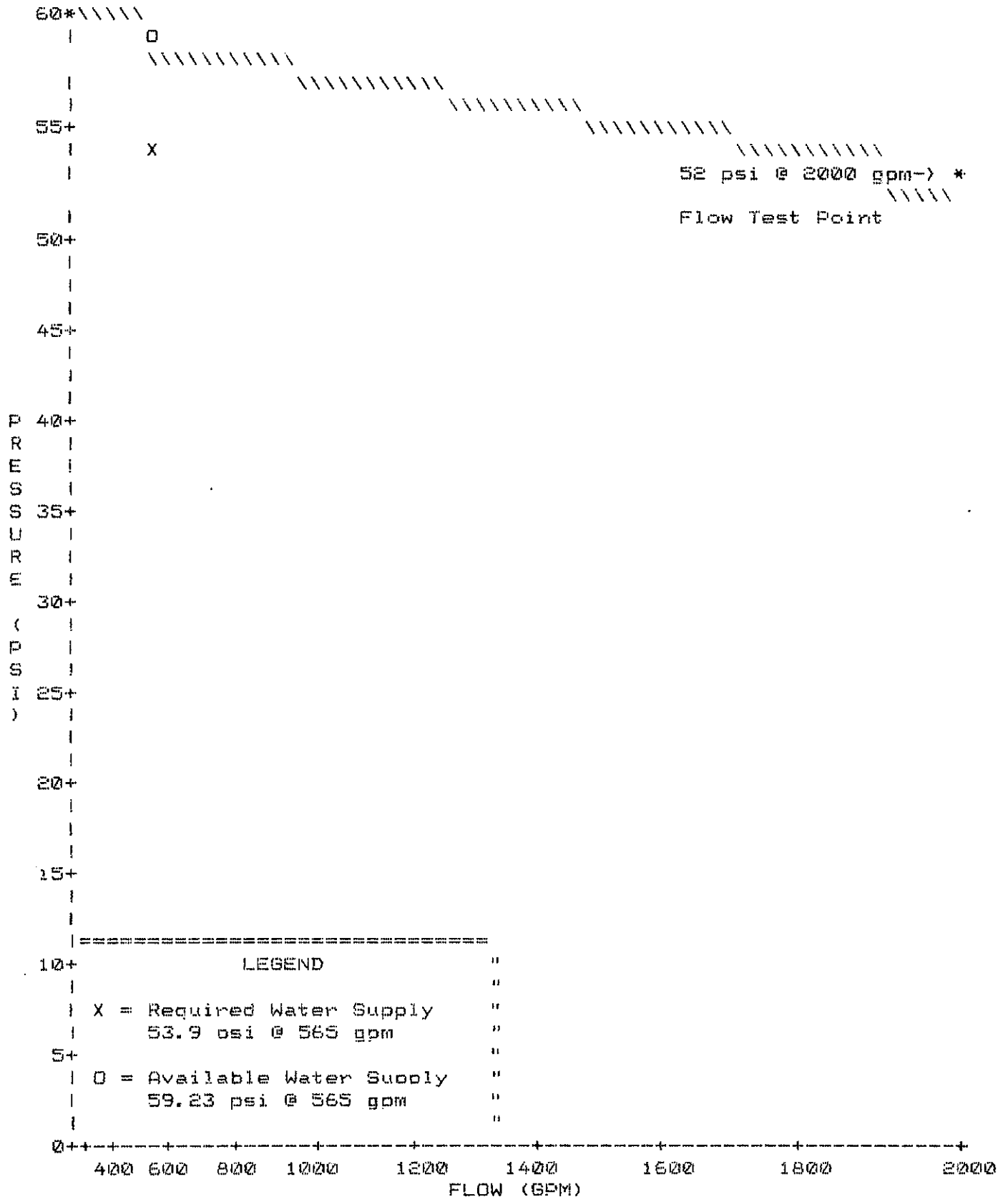
JOB TITLE: BRICK

NOTES:

- (1) Calculations were performed by the HASS 5.0 computer program under license no. 428I183XXX granted by
HRS Systems, Inc.
2193 Ranchwood Dr., N.E.
Atlanta, Georgia 30345
- (2) The system has been balanced to provide an average imbalance at each node of 0.006 gpm and a maximum imbalance at any node of 0.184 gpm.
- (3) Velocity pressures are printed for information only, and are not used in balancing the system. Maximum water velocity in any pipe is 18.5 ft/sec.
- (4) a. System remote area HAS been proven or 'peaked'.
b. Minimum pressure at any sprinkler: 15.224 psi
c. Minimum pressure with remote area shifted one sprinkler space toward left cross main: 15.235 psi
d. Minimum pressure with remote area shifted one sprinkler space toward right cross main: 15.243 psi

JOB TITLE: BRICK

WATER SUPPLY CURVE



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GRID FLOW DIAGRAM

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[ 1]-->--*-->--*-->--*--<--*--<--*--<--[ 7]
^      55.7  33.5  11.6  10.2  32.1  54.2      ^
55.7                                     54.2
^
[ 8]-->--*-->--*-->--*--<--*--<--*--<--[ 14]
^      55.8  33.6  11.6  10.3  32.2  54.4      ^
111.5                                     108.7
^
[ 15]-->--*-->--*-->--*--<--*--<-----[ 20]
^      50.8   27    3.4  20.3   44      ^
162.4                                     152.7
^
[ 21]----->-----[ 22]
^                                35.6      ^
197.9                                     117.1
^
[ 23]----->-----[ 24]
^                                36.7      ^
234.6                                     80.4
^
[ 25]----->-----[ 26]
^                                38.8      ^
273.4                                     41.7
^
[ 27]----->-----[ 28]
^                                41.7
315.1
^

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TRI-STATE FIRE PROTECTION, INC.

CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR ABOVEGROUND PIPING

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative. All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

PROPERTY NAME

DATE

TOWNE HALL SHOPPES

1-7-88

PROPERTY ADDRESS

BRICK TWP. N.J.

PLANS

ACCEPTED BY APPROVING AUTHORITY(IES) NAMES

J. EVERISTO - FIRE Subcode Official - 1 ISO

ADDRESS

BRICK TWP. N.J.

MT. LAUREL, N.J.

INSTALLATION CONFORMS TO ACCEPTED PLANS

EQUIPMENT USED IS APPROVED

IF NO, EXPLAIN DEVIATIONS

☒ YES ☐ NO☒ YES ☐ NO

INSTRUCTIONS

HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF THIS NEW EQUIPMENT IF NO, EXPLAIN

☒ YES ☐ NO

HAVE COPIES OF APPROPRIATE INSTRUCTIONS AND CARE AND MAINTENANCE CHARTS AND NFPA 13A BEEN LEFT ON PREMISES IF NO, EXPLAIN

☒ YES ☐ NO

LOCATION OF SYSTEM

SUPPLIES BLDGS.

ENTIRE BLDG.

SPRINKLERS

MAKE	MODEL	YEAR OF MANUFACTURE	ORIFICE SIZE	QUANTITY	TEMPERATURE RATING
CENTRAL CR PD	"A"	1987	1/2"	226	165°
CENTRAL BR UP	"A"	1987	1/2"	15	212°
CENTRAL BR UP	"A"	1987	1/2"	2	286°

PIPE AND FITTINGS

PIPE CONFORMS TO NFPA #13 STANDARD

FITTINGS CONFORM TO NFPA #13 STANDARD

IF NO, EXPLAIN

☒ YES ☐ NO☒ YES ☐ NO

ALARM VALVE OR FLOW INDICATOR

ALARM DEVICE			MAXIMUM TIME TO OPERATE THROUGH TEST PIPE	
TYPE	MAKE	MODEL	MIN.	SEC.
RDW SWITCH	POTTER	VERD	—	15

DRY PIPE OPERATING TEST

DRY VALVE					O.O.D.				
MAKE		MODEL	SERIAL NO.		MAKE		MODEL	SERIAL NO.	
	TIME TO TRIP THRU TEST PIPE*		WATER PRESSURE	AIR PRESSURE	TRIP POINT AIR PRESSURE	TIME WATER REACHED TEST OUTLET*		ALARM OPERATED PROPERLY	
	MIN.	SEC.	PSI	PSI	PSI	MIN.	SEC.	YES	NO
Without O.O.D.									
With O.O.D.									

IF NO, EXPLAIN

SPRINKLER SYSTEMS

DELUGE & PREACTION VALVES	OPERATION ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC													
	PIPING SUPERVISED ☐ YES ☐ NO				DETECTING MEDIA SUPERVISED ☐ YES ☐ NO									
	DOES VALVE OPERATE FROM THE MANUAL TRIP AND/OR REMOTE CONTROL STATIONS ☐ YES ☐ NO													
	IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING ☐ YES ☐ NO IF NO, EXPLAIN													
	MAKE	MODEL	DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM		DOES EACH CIRCUIT OPERATE VALVE RELEASE		MAXIMUM TIME TO OPERATE RELEASE							
			YES	NO	YES	NO	MIN.	SEC.						
TEST DESCRIPTION	HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for two hours. Differential dry-pipe valve clappers shall be left open during test to prevent damage. All aboveground piping leakage shall be stopped. FLUSHING: Flow the required rate until water is clear as indicated by no collection of foreign material in burlap bags at outlets such as hydrants and blow-offs. Flush at flows not less than 400 GPM (1514 L/min) for 4-inch pipe, 800 GPM (2271 L/min) for 6-inch pipe, 750 GPM (2839 L/min) for 8-inch pipe, 1000 GPM (3785 L/min) for 10-inch pipe, 1600 GPM (6678 L/min) for 12-inch pipe and 2000 GPM (7570 L/min) for 14-inch pipe. When supply cannot produce stipulated flow rates, obtain maximum available. PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours. Test pressure tanks at normal water level and air pressure and measure air pressure drop which shall not exceed 1-1/2 psi (0.1 bars) in 24 hours.													
TESTS	ALL PIPING HYDROSTATICALLY TESTED AT <u>200</u> PSI FOR <u>2</u> HRS. IF NO, STATE REASON DRY PIPING PNEUMATICALLY TESTED ☐ YES ☐ NO EQUIPMENT OPERATES PROPERLY ☐ YES ☐ NO <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">DRAIN TEST</td> <td style="width:40%;">READING OF GAGE LOCATED NEAR WATER SUPPLY TEST PIPE: STATIC PRESSURE: <u>70</u> PSI</td> <td style="width:50%;">RESIDUAL PRESSURE WITH VALVE IN TEST PIPE OPEN WIDE <u>60</u> PSI</td> </tr> </table> Underground mains and lead in connections to system risers flushed before connection made to sprinkler piping. VERIFIED BY COPY OF THE U FORM NO. 85B ☐ YES ☐ NO OTHER EXPLAIN FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING ☐ YES ☐ NO								DRAIN TEST	READING OF GAGE LOCATED NEAR WATER SUPPLY TEST PIPE: STATIC PRESSURE: <u>70</u> PSI	RESIDUAL PRESSURE WITH VALVE IN TEST PIPE OPEN WIDE <u>60</u> PSI			
DRAIN TEST	READING OF GAGE LOCATED NEAR WATER SUPPLY TEST PIPE: STATIC PRESSURE: <u>70</u> PSI	RESIDUAL PRESSURE WITH VALVE IN TEST PIPE OPEN WIDE <u>60</u> PSI												
BLANK TESTING GASKETS	NUMBER USED <u>0</u>		LOCATIONS					NUMBER REMOVED						
WELDING	WELDED PIPING ☐ YES ☒ NO IF YES ... DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3 ☐ YES ☐ NO DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3 ☐ YES ☐ NO DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO INSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT THE INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED ☐ YES ☐ NO													
HYDRAULIC DATA NAMEPLATE	NAMEPLATE PROVIDED ☒ YES ☐ NO		IF NO, EXPLAIN											
REMARKS	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN: <u>1-7-88</u>													
SIGNATURES	NAME OF SPRINKLER CONTRACTOR TRI-STATE FIRE PROTECTION, INC. R. D. #3 Box 97, SEWELL, N. J. 08080 <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">FOR PROPERTY OWNER (SIGNED) <u>[Signature]</u></td> <td style="width:20%;">TITLE <u>SUPERINTENDENT</u></td> <td style="width:30%;">DATE <u>1/7/88</u></td> </tr> <tr> <td>FOR SPRINKLER CONTRACTOR (SIGNED) <u>[Signature]</u></td> <td>TITLE <u>OWNER</u></td> <td>DATE <u>1-7-88</u></td> </tr> </table>								FOR PROPERTY OWNER (SIGNED) <u>[Signature]</u>	TITLE <u>SUPERINTENDENT</u>	DATE <u>1/7/88</u>	FOR SPRINKLER CONTRACTOR (SIGNED) <u>[Signature]</u>	TITLE <u>OWNER</u>	DATE <u>1-7-88</u>
FOR PROPERTY OWNER (SIGNED) <u>[Signature]</u>	TITLE <u>SUPERINTENDENT</u>	DATE <u>1/7/88</u>												
FOR SPRINKLER CONTRACTOR (SIGNED) <u>[Signature]</u>	TITLE <u>OWNER</u>	DATE <u>1-7-88</u>												

ADDITIONAL EXPLANATION AND NOTES