

RECEIVED



CONSTRUCTION PERMIT APPLICATION

Beick
VO Tech

DIV. OF INSPECTION Application Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: Chambersbridge Rd. by Beick High School
2. Name of Owner in Fee: Ocean County Voc Ed Tel. () 438 3112
Address 1200 Old Freehold Rd Toms River 08553-1614
street municipality zip code
3. Ownership in Fee: Public ☒ Private ☐
4. Principal Contractor: Michael T. Galvin Inc Tel. () 367 3401
Address 1500 N Apple St
License No. OR, if new home, Builder Reg. No. Exp. Date
Federal Employee No. 222 270 353 FAX: () 901 9616
5. Architect or Engineer: Utzzi Assoc Tel. ()
Address Wash. St Toms River
6. Responsible Person in Charge of Work: K Galvin
Tel. () Same FAX ()

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$		
2. Electrical			
3. Plumbing			
4. Fire Protection			
5. Elevator Devices			
6. Subtotal	\$		
7. Less 20% for State Plan Review			
8. Subtotal	\$		
9. DCA Training Fee			
10. Subtotal			
11. Cert. of Occupancy			
12. Other			
13. TOTAL	\$		

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____
no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

(office use only)

II. PROPOSED WORK

1. ☐ Minor Work
2. ☐ New Building
3. ☐ Addition
4. ☒ Alteration
5. ☒ Fire Protection
6. ☒ Plumbing
7. ☒ Electrical
8. ☒ Elevator Devices
9. ☐ Asbestos Abat. Subch. 8
10. ☐ Lead Hazard Abatement
11. ☐ Demolition

Est. Cost

OPTIONAL (for office use only)

Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Re-viewer
					Approval	Rejection
POX			7-21-98	Ph	10/23/98	OK
			8-21-98	Kab	11-2-98	
			8-5-98	nn	10/14/98	OK

TOTAL COSTS

90870-

III. DO YOU WANT: (optional)

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No. of dwelling units:

Before Construction _____
After Construction _____
Net Gain or Loss _____

B. NON-RESIDENTIAL

1. State Specific Use:

2. Use Group:

3. Change in Use Group, Indicate Former:

LDS BR 10409595

CERTIFICATION IN LIEU OF OATH

☒ OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 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.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

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 further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

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

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

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 T. Conrad Inc

Address 1500 N Apple St

Lakewood NJ 08701-1908

Telephone (367) 3900

Signature [Signature] Adm. Asst.

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition _____

Name of Code & Edition _____

Building _____	Energy _____	Other _____
Electrical _____	Barrier Free _____	
Plumbing _____	Flood Hazard _____	
Fire Protection _____	As Built Elevation Cert. _____	
Mechanical _____	Other _____	

X. CERTIFICATES ISSUED (office use only)

DATE ISSUED

DATE EXPIRED

DATE REISSUED

DATE EXPIRED

	No.	No.	No.	No.	No.	No.	No.	No.	No.
☐ Temporary Certificate of Occupancy									
☐ Temporary Certificate of Compliance									
☐ Continued Certificate of Occupancy									
☐ Certificate of Compliance									
☐ Certificate of Occupancy									
☐ Certificate of Approval									
☒ Lead Abatement Clearance Certificate									

2893 11/15/98



CERTIFICATE

Date Issued 11/05/98
Control #
Permit # 98-2893

IDENTIFICATION

Block 701.39 Lot 12
Work Site Location 350 Chambersbridge Rd.
Owner in Fee Ocean County Vo-Tech. School
Address 350 Chambersbridge Rd.
Brick, NJ
Tele. ()
Contractor Michael T. Gavan
Address 1500 N. Apple St.
Lakewood, NJ 08701
Tele. ()
Lic. No. or Bldg. Reg. No.
Federal Emp. No.
or Social Security No.

Home Warranty No. N/A
Use Group
Maximum Live Load
Description of Work/Use:

Interior alterations
"Classroom Use Only"

Type of Warranty Plan: [] State [] Private
Construction Classification
Maximum Occupancy Load

CERTIFICATE OF OCCUPANCY/APPROVAL

☐ CERTIFICATE OF OCCUPANCY

This serves notice that said building, structure, or equipment has been constructed or installed in accordance with the New Jersey Uniform Construction Code, and is approved for use and/or occupancy.

☐ CERTIFICATE OF CONTINUED OCCUPANCY

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ TEMPORARY CERTIFICATE OF OCCUPANCY

If this is a Temporary Certificate of Occupancy the following conditions must be met no later than Nov. 20, 1998 or the owner will be subject to a fine or order to vacate: TCA Pending Back Flow Preventer

Fee \$
Paid [] Check No.
Collected by:

CONSTRUCTION OFFICIAL

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

Date Issued 01/13/99
Control #
Permit # 98-2893.2

UCC NEW JERSEY
CERTIFICATE

IDENTIFICATION

Block 701.39 Lot 12 Qual
Work Site Location 350 CHAMBERS BRIDGE RD
INTERIOR ALTERATIONS
Owner in Fee/Occupant OCEAN CTY VOC BD OF EDUCATION
Address 1200 OLD FREEHOLD RD
TOMS RIVER, NJ 08753-1614
Telephone (732)473-3112
Contractor MICHAEL T GAYAN INC
Address 1500 N APPLE ST
LAKEWOOD, NJ 08701-1408
Telephone (732)367-3900 Fax ()
Lic. No. or Bldrs. Reg. No.
Federal Emp. No. 22-2210353

Home Warranty No.
Type of Warranty Plan: [] State [] Private
Use Group F
Maximum Live Load 0
Construction Classification
Maximum Occupancy Load 0
Description of Work/Use:

INTERIOR ALTERATIONS FOR BRICK TWP VOTEC SCHOOL

[] CERTIFICATE OF OCCUPANCY
This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

[] CERTIFICATE OF CLEARANCE - LEAD ABATEMENT 5:17
This serves notice that based on written certification, lead abatement was performed as per NAC 5:17, to the following extent:
[] Total removal of lead-based paint hazards in scope of work
[] Partial or limited time period (years); see file

[X] CERTIFICATE OF APPROVAL
This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

[] CERTIFICATE OF CONTINUED OCCUPANCY
This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

[] TEMPORARY CERTIFICATE OF OCCUPANCY/COMPLIANCE
If this is a Temporary Certificate of Occupancy or Compliance, the following conditions must be met no later than or the owner will be subject to fine or order to vacate:

[] CERTIFICATE OF COMPLIANCE
This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

Fee \$ 0
Paid [] Check No.
Collected by:
CONSTRUCTION OFFICIAL
U.C.C. 7260 (rev. 3/96)

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
CONSTRUCTION
PERMIT

Date Issued 08/24/98
Control #
Permit # 98-2893

IDENTIFICATION Block 701.39 Lot 12 Qual

Work Site Location 350 CHAMBERS BRIDGE RD
INTERIOR ALTERATIONS
Owner In Fee OCEAN CITY VOC RD OF EDUCATION
Address 1200 OLD FREEHOLD RD
TOMS RIVER, NJ 08753-1614
Telephone (732)473-3112

Contractor MICHAEL T GAYAN INC
Address 1500 N APPLE ST
LAKEWOOD, NJ 08701-1408
Telephone (732)367-3900
Lic. No. or Bldrs. Reg. No.
Federal Exp. No. 22-2210353

Is hereby granted permission to perform the following work:

- ☒ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT ☐ OTHER

(Subchapter 8 only)

DESCRIPTION OF WORK:

INTERIOR ALTERATIONS FOR BRICK TYP VOTEC SCHOOL BY OLD BRICK HIGH SCHOOL

NOTE: If construction does not commence within one (1) year of date of issuance,
or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$ 90,870

Construction Official

[Signature]

08/24/98
Date

U.C.C. #170 (rev. 3/96)

PAYMENTS (Office Use Only)

Building 0
Electrical 0
Plumbing 0
Fire Protection 0
Elevator Devices 0
Other
DCA Training Fee 0
Cert. of Occupancy 0
Other
Total 0
Check No.
Cash
Collected By

926-0050

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
BUILDING
SUBCODE
TECHNICAL SECTION

Date Received 07/16/98
Date Issued 8/24/98
Control # C16-12
Permit # 98-2893

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING
CONTRACTORS. NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000

Block 701.39 Lot 12 Quad 1
Work Site Location 350 CHAMBERS BRIDGE RD

INTERIOR ALTERATIONS

Owner in Fee OCEAN CITY VOC HD OF EDUCATION
Address 1200 OLD FREEHOLD RD
TOMS RIVER, NJ 08753-1614

Tele. (732) 473-3112

Contractor MICHAEL P GAVAN INC

Address 4500 N APPLE ST
LAKEWOOD, NJ 08701-1408

Tele. (732) 367-3900 Fax ()

Lic. No. or Bldg. Reg. No. 22-2210353
Federal Reg. No. 22-2210353

JOB SUMMARY (Office Use Only)

PLAN REVIEW Date Initial INSPECTIONS Failure Failure Approval Initial

[] No Plans Req. [] All [] Footing [] Foundation [] Slab [] Frame [] Other [] Joint Plan Review Required [] Barrier Free [] Insulation [] Finishes [] Energy [] Mechanical [] CO [] TCA [] RCO

Date: 10-23-98 Approved By: [Signature] Final Barrier Free

Est. Cost of Bldg. Work: 1. New Bldg. \$ 0 2. Alteration \$ 75,870 3. Total (1+2) \$ 75,870

Industrialized Building: [] State Approved [] HUD

Use Group Present Proposed E

Constr. Class Present Proposed

No. of Stories 0

Height of Structure 0 Ft.

Area Largest Floor 0 Sq. Ft.

New Bldg. Area/All Floors 0 Sq. Ft.

Volume of New Structure 0 Cu. Ft.

C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the (agent of) owner
of record and am authorized to make this application.

D. TECHNICAL SITE DATA
DESCRIPTION OF WORK

INTERIOR ALTERATIONS FOR BRICK TWP VOTCH SCHOOL BY OLD BRICK HIGH SCHOOL

TYPE OF WORK

[] New Building [] Addition [X] Alteration

[] Roofing [] Siding [] Fence [] Sign [] Pool [] Asbestos Abatement Subchapter 8 [] Lead Haz. Abatement NJAC 5:17 [] Other [] Demolition

Height (exceeds 6')

Sq. Ft.

Height (exceeds 6')

Sq. Ft.

Height (exceeds 6')

Sq. Ft.

Height (exceeds 6')

Sq. Ft.

Height (exceeds 6')

Sq. Ft.

Height (exceeds 6')

Sq. Ft.

FEE (Office Use Only)

\$ 1,907

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

\$ 0

8/25/98

Bracing For movable wall Not per plan

10/19/98

CANT see Framing over Partition

No Exit Signs in Place

No Code Base installed

No Drawings on Site

(Contractor called)

10/26/98

Bracing For movable wall NOT per plan

Clocks Not installed in open Electric Box

DIVISION OF ...
FOR CHAMBERS ...
MATERIALS ...

COLLECTOR SECTION
21 ...
EN ...
JUL ...

SALE # 18- ...
DATE RECEIVED ...

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

UCC NEW JERSEY
BUILDING
SUBCODE
TECHNICAL SECTION

Date Received 07/16/98
Date Issued 8/24/98
Control # C16-12
Permit # 98-2893

A. IDENTIFICATION-APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING
CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO. 1-800-272-1000

Block 701.39 Lot 12 Qual
Work Site Location 350 CHAMBERS BRIDGE RD

INTERIOR ALTERATIONS

Owner in Fee OCEAN CRY VOC RD OF EDUCATION
Address 1200 OLD FREEHOLD RD

TOWNSHIP OF BRICK NJ 08753-1614

Tele. (732) 473-3112

Contractor MICHAEL T GAVAN INC

Address 1500 N. APPLE ST

LAKESIDE, NJ 08701-1408

Tele. (732) 367-3900 Fax ()

Lic. No. or Bldgs. Reg. No.

Federal Emp. No. 22-2210353

JOB SUMMARY (Office Use Only)

PLAN REVIEW Date Initial

☐ No Plans Req.

☒ All 7-11-98 PM

☐ Footing

☐ Foundation

☐ Frame

☐ Other

Joint Plan Review Required:

☐ Elect ☐ Plumb ☐ Fire

SUBCODE APPROVAL ☐ Elev

☐ CO ☐ CCO ☐ CA

Date:

Approved By:

INSPECTIONS

Type

Footing

Foundation

Slab

Frame

BarrierFree

Insulation

Finishes

Energy

Mechanical

TCO

Other

Final

BarrierFree

Dates (Month/Day)

Failure Failure Approval Initial

FEE (Office Use Only)

\$

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C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner
of record and am authorized to make this application.

Signature

D. TECHNICAL SITE DATA
DESCRIPTION OF WORK

INTERIOR ALTERATIONS FOR BRICK TWP VOTEC SCHOOL BY OLD BRICK HIGH SCHOOL

TYPE OF WORK

☐ New Building

☐ Addition

☒ Alteration

☐ Roofing

☐ Siding

☐ Fence

☐ Sign

☐ Pool

☐ Asbestos Abatement Subchapter 8

☐ Lead Haz. Abatement NAC 5:17

☐ Other

☐ Demolition

Height (exceeds 6')

Sq. Ft.

Administrative Surcharge

Minimum Fee

TOTAL FEE

DCA Training Fee

FLORIDA **SUBCODE** **TECHNICAL SECTION**

Date Received **8-24-98**
 Date Issued
 Control # **98-2893**
 Permit # **USE 2000**
2000

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block **701, 39** Lot **1/2**
 Work Location **Ocean County 1/2-1/2**
 Owner in Fee **Ocean County 1/2-1/2**
 Address **1206 Old Fuelhold Rd**
 Jones River 08753-4298
 Tele: **473-3112**
 Contractor **Luback & Son, Inc**
 Address **235 Dunn Rd**
 Tele: **732 8414**
 Lic. No. **222 209 329** or Social Security No. _____
 Federal Emp. No. _____

B. FIRE PROTECTION CHARACTERISTICS

Use Group _____ Present _____ Proposed _____
 Constr. Class. _____ Present _____ Proposed _____
 Heating Systems [] New [] Existing
 Type: [] Gas [] Oil [] Electrical [] Solar
 [] Other _____
 Location: _____
 Total Est. Cost of Fire Prot. Work \$ **1000** [] Other _____

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
 [] No Plans Required
 Joint Plan Review Required:
 [] Bldg. [] Plumb.
 [] Elec. [] Elevator
 [] Fire Plans Approved
 Date: **8-21-98**
 Approved by: **PCAS**
SUBCODE APPROVAL:
 [] CO [] CCO **PCAS**
 Date: **11-2-98**
 Approved by: **PCAS**

D. TECHNICAL SITE DATA

Description of Work
 Water Supply Source
 Method of Valve Supervision
 Local Alarm Supervision
 Central Supervision
 Proprietary Supervision
 Flammable Liquid Storage Tanks
 Combustible Liquid Storage Tanks
 L.P.G. Storage Tanks
 L.N.G. Storage Tanks
 () Capacity _____ Fuel _____
 () Capacity _____ Fuel _____
 () Capacity _____ Fuel _____

Wet Sprinkler Heads
 Dry Sprinkler Heads
 TOTAL

Smoke Detectors
 Heat Detectors
 TOTAL

Stand Pipes
 Kitchen Hood Exhaust Systems

Pre-Engineered Systems

CO₂ Suppression
 Halon Suppression
 Foam Suppression
 Dry Chemical
 Wet Chemical

Gas or Oil Fired Appliance
 OTHER

Paid [] Check # _____
 Collected by: _____
 Administrative Surcharge \$ _____
 Minimum Fee \$ _____
 DCA Training Fee \$ _____
 TOTAL FEE \$ _____

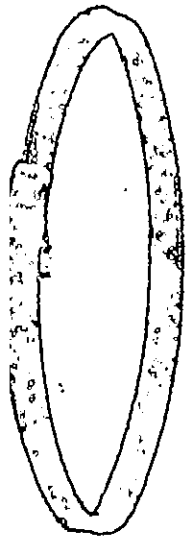
FEE (Office Use Only)

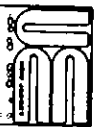
SIGNATURE

11-2-98

~~Need~~
~~Stop by~~ 1 classroom
- heat det in back storage

Sprinkler not ready





**FIRE PROTECTION
SUBCODE
TECHNICAL SECTION**



Date Received
Date Issued
Control #
Permit #

8-24-98
98-2693

USE GROUP E
2C CONST.

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 701.36 Lot 12
Work Site Location Ocean County V6-12
Owner in Fee Ocean County VOS, Bldg. C-1
Address 1206 Old Philadelphia Rd.
Telephone 732-929-0601
Contractor SE-CLY HSS 08733
Address 235 Deerpark Rd.
Telephone 732-929-0601
Lic. No. 8414 or Social Security No. 222-209-329
Federal Emp. No. 222-209-329

B. FIRE PROTECTION CHARACTERISTICS

Use Group Present Proposed _____
Constr. Class. Present Proposed _____
Heating Systems _____ Existing _____
Type: _____ Gas _____ Oil _____ Electrical _____ Solar _____
_____ Other _____

Location: _____ [] Other _____
Total Est. Cost of Fire Prot. Work \$ 1000

JOB SUMMARY (Office Use Only)

PLAN REVIEW:	INSPECTIONS:	Dates (Month/Day)	Initial
☐ No Plans Required	Type: <u>_____</u>	Failure	Failure
Joint Plan Review Required:	Suppression Test	_____	_____
☐ Bldg. ☐ Plumb.	Fire Alarm Test	_____	_____
☐ Elec. ☐ Elevator	Smoke Test	_____	_____
☐ Fire Plans Approved	Mechanical	_____	_____
Date: <u>8-21-98</u>	TCO	_____	_____
Approved by: <u>[Signature]</u>	Other	_____	_____
SUBCODE APPROVAL:	Other	_____	_____
☐ CO ☐ CCO ☐ CA	Other	_____	_____
Date: <u>_____</u>	_____	_____	_____
Approved by: <u>_____</u>	_____	_____	_____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of
record and am authorized to make this application.

[Signature]
SIGNATURE

D. TECHNICAL SITE DATA

Description of Work	_____
Water Supply Source	_____
Method of Valve Supervision	_____
Local Alarm Supervision	_____
Central Supervision	_____
Proprietary Supervision	_____
Flammable Liquid Storage Tanks	() Capacity _____ Fuel _____
Combustible Liquid Storage Tanks	() Capacity _____ Fuel _____
L.P.G. Storage Tanks	() Capacity _____ Fuel _____
L.N.G. Storage Tanks	() Capacity _____ Fuel _____
Wet Sprinkler Heads	Number <u>8 heads</u>
Dry Sprinkler Heads	<u>Wet system</u>
TOTAL	<u>3</u>
Smoke Detectors	<u>3</u>
Heat Detectors	<u>1</u>
TOTAL	<u>4</u>
Stand Pipes	_____
Kitchen Hood Exhaust Systems	_____
Pre-Engineered Systems	_____
CO ₂ Suppression	_____
Halon Suppression	_____
Foam Suppression	_____
Dry Chemical	_____
Wet Chemical	_____
Gas or Oil Fired Appliance	_____
OTHER	_____
Paid [] Check # _____	Administrative Surcharge \$ <u>100</u>
Minimum Fee \$ _____	DCA Training Fee \$ <u>100</u>
Collected by: _____	TOTAL FEE \$ <u>200</u>

OWNER IN FEE: Ocean County Voc, Bd, Ed
BLOCK 701.37 LOT 12 SITE LOCATION

Beich Voc, Sch. Chamber Bridge Rd

BUILDING INSPECTION

Contractor Smith & Brown Inc.
Address 1500 N Maple St Phone () 367 3410
Town LAKE WA State NC Zip 04701-1408
LIC # 222 210 353 FEDERAL EMP. NO. (or SSN#)

ESTIMATED COST OF BUILDING WORK

NEW BUILDING (1) \$ 90,870 ALTERATION (2) \$ 0
ADDITION (3) \$ 0 TOTAL (1+2+3) \$ 90,870

BUILDING CHARACTERISTICS

ADDITION or SINGLE FAMILY DWELLING	PRESENT	PROPOSED
USE GROUP	PRESENT	PROPOSED
CONSTRUCTION CLASS	PRESENT	PROPOSED
NO. OF STORES	HT. OF STRUCTURE	FT.
AREA: LARGEST FLOOR	SO. FT.	
TOTAL BLDG. AREA: ALL FLOORS	SO. FT.	
VOLUME OF STRUCTURE	CU. FT.	
TOTAL LAND AREA DISTURBED	SO. FT.	
TYPE OF WORK		
TYPE OF WORK	MISC.	COST
NEW BLDG.	FENCE	HT.
ADDITION	SIGN	Sq. Ft.
ALTERATION	POOL	
ROOFING	ASBESTOS ABATEMENT	
SIDING	DCA	
DEMOLITION	TOTAL	

DESCRIPTION OF WORK

COMMENTS See Plans

CERTIFICATION IN LIEU OF OATH

I HEREBY CERTIFY THAT I AM THE (AGENT OF) OWNER OF RECORD AND AM AUTHORIZED TO MAKE THIS APPLICATION AND PERFORM THE WORK LISTED ON THIS APPLICATION.
SEAL & SIGNATURE [Signature]

PLUMBING INSPECTION

Contractor Smith & Brown Inc.
Address 1500 N Maple St Phone () 367 3410
Town LAKE WA State NC Zip 04701-1408
LIC # 222 210 353 FEDERAL EMP. NO. (or SSN#)

ESTIMATED COST OF PLUMBING WORK

Sewer Size 12" Water Size 1/2"

TECHNICAL SITE DATA (List all fixtures)

NO.	FIXTURE/EQUIPMENT	NO.	FIXTURE/EQUIPMENT
	Water Closet		Steam Boiler
	Urinal / Bidet		Hot Water Boiler
	Bath Tub		Sewer Pump
	Lavatory		Interceptor/separator
	Shower		Backflow Preventer
	Floor Drain		Grease Trap
	Sink		Water Cooled A/C
	Dishwasher		or Refrigeration Unit
	Drinking Fountain		Sewer Connection
	Washing Machine		Water Service Connection
	Hose Bibb		Active Solar System
	Water Heater		Other
	Fuel Oil Piping		Other
	Gas Piping		Other

DESCRIPTION OF WORK

COMMENTS

CERTIFICATION IN LIEU OF OATH

I HEREBY CERTIFY THAT I AM THE (AGENT OF) OWNER OF RECORD AND AM AUTHORIZED TO MAKE THIS APPLICATION AND PERFORM THE WORK LISTED ON THIS APPLICATION.
SEAL & SIGNATURE (Contractor's Seal)

FIRE INSPECTION

Contractor Smith & Brown Inc.
Address 1500 N Maple St Phone () 367 3410
Town LAKE WA State NC Zip 04701-1408
LIC # 222 210 353 FEDERAL EMP. NO. (or SSN#)

ESTIMATED COST OF FIRE PROT. WORK

Heating Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar
Heating System: ☐ New ☐ Existing
Location of Furnace / Boiler

TECHNICAL SITE DATA (Description of Work)

WATER SUPPLY SOURCE	
METHOD OF VALVE SUPERVISION	
LOCAL ALARM SUPERVISION	
CENTRAL SUPERVISION	
PROPRIETARY SUPERVISION	
Flammable Liquid Storage Tanks	☐ Capacity
Combustible Liquid Storage Tanks	☐ Capacity
L.P.G. Storage Tanks	☐ Capacity
L.N.G. Storage Tanks	☐ Capacity
NO. ITEM	NO. ITEM
Wet Sprinkler Heads	Pre-Engineered:
Dry Sprinkler Heads	CO ₂ Suppress
TOTAL	Halon Suppress
Smoke Detectors	Roam Suppress
Heat Detectors	Dry Chemical
TOTAL	Wet Chemical
Stand Pipes	Gas or Oil Fire
Kitchen Hood Exhaust System	Other

DESCRIPTION OF WORK

COMMENTS

CERTIFICATION IN LIEU OF OATH

I HEREBY CERTIFY THAT I AM THE (AGENT OF) OWNER OF RECORD AND AM AUTHORIZED TO MAKE THIS APPLICATION AND PERFORM THE WORK LISTED ON THIS APPLICATION.
SEAL & SIGNATURE (Contractor's Seal)

701.39
12

150 Chambers
Drick
Hed
Hed

RECEIVED

JAN 13 1999

DIV. OF INSPECTION



For Information Call: 262-1025

Permit No. 98-2893

APPROVAL FOR FIRE PROTECTION

Date

1-12-98

Inspector

DB

☒ Sprinklers

☐ Standpipes

☐ Special Supp.

☒ Alarm

☐ Mechanical

☐ Other

☐ Final

U.C.C. Form F-224A

PRO 117



CARL A. MOENKE, PE



Mechanical & Electrical Systems
37 Main Street - 3rd Floor Suite
Toms River, NJ 08753
(732) 818-1599
Fax: (732) 818-1644

August 12, 1998

Brick Township Building Dept.
401 Chambersbridge Road
Brick, NJ 08723

ATTN: Marcel Renson, Electrical Subcode Official

RE: Ocean County Vo-Tech School, Brick Campus, Shop Conversion To Classrooms
Project, Brick Township, NJ; Comm. No. 98061.

Dear Mr. Renson:

The following Fault Current Calculations for the above referenced Project are based, in part, on information provided by GPU Energy regarding the size and nature of the electrical service and information found in the 1996 Cooper/Bussman Electrical Protection Handbook:

- ◆ Incoming Service is 120/208 VAC (E*L-L), 3-Phase, 4-Wire, 2000 Amps.
- ◆ Service originates from one (1) 500 KVA Pad Mounted Transformer. Available Fault Current (AFC) at the Secondary of the Transformer is 60,300 Amps.
- ◆ Service Entrance from the Transformer is N = 5 Sets of # 600 MCM Copper Wires in PVC Conduit. Distance from Transformer to Service Entrance is L = 60 Feet.
- ◆ "C" Value for # 600 MCM Copper in Non-Magnetic Duct = 28,033 (from Bussman Table).

$$f = \frac{1.732 \times L \times AFC}{N \times C \times E * L-L} = \frac{1.732 \times 60 \times 60,300}{5 \times 28,033 \times 208} = 0.2149381$$

$$M = \frac{1}{1 + f} = \frac{1}{1 + 0.2149381} = 0.8231$$

Fault Current @ Service Entrance = M x AFC = 0.8231 x 60,300 = **49,632 Amps**

- ♦ The Available Fault Current at the Feeder Breaker in the Main Switchgear that Back-Feeds to Sub-Distribution Center **DB3** is **49,632 Amps**.
- ♦ The Feeder Circuit to Sub-Distribution Center **DB3** consists of N = 4 Sets of # 600 MCM Copper Wires in EMT Conduit. Distance from the Main Switchgear to Sub-Distribution Center **DB3** is L = 270 Feet.
- ♦ "C" Value for # 600 MCM Copper in Metal Duct = 22,965 (from Bussman Table).

$$f = \frac{1.732 \times L \times AFC}{N \times C \times E \times L-L} = \frac{1.732 \times 270 \times 49,632}{4 \times 22,965 \times 208} = 1.2147408$$

$$M = \frac{1}{1 + f} = \frac{1}{1 + 1.2147408} = 0.4515$$

$$\text{Fault Current @ Panel } \mathbf{DB3} = M \times AFC = 0.4515 \times 49,632 = \mathbf{22,410 \text{ Amps}}$$

By receipt of his copy of this letter, the Electrical Contractor is directed to provide a New 100 Amp, 3-Pole Circuit Breaker in Sub-Distribution Center **DB3** that is rated **25,000 AIC**, or greater to feed the New Electrical Panel [**LPP**] for the Classrooms.

Should you have any questions concerning this calculation, please contact me at **(732) 818-1599**.

Sincerely,


8-12-98

Carl A. Moenke, P.E.

CAM/cmm

cc: Massimo Yezi – Yezi Associates
Bill Lubeck – Electrical Contractor
File No. 98061 - Construction Phase

CARL A. MOENKE, P.E.

37 Main Street, 3rd Floor Suite
Toms River, New Jersey 08753
(732) 818-1599
Fax: (732) 818-1644

FAX TRANSMISSION COVER SHEET

Date: August 12, 1998
To: Marcel Renson - Electrical Subcode Official @ Brick Township Building Dept.
Fax: (732) 262-8954
Subject: Ocean County Vo-Tech School - Brick Campus, Shop to Two Classroom Conversion Project, Chambersbridge Road, Brick, NJ. Comm # 98061.
Sender: Carl A. Moenke, P.E.

YOU SHOULD RECEIVE 3 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL

Copy of requested Fault Current Calculations on the above referenced Project. Original Signed/Sealed Letter is being mailed to you today.

If you have any questions, contact me at (732) 818-1599.

CAM



CARL A. MOENKE, PE



Mechanical & Electrical Systems
 37 Main Street - 3rd Floor Suite
 Toms River, NJ 08753
 (732) 818-1599
 Fax: (732) 818-1644

August 12, 1998

Brick Township Building Dept.
 401 Chambersbridge Road
 Brick, NJ 08723

ATTN: Marcel Renson, Electrical Subcode Official

RE: Ocean County Vo-Tech School, Brick Campus, Shop Conversion To Classrooms
 Project, Brick Township, NJ; Comm. No. 98061.

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Sincerely,

Carl A. Moenke
8-12-98

Carl A. Moenke, P.E.

CAM/cmm

cc: Massimo Yezi - Yezi Associates
Bill Lubeck - Electrical Contractor
File No. 98061 - Construction Phase

TOWNSHIP OF BRICK
OCEAN COUNTY, NEW JERSEY
401 CHAMBERS BRIDGE ROAD, BRICK, N.J. 08723



Joseph C. Scarpelli, Mayor

Township Council:

Victor Cantillo – President
Martin J. Anton
Helen Fayad
Gregory S. Kavanagh
Mary Lou Powner
Kathy M. Russell
Frederick J. Underwood, Sr.

Department of Administration & Finance

Division of Inspections

Joseph Curiazza

Construction Official

(732) 262-1024

Fax (732) 262-8954

<http://www.gbshost.com/brick>

August 17, 1998

Micheal T Gavon Inc

1500 N Apple St

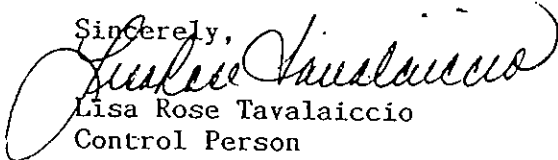
Lakewood, NJ 08701

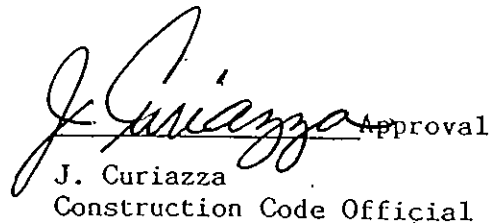
re: OC Votech School-Brick

On 07-27-98, your application for a interior renovations permit has been rejected or denied. You have been contacted by either phone or mail in regards to why the application has been rejected. If the information is not supplied within 14 days of this letter, we will consider the application null and void and it will be filed appropriately for a period of six (6) months.

If you have any questions or need an extension for any particular reason, please contact me at 732-262-1031.

Sincerely,


Lisa Rose Tavaluiccio
Control Person


J. Curiazza
Construction Code Official

/ajp

**BOCA®
NATIONAL BUILDING CODE
PLAN REVIEW RECORD**

Valuation: _____

Plan Review # _____

Fee: _____

Date: 7-27-88

JURISDICTION BRICK

(City, County, Township, etc.)

BUILDING LOCATION O.C. Voe. School

(Street address)

BUILDING DESCRIPTION _____

REVIEWED BY KEU

Numerals indicated in parenthesis are applicable code sections of the 1993 BOCA National Building Code. The organization of this Plan Review Record follows the common Building Code format implemented in the 1993 BOCA National Building Code. The plan review accomplished as indicated in this record is limited to those code sections specifically identified herein. This record references commonly applicable code sections. It does not reference all code provisions which may be applicable to specific buildings. This record is designed to be used only by those who are knowledgeable and capable of exercising competent judgement in evaluating construction documents for code compliance.

CORRECTION LIST

No.	DESCRIPTION	Code Section
-	Limit Area SPK system in File/Storage Room over 100' - no detection	
	7-27-88 0920 spoke w/ Sec sh y hsp	
	BASHIR call not available 740 3433	
	SPK drawings submitted see attached	



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**BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC.
4051 W. FLOSSMOOR ROAD COUNTRY CLUB HILLS, ILLINOIS 60478-5795**

MICHAEL T. GAVAN, INC.
1500 North Apple Street
LAKEWOOD, NEW JERSEY 08701

LETTER OF TRANSMITTAL

732
(908) 367-3900
FAX (908) 901-9616

TO

Brich Twp. Bldg Dept

RECEIVED

AUG 18 1998

DATE	8-18-98	JOB NO.	499
ATTENTION	Mr. Kevin Batzel, Fire Insp.		
RE:	O.C.V.T School		
	BLK 701.39 LOT 12		
	350 Chambers Bridge Rd		

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

- ☐ Shop drawings ☐ Prints ☒ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐

COPIES	DATE	NO.	DESCRIPTION
2			Fire Sprinkler Signed & Sealed
2			Hydr. Summary

THESE ARE TRANSMITTED as checked below:

- ☒ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☒ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

COPY TO

YERRI ASSOC.
M.D. GRANFORD

SIGNED:

40% Pre-Consumer Content • 10% Post-Consumer Content

File: OCVT

HYDRAULIC SUMMARY

WATER SUPPLY INFORMATION

Static (psi): 73.00
Residual (psi): 62.00
@ (gpm): 935.00
Hose (gpm): 100.00

System req. (gpm): 262.13
@ (psi): 59.03

Supply available: 71.95 psi

Safety Margin: 12.93 psi

Maximum velocity in the system is: 16.81 ft/sec

Continuity at all nodes satisfied to 0.01 gpm

Pipe Type Legend

CL = Copper Type L
D1 = Ductile Iron Class 51

Fitting Type Legend

T = (Table 2) Tee or Cross (Flow Turned 90°)
E = (Table 2) 90° Standard Elbow
G = (Table 2) Gate Valve
C = (Table 2) Swing Check
F = (Table 2) 45° Elbow
E = (Table 1) 90° Standard Elbow
G = (Table 1) Gate Valve
T = (Table 1) Tee or Cross (Flow Turned 90°)

Notes:

Existing 4" Double Detector Check valve installed on service.

Friction loss through BFP = 4.5 PSI @ 165.0 GPM.

Carl A. [Signature]
8-17-98

HYDRAULIC DESIGN INFORMATION SHEET

Name: Ocean County Vo. Tech. Building
 Location: 350 Chambers Bridge Road, Brick NJ
 Building:
 Contractor: Fire Pro Tech, Inc.
 Calculated By: K. Gigenbach
 Construction: ☐ -Combustible ☒ -Non-Combustible
 Occupancy: Ordinary Hazard Group 1

Date: 8/16/98
 08723
 System No. 1
 Contract No. 98022
 Drawing No. 1
 Ceiling Height: 18-8" Ft.

SYSTEM DESIGN

☒ -NFPA 13: ☐ -LT. HAZ. ☒ -ORDINARY HAZARD GROUP: 1 ☐ -EX.HAZARD.
☐ -NFPA 231 ☐ -NFPA 231C: FIGURE: CURVE:
☐ -OTHER (Specify): BOCA - Limited Area
☐ -SPECIFIC RULING: MADE BY: DATE:

Area of Sprinkler Operation: 1500 * System Type *
 Density: .15 ☒ -WET ☐ -DRY ☐ -DELUGE ☐ -PRE-ACTION
 Area Per Sprinkler: 120.0 sq. ft.
 Hose Allowance GPM: Inside: * SPRINKLER OR NOZZLE *
 Hose Allowance GPM: Outside: 100.0 Make: Reliable Model: G
 Rack Sprinkler Allowance: Size: 1/2" K-Factor: 5.62
 Temperature Rating: 212 degrees

CALCULATION SUMMARY

GPM Required: 262.13 PSI Required: 59.03
 "C" Factor Used: Overhead: 150 Underground: 150

WATER SUPPLY

* WATER FLOW TEST *	* PUMP DATA *	* TANK OR RESERVOIR *
Date & Time: 8/13/98 4:00P	Rated Capacity:	Capacity:
Static PSI: 73.0	At PSI:	Elevation:
Residual PSI: 62.0	Elevation:	
GPM Flowing: 935.0		* WELL *
Elevation: 0		Proof Flow:

Location: 6" Loop behind Brick High School
 Source Information: FPT & BTMUA

File: OCVT

"THE" Sprinkler Program by FPE Software, Inc.

Page: 1

Node	NodeFlow	Kfactor	Elev.	Pressure	Diameter		Length	FricLoss
Node	NodeFlow	Kfactor	Elev.	Pressure	HWC	Fittings	EqvLgth	ElevLoss
	PipeFlow				Velocity		TotLgth	TotFric
S01	18.00	5.62	18.0	10.26	1.025		12.0	0.079
S02	18.81	5.62	18.0	11.21	150		0.00	0.00
	18.00				7.00		12.00	0.95
S02	18.81	5.62	18.0	11.21	1.265		12.0	0.107
S03	19.86	5.62	18.0	12.49	150		0.00	0.00
	36.81				9.40		12.00	1.28
S03	19.86	5.62	18.0	12.49	1.265		8.5	0.238
L01	0.00		18.0	14.51	150		0.00	0.00
	56.68				14.47		8.50	2.02
L01	0.00		18.0	14.51	1.505		3.5	0.176
S04	21.85	5.62	18.0	15.13	150		0.00	0.00
	76.01				13.71		3.50	0.61
S04	21.85	5.62	18.0	15.13	1.985		7.5	0.073
B02	0.00		18.0	16.77	150	T	15.11	0.00
	97.86				10.15		22.61	1.65
B02	0.00		18.0	16.77	1.985		.5	0.106
A02	0.00		17.5	18.64	150	T	15.11	0.22
	119.90				12.43		15.61	1.65
A02	0.00		17.5	18.64	1.985		28.0	0.185
A03	0.00		10.5	31.06	150	3E	22.67	3.03
	162.13				16.81		50.67	9.38
A03	0.00		10.5	31.06	1.985		2.0	0.185
M01	0.00		10.5	40.38	150	2TGC	48.35	0.00
	162.13				16.81		50.35	9.32
M01	0.00		10.5	40.38	2.945		12.5	0.027
M02	0.00		11.75	40.79	150	T	22.67	-0.54
	162.13				7.64		35.17	0.95
M02	0.00		11.75	40.79	2.945		210.0	0.027
M03	0.00		10.18	49.91	150	4E2T3F	101.24	0.68
	162.13				7.64		311.24	8.44
M03	0.00		10.18	49.91	3.905		47.0	0.007
M04	0.00		10.0	50.52	150	2E	30.22	0.08
	162.13				4.34		77.22	0.53
M04	0.00		10.0	50.52	3.905		10.0	0.007
M05	0.00		1.0	54.74	150	2E2G	36.27	3.90
	162.13				4.34		46.27	0.32
M05	0.00		1.0	54.74	4.280		300.0	0.004
M06	262.13	SOURCE	-5.0	59.03	150	2EGT	85.39	2.60
	162.13				3.62		385.39	1.69

Node	NodeFlow	Kfactor	Elev.	Pressure	Diameter		Length	FricLoss
Node	NodeFlow	Kfactor	Elev.	Pressure	HWC	Fittings	EqvLgth	ElevLoss
	PipeFlow				Velocity		TotLgth	TotFric

S05	19.33	5.62	18.0	11.83	1.025		16.0	0.091
L01	0.00		18.0	14.51	150	2ET	13.60	0.00
	19.33				7.52		29.60	2.68
S06	22.04	5.62	18.0	15.38	1.025		4.5	0.115
B02	0.00		18.0	16.77	150	T	7.56	0.00
	22.04				8.57		12.06	1.39
S07	20.71	5.62	18.0	13.58	1.025		10.0	0.103
B01	0.00		18.0	16.00	150	2ET	13.60	0.00
	20.71				8.05		23.60	2.43
B01	0.00		18.0	16.00	1.265		.5	0.138
A01	0.00		17.5	17.54	150	T	9.07	0.22
	42.23				10.78		9.57	1.32
A01	0.00		17.5	17.54	1.265		8.0	0.138
A02	0.00		17.5	18.64	150		0.00	0.00
	42.23				10.78		8.00	1.10
S08	21.52	5.62	18.0	14.67	1.025		4.5	0.110
B01	0.00		18.0	16.00	150	T	7.56	0.00
	21.52				8.37		12.06	1.33

Units Legend

Flow = gpm
 Elev. = feet
 Pressure = psi
 Diameter = inches

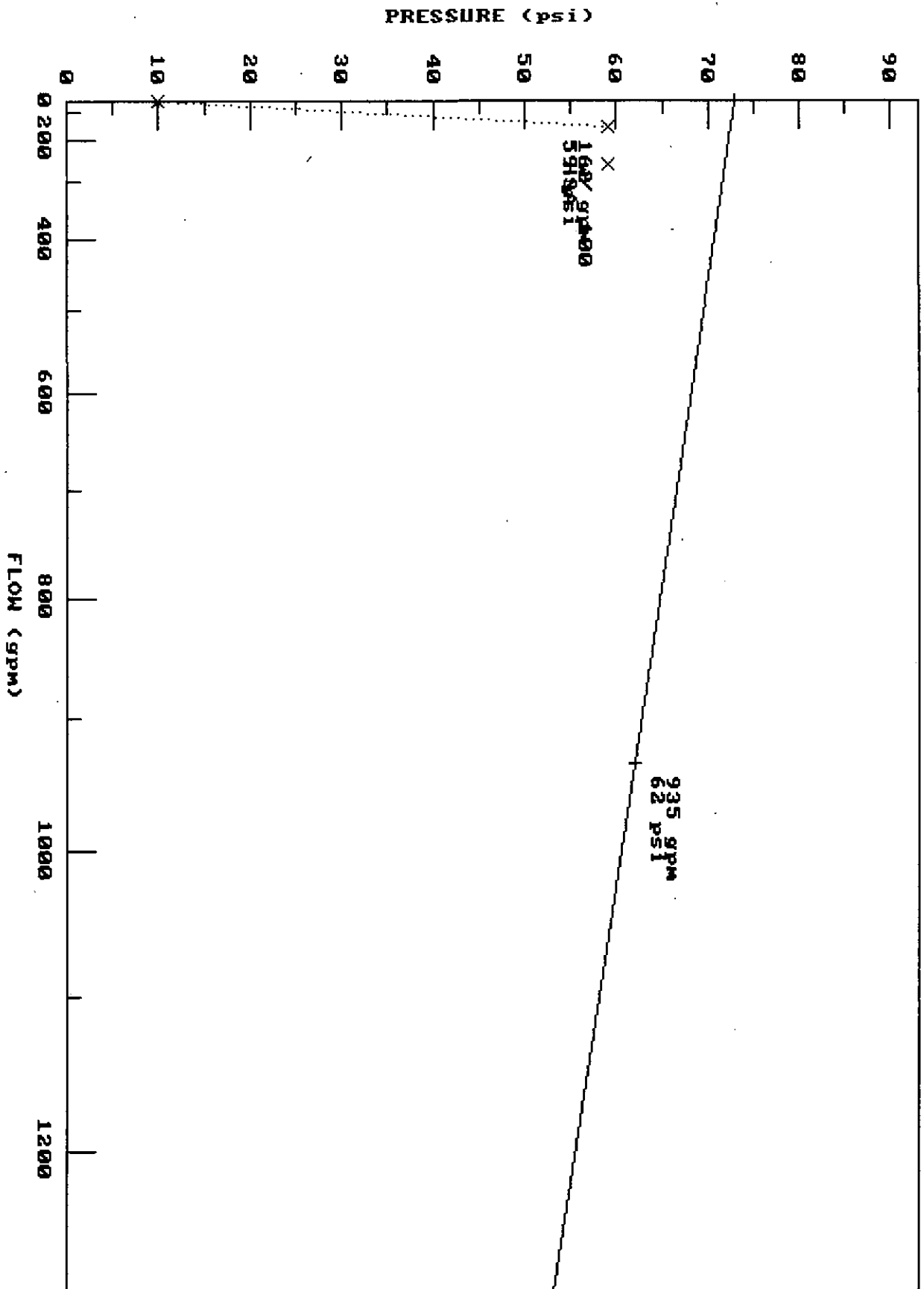
Velocity = ft/sec
 Length,
 EqvLgth,
 TotLgth = feet

FricLoss,
 ElevLoss,
 TotFric = psi

Node	Pressure (psi)	Flow (gpm)	Elevation (feet)	K-Factor	Area (ft ²)	Density (gpm/ft ²)
S01	10.26	18.00	18.00	5.62	120.0	0.150
S02	11.21	18.81	18.00	5.62	120.0	0.157
S03	12.49	19.86	18.00	5.62	120.0	0.166
S04	15.13	21.85	18.00	5.62	120.0	0.182
S05	11.83	19.33	18.00	5.62	120.0	0.161
S06	15.38	22.04	18.00	5.62	120.0	0.184
S07	13.58	20.71	18.00	5.62	120.0	0.173
S08	14.67	21.52	18.00	5.62	120.0	0.179
L01	14.51	0.00	18.00			
B01	16.00	0.00	18.00			
B02	16.77	0.00	18.00			
A01	17.54	0.00	17.50			
A02	18.64	0.00	17.50			
A03	31.06	0.00	10.50			
M01	40.38	0.00	10.50			
M02	40.79	0.00	11.75			
M03	49.91	0.00	10.18			
M04	50.52	0.00	10.00			
M05	54.74	0.00	1.00			
M06	59.03	262.13	-5.00	SOURCE		

Begin Node	End Node	Flow (gpm)	Diameter (inches)	Type	Fittings	Length (feet)	Eqv Length (feet)	Tot Len (feet)
S02	S01	18.00	1.025	CL		12.00	0.00	12.
S03	S02	36.81	1.265	CL		12.00	0.00	12.
L01	S03	56.68	1.265	CL		8.50	0.00	8.
S04	L01	76.01	1.505	CL		3.50	0.00	3.
B02	S04	97.86	1.985	CL	T	7.50	15.11	22.
A02	B02	119.90	1.985	CL	T	0.50	15.11	15.
A03	A02	162.13	1.985	CL	3E	28.00	22.67	50.
M01	A03	162.13	1.985	CL	2TGC	2.00	48.35	50.
M02	M01	162.13	2.945	CL	T	12.50	22.67	35.
M03	M02	162.13	2.945	CL	4E2T3F	210.00	101.24	311.
M04	M03	162.13	3.905	CL	2E	47.00	30.22	77.
M05	M04	162.13	3.905	CL	2E2G	10.00	36.27	46.
M06	M05	162.13	4.280	D1	2EGT	300.00	85.39	385.
L01	S05	19.33	1.025	CL	2ET	16.00	13.60	29.
B02	S06	22.04	1.025	CL	T	4.50	7.56	12.
B01	S07	20.71	1.025	CL	2ET	10.00	13.60	23.
A01	B01	42.23	1.265	CL	T	0.50	9.07	9.
A02	A01	42.23	1.265	CL		8.00	0.00	8.
B01	S08	21.52	1.025	CL	T	4.50	7.56	12.

Water Supply vs. Demand Curve



File: OCVT

HYDRAULIC SUMMARY

WATER SUPPLY INFORMATION

Static (psi): 73.00
Residual (psi): 62.00
@ (gpm): 935.00
Hose (gpm): 100.00

System req. (gpm): 262.13
@ (psi): 59.03

Supply available: 71.95 psi

Safety Margin: 12.93 psi

Maximum velocity in the system is: 16.81 ft/sec

Continuity at all nodes satisfied to 0.01 gpm

Pipe Type Legend

CL = Copper Type L
DI = Ductile Iron Class 51

Fitting Type Legend

T = (Table 2) Tee or Cross (Flow Turned 90°)
E = (Table 2) 90° Standard Elbow
G = (Table 2) Gate Valve
C = (Table 2) Swing Check
F = (Table 2) 45° Elbow
E = (Table 1) 90° Standard Elbow
G = (Table 1) Gate Valve
T = (Table 1) Tee or Cross (Flow Turned 90°)

Notes:

Existing 4" Double Detector Check valve installed on service.

Friction loss through BFP = 4.5 PSI @ 165.0 GPM.

Carl A. H. H. H.
8-17-98

HYDRAULIC DESIGN INFORMATION SHEET

Name: Ocean County Vo. Tech. Building Date: 8/16/98
 Location: 350 Chambers Bridge Road, Brick NJ 08723
 Building: System No. 1
 Contractor: Fire Pro Tech, Inc. Contract No. 98022
 Calculated By: K. Gigenbach Drawing No. 1
 Construction: []-Combustible [x]-Non-Combustible Ceiling Height: 18-8" Ft.
 Occupancy: Ordinary Hazard Group 1

SYSTEM DESIGN

[x]-NFPA 13: []-LT. HAZ. [x]-ORDINARY HAZARD GROUP: 1 []-EX.HAZARD.
 []-NFPA 231 []-NFPA 231C: FIGURE: CURVE:
 []-OTHER (Specify): BOCA - Limited Area
 []-SPECIFIC RULING: MADE BY: DATE:

Area of Sprinkler Operation: 1500 * System Type *
 Density: .15 [x]-WET []-DRY []-DELUGE []-PRE-ACTION
 Area Per Sprinkler: 120.0 sq. ft.
 Hose Allowance GPM: Inside: * SPRINKLER OR NOZZLE *
 Hose Allowance GPM: Outside: 100.0 Make: Reliable Model: G
 Rack Sprinkler Allowance: Size: 1/2" K-Factor: 5.62
 Temperature Rating: 212 degrees

CALCULATION SUMMARY

GPM Required: 262.13 PSI Required: 59.03
 "C" Factor Used: Overhead: 150 Underground: 150

WATER SUPPLY

* WATER FLOW TEST *	* PUMP DATA *	* TANK OR RESERVOIR *
Date & Time: 8/13/98 4:00P	Rated Capacity:	Capacity:
Static PSI: 73.0	At PSI:	Elevation:
Residual PSI: 62.0	Elevation:	
GPM Flowing: 935.0		* WELL *
Elevation: 0		Proof Flow:

Location: 6" Loop behind Brick High School
 Source Information: FPT & BTMUA

File: OCVT

"THE" Sprinkler Program by FPE Software, Inc.

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Node Node	NodeFlow NodeFlow PipeFlow	Kfactor Kfactor	Elev. Pressure Elev. Pressure	Diameter HWC Velocity	Fittings	Length EqvLgth TotLgth	FricLoss ElevLoss TotFric
S01	18.00	5.62	18.0	10.26	1.025	12.0	0.079
S02	18.81	5.62	18.0	11.21	150	0.00	0.00
	18.00			7.00		12.00	0.95
S02	18.81	5.62	18.0	11.21	1.265	12.0	0.107
S03	19.86	5.62	18.0	12.49	150	0.00	0.00
	36.81			9.40		12.00	1.28
S03	19.86	5.62	18.0	12.49	1.265	8.5	0.238
L01	0.00		18.0	14.51	150	0.00	0.00
	56.68			14.47		8.50	2.02
L01	0.00		18.0	14.51	1.505	3.5	0.176
S04	21.85	5.62	18.0	15.13	150	0.00	0.00
	76.01			13.71		3.50	0.61
S04	21.85	5.62	18.0	15.13	1.985	7.5	0.073
B02	0.00		18.0	16.77	150	T 15.11	0.00
	97.86			10.15		22.61	1.65
B02	0.00		18.0	16.77	1.985	.5	0.106
A02	0.00		17.5	18.64	150	T 15.11	0.22
	119.90			12.43		15.61	1.65
A02	0.00		17.5	18.64	1.985	28.0	0.185
A03	0.00		10.5	31.06	150	3E 22.67	3.03
	162.13			16.81		50.67	9.38
A03	0.00		10.5	31.06	1.985	2.0	0.185
M01	0.00		10.5	40.38	150	2TGC 48.35	0.00
	162.13			16.81		50.35	9.32
M01	0.00		10.5	40.38	2.945	12.5	0.027
M02	0.00		11.75	40.79	150	T 22.67	-0.54
	162.13			7.64		35.17	0.95
M02	0.00		11.75	40.79	2.945	210.0	0.027
M03	0.00		10.18	49.91	150	4E2T3F 101.24	0.68
	162.13			7.64		311.24	8.44
M03	0.00		10.18	49.91	3.905	47.0	0.007
M04	0.00		10.0	50.52	150	2E 30.22	0.08
	162.13			4.34		77.22	0.53
M04	0.00		10.0	50.52	3.905	10.0	0.007
M05	0.00		1.0	54.74	150	2E2G 36.27	3.90
	162.13			4.34		46.27	0.32
M05	0.00		1.0	54.74	4.280	300.0	0.004
M06	262.13	SOURCE	-5.0	59.03	150	2EGT 85.39	2.60
	162.13			3.62		385.39	1.69

Node	NodeFlow	Kfactor	Elev. Pressure	Diameter		Length	FricLoss
Node	NodeFlow	Kfactor	Elev. Pressure	HWC	Fittings	EqvLgth	ElevLoss
	PipeFlow			Velocity		TotLgth	TotFric

S05	19.33	5.62	18.0	11.83	1.025	16.0	0.091
L01	0.00		18.0	14.51	150	13.60	0.00
	19.33			7.52	2ET	29.60	2.68
S06	22.04	5.62	18.0	15.38	1.025	4.5	0.115
B02	0.00		18.0	16.77	150	7.56	0.00
	22.04			8.57	T	12.06	1.39
S07	20.71	5.62	18.0	13.58	1.025	10.0	0.103
B01	0.00		18.0	16.00	150	13.60	0.00
	20.71			8.05	2ET	23.60	2.43
B01	0.00		18.0	16.00	1.265	.5	0.138
A01	0.00		17.5	17.54	150	9.07	0.22
	42.23			10.78	T	9.57	1.32
A01	0.00		17.5	17.54	1.265	8.0	0.138
A02	0.00		17.5	18.64	150	0.00	0.00
	42.23			10.78		8.00	1.10
S08	21.52	5.62	18.0	14.67	1.025	4.5	0.110
B01	0.00		18.0	16.00	150	7.56	0.00
	21.52			8.37	T	12.06	1.33

Units Legend

Flow = gpm
Elev. = feet
Pressure = psi
Diameter = inches

Velocity = ft/sec
Length,
EqvLgth,
TotLgth = feet

FricLoss,
ElevLoss,
TotFric = psi

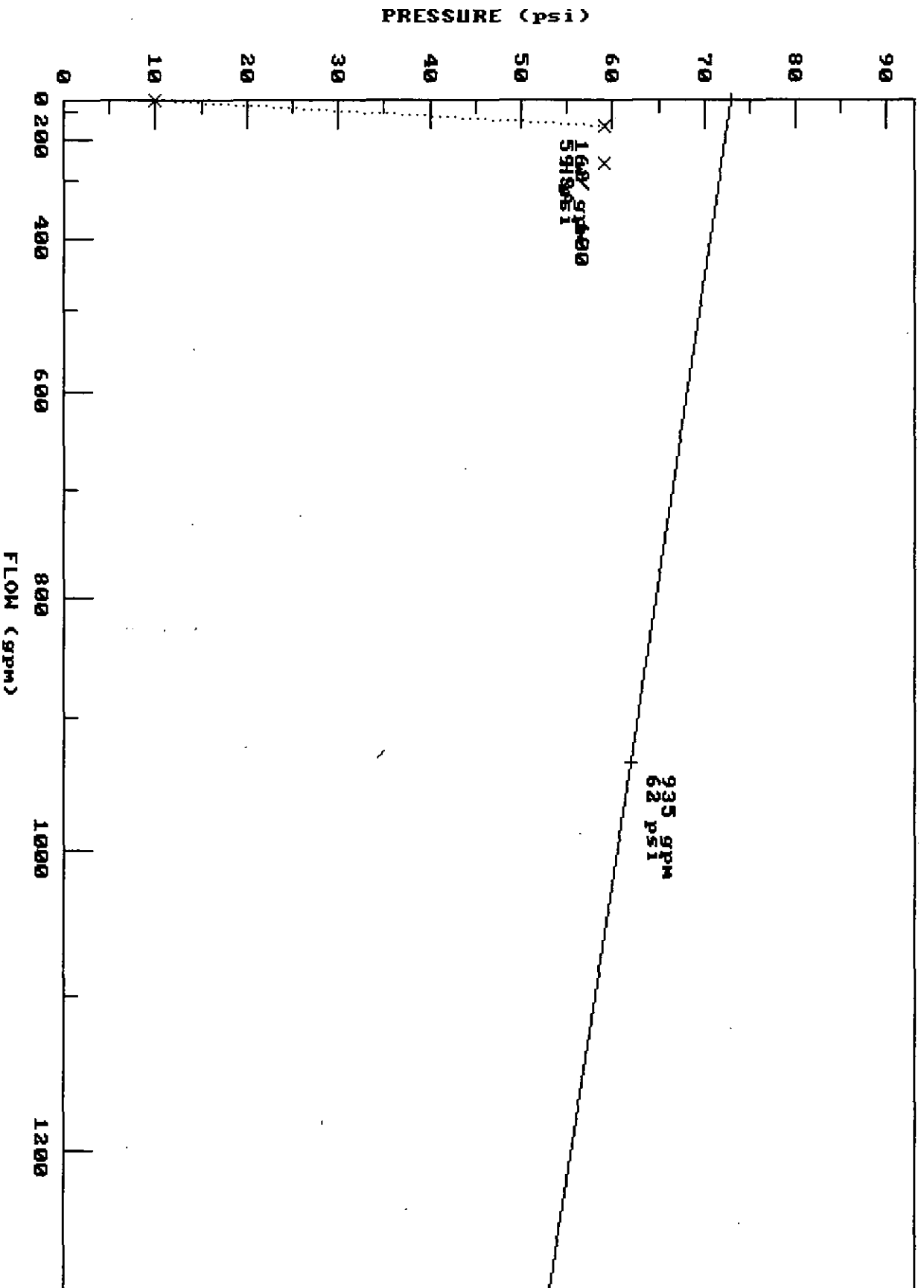
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File: OCVT

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Node	Pressure (psi)	Flow (gpm)	Elevation (feet)	K-Factor	Area (ft ²)	Density (gpm/ft ²)
S01	10.26	18.00	18.00	5.62	120.0	0.150
S02	11.21	18.81	18.00	5.62	120.0	0.157
S03	12.49	19.86	18.00	5.62	120.0	0.166
S04	15.13	21.85	18.00	5.62	120.0	0.182
S05	11.83	19.33	18.00	5.62	120.0	0.161
S06	15.38	22.04	18.00	5.62	120.0	0.184
S07	13.58	20.71	18.00	5.62	120.0	0.173
S08	14.67	21.52	18.00	5.62	120.0	0.179
L01	14.51	0.00	18.00			
B01	16.00	0.00	18.00			
B02	16.77	0.00	18.00			
A01	17.54	0.00	17.50			
A02	18.64	0.00	17.50			
A03	31.06	0.00	10.50			
M01	40.38	0.00	10.50			
M02	40.79	0.00	11.75			
M03	49.91	0.00	10.18			
M04	50.52	0.00	10.00			
M05	54.74	0.00	1.00			
M06	59.03	262.13	-5.00	SOURCE		

Begin Node	End Node	Flow (gpm)	Diameter (inches)	Type	Fittings	Length (feet)	Eqv Length (feet)	Tot Len (feet)
S02	S01	18.00	1.025	CL		12.00	0.00	12.
S03	S02	36.81	1.265	CL		12.00	0.00	12.
L01	S03	56.68	1.265	CL		8.50	0.00	8.
S04	L01	76.01	1.505	CL		3.50	0.00	3.
B02	S04	97.86	1.985	CL	T	7.50	15.11	22.
A02	B02	119.90	1.985	CL	T	0.50	15.11	15.
A03	A02	162.13	1.985	CL	3E	28.00	22.67	50.
M01	A03	162.13	1.985	CL	2TGC	2.00	48.35	50.
M02	M01	162.13	2.945	CL	T	12.50	22.67	35.
M03	M02	162.13	2.945	CL	4E2T3F	210.00	101.24	311.
M04	M03	162.13	3.905	CL	2E	47.00	30.22	77.
M05	M04	162.13	3.905	CL	2E2G	10.00	36.27	46.
M06	M05	162.13	4.280	D1	2EGT	300.00	85.39	385.
L01	S05	19.33	1.025	CL	2ET	16.00	13.60	29.
B02	S06	22.04	1.025	CL	T	4.50	7.56	12.
B01	S07	20.71	1.025	CL	2ET	10.00	13.60	23.
A01	B01	42.23	1.265	CL	T	0.50	9.07	9.
A02	A01	42.23	1.265	CL		8.00	0.00	8.
B01	S08	21.52	1.025	CL	T	4.50	7.56	12.

Water Supply vs. Demand Curve



CARL A. MOENKE, P.E.

37 Main Street, 3rd Floor Suite
Toms River, New Jersey 08753
(732) 818-1599
Fax: (732) 818-1644

FAX TRANSMISSION COVER SHEET

Date: October 28, 1998
To: Daniel Newman - Plumbing Subcode Official @ Brick Township Building Dept.
Fax: (732) 262-8954
Subject: Ocean County VoTech School Classrooms Conversion Project, Brick, NJ: Fire Sprinkler System Addition.
Sender: Carl A. Moenke, P.E.

YOU SHOULD RECEIVE 1 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL.

This follows-up my Voice Mail message left this afternoon. On the above referenced Project, I have been told that you will not approve the Fire Sprinkler System Addition because it does not have a Backflow Preventer. The New System taps into an Existing Wet Fire Sprinkler System. For some reason, the Existing Fire Sprinkler System was run in Copper Pipe which may have led you to believe it was the Domestic Water System. The Existing Fire Sprinkler System has a 4-Inch Double Check Backflow Preventer with OS&Y Valves. In addition, there is a 2-Inch Check Valve and a 2-Inch OS&Y Valve just upstream of where the Addition is connected. I hope this will now meet with your approval.

Please contact me at (732) 818-1599.

CAM

cc: Massimo Yezi - Yezi Associates
Edward Crawford